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Strategic Environmental Assessment

Its Potential Adoption and Use in Corporate Strategic Planning and Decision-Making

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STRATEGIC ENVIRONMENTAL ASSESSMENT: ITS POTENTIAL ADOPTION AND USE IN CORPORATE STRATEGIC PLANNING AND DECISION-MAKING

Stephen J. Bonnell, BA (Hons), MA

**A thesis submitted in fulfilment of the requirements
for the degree of Doctor of Philosophy**

**University of Dundee
March 2016**

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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Alberta
AESO	Alberta Electric System Operator
APPPrO	Association of Power Producers of Ontario
BC	British Columbia
BCEA	British Columbia Electrical Association
CAD	Canadian Dollars (\$)
CAMPUT	Canada's Energy and Utility Regulators
CBA	Cost-benefit Analysis
CEA	Canadian Electricity Association
CEATI	Centre for Energy Advancement through Technological Innovation
CHA	Canadian Hydropower Association
EA	Environmental Assessment
EDA	Electricity Distributors Association (Ontario)
ERM	Enterprise Risk Management
EU	European Union
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIS	Geographic Information System
IESO	Independent Electricity System Operator (Ontario)
IPPSA	Independent Power Producers Society of Alberta
LCA	Life-cycle Analysis
MB	Manitoba
MW	Megawatt
NB	New Brunswick
NEPA	<i>National Environmental Policy Act</i> (United States)
NL	Newfoundland and Labrador
NS	Nova Scotia
NTPC	Northwest Territories Power Corporation
NU	Nunavut Territory

NWT	Northwest Territories
OEA	Ontario Energy Association
ON	Ontario
OPG	Ontario Power Generation
PEI	Prince Edward Island
PEST	Political, Economic, Social and Technological
PPPs	Policies, Plans and Programmes
QC	Québec
SA	Sustainability Assessment
SEA	Strategic Environmental Assessment
SK	Saskatchewan
Twh	Terawatt hour
UK	United Kingdom
US	United States
YK	Yukon Territory

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Steve Bonnell

March 2016

DEDICATION

This work is dedicated to the memory of my father, the late James R. Bonnell (1941-1993).

Although this year marks the point in my life where I will have been without my father for as many years as I had him, I have carried his words and his wisdom with me throughout all of my endeavours, including this one.

I cannot think that I would have ever gotten to this point without him, and the things he taught and instilled in me during the time that we did have together, including - To work hard. To dream big. To be focussed and organized in my thoughts and words. And to always see things through.


Thanks Dad.

Imagine....

DECLARATION

I, Stephen J. Bonnell, declare that I am the sole author of this thesis and that unless otherwise stated all references cited herein have been consulted by me. I confirm that the work of which the thesis is a record has been completed by me, and has not been previously accepted for a higher degree.

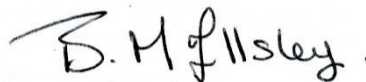
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Signature of the Supervisor:



Date: 18 February 2016

ABSTRACT

Strategic Environmental Assessment (SEA) is a systematic process for assessing and evaluating the potential environmental effects of proposed policies, plans and programmes (PPPs) and their alternatives, in order to identify and address such issues at the early (pre-project) stages of strategic planning and decision-making. Although SEA is a key aspect of current and evolving environmental assessment theory and practice, the primary focus thus far has been on its statutory application to public-sector planning initiatives. Despite previous comments that SEA should also be applicable and of interest to corporations, there has been very little evidence or investigation of its potential voluntary adoption and application in this context. Important questions therefore remain about what might motivate or deter a corporation from deciding to use SEA, and if so, the particular timing or stage of planning at which it is to be applied, the environmental issues upon which it would focus, and the SEA approach and methods to be used.

This study has therefore been designed and conducted to investigate corporate decision-making about whether, why, when and how to voluntarily adopt and apply SEA. Due to a lack of previous research on this topic, and the overall inapplicability and inadequacy of other existing theory and knowledge to it, the study has adopted a qualitative and inductive (exploratory) approach. The research methods involved a series of semi-structured interviews and subsequent focus group sessions with strategic planning personnel within electricity utilities in Canada, in order to identify and seek to understand their views and decisions about the possible voluntary adoption and application of SEA.

The results of the study indicate that a variety of factors are considered by corporations in decision-making about the potential use of SEA. This includes issues related to: 1) The type and level of environmental uncertainty and risk that is perceived to be associated with the company's overall strategic planning initiatives (PPPs); 2) The particular reasons for it perceiving a need to proactively address environmental risks at the strategic level as opposed to at later stages of planning or during PPP implementation;

3) The specific rationale for, and objectives and desired outcomes of, any such SEA use by the corporation; and 4) the perceived applicability of SEA to the corporation's planning and business activities, and its likely effectiveness in achieving the above referenced objectives and outcomes. A number of internal and external contextual factors were also found to be influential in corporate views about whether SEA is considered to be necessary, possible, applicable and likely effective, including the perceived benefits, costs, risks and challenges associated with its use. As a key outcome of the study, these research findings are used in the development and discussion of a conceptual framework that identifies the occurrence, influence and interrelationships of these factors and the manner and order in which they are recognized and considered in corporate decisions about SEA and its use. A summary of the main results of the study, including the resulting conceptual framework, was subsequently provided to all interviewees and focus group participants and is included as an appendix to the thesis.

In addition to providing an opportunity to generate new knowledge in relation to this previously uninvestigated subject, this research has also provided an interesting and unique context through which to investigate and evaluate longstanding and more recent and evolving theoretical perspectives about SEA, as reflected in the current literature. The study's results highlight a number of new and important dimensions of how SEA is viewed and potentially used in certain contexts, including issues related to its perceived purpose and objectives, approaches, and potential and desired outcomes, which are presented and evaluated herein in order to contribute to the further advancement of SEA theory.

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1 INTRODUCTION

Increasing awareness of the important environmental consequences of human development activities, and recognition that these must be identified and considered in the initial planning and decision-making phases of such actions, has led to the development of environmental assessment (EA) processes and their adoption and implementation in jurisdictions throughout the world (Morgan 2012). EA is a systematic review process that is often applied to proposed development projects and activities in order to predict and evaluate their potential environmental effects, and to attempt to address these in associated planning and decision-making (Lawrence 2013).

In the over four decades since its introduction, EA has become widely used as a means of identifying and integrating environmental considerations into the planning and implementation stages of development activities, as evidenced by both the establishment and application of EA systems around the world, as well as within the process itself in terms of its objectives, focus and methods. EA requirements are currently in place in most countries (Pope et al 2013; Fischer and Noble 2015), and are being applied to an increasingly wide and varied range of development activities and environmental issues (McDonald and Brown 1995; Alshuwaikhat 2005). The nature and scope of the EA process itself have also evolved considerably since its inception, moving beyond its initial application in a relatively late stage, reactive and disjointed manner, to an increased emphasis on, for example: multidimensional assessments that consider biophysical and socio-cultural environments and issues and their inter-relationships; public and stakeholder involvement in EAs and associated decision-making; better integration of EA requirements with larger environmental planning and management processes; and an increased emphasis on the consideration and management of environmental effects at the earlier (pre-project) and later (after EA approval, through follow-up) stages of development planning and implementation (Noble 2015).

While EA requirements and processes are typically established and administered by governments (Abaza et al 2004; Glasson et al 2012) and usually culminate in associated regulatory decisions upon completion of the required EA documentation by the

proponent, there is also an increasing emphasis on its perception and use by proponents as a tool for identifying and proactively managing environmental issues and risk as part of their own planning and decision-making processes (Annandale and Taplin 2003; Bonnell 2015; Morrison-Saunders et al 2015).

1.1 Strategic Environmental Assessment: An Overview

Although initially and primarily applied to individual development project proposals (Morgan 2012), the focus of EA has since been expanded to also include earlier, more “upstream” and “strategic” aspects of development planning (Dalal-Clayton and Sadler 2005). Strategic Environmental Assessment (SEA) is a systematic process for assessing and evaluating the potential environmental effects of proposed strategic initiatives - including policies, plans and programmes (PPPs), and their alternatives - in order to identify and consider such environmental issues in associated decision-making (Therivel et al 1992; Noble 2000).

SEA was originally conceived, and has been increasingly recognized and used, as a means of overcoming the problems that are often associated with attempting to deal with environmental effects solely through project-specific assessments and decisions. Although project-level EA can be a useful tool in informing and improving decision about individual development activities, it has long been recognized (and is often criticized) as being somewhat reactive and narrow in focus, as well as being poorly integrated into overall planning and decision-making processes (Stinchcombe and Gibson 2001). This has often limited its ability to address some environmental issues, which may be more effectively dealt with by identifying and managing them in an earlier and more comprehensive manner, rather than reacting them in the context of individual project plans and decisions. SEA can therefore provide a means of more proactively and comprehensively avoiding or reducing the potential environmental effects that may result from the eventual implementation of earlier strategic decisions, by identifying and considering these at the early stages of planning before fundamental and often irrevocable decisions are made and other possible strategic directions (PPP alternatives) are foreclosed (Therivel et al 1992; Nooteboom and Wieringa 1999; Steinemann 2001).

The underlying purpose of SEA is therefore to inform earlier, strategic decisions, and in doing so, to guide subsequent decisions and actions towards more environmentally acceptable and sustainable solutions (Alshuwaikhat 2005). The rationale for and objectives of SEA are based on the premise that environmentally sound PPPs help to ensure the environmental acceptability of the individual projects and activities that are eventually proposed and implemented pursuant to them. In theory, therefore, SEA at one level of the planning process helps sustainability to “trickle down” to later decisions and actions (Partidario 2000; White and Noble 2013a), including down to the project level where environmental effects actually occur. SEA is also considered to potentially help improve overall EA effectiveness and efficiency by providing environmental information and mitigation for use in later assessments, as well as to help identify and streamline the environmental issues that require consideration at the project level (Lee and Walsh 1992; Wood and Dejeddour 1992; Ortolano and Shepherd 1995; Fischer 1999; Nooteboom 2000; Stinchcombe and Gibson 2001; Dalal-Clayton and Sadler 2005). Whether and how many of these potential and often touted SEA benefits and outcomes actually occur in practice has yet to be fully investigated (Marshall and Arts 2005), however, particularly the degree to which they are recognized and influential in decisions and actions about SEA adoption and its use. In any event, the overall purpose and function of SEA is to inform, influence and ultimately seek to improve both strategic and downstream planning and decision-making, and the eventual implementation of PPPs and associated projects.

Alongside these original and long-standing views about the rationale for and potential benefits of SEA and the continued expansion of SEA practice worldwide, the past decade has also seen significant developments in the conceptualization and theoretical basis of SEA (Bina et al 2011; Lobos and Partidario 2014), including perspectives on and on-going discourse around its overall need, purpose, objectives, function and outcomes. The literature repeatedly notes that most early discussions of SEA and much of its practice to date have reflected an “assessment” focus and approach, involving analytical approaches and methods (Montanez-Cartaxo 2014; Geneletti 2015) that seek to identify and document the potential environmental effects of proposed or potential PPPs as input into strategic planning decisions. SEA application has therefore largely been

focused on providing environmental information into specific stages of existing strategic planning exercises, as a technical input into presumed rational decision-making processes (Nilsson and Dalkmann 2001; Morgan 2012; Tetlow and Hanusch 2012), potentially with some degree of passive public and stakeholder consultation at select stages in order to identify key issues and/or to address statutory requirements for same (Rauschmayer and Risse 2005; Gauthier et al 2011). There has therefore been an associated focus on a substantive rationale for SEA, and particularly, its analytical and information outputs and their direct influence on the final PPP decision (Jiliberto 2011).

The current literature reflects far greater expectations of SEA, however, including with regard to its purpose, objectives, approaches and potential outcomes, and consequently, the required nature and scope of its application. SEA has become increasingly viewed less as an analytical instrument for reviewing the PPP outcomes of existing planning processes, but rather as an exercise that is (or should be) much more integral to strategic planning and decision-making itself (Noble 2000; Nilsson and Dalkmann 2001; Bina 2007). This involves an earlier and deeper penetration of, and contribution to, the early stages of PPP formulation (Noble 2000; Bina 2007; Stoeglehner 2010; Tetlow and Hanush 2012), including in the establishment of strategic objectives and the identification and evaluation of PPP alternatives (Kornov 1997; Brown and Therivel 2000; Nitz and Brown 2001; Chaker et al 2006; Bidstrup and Hansen 2014; Geneletti 2014), as well as in eventual strategic decisions and their implementation.

There are also clear shifts away from purely or primarily technocratic and analytical SEA methods and outcomes to more participative approaches and rationales. While it has long been recognized that public and stakeholder involvement is an important and necessary component of SEA (Gauthier et al 2011; Rega and Baldizzone 2015) and a key contributor to its effectiveness (Runhaar and Driessen 2007), the emphasis has likewise evolved from a focus on consultation as a means of achieving SEA's substantive (information and issues scoping) or procedural (quality of process) rationales (Bonifazi et al 2011; Jiliberto 2011) to reflect a larger and broader vision of the nature, purpose and scope of its public and stakeholder participation elements. Based on post-modern,

post-positivist and collaborative planning traditions (Tetlow and Hanush 2012; Lobos and Partidario 2014), SEA processes are increasingly being seen as forums for the identification and consideration of various issues, perspectives and types of knowledge (Connelly and Richardson 2005; Beckwith 2012; Morgan 2012; Partidario and Sheate 2013), and as processes of communication, learning and negotiation amongst its participants (Jackson and Illsley 2007; Jha-Thakur et al 2009; Stoeglehner 2010; Illsley et al 2014). There is therefore an increasing emphasis on a collaborative-deliberative rationale for SEA (Jiliberto 2011) with its potential transformative effects on the participants, planning processes and institutions involved (Wallington et al 2007; Bina et al 2011; Lobos and Partidario 2014) being seen as a primary reason for, and desired outcome of, the establishment and application of SEA processes.

1.2 Research Rationale and Focus

SEA is an important and significant aspect of current EA theory and practice, as reflected in the voluminous and diverse literature that has been produced in relation to it in recent years (Fischer and Onyango 2012; Caschili et al 2014), and in the development and implementation of SEA systems and procedures worldwide (Fischer and Noble 2015). As summarized above and described in further detail in Chapter 2 of this thesis, recent years have also seen considerable evolution and growth in the theoretical basis of SEA, including current views on, and continuing debates around, its rationale, objectives, function, and potential and desired outcomes.

It has been recognized that the field of EA in general presents an interesting and somewhat challenging situation in terms of theory and practice, in that the development and use of EA processes has predated much of its associated research and theory development (Kagstrom and Richardson 2015). The resulting differences in the origins and trajectories of theory and practice have led to observations that the current theoretical perspectives on SEA in particular are considerably further advanced than, and remain somewhat decoupled from, its practice (Axelsson et al 2012; Lobos and Partidario 2014). This, along with recent criticisms regarding a perceived lack of theory use and development in EA research overall (Kornov 2015), makes it clear that there are

important and ample opportunities to further develop and refine the theoretical basis for SEA through additional research. This includes investigations aimed at identifying, evaluating and testing existing theory (SEA-specific or incorporating that from other disciplines, as advocated by Kornov 2015) by conducting empirical studies of SEA systems and experience, as well as in a more exploratory manner through research that is aimed at investigating its use in new and previously un- or under-researched contexts, in order to contribute further to the development and refinement of theory (Cherp et al 2007).

In keeping with the latter of these two approaches and areas of focus, almost all of the discussion around and experience with SEA to date has been with regard to its application by governments and other responsible authorities to “public-sector” PPPs, pursuant to the requirements of applicable legislation or other directives. There has been far less consideration or evidence of the use of SEA in industry, as a means of aiding and informing strategic planning by corporations. Strategic business planning and associated decision-making often give rise to development projects or other activities which may have important environmental issues and consequences. An SEA approach could potentially provide a systematic process for identifying, assessing and attempting to proactively manage environmental issues and risks and for consulting with stakeholders, thereby informing and improving decision-making, and in doing so, potentially benefitting the environment and the corporation itself in the long-run (Marshall and Fischer 2006). While it appears to be generally accepted that SEA principles and approaches would be applicable to corporate strategic planning and decision-making (Stinchcombe and Gibson 2001), there is very little evidence of its voluntary use by private- or public-sector firms to date (Marshall and Fischer 2006).

Notwithstanding some general discussion of this subject in the SEA literature (Jay and Marshall 2005; Marshall and Fischer 2005, 2006; Jay 2007, 2010), there has been very limited analysis of corporate SEA use, including the various factors and situations that might result in a corporation deciding to voluntarily adopt and apply an SEA approach as part of its strategic planning and decision-making. Although, through their previous discussions on corporate SEA use, the above referenced authors have established

interest in this topic and provided good, initial overviews of it as a basis for its further investigation, these have primarily involved an initial and somewhat speculative commentary on the possible applicability, use and outcomes of SEA in this context, including referencing a number of possible drivers of and associated enablers and challenges for corporate SEA use. There has, however, been no investigation of actual, real-time corporate decision-making about SEA use, including any detailed, empirical analyses of the particular motivations, deterrents and other determinants of decisions around whether, when, why and how to voluntarily adopt and apply SEA. This includes the degree to which these or other potential SEA outcomes, benefits or challenges are recognized and influential in such decisions, as well as the presence, influence and relative importance of these and other such factors (both internal and external to the firm) in such decisions and in specific situations and contexts. As most of the previous discussions and analysis around the voluntary use of SEA approaches in particular jurisdictions (Malvestio and Montano 2013; Margato and Sanchez 2014; Mota et al 2014; Silva et al 2014; Victor and Agamuthu 2014) have focused upon its application in public-sector planning situations, these have likewise provided limited insights into the key factors that would influence its voluntary use in a corporate setting.

There have therefore been previous and recent calls for research into whether and how SEA could be adopted and applied in a corporate context (Marshall and Fischer 2005; Mota et al 2014). In terms of the reasons why SEA might be adopted and applied by a corporation, it is not currently known, for example, whether there are particular drivers for corporate SEA acceptance, such as certain types and levels of perceived environmental issues or interests that are considered to require early analysis and proactive management at the PPP level and upon which SEA use would therefore be focused, as well as what the particular rationale for and objectives of doing so at such an early stage might be. It is also not clear whether and how these or other influential factors are present or are enhanced in particular situations or contexts, and how perceived SEA requirements and benefits are weighed against any recognized challenges or potential negative outcomes that may be associated with SEA use.

Voluntarily adopting SEA in corporate strategic planning would also involve decisions around the timing and focus of its use, including the particular stage(s) of the planning process and of PPP development at which it is applied. These questions relate to a number of important issues and on-going debates in the SEA literature as summarized earlier, particularly with regard to the potential timing and depth of the SEA process. It is not known, however, whether and how the particular factors and determinants that might lead a corporation towards voluntary SEA use might then translate into associated decisions about the specific stage(s) of strategic planning and PPP development at which SEA would then be applied, as well as whether the perceived objectives and planned focus of SEA use might be consistent or variable at different planning levels.

Should a corporation decide to voluntarily adopt and apply SEA in its strategic planning process, there are also a variety of possible approaches for its use, ranging from, for example, a purely internal and analytical exercise for the identification and evaluation of proposed or alternative PPPs, to a process involving external consultation at defined stages in the review of a PPP, to a more open, participative and deliberative exercise through which a corporation seeks to involve stakeholders in early and fundamental stages of PPP formulation. Although public and stakeholder participation is considered to be an integral part of SEA (Runhaar and Driessen 2007; Gauthier et al 2011; Rega and Baldizzone 2015), a decision to voluntarily open up a corporation's strategic planning process to a degree of outside input and scrutiny would clearly be a significant one, both for reasons of commercial confidentiality as well as other issues and risks that may be associated with doing so. While reports from SEA practice suggest that relatively late, low level and selective public engagement is somewhat of the norm (Noble 2009; Bonifazi et al 2011; Gao et al 2013; Illsley et al 2014) as opposed to the early, inclusive and discursive engagement that is envisioned in some of the more theoretical perspectives on SEA consultation (Connelly and Richardson 2005; Stoeglehner 2010; Jiliberto 2011), there has been little research into practitioners' actual decision-making about the nature (type, level and stakeholder selection) and timing of such involvement, especially in a corporate setting. A key focus of this study is therefore on seeking to understand corporate perspectives and decisions around potentially engaging the public and relevant stakeholders in any such voluntary SEA use. This includes the various

factors that might drive a corporation towards or away from choosing to do so at such an early and likely sensitive stage of its business planning and decision-making, and the manner in which considerations related to the need, benefits, desired outcomes and risks of any such engagement are influential in such decisions.

This study has therefore been undertaken in order to investigate what factors would motivate or deter a corporation from taking such a proactive approach to understanding and potentially addressing environmental issues early in its strategic planning process through the adoption and use of an analytical (and potentially, consultative) tool such as SEA, as well as the manner in which these and other factors would then influence associated decisions and perspectives about the nature and timing of any such SEA use.

1.3 Research Purpose, Objectives and Questions

The purpose of this research is to investigate whether, why, when and how corporations may choose to voluntarily adopt and apply SEA as part of their strategic planning and decision-making processes, including the key factors and situations that influence such decisions. As summarized in the above sections and described in further detail in the two literature review chapters that follow, the subject of corporate SEA use and the various research objectives and questions outlined below represent important but as yet uninvestigated issues, for which there has been very limited previous discussion in the literature and almost no applicable previous research. They therefore provide a good setting for the contribution of new knowledge through the research reported herein, including an opportunity to develop a new conceptual understanding of corporate perspectives and decision-making about SEA and its use, and in doing so, to contribute to relevant theory about SEA and about corporate environmental proactivity in general.

In investigating this subject and addressing the research purpose identified above, the study has adopted a qualitative, inductive and largely exploratory approach. This is again due to the lack of previous research on this particular subject, as well as the overall inapplicability and inadequacy of existing knowledge, theory and past research to

understanding corporate decision-making about SEA, particularly given the various dimensions and unique characteristics of corporate SEA use as compared to other, more traditional areas of SEA application and other types of corporate environmental initiatives. It is also anticipated that SEA related decisions by a corporation may involve multiple, complex, situation-specific and potentially interacting issues and considerations, which may therefore be beyond the scope and explanatory power of any particular theory. It was therefore thought that the use of hypothetico-deductive and quantitative research approaches and techniques would have inappropriately restricted the scope of the investigation and prevented it from exploring all of the various factors, dimensions and the full richness and complexity of such decisions. As these types of issues and topics in the social sciences are often particularly well suited to exploratory investigations through qualitative research methods (Creswell 2013), the research methods have included a series of semi-structured interviews with representatives of electricity utilities in Canada who are responsible for or involved in strategic planning activities, in order to seek to understand their decision-making about the possible voluntarily adoption and application of SEA.

In addressing this overall purpose, the design and conduct of the study has been shaped and guided by the following research objectives:

- 1) To identify, review and assess the existing and available literature on SEA and corporate environmental governance and proactivity, including past research and previous applicable theory, to evaluate their applicability to the research topic and questions (see below) that are the focus of this study, identify the particular gaps or issues in theory and knowledge that the study is intended to address, and to provide a guide and framework for the analysis;
- 2) Through interviews with corporate representatives, to gather and analyse empirical information on their perspectives and decisions about the potential adoption and application of SEA approaches in their corporations' strategic planning processes, including the main considerations in and determinants of these views and associated decisions;

- 3) To develop and present a new conceptual understanding of corporate decision-making about SEA use based on the findings of this exploratory study. This will take the form of a structured and empirically derived conceptual framework that describes the occurrence, influence and interrelationships of the various factors that influence corporate SEA use decisions, including the manner and order in which they are recognized and considered in such decisions; and
- 4) To evaluate the study's findings against current theoretical perspectives about the overall purpose, function and outcomes of SEA and corporate environmental proclivity in general, to re-evaluate their relevance and relationship to decision-making about the voluntary adoption and use of SEA in a corporate context, and especially, the implications of the results of this research for the further development and advancement of theory.

In addressing the overall research purpose and specific objectives outlined above, the study and its associated data collection, analysis and interpretation have focused on addressing the following research questions:

- 1) Would corporations decide to voluntarily adopt and implement an SEA approach?
- 2) What are the main considerations in, and determinants (motivations / deterrents) of, corporate decisions around whether or not to voluntarily adopt SEA, and how and to what degree do these factors influence such decisions?
- 3) Are the various determinants of corporate decisions around SEA use derived from or influenced by particular contextual elements (including internal and/or external factors)?
- 4) If a corporation were to decide to voluntarily adopt SEA, what factors then influence its decisions about the SEA approach to be used (including the stage of

planning to which it is applied, and the analytical and/or consultative methods to be used)?

The scientific importance and relevance of this research stems from the fact that there has again been no investigation of this subject to date. An analysis of corporate decision-making around SEA use will provide an opportunity to investigate, observe and evaluate SEA in a new context and from a somewhat unique perspective, namely decision-making about its potential use in a voluntary capacity in general, and in a corporate setting in particular. In doing so, the study will contribute to the further advancement of SEA theory and the associated discourse.

The study will also have implications and potential benefits for SEA practice. In order for SEA to inform and improve strategic planning and decision-making, it will have to be subject to increased application, including in situations where there is an absence of formal and legislative requirements to do so. This requires that SEA be recognized by corporations and other organizations as a valuable, effective and efficient tool for aiding and improving their planning. The benefits of SEA in general need to be more clearly demonstrated, communicated and understood (Marshall and Fischer 2005; Jay 2007; Noble 2009; Roura and Hemmings 2011; Wang et al 2012; McGimpsey and Morgan 2013), and this is particularly the case in non-compulsory contexts where its value must be further demonstrated (Margato and Sanchez 2014). If SEA approaches are to be voluntarily adopted and applied by organizations, it will therefore be important to understand the key motivations, possible deterrents and other factors which influence whether, why and how they may use it, so that the future development of SEA systems and methods can seek to incorporate and address such issues.

1.4 Structure of the Thesis

This thesis is organized and presented as follows:

Chapter 1 (this Introduction) provides an initial overview of SEA, including its purpose, application, potential outcomes and a number of key areas of on-going discussion and

inquiry, as well as its potential use in corporate strategic planning. It goes on to introduce, describe and justify the research reported herein, including the study's rationale, purpose and objectives, the research questions being investigated, the overall approach used, and the planned outcomes and implications of the study.

Chapter 2 (Literature Review – Strategic Environmental Assessment) provides a review and analysis of the existing and applicable literature on the theory and practice of SEA. This includes an overview of SEA's origins, purpose and rationale, current and evolving theoretical perspectives related to its objectives, application and its demonstrated and potential outcomes, as well as their relationship to current practice as reflected in past research. It then provides an overview of previous discussions in the SEA literature about its observed and potential use in a voluntary capacity and by corporations. The objective of this literature review is to investigate and evaluate the relevance and implications of existing and developing SEA theory and previous research for the topic and questions that are the focus of this study, and in doing so, to place and conceptualize the research within the overall context of same.

Chapter 3 (Literature Review – Corporate Environmental Governance and Proactivity) provides a review and analysis of available and applicable literature related to corporate environmental governance, with a particular focus on the proactive adoption and implementation of environmental protection initiatives by corporations. This includes identifying and reviewing existing theory and previous research related to the motivations, deterrents, enablers, impediments and potential outcomes of corporate environmental proactivity, in order to investigate and evaluate their relevance to, and implications for, the research topic, objectives and questions that are the focus of this study.

Each of the two Literature Review chapters referenced above are intended to further identify and highlight the particular gaps in knowledge that this study addresses, and to provide an overall conceptual framework for the research, guiding the associated data collection and analysis and the eventual interpretation and presentation of the study's findings.

Chapter 4 (Approach and Methods) describes the research approach and methods that have been adopted and utilized in planning and undertaking this study. This includes an initial reiteration of the study's purpose, followed by a description of the overall approach used, including its qualitative, inductive and exploratory nature and the rationale for this in view of its key characteristics, underlying purpose and objectives and intended outcomes. The chapter then identifies and describes the industrial sector and jurisdictions upon which the research and its associated data collection have focused and provides some background information on this industry and the various corporations involved. This is followed by a description of the data collection methods used, including the selection and size of the research sample, and the design, conduct, recording and reporting of the interviews themselves. The chapter concludes with a discussion of the approach and techniques used for data analysis and interpretation.

Chapter 5 (Results) presents the key results of this research, as obtained through the previously described processes of data collection, analysis and interpretation. These are outlined and summarized in the sections that follow, which are organized according to the research questions and associated themes upon which the study has focused as well as presenting other insights into corporate decisions about SEA use that were otherwise evident from the data.

Chapter 6 (Discussion) presents and discusses the main findings and key outcomes of this study. It initially describes its overall findings regarding the various considerations in and determinants of corporate decisions about SEA use, including the manner in which these are present and influential in general and in particular contexts. In doing so the discussion also evaluates these research results alongside relevant aspects of the previously reviewed literature on SEA (Chapter 2) and corporate environmental proactivity (Chapter 3), in order to identify and highlight the associated contributions of new knowledge that are being made through this exploratory study. This includes a particular emphasis on considering the research outcomes against current theoretical perspectives about the overall purpose, function and outcomes of SEA (as outlined in Chapter 2), to evaluate their relevance and relationship to decision-making about the

voluntary adoption and use of SEA in a corporate context, and especially, the implications of this research for the further development and advancement of theory.

Chapter 7 (Conclusion) presents the conclusion of this thesis, including a short reiteration of the study topic and the research rationale and approach, as well as a brief overview of some of its main findings and outcomes which are presented in the context of the research objectives that the study was intended to address. It also includes a discussion of the study's limitations and a number of associated recommendations for further research.

Chapter 8 (References) provides a bibliography of all of the literature and other information sources that have been cited in this thesis.

Supporting (interview and focus group) materials are provided in a number of *appendices*.

2 STRATEGIC ENVIRONMENTAL ASSESSMENT

This chapter provides a review and analysis of the existing and applicable literature on the theory and practice of SEA. This includes an overview of SEA's origins, purpose and rationale, current and evolving theoretical perspectives related to its objectives, application and its demonstrated and potential outcomes, as well as their relationship to current practice as reflected in past research. It then provides an overview of previous discussions in the SEA literature about its observed and potential use in a voluntary capacity and by corporations.

The objective of this literature review is to investigate and evaluate the relevance and implications of existing and developing SEA theory and previous research for the topic and questions that are the focus of this study, and in doing so, to place and conceptualise the research within the overall context of same. It therefore forms part of an overall conceptual framework for the research, which has served to identify and highlight the key issues and gaps in knowledge that this study focuses upon and addresses, and which has thus informed and guided the associated data collection and analysis (Chapter 4) and the interpretation and presentation of the study's findings (Chapters 5 and 6).

2.1 SEA Origins, Purpose and Rationale

As defined in Section 1.1, SEA is a systematic process for assessing and evaluating the potential environmental effects of proposed strategic initiatives (PPPs) and their alternatives, in order to identify and consider these in associated strategic planning and decision-making (Therivel et al 1992; Noble 2000). SEA represents a key aspect of current EA theory and practice, and this "upstreaming" of EA (Jay 2010: 3490) reflects an evolution and progressive expansion of its purpose and scope to more comprehensively and proactively assess, evaluate and manage environmental issues as an early and integrated part of development planning and decision-making.

It has been noted that although the United States *National Environmental Policy Act* (NEPA) and other early EA legislation referred both to projects as well as larger strategic initiatives (including PPPs) (Partidario 2000; Bina 2007; Joao and Mclauchlan 2011; Mclauchlan and Joao 2011; Tetlow and Hanusch 2012), the EA process has traditionally and primarily focussed upon the environmental review of, and decision-making about, individual proposed projects and activities (Morgan 2012). While project-level EA has, in that capacity, become an important and prevalent tool for predicting and mitigating the likely environmental effects of individual development proposals, it has long been recognized and often criticized as being somewhat reactive and narrow in focus and scope, as well as poorly integrated into overall planning and decision-making systems (Stinchcombe and Gibson 2001; Alshuwaikhat 2005; Kirchoff et al 2011). SEA involves the assessment and consideration of environmental issues at the earlier, strategic (pre-project) stages of development planning, and was originally envisaged as a means of overcoming the problems often associated with attempting to address environmental effects through late stage, project-level assessments alone.

The rationale for and use of SEA procedures has been based on the premise that planning often take the form of a tiered process, which is comprised of initiatives and decisions at increasing levels of definition and specificity. This may initially involve the formulation of a policy (the general and overall inspiration and guidance for action), followed by a plan (a set of coordinated and timed objectives for implementing the policy), and then a program (a development scheme in a particular area) (Wood and Dejeddour 1992), and ultimately, the identification, proposal and implementation of specific projects. Although it has been widely recognized that strategic planning processes rarely exhibit such an orderly, hierarchical and idealized structure (Arts et al 2005, 2011; Dalal-Clayton and Sadler 2005; Bina 2007), the underlying concept is that development projects and their EAs are typically preceded by one or more larger strategic decisions which direct and influence them. By the time that specific development projects have been defined, proposed and are being assessed, fundamental and often irrevocable strategic decisions will therefore usually have been made, and alternative directions and courses of action will have therefore been foreclosed (Wood and Dejeddour 1992; Vicente and Partidario 2006). It is often difficult

or impossible to revisit and revise these larger PPP decisions later in the process, and by the time a proposed development project is subject to EA, decision options are essentially limited to whether or not to allow that individual action to proceed, and if so, the identification of mitigation to reduce its environmental effects. This relatively narrow and late stage focus on individual developments, proponents and project-specific decisions can also limit the ability of project EAs to address larger scale environmental issues (Nooteboom 2000), including the overall, cumulative effects that result from the various (and often by that time, largely independent) activities that comprise or result from the strategic initiative (Piper 2002), which typically requires an earlier, broader (Bonnell and Storey 2000) and more strategic (Cooper and Sheate 2004) approach. The late timing and narrow scope of project-specific EA can therefore limit its ability to proactively and effectively deal with important environmental issues, which are often best addressed by identifying and managing them early rather than attempting to react to them in the context of individual project-level decisions.

As a process for informing and influencing strategic planning and decision-making, SEA involves the proactive and systematic review of proposed and alternative strategic initiatives on the basis of environmental (and possibly other) considerations. This is intended to allow for the identification and consideration of such issues at the early stages of planning, with a view to selecting and implementing a PPP that meets planning objectives and requirements while at the same time avoiding or reducing adverse environmental effects (Noble 2000). The resulting PPP then sets the stage for and directs subsequent decisions and actions, including eventual development projects or other activities. The underlying purpose of SEA is therefore to inform and improve strategic decisions, but in doing so to help guide subsequent decisions and actions towards more environmentally preferable solutions, based on the idea that environmentally sound PPPs help to ensure the environmental acceptability of the individual projects and activities that are eventually proposed and implemented in accordance with them. In theory, SEA at one level of the planning process therefore helps sustainability to “trickle down” to later decisions and actions (Partidario 2000; Noble and Storey 2001; White and Noble 2013a), including down to the project level where environmental effects actually occur. An important function of SEA is therefore

to inform, influence and improve strategic and downstream decisions and actions, with SEA / PPP outcomes contributing to the eventual identification and implementation of specific projects and activities, as well as providing information and focus to later project EAs (Lee and Walsh 1992; Wood and Dejeddour 1992; Nooteboom 2000; Stinchcombe and Gibson 2001; Dalal-Clayton and Sadler 2005).

2.2 SEA Objectives, Approaches and Outcomes

During and since its initial formulation phase in the 1990s, SEA has evolved from a process that initially saw little interest or evidence of its use, to initial discussions and early writings about its potential application and benefits, to increasing evidence of its adoption and application in jurisdictions and by organizations in various parts of the world (Dalal-Clayton and Sadler 2005). The establishment and implementation of SEA systems has continued to expand globally (Fischer and Seaton 2002), as has the nature and scope of its application and practice. Recent years have also seen considerable growth and evolution in the theoretical basis for SEA, including current views on, and continuing debates around, some of its most fundamental elements, including its key components, approaches and potential (and desired) outcomes (Wallington et al 2007; Bina et al 2011; Jiliberto 2011; Lobos and Partidario 2014).

A large number and variety of SEA definitions have been presented in the literature (Jiliberto 2011), several representative and illustrative examples of which are provided below (all as cited in da Silva et al 2014). These sample definitions were selected and presented as they reflect the fundamental nature, purpose and outcomes of SEA, as well as highlighting key aspects of current and developing SEA theory. This includes the continued evolution of SEA from being viewed as a purely or primarily analytical tool and assessment exercise, to one that is more fully integrated into the early stages of strategic planning and PPP formulation and which emphasizes earlier and deeper public and stakeholder involvement in associated decision-making:

“SEA can be defined as the formalized, systematic and comprehensive process of evaluating the environmental impacts of a policy, plan or programme and its

alternatives, including the preparation of a written report on the findings of that evaluation, and using the findings in publicly accountable decision-making” (Therivel et al 1992: 19-20).

“SEA is a systematic, decision aiding procedure for evaluating the likely significant environmental effects of options throughout the policy, plan or programme development process, beginning at the earliest opportunity, including a written report and the involvement of the public throughout the process” (Sheate et al 2001: 7).

“SEA is a structured, proactive process to strengthen the role of environmental issues in strategic decision making” (Verheem and Tonk 2000: 177).

“SEA is the proactive assessment of alternatives to proposed or existing PPPs, in the context of a broader vision, set of goals, or objectives to assess the likely outcomes of various means to select the best alternative(s) to reach desired ends” (Noble 2000: 215).

“SEA is a systematic, procedural and participative decision making support instrument that aims at ensuring environmental aspects are given due consideration in policy, plan and programme...making” (Fischer 2005: 407).

SEA is a “systematic, public, participatory and democratic environmental policy instrument, which aims to promote sustainable development through the incorporation of the environmental variable in the strategic planning process of public policy” (Silva 2011: 8).

SEA “is a systematic, participatory decision-making support process undertaken to ensure that key factors relating to the environment and sustainability are taken into account in the development of policies, plans, and programmes” (Posas 2011: 110).

The following sections provide an overview of current SEA theory and practice as reflected in the existing and available literature, including the on-going discourse around its purpose, methods and potential outcomes. This is provided both as general background for the study, as well as to help place the research with this larger context of existing theory and practice. In particular, the literature review that follows evaluates and describes the applicability of these overall SEA concepts and issues for the research topic, objectives and questions, including the associated gaps in theory and knowledge that the research addresses, as well as highlighting the study's planned contribution to same.

2.2.1 SEA's Multiple and Evolving Rationales and Rationalities

Perhaps due to its original rationale and objective of addressing the recognized shortcomings of project-specific assessments, it has been observed that much SEA practice to date has reflected the extension and application of project EA principles and methods to PPPs (Wood and Dejeddour 1992; Brown and Therivel 2000; Fisher 2002; Jiliberto 2002; Arts et al 2005; Lobos and Partidario 2014), with many existing and developing SEA systems continuing to reflect such an "assessment" approach (Noble 2009). Indeed, much of the initial SEA literature and its early practice are strongly rooted in the concepts of project level EA, including the adoption and application of similar predictive tools and mitigative approaches to strategic initiatives, and where SEA is viewed primarily as an analytical exercise for providing environmental information into particular stages of existing development planning processes.

In that regard, it has often been stated that EA (and SEA) origins and approaches are deeply rooted in rational planning theory (Fischer 2003) and based largely on a positivist and technical-rational model of planning and decision-making (Kornov and Thissen 2000; Nitz and Brown 2001; Nilsson and Dalkmann 2001; Connelly and Richardson 2005; Wallington et al 2007; Elling 2009; Weston 2010; Meuleman 2015). This model considers these to be logical and structured processes extending from problem setting and the identification of objectives, to the evaluation of alternatives, to the eventual selection and implementation of a planning solution from amongst these options (Runhaar and

Driessen 2007; Elling 2009). Rational decision-makers are assumed to be knowledgeable and to act purposively and intentionally to seek optimal solutions in pursuit of their goals, with EA and other decision-aiding tools contributing technical information and expert knowledge to inform such processes (Sheate et al 2003; Connelly and Richardson 2005). Decisions are therefore assumed to be made systematically and objectively from amongst all possible options by weighing likely costs and benefits, in order to select that which represents the most effective and efficient means of achieving one's objectives, with an associated emphasis on scientific information and with objective experts being the key sources of knowledge (Weston 2010).

Recognition that true rationality is a normative concept that may be constrained by various issues such as the availability and accuracy of information, time and resource constraints, cognitive issues, the presence of values, perceptions and biases and other factors has resulted in continued criticism of these assumptions of rationality in EA (Runhaar and Driessen 2007; Morgan 2012) as well as the development of other decision theories and models to incorporate and account for these influences (Kornov and Thissen 2000; Nilsson and Dalkmann 2001; Nitz and Brown 2001; Owens et al 2004; Weston 2010). These include models that include both descriptive and normative elements (Nitz and Brown 2001), including those that emphasize the high levels of uncertainty and complexity involved in decision-making, the often incremental nature of planning decisions, and the degree to which these processes are driven by external and often dynamic factors and influences (Nilsson and Dalkmann 2001). Still other theories and models lie somewhere in between these two extremes, and assume a restricted substantive rationality in planning and decision-making (Jiliberto 2002).

The concept of a "bounded rationality" (Simon 1957, cited in Nilsson and Dalkmann 2001), for example, suggests that rational decision-making takes place within the limited capacity of decision-makers to be entirely knowledgeable and objective. True rationality may thus be constrained by the availability and accuracy of information, the presence of values, perceptions and biases and other behavioural and cognitive issues, as well as other influences such as limited time and resources and external pressures and institutional norms, which often results in one seeking or accepting a satisfactory or

comprise decision, rather than an optimal solution. In such cases, what legitimizes a decision as rational is not necessarily the resulting decision outcome or its optimal nature, but often the process through which the decision is reached (Jiliberto 2002), with an associated emphasis on achieving “procedural rationality” by ensuring that the decision is the outcome of appropriate reflection and deliberation (Simon 1996, cited in Jiliberto 2002). A number of authors (Kornov and Thissen 2000; Nilsson and Dalkmann 2001; Fischer 2003) suggest that SEA is inherently characterized by a bounded rationality, for which the trend towards increasing participation and deliberation in EA and planning processes (Section 2.2.5) has been seen to be geared towards the achievement of procedural rationality (Jiliberto 2002). Still other rationality concepts relate to the nature, timing and “depth” of the planning process and its outcomes and influence. An instrumental rationality for example, is based on seeking a means of achieving a defined goal but does not entail critical reflection on the appropriateness or value of the goal itself (Fischer 2003). In the case of SEA this would involve, for example, evaluating proposed PPPs against pre-determined and often externally defined criteria and planning objectives (Jackson and Illsley 2007), as opposed to applying SEA at the early and formative stages of planning and allowing it the opportunity to contribute to the setting of strategic planning goals.

As described in the sections that follow, each of these issues and potential planning approaches and decision-making models relate to important aspects of SEA theory and the associated, on-going discourse around its objectives, methods and outcomes. These include issues and considerations related to the traditionally analytical and assessment-like focus of SEA and its associated contributions to decision-making, an increased interest in the “strategic” dimension of SEA and its perceived role and influence at the earliest stages of PPP formulation, and an increased emphasis on the procedural aspects of SEA including the nature and quality of its associated analytical and consultative components and their overall effectiveness in informing and influencing strategic and downstream decision-making. Another important aspect of the on-going theoretical development of SEA and the associated discourse also relates to expanding views and expectations regarding its consultative components, and particularly, SEA’s role as a participative and deliberative processes aimed at identifying and reconciling issues

through discussion, learning and compromise amongst its participants (Bina et al 2011). A key element of this evolution has been the incorporation of planning theory, other participatory decision-making models, social learning theory and other paradigms and perspectives into the conceptualization, development and implementation of EA and SEA (Kornov and Thissen 2000; Lawrence 2000; Partidario 2000; Nitz and Brown 2001; Richardson 2005; Cherp et al 2007; Weston 2010; Lobos and Partidario 2014). There is therefore an increased focus on post-modern, post-positivist approaches that recognize the existence and relevance of various perspectives, values and types of knowledge in SEA, and which seek to incorporate and address environmental, social, economic, cultural and political issues and influences (Tetlow and Hanush 2012).

Although the discourse around SEA's purpose, function and outcomes have tended to view the technical-rational and deliberative rationales for SEA as being separate, incompatible and somewhat conflicting (Bina et al 2011), the distinction between them appears increasingly artificial (Sheate 2011), and it is considered rare for anyone to advocate and adhere to the technical-rational model in its pure form (Owens et al 2004). Indeed, there is an increasing recognition that multiple rationales and rationalities are therefore usually relevant and at play (Richardson 2005; Cashmore et al 2010), and there have been calls for greater integration and synthesis of these two paradigms (Connelly and Richardson 2005; Stoeglehner 2010; Bina et al 2011; Gao et al 2013). The following sections provide a more detailed overview and analysis of these various issues and perspectives related to SEA's objectives, approaches (timing and methods) and potential outcomes, with a particular focus on evaluating their relevance and relationship to the potential use of SEA by corporations and the various objectives of this study.

2.2.2 Analytical SEA: Components, Methods and Outputs

Notwithstanding continued criticisms of the technical-rational model and widespread recognition of its inapplicability to many decision-making processes, SEA theory and practice have (whether intentionally or intuitively), traditionally reflected a continuation of the modernist, rational planning traditions (Owens et al 2004), dominated by

positivism and focussed upon an analysis (prediction) of the potential environmental effects of proposed PPPs as an informational input to some stage of existing strategic planning exercises (Jiliberto 2011; Tetlow and Hanusch 2012). Many SEA approaches and applications have therefore been based on the continued presumption that the development and contribution of technical information and objective evidence on the likely environmental consequences of proposed PPPs will have a positive influence on planning decisions (Bina 2008; Tetlow and Hanusch 2012). As a result, there has been an overall focus on the substantive rationale for SEA, including its information outputs and their direct effect on the final PPP decision (Jiliberto 2011).

Analytical approaches and methodologies for SEA have been identified and reviewed by several authors (Finnveden et al 2003; Therivel and Wood 2005; Noble et al 2012). It has been noted that SEA techniques are still focussed mainly upon the more traditional predictive and deterministic methods (Lobos and Partidario 2014), although the analytical content and quality of SEAs have been the subject of recent criticism (Geneletti 2015). Whereas some authors (Noble et al 2012; Geneletti 2015), have noted a predominance of qualitative methods and suggest that quantitative techniques are necessary but currently underutilized and under-promoted in SEA, others have indicated that SEA techniques have been evolving from the primarily qualitative to semi-quantitative to being increasingly quantitative in nature (Du et al 2012). This includes the documented use of quantitative analytical tools such as cost-benefit analysis (CBA), life-cycle assessment (LCA), geographic information systems (GIS), scenario modelling and others (Gonzalez et al 2011; Bjorklund 2012; Rozas-Vasquez et al 2014), although some cautioned against the exclusive or primary use of such techniques as they may lead to “fictitious precision” given the fuzzy nature of PPPs and issues at the strategic level (Sommer 2005, cited in White and Noble 2012) as well as not allowing for the analysis and consideration of “softer” and at times more complex environmental components and issues that may not be readily quantified. It has therefore been suggested that a plurality of methods, including the use and possible combination of qualitative and quantitative techniques, may therefore be required in SEA (Zhu et al 2011). Although there have also been debates about the appropriate degrees of structure vs. flexibility in SEA approaches (Partidario 2000; Noble and Storey 2001; Gunn

and Noble 2009), it also appears to be generally acknowledged that SEA methods need to be appropriate to the situation and fit for purpose (Kornov and Thissen 2000; Partidario 2000; Verheem and Tonk 2000; Noble et al 2012), including the objectives of the assessment, the types of environmental issues of interest, its technical or participative nature, and the intended use of the resulting information in planning and decision-making.

As described in later sections, there is a growing criticism of the predominantly analytical and assessment like focus and methods that have characterized SEA to date, with calls for it to be applied in an earlier, more integrated and participative manner as part of planning and decision-making processes. These issues and perspectives notwithstanding, the point remains that the analytical component of SEA has been and will likely continue to be a key aspect of its application (Montanez-Cartaxo 2014; Geneletti 2015). Indeed, whether as a sole, primary or supporting element, the identification and analysis of potential environmental issues and the contribution of information on these is clearly a fundamental and essential part of considering and attempting to address such issues in strategic planning through SEA.

The current literature reflects far greater expectations of SEA, however, including with regard to its purpose, objectives, approaches and potential outcomes, and consequently, the required nature and scope of its application. It has been suggested that the predominance of rationality paradigms and the resulting focus on the transfer of environmental information from experts to decision-makers not only does not reflect the realities of most planning processes, but has also resulted in EA being somewhat isolated from larger planning and management exercises, and thus, from interacting with and influencing overall matters of environmental governance (Meuleman 2015). As part of the significant evolution in SEA concepts and theory that have occurred in recent years, the associated discourse has experienced a profound shift from the rationalist thinking and technocratic approaches that characterized its initial conceptualization and practice towards more strategic, integrated and participative foundations and approaches (Lobos and Partidario 2014).

2.2.3 Strategic SEA: Its Place and Role in Planning

Although in many ways SEA practice has been “strategic” only in the sense that that it has involved the application of analytical EA methods to strategic initiatives (PPPs) rather than individual project proposals, there is an increasingly recognized difference between “EA-based SEA” and “strategic SEA” (Fischer 2003, 2010a; Therivel 2010; Bidstrup and Hansen 2014; Partidario 2015). Indeed, and notwithstanding the nature and focus of its early conceptualization and initial practice, SEA is no longer viewed solely as an analytical tool for assessing the results of planning, or as a late stage “environmental check” prior to a final PPP decision. Rather, it has moved past this largely instrumental function to being increasingly being viewed as a process that is (or should be) much more akin to, and integrated with, strategic planning itself (Elling 2000).

This has resulted in a much expanded interpretation of the “strategic” dimension of SEA (Noble 2000; Nilsson and Dalkmann 2001; Bina 2007), where it is intended to contribute to the development and implementation of strategic initiatives (Tetlow and Hanush 2012) including the early formulation and shaping of PPPs (Brown and Therivel 2000; Bina 2007). This involves influencing key aspects of planning at critical moments throughout the process, such as in the setting of strategic planning objectives (Stoeglehner 2010) and the identification and evaluation of alternative PPPs that are in keeping with these goals (Brown and Therivel 2000; Nitz and Brown 2001; Noble and Storey 2001; Du et al 2012; Bidstrup and Hansen 2014; Geneletti 2014; Gonzalez et al 2015), as well as the eventual PPP decisions and their implementation (Partidario and Arts 2005).

2.2.3.1 Strategic Planning Objectives and PPP Alternatives

This expanding view of SEA as less of a purely analytical exercise for PPP review but rather as one that is more integral to planning itself is clearly reflected in current perspectives about where, when and how it must engage with strategic planning and decision-making exercises. The timing of, and associated “point of entry” for, SEA is

therefore an important consideration here, and a key factor in determining its eventual influence and overall effectiveness (Runhaar and Driessen 2007; Partidario and Coutinho 2011; Van Doren et al 2013). SEA is increasingly being seen as a means of identifying and evaluating the particular goals to be accomplished through the strategic initiative in question, as well as the eventual evaluation of various options and PPP alternatives through which these objectives might be met (Arce and Gullon 2000; Noble 2000; Stoeglehner et al 2009; Stoeglehner 2010).

As described previously, an important rationale for and possible benefit of SEA is that there are typically a much broader range of options available at these early stages of planning (Noble 2000; Du et al 2012), with an associated recognition that different types of alternatives are usually available at different tiers of the planning process (Desmond 2007, 2009). In reviewing the planning literature, Stoeglehner (2010) distinguishes various types and levels of alternatives that are relevant to strategic and downstream planning and EA, ranging from alternative visions and objectives for a strategic initiative, to PPP options and associated technological choices, to locational alternatives for the eventual activities that are directed by the PPP, to the design of individual and specific projects. He goes on to note that these various alternative types are characterized by decreasing levels of “strategicness”, with the earlier stages and decisions being particularly relevant to determining eventual environmental outcomes (Stoeglehner 2010). Noble (2000) states that the strategic consideration of alternatives in SEA requires the identification and evaluation of *alternative options* (PPP alternatives for meeting planning objectives), as opposed to *option alternatives* for the eventual implementation of a selected PPP (such as alternative sites or routes), and it has been stated that without a proper evaluation of PPP alternatives at the highest levels of planning, options and associated planning outcomes at lower levels will continue to be constrained, even with SEA (Eales and Sheate 2011). The early stage identification, analysis, evaluation and comparison of PPP alternatives from amongst broad, diverse potential courses of action – as opposed to merely assessing the effects of a proposed PPP that has been selected through other means - is therefore considered to be an essential element of any SEA process and an important determinant of its eventual influence (Noble 2000; Desmond 2007, 2009; Geneletti 2014). Normative models of SEA

processes and methods also reference its role in initially “choosing between alternatives” but also then in fine-tuning the chosen PPP option based on environmental considerations (Joao 2005a, 2005b; Therivel 2010; Gonzalez et al 2015).

Further deviation from the traditional EA and planning paradigms is reflected in the increased recognition that planning and decision-making are typically not orderly, structured activities presided over by a central authority, and the progressive replacement of such assumptions with the acknowledgement that PPP making and implementation is an inherently complex, dynamic, fragmented, socio-political and interactive process (Nilsson et al 2009; Lobos and Partidario 2014) which SEA must fit within and adapt (often flexibly) to (Jay 2007). There may not, for example, be well-defined and hierarchical planning and decision processes and stages involved, nor specific activities, authorities, responsibilities and tangible PPP decision points that can be subject to SEA review (Bina 2007; Wallington et al 2007). Planning responsibilities may also be fragmented and divided across various authorities and jurisdictions (Wallgren et al 2011) with no single, clear or centralized decision-making authority. The development and implementation of strategic initiatives is thus, in reality, often a much more informal, ad hoc and somewhat erratic process, where PPPs may be emergent rather than deliberate (Cherp et al 2007), involve multiple, inter-related decisions (Weston 2010) or be incrementally achieved (Lobos and Partidario 2014), as well as involve multiple actors and complex and dynamic interests, perspectives and relationships (Kornov and Thissen 2000; Nitz and Brown 2001; Hilden et al 2004, Retief et al 2013).

Therefore, while the previous assumption of structured, linear and rational planning and decision-making has been widely recognized as naive and problematic in the design and use of SEA, it is often the very lack of same that makes SEA particularly difficult, and which may create challenges for its fit within and application to such processes. Ensuring its early, appropriate and effective use therefore often requires that SEA processes and methods be appropriate to the situation and applied flexibly with full consideration of these characteristics and challenges (Hilden et al 2004; Cherp et al 2007; Hilding-Rydevik and Bjarnadottir 2007; Fidler and Noble 2012). It has also been noted that the typical

focus of SEA application on specific PPP decision points and precise windows within the planning process at which it can add value (Tetlow and Hanush 2012; Partidario 2015) needs to be balanced with a larger and longer-term perspective on the various ways and times in which SEA may interact with, and have possible direct and indirect effects on, strategic planning (Dalkmann et al 2004; Lyhne 2012). Lyhne (2011), for example, argues that there is a need for greater recognition of the overlap and interaction between policy-making and other, subsequent levels of planning, rather the typical approach of viewing these as separate and distinct stages as is prevalent in SEA legislation, guidance and practice.

2.2.3.2 Strategic SEA in Practice

Despite this advancing and widely discussed theoretical dimension of SEA and its ideal role and place in strategic planning, it has been observed and reported that in many cases these truly strategic elements of SEA are largely lacking in practice (Noble 2000, 2004a; Hansen and Kornov 2010; Stoeglehner 2010). Although admittedly being applied at earlier stages of planning than would otherwise be the case through project-level assessments alone, SEAs are still considered to be largely reactive and isolated exercises as opposed to being truly strategic and well integrated into planning (Tetlow and Hanush 2012; Bidstrup and Hansen 2014). The strategic planning process may instead be driven and constrained by other, influential policies or political directives, or even by project specific imperatives (Eales and Sheate 2011), and may at times be used to rationalize and legitimize decisions that have already been made on other grounds (Owens et al 2004; Elling 2009).

In terms of the early use of SEA in identifying and evaluating PPP options, for example, in reviewing a set of 40 European SEA Reports, Gonzalez et al (2015) reported various practical issues in the identification and consideration of alternatives. These included an overall late stage and unsystematic analysis, the relatively narrow scope and unrealistic nature of alternatives being considered, limited stakeholder and public involvement in alternatives identification, assessment and selection, and inadequate reporting of how alternatives were selected, assessed and how this contributed to decision-making. In

another recent analysis, Lobos and Partidario (2014) similarly found that the majority of the 100 SEAs they reviewed focussed upon a single, proposed PPP and did not address or describe any larger strategic objectives, options or associated dialogues. They therefore highlighted a typically late stage use of SEA in planning, with SEAs and strategic planning processes typically running in parallel with limited interactivity. Numerous other, recent reviews in various jurisdictions and industrial sectors have likewise reported a lack of alternatives identification and consideration in SEA documents (Kis Madrid et al 2011; McCluskey and Joao 2011; Du et al 2012; Fidler and Noble 2012; Geißler 2013; Malvestio and Montano 2013; White and Noble 2013b; Bidstrup and Hansen 2014; De Montis 2014; Mota et al 2014; Silva et al 2014), and that how and why any considered alternatives were selected was not made clear (Phylip-Jones and Fischer 2015). Even where PPP options are identified and considered, the SEA literature has noted the tendency for this focus on “bland” (Joao 2005b) and uninspired alternatives and an associated need to move beyond the typical “either-or” PPP options (e.g. nuclear vs. renewable energy) and to also include “mix-and-match” options (Therivel 2010) combining various potential strategic directions.

As a result of its relatively late stage application and its continued focus on assessing and managing the effects of proposed PPPs, SEA appears mostly to be contributing information and mitigation to strategic planning, and thus functions primarily as a review process (Montanez-Cartaxo 2014). In this way, it is often influencing PPP implementation rather than overall strategic planning directions and choices (Bonifazi et al 2011), although even then there is often limited information and analysis on the selection and implementation of such mitigation and its likely effectiveness (Eales and Sheate 2011). In other, extreme cases SEA exercises may actually occur after strategic planning and project EAs have been completed, in order to help fill information gaps for project licencing and permitting (Silva et al 2014).

It has been suggested that these characteristics of SEA in practice are a reflection of it continuing to be viewed and applied on the basis of project EA principles and methods (Dalal-Clayton and Sadler 2005; Tetlow and Hanush 2012; De Montis 2014), including the associated assumption of a technical-rational decision-making process (Cherp et al

2007; Bidstrup and Hansen 2014). SEA has continued to follow the standard EA stages of screening, scoping, effects analysis, mitigation, reporting, review and decision-making (Lobos and Partidario 2014), where the primary role and main contribution of SEAs continues to be the provision of environmental information and analysis for the review, rather than the development, of PPPs (Nilsson and Dalkmann 2001; Hansen 2011; Lobos and Partidario 2014). There may therefore be a degree of procedural and methodological inertia involved, where practitioners and planners are reluctant or unable to give up their EA centred focus and thinking inherited from years of project level practice or experience (Slunge and Tran 2014). There is also often an overall lack of knowledge and understanding amongst current and potential SEA users about what it is and what it can and should look like and achieve, as well as possible approaches and methods (Fischer and Seaton 2002; White and Noble 2013a). Whereas it has been said that SEA's true potential can and will only be realized when planners recognize its value and take ownership of the process (Stoeglehner et al 2009; Stoeglehner 2010; Lobos and Partidario 2014), in many cases practitioners and planners do not recognize or appreciate its value and possible benefits, and they may therefore view it rather narrowly in scope or as an additional and unnecessary layer of environmental process (Wallgren et al 2011; Noble et al 2013; Acharibasam and Noble 2014; Bidstrup and Hansen 2014). Procedural, methodological and capacity issues are therefore also relevant, including a lack of experience amongst, and guidance materials for, SEA practitioners and others coupled with insufficient time and resources to apply SEA in a full and effective manner (Acharibasam and Noble 2014), particularly with regard to the framing and consideration of alternatives (Desmond 2007) as well as the choice of methods used and the overall nature and depth of the exercise.

Institutional and other contextual issues can also prevent or limit the strategic nature of SEA in practice (Partidario and Coutinho 2011), even where planners and practitioners recognize the role and value of SEA and the benefits of early application (Bidstrup and Hansen 2014; Lobos and Partidario 2014). In reality, many PPPs have little or no strategic content or dimensions to them (Jay 2007; Wallgren et al 2011), or are inherently and inevitably vague and nebulous, particularly at the early stages of their formulation when SEA is considered most useful and relevant. There is therefore a relatively high degree

of complexity and uncertainty at the strategic stages of planning as compared to the more tangible and familiar project level (Jiliberto Herrera 2007; Sheate 2011; Zhu et al 2011), which inevitably complicate the early and orderly application of SEA to such processes (Bidstrup and Hansen 2014). SEA practitioners also therefore often gravitate towards and search out more concrete and “project like” issues and processes (Slunge and Tran 2014). Although SEA should ideally start at a stage where the planning process is concrete enough to allow for analysis and discussion but also where objectives and broad alternatives can still be identified and included (Therivel and Minas 2002), this often results in SEA occurring either too late or sometimes too early for meaningful analysis or real influence (Lyhne 2011). The dynamic nature of strategic planning and PPPs also often means that SEA information and outcomes can quickly become dated and obsolete (Arts et al 2005, 2011; Wallgren et al 2011). It has also been found that the limited consideration of alternatives in SEA is often influenced by the planning context, in which an organization’s planning latitude is low due to previous decisions and directions provided by other, separate authorities and planning processes (Geißler 2013). In some such cases it has been recognized that it may therefore be appropriate and acceptable for SEA to be less strategic, particularly with regard to the consideration of alternatives, and it is therefore necessary to consider context in applying SEA and evaluating its quality and effectiveness (Bidstrup and Hansen 2014).

The presence and nature of a legal basis or other statutory requirement for SEA in a particular jurisdiction, and the degree of specificity of same, is also influential in decisions and actions around whether, when and how SEA is applied. Although it has been argued that a firm legislative basis for SEA is required for its proper and effective use (Stoeglehner et al 2010; Kis Madrid et al 2011; Song et al 2011; Silva et al 2014; Slunge and Tran 2014), these regulatory instruments are seldom if ever detailed and prescriptive about required SEA approaches, times and methods, which means that practitioners usually have considerable discretion and flexibility in that regard. This, along with the various procedural, capacity and institutional constraints described above, often means that SEAs are planned and completed to meet the minimum legal requirements. They may thus be viewed primarily as a regulatory hurdle or

administrative burden, with the motivation continuing to be to produce SEA Reports to meet statutory obligations (Eales and Sheate 2011; Lobos and Partidario 2014).

The continuing late stage application of SEA to proposed (rather than alternative) PPPs may also reflect a deliberate attempt by planners and decision-makers to retain planning control (Dalal-Clayton and Sadler 2005; Beckwith 2012; Rega and Baldizzone 2015), and to allow a continued initial focus on technical, economic or others matters, with the consideration of environmental issues coming later after other issues and planning constraints have been addressed. There may therefore be organizational or political pressures to include or ignore certain PPP alternatives (Runhaar and Driessen 2007; Van Buuren and Nootboom 2009; Zhang et al 2013). On the other hand, a recent survey of SEA practitioners (Lobos and Partidario 2014) found that decision-makers seem to be more interested than other SEA participants in having a proactive and constructive process that included discussion around strategic options and scenarios and to use this to influence PPP formulation.

These and other (often conflicting) perspectives and findings have prompted some to suggest that the theory of SEA is considerably further advanced than its practice, and that these remain somewhat decoupled at present (Lobos and Partidario 2014). Although there have been somewhat variable findings in terms of the consideration of PPP alternatives in SEA (Gonzalez et al 2015) and a perceived tendency in the research and literature to identify and describe issues and shortcomings rather than positive outcomes (Tetlow and Hanusch 2012), it remains that many of the claims and expectations of SEA continue to go largely unchallenged (Scott 2011). This has caused some to reiterate that SEA must have a clearer sense of its purpose and objectives and associated theoretical grounding (Retief 2010), but also to establish and communicate valid and realistic expectations of what SEA can and should achieve (Wallgren et al 2011).

In the context of this study, it is interesting to consider how the voluntary use of SEA by corporations, without formal requirements or specific directives to do so, would relate to and influence when and how SEA is applied. On one hand, if there is no formal and

prescriptive requirement to use SEA or to carry out such an exercise in a specific (early, strategic) way, it may be that there is no real incentive to use it to its full purpose and potential, including its early and integrated application in PPP formulation and alternatives evaluation and selection. A decision to use SEA by a corporation outside of formal requirements to do so and in a business environment would, however, likely have its own particular motivations, and potentially, other unique dimensions and considerations (benefits, risks, and other factors) that then have associated implications for why, when and how it is to be applied in a particular situation. This research study therefore provides a unique and interesting context in which to explore the key drivers related to SEA adoption and use, including its potential application at the early and formative stages of PPP making, which have not been considered in previous research and which have not contributed to SEA theory thus far.

2.2.4 SEA Focus and its Potential Integration Role

Although EA processes and practice initially focussed primarily if not exclusively upon the potential effects of proposed development projects on the natural (biophysical) environment, this focus has gradually changed to an increased emphasis on considering both biophysical and socioeconomic issues and their interactions, and on the integration and management of these in associated decision-making (Noble 2015). Kornov and Thissen (2000) note that SEA itself may have a sole or primary focus on the natural environment and can play an advocacy role for its protection, or can have an integrative role where environmental, social and economic issues are considered and addressed in a balanced way. Although SEA has been generally recognized as an important tool for helping achieve and advance sustainable development (Connelly and Richardson 2005; Joao and Mclauchlan 2011; Partidario 2015), there have been important and on-going debates in the SEA literature around the fundamental question of whether it should focus solely on the natural environment and support its protection, or should simultaneously consider and attempt to address and integrate social, economic and environmental (biophysical) considerations and values in planning (Kornov and Thissen 2000; Morrison Saunders and Fisher 2006; Wallington et al, 2007; Nilsson 2009; Bina et al 2011; Tetlow and Hanusch 2012; Lamorgese and Geneletti 2013).

On the one hand, SEA has been advocated by some as a means of introducing an “ecological rationality” into planning processes and eventual decisions (Bina 2007), which often otherwise have a strong technical and economic rationale and focus (Weston 2010; Tajima and Fischer 2013). Indeed, in their recent review of 100 SEA cases conducted worldwide over the preceding six years, Lobos and Partidario (2014) found a strong degree of emphasis on the biophysical environment rather than sustainability as a whole. Others have suggested that EA processes should take a holistic and integrated view of the three pillars of sustainability (Gibson 2006), and a related approach, Sustainability Assessment (SA), has emerged in recent years, its focus being on the application of sustainability criteria in the assessment and evaluation of PPPs or projects (Pope et al 2004; Gibson 2006; Runhaar and Drissen 2007; Bond and Morrison-Saunders 2011; Bond et al 2012; Morgan 2012). Others have also argued that in addition to anticipating and mitigating the potential adverse effects of PPPs, SEAs should also give greater consideration to positive outcomes and means of confirming and enhancing these, and that these beneficial effects should be more clearly influencing planning and decision-making (Joao and Mclauchlan 2011; McCluskey and Joao 2011).

There have been associated concerns that this recent trend towards integration means that social and economic aspects will be considered to an equal or even greater degree than the natural environment in SEA and similar processes, resulting in environmental issues being marginalized and downgraded in decision-making, and with eventual trade-offs tending to favour socioeconomic benefits over environmental protection (Morrison Saunders and Fisher 2006; Nilsson 2009). Morrison Saunders and Fisher (2006) suggest that a number of factors may lead to this, including: the relatively specific and defined nature of socioeconomic considerations as compared to the often subjective and vague nature of environmental issues and objectives; the tendency for socioeconomic benefits to be overemphasised and potentially double counted as they are considered both as part of the project or PPP rationale and are then included in the effects assessment; a resulting lack of focus leading to the assessment being spread too thin and an associated inadequate and superficial analysis; and concerns that the trend towards more consultative and participative approaches to SEA may be having the effect of promoting a focus on socioeconomic issues in planning at the expense of the natural environment.

Many of those that advocate integration and a focus on sustainability have acknowledged these “well-grounded fears that integrated, sustainability-based assessments may facilitate...[a] neglect of traditionally under valued considerations, especially the protection of ecological systems and functions” and that “this problem needs to be addressed thoughtfully in judgements about how integration is to be done” (Gibson 2006: 259). Sheate et al (2003: 15-16) similarly state that:

[C]are is needed to ensure the environment is not diminished in decision-making as a consequence of taking a more ‘integrated’ approach...SEA and SA have different objectives and, it is suggested, should be conducted together or their processes integrated to ensure the environment does not lose its explicit recognition in decision-making. Tradeoffs should be transparent and carried out by the decision-making process, rather than by the tool being used.

As indicated in the above discussion, the focus of the associated “environment vs. sustainability” debates thus far has been primarily around whether and how SEA requirements process should play an advocacy role for the natural environment or an integrative one that focuses on and attempts to integrate and address environmental, social and economic considerations (Kornov and Thissen 2000). There has been no previous analysis of where the intended focus of SEA “naturally goes” in that regard, especially in particular situations and contexts such as its voluntary application in corporate strategic planning, as well as the key reasons and drivers for the resulting focus of SEA use. Although there is a perceived desire amongst some planners and SEA practitioners to retain and even increase its emphasis on technical and economic considerations for political or commercial reasons (Lobos and Partidario 2014), and while this could potentially be even further accentuated in a business context, it is not currently known whatever or how the particular rationales and motivations for voluntary SEA use by a corporation would translate into associated decisions about the particular focus of that use, especially in the absence of statutory requirements for SEA review and an associated lack of an eventual PPP approval stage by an outside regulatory body.

2.2.5 Participative SEA: Its Consultative and Deliberative Components and Outcomes

As the theoretical purpose and perceived function of SEA have penetrated earlier and deeper into strategic planning and decision-making processes, so too have its associated components and methods progressed from the purely or primarily analytical and expert-driven towards more consultative and participative approaches.

2.2.5.1 Public and Stakeholder Involvement in EA and SEA

Recognition of the importance and relevance of human perspectives and interests related to development activities and their potential effects, including that environmental concerns are often socially-derived and value-laden (Connelly and Richardson 2005; Beckwith 2012) has resulted in public and stakeholder involvement being an integral aspect of most EA systems. The insights and input derived from such consultations are an important aspect of any EA review, and are key elements of EA that set it apart from other purely technocratic tools such as risk assessment (Petts 2003). These initiatives may include the provision, sharing and use of information and knowledge related to the existing environment, perspectives on important environmental components and issues that require consideration, the need for and associated design of mitigation, and the eventual (and inherently subjective) evaluation of the significance and acceptability of predicted environmental effects (O'Faircheallaigh 2010). EA consultation initiatives therefore provide opportunities for interested and potentially affected individuals and organizations to receive and review information and provide input at one or more stages of an assessment process.

Notwithstanding the overall recognition of the need for and value of public participation in EA, there is continued uncertainty and debate about what it is, what its objectives are, and who should participate in it (Dietz and Stern 2008; Glucker et al 2013). In their recent review and summary of the literature, Glucker et al (2013) noted that the various stated purposes and expectations of EA participation were broad and diverse. They

identified nine potential and overarching objectives, which could be subdivided according to their underlying rationale and possible outcomes:

- 1) *Normative Rationale*: Public participation may be a goal in itself for quality, ethical or other reasons:
 - Influencing decisions: Giving people that may be affected by a decision the ability to influence it, for democratic and/or moral reasons;
 - Enhancing democratic capacity: Enabling participants to develop their citizenship skills (interest articulation, communication and cooperation) and an opportunity to exercise these;
 - Social learning: Enabling deliberation amongst participants, leading to learning and a richer collective knowledge; and
 - Empowering and emancipating marginalized persons and groups: Thereby altering the nature and distribution of power within society.

- 2) *Substantive Rationale*: Improving the quality of the decision and other goals and desired outcomes:
 - Gathering and incorporating environmentally relevant information and knowledge;
 - Incorporating experimental and value based knowledge to supplement scientific and technical information; and
 - Testing and validating the robustness of information from other sources.

- 3) *Instrumental Rationale*: Improving and legitimizing decisions:
 - Generating legitimacy: Legitimizing the decision-making process, authority and/or the decision and its implementation; and
 - Resolving conflict: The identification and resolution of substantive matters of disagreement, prior to decisions being taken which may then help facilitate implementation.

Similar to project-specific EA processes and practice, it is also generally recognized that public and stakeholder involvement is an important and necessary component of SEA

(Gauthier et al 2011; Rega and Baldizzone 2015) and a key contributor to its overall effectiveness (Runhaar and Driessen 2007). This is reflected in existing SEA requirements and guidelines, including the *European Union (EU) SEA Directive* (Directive 2001/42/EC, 27 June 2001) which states for example that (European Union 2001):

15) In order to contribute to more transparent decision making and with the aim of ensuring that the information supplied for the assessment is comprehensive and reliable, it is necessary...that...the public are...consulted during the assessment of plans and programmes, and that appropriate time frames are set, allowing sufficient time for consultations, including the expression of opinion.

17) The environmental report and the opinions expressed by the relevant authorities and the public,...should be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

18) Member States should ensure that, when a plan or programme is adopted, the relevant authorities and the public are informed and relevant information is made available to them.

Article 6 (Consultations) of the SEA Directive (European Union 2001) goes on to specify that the Draft PPP and associated SEA Report must be provided for review by the public, who are to have an “early and effective opportunity within appropriate time frames to express their opinion” with the particular “arrangements for the information and consultation of the authorities and the public [being] determined by the Member States”.

Although there have been debates around whether SEA should be reaffirmed as an objective, scientific process or as one that explicitly considers societal views and values (Connelly and Richardson 2005), there is a general acknowledgement of the relevance and importance of other types of information, knowledge and values in EA processes (Nilsson and Dalkmann 2001; Cashmore et al 2004; Richardson 2005; Runhaar 2009;

Sheate and Partidario 2010) as opposed to just that which is expert-derived (Partidario and Sheate 2013). As strategic options, initiatives and environmental issues are inherently and often heavily value-laden (Nilsson and Dalkmann 2001; Beckwith 2012), there is a recognized need to move towards the more interactive and participative approaches to SEA in order to try and seek out and address these (Kornov 1997; Illsley et al 2014). In addition to providing additional (non-technical and often socially constructed) information and perspectives to an SEA, public and stakeholder participation also helps bring balance to the process, where the identification and incorporation of public concerns and values is considered key to not only supplementing cognitive knowledge, but to also temper the views, priorities and rationalities of the proponent and decision-maker who are often most focussed on obtaining regulatory approvals, reducing costs, making profits and/or increasing legitimacy (Weston 2010).

2.2.5.2 SEA Consultation: Current Applications and Increasing Expectations

Although key to identifying and providing societal perspectives and input into SEAs and eventual PPP decisions, public and stakeholder involvement has largely retained an “information providing” role and focus. As illustrated in the next section, SEA consultation initiatives have typically been designed and implemented from an “information out” and “information in” perspective, using various mechanisms to provide individuals and groups with information on the proposal under assessment, allowing them to review and consider this information and formulate their questions and views, and then giving them the opportunity to provide these perspectives for consideration at one or more stages of the assessment process. The main purposes have therefore been to conduct an initial issues scoping exercise to focus and frame the assessment, to contribute information and relevant knowledge to supplement or validate technical data, or to eventually review and comment on the eventual SEA Report itself prior to a final decision being made. This somewhat shallow and passive approach to public participation is evident in past and on-going practice around the world, and reflected in associated legislation and guidance materials (Petts 2003). The previously described substantive rationale for SEA has therefore remained prevalent in terms of its contribution to SEA’s informational outputs and their consideration in

decision-making (Glucker et al 2013; Salomons and Hoberg 2014), along with an associated “procedural rationale” which sees the inclusion of some degree of public and stakeholder participation as being key to ensuring the overall integrity and quality of the SEA exercise (Jiliberto 2011).

Despite this continued focus on information, results and procedural characteristics and quality in practice, the current SEA literature again reflects a much larger and broader vision of the nature, purpose and scope of its public and stakeholder participation components and the potential outcomes of these activities. Through advancing theoretical development, SEA is being increasingly seen and touted as a forum for deep and on-going dialogue, deliberation and negotiation (Runhaar 2009; Lobos and Partidario 2014), which can not only help identify the various interests, concerns and values associated with a proposed strategic initiative, but may also seek to reconcile competing or divergent views through dialogue and more participative planning. In this way, SEA has been described as taking the “communicative turn” that has been evident in other planning fields (Richardson 2005: 341), drawing upon the Habermasian concept of communicative rationality (Habermas 1984, cited in Hilden et al 2004), where through discussion, reflection and collective reasoning, participants become aware of and open to new ideas and perspectives and alternative approaches (Runhaar 2009). Under such an approach, is it considered that the “power of a good argument” can transcend and modify the perspectives and power structures of participants (Gouldson and Bebbington 2007: 10), and through dialogue and reflection the emergence and sharing of new information and points of view serve to alter the various actors’ reaction to and consideration of alternative approaches and solutions (Nitz and Brown 2001). Although this movement towards post-positivist planning theories and approaches has reached a variety of planning fields and disciplines, this has been most prevalent at the more strategic levels of planning (Kornov and Thissen 2000), where decision-making is typically more nebulous and subjective and where uncertainty is therefore inevitability higher (Runhaar and Driessen 2007).

There is thus an increasing emphasis on a perceived “deliberative rationale” for SEA (Jiliberto 2011), which goes beyond the mere gathering and provision and information

and views for consideration in decisions (as per the rational models) to a forum of deliberation amongst stakeholders, which has been defined as dialogue that “induces reflection upon preferences in a non-coercive fashion” (Dryzek 2000, cited in Petts 2003: 270). Through earlier and deeper forms of public and stakeholder involvement, SEA is thus being viewed more as a planning forum that acknowledges and embraces the existence and role of various actors (Partidario and Sheate 2013) and their different interests, positions and value systems, and which facilitates a reflexive approach to PPP development through communication, negotiation and joint learning among its participants (Nitz and Brown 2001; Jackson and Illsley 2007; Stoeglehner 2010; Illsley et al 2014). This involves the creation of public spaces and planning arenas (Connelly and Richardson 2005; Beckwith 2012; Morgan 2012; Lobos and Partidario 2014), which are “open to all, [and] where stakeholders can come together to discuss and negotiate alternatives and reach preferred solutions” (Illsley et al 2004: 2) through both direct interaction and dialogue as well as informal communication between participants (Hansen et al 2013).

As a possible consequence of such SEA-related deliberations, there is increasing reference to and interest in the potential learning (Jha-Thakur et al 2009; Sims 2012) and knowledge brokering (Sheate and Partidario 2010; Partidario and Sheate 2013; Kuldna et al 2015) potential of SEA. Whereas knowledge generation and transfer in EA used to be considered to be expert-driven and unidirectional (from expert to decision maker), it is now being viewed as a much more inclusive, interactive and dynamic process (Partidario and Sheate 2013), with various, diverse perspectives, forms of knowledge, values and realities being generated and contributed by SEA participants. There is therefore a corresponding shift towards interpretivism and social constructivist perspectives, where knowledge is not just provided through analysis and by experts to decision-makers, but rather meaning and knowledge may be developed and co-created by SEA participants through appropriate, interactive processes.

SEA related learning can be proactive and deliberate or reactive and reflexive (Jha-Thakur et al 2009), and may include both single loop (where the decision itself changes, but the processes and underlying values remain the same) and/or double loop (shifts in

understanding, objectives and/or values) learning (Jha-Thakur et al 2009; Stoeglehner 2010). A number of types of learning have also been referenced in an SEA context, including instrumental (acquiring technical knowledge), communicative (improved dialogue and reflection) and transformative (expansion of consciousness and changing worldview) learning. In a recent investigation of public involvement and stakeholder learning in SEAs in Kenya, for example, Walker et al (2014) found evidence of each of these learning types having occurred, even though in some cases ideal conditions for such learning were not established as part of these SEA processes. A number of authors (Partidario and Sheate 2013; Kuldna et al 2015) have also discussed the knowledge brokering role of SEA, and have argued that consideration of potential information sharing and associated learning in SEA processes needs to go beyond the mere creation and linear transfer of environmental and technical knowledge, to a greater focus on the actual and often dynamic processes through which knowledge can be created, shared and used through such processes.

Views and expectations around SEA outcomes are therefore moving beyond just its direct effect on PPP decisions to also include whether and how the process may affect its participants (Stinchcombe and Gibson 2001; Fischer 2005; Tetlow and Hanusch 2012). This is the so-called “transformative strategy” of SEA, where the information gathering and sharing, dialogue and deliberation facilitated by the consultative elements of the SEA process “aims to contribute to longer-term changes in the range of values, worldviews, behaviours and practices of actors and institutions” (Wallington et al 2007: 574). An early perceived benefit of SEA was that by increasing transparency and stakeholder involvement, the eventual public understanding and acceptance of eventual PPP decisions and their implementation would be enhanced (Nilsson and Dalkmann 2001; Rauschmayer and Risse 2005; Rega and Baldizzone 2015). Indeed, generating and maintaining legitimacy is considered to be one of the most important objectives and outcomes of EA public participation (Petts 2003) including SEA (Elling 2009; Jiliberto 2011). SEA-related transformations may also extend to developers and decision-makers through, for example, an enhanced awareness of environmental issues, changes in underlying goals and values, and thus, an increased willingness to address such issues in planning. This has been referred to by Fischer (2005: 410) as

potential SEA-related “changes to the mentality and attitudes” of decision-makers or “value transformations”, which may involve direct contributions to environmental awareness and understanding which influence the PPP decision at hand or which have indirect effects on other, future planning activities (Runhaar and Driessen 2007; Runhaar 2009).

Key elements of, and principles and prerequisites for, such a deliberative approach to SEA and the potential learning and transformative outcomes of same have been said to include (Illsley et al 2014):

- 1) Inclusion, or ensuring adequate and appropriate access to the process and information, and the ability to present one’s view and to have these taken into account in planning;
- 2) Reasoned dialogue, or the establishment of forums for discussion and debate, as well as an open minded approach to receive and consider others’ views and to change or revise one’s viewpoints based on new information and perspectives; and
- 3) The search for common ground, where the outcome may be consensus but at very least this involves the full and fair consideration of all viewpoints in planning and eventual decisions.

The realization of these larger goals for SEA consultation therefore requires the involvement of the right number and mix of stakeholders, with adequate time, resources and spaces to create an appropriate learning environment, and a receptiveness and willingness to accept, consider and use other sources of knowledge (Sheate and Partidario 2010; Partidario and Sheate 2013). The presence of these factors, and thus the potential for SEA to achieve these various learning and transformative objectives, is therefore very much influenced by whether, when, how and for whom its consultative components are undertaken.

In terms of timing, and in keeping with the previous discussion around the strategic nature of SEA through its early application, SEA can provide a public space where alternative strategic directions and options can be identified, assessed and debated by decision-makers and stakeholders (Beckwith 2012). PPP alternatives that are defined and selected prior to SEA consultation activities may be identified solely or primarily on the basis of technical, economic or other non-environmental factors, or otherwise influenced by the values and cognitive biases of the individuals involved (Du et al 2012). It is also at the early stage of planning that choices are made between various, diverse and often competing PPP options which may have significant public interests associated with them, and ideally the SEA process can contribute to the identification of alternatives rather than reacting to it at which time its influence will inevitably be far less (Illsley et al 2014). Public and stakeholder participation may also be required at multiple stages of the SEA process rather than as a one-time consultation event, particularly if learning and transformative effects are to occur (Axelsson et al 2012; Illsley et al 2014), and may extend into the post-decision and implementation stages of a strategic initiative as well (Gacheciladze-Bozhesku 2012).

Whatever its timing in an SEA process, there are also a range of types and levels of public participation that may be planned and implemented, as outlined by Arnstein (1969) who is frequently cited in the EA consultation literature. Gauthier et al (2011: 49), for example, note that public participation is a generic term that “ranges from the provision of information and consultation of the public to consensus-building, mediation and negotiation”. There is also a variety of associated terminology including consultation, participation and involvement, which are often used interchangeably but in some cases are considered to represent different levels of engagement. O’Faircheallaigh (2010), for example, suggests a three-part classification of public participation in EA, which include and extend from: 1) obtaining public input into decisions that are eventually taken separately by decision-makers, 2) providing some degree of public sharing of decision-making, and 3) altering the overall structures and power relationships of decision-making, although he also cautions that these are not always mutually exclusive, and may occur simultaneously and be interrelated.

It has been noted that facilitating and achieving the previously described learning and transformative outcomes of SEA require earlier and deeper forms of engagement than the relatively late stage and passive consultation that has often characterized SEA in practice, as it is considered that the main outcome of many assessment processes – the EA Report – is itself unlikely to convince or transform anyone (Weston 2010). The type and level of public and stakeholder involvement that is required and appropriate in SEA will typically vary between situations and circumstances (Fischer 2003), and often depends upon the characteristics of the PPP issue at hand, including the associated levels of potential effect, interest, divergent views and uncertainty (Runhaar and Driessen 2007). Communicative and participative approaches to SEA may also require multiple, flexible procedures (Partidario 2000; Fischer 2003; Vicente and Partidario 2006; Gao et al 2013), and need to be sensitive to local situations and context, including institutional and social structures, power relationships (Elling 2009; Cashmore and Richardson 2013) and culture (Axelsson et al 2012), as well as the different interests, approaches, capacities and expectations of participants (Glucker et al 2013).

With regard to who can or should participate, a fundamental perceived benefit of SEA is procedural environmental justice, in that its consultations typically provide opportunities for anyone that is interested to become informed about and involved in public sector decisions (Jackson and Illsley 2007; Rega and Baldizzone 2015). It is therefore often open to any individual or group that is interested in, may be affected by, or has relevant information concerning the decision and action that is under assessment (Andre et al 2006; Glucker et al 2013). It has been suggested that its inclusive nature must be maintained to truly democratise planning (Bonifazi et al 2011) by involving those that may otherwise be excluded or marginalized (Walker et al 2014) and based on the recognition that the public and its interests and viewpoints are not homogeneous (Petts 2003; Dietz and Stern 2008), as well as to help ensure impartiality (Salomons and Hoberg 2014). It may however, be necessary and appropriate to differentiate between different segments of the public, and it may not be possible or effective to involve all persons and organizations in the same manner for all engagement events for all initiatives and environmental issues (Dietz and Stern 2008).

In summary, therefore, recent years have seen significant evolution and growth in the theoretical basis for SEA and its associated approaches and methods, where it is being viewed less as a purely or primarily analytical exercise for contributing environmental information (wherever scientifically or socially derived) to decision-making, and more as a participative and deliberative process that is more akin to, and integrated with, planning itself. This has led some to suggest that the participatory aspects of SEA are of equal, if not greater, importance than its analytical components (Vicente and Partidario 2006; Montanez-Cartaxo 2014), whereas others have recognized that the analytical and participative elements of SEA are complementary and interdependent (Axelsson et al 2012), with SEA analysis providing information and support to consultation, and with the public and stakeholders providing additional information, defining issues and using and evaluating the analytical results as part of their deliberations. Illsley et al (2014) refer to the “messy reality” of planning, where scientific and technical information and value judgements interact and become blurred, and in some cases one form of knowledge can influence the development and use of the other (Weston 2010).

It is expected that SEA will therefore likely continue to involve a balancing and blending of the analytical / technical and participative approaches (Owens et al 2004; Bina et al 2011; Gao et al 2013), an “analytic-deliberative” (Petts 2003: 268) or “rational-collaborative” (Stoeglehner 2010: 217) model that takes the form of something “more than an analysis and less than a consensual arena” (Connelly and Richardson 2005: 402). The required and desirable balance between the analytical and deliberative approaches in SEA remains unclear, however (Fischer 2003; Petts 2003; Bonifazi et al 2011), and is likely context-dependent (Owens et al 2004).

2.2.5.3 SEA Consultation in Practice

Although the recent literature places great expectations on the objectives, methods and outcomes of public and stakeholder participation in SEA, it has been suggested that these theoretical perspectives are also considerably further advanced than its practice (Axelsson et al 2012). While increased opportunities for involvement, information sharing and communication and enhanced transparency are often reported as a positive

outcome and perceived success of SEA consultation activities (White and Noble 2013a; Walker et al 2014), in many ways it continues to fall short of the larger principles, processes and results that have been referenced in the literature.

Recent studies and reviews have generally reported mixed findings and perspectives in that regard, and show that while there is evidence of good practice and positive outcomes from and views about public involvement in SEA, there are areas of needed improvement if SEA is to meet many of the larger objectives that have been established for it. In their review survey of SEA practitioners and scholars in various countries, Rega and Baldizzone (2015), for example, found evidence of effective public consultation and its positive effect on the environmental characteristics and performance of PPPs, although their results also indicated that the nature and depth of such engagements was often quite limited, with an associated narrow influence on decision-making. They attribute these issues to a lack of overall willingness by proponents, limited public understanding of the SEA process, and weak legal frameworks for SEA practice. Walker et al (2014) found that SEA processes in Kenya had the positive effect of providing opportunities for previously marginalized persons to participate, but also that these processes were often characterized by a lack of adequate information and opportunities for communication as well as being applied at a relatively late stage of the planning process.

Several researchers have found that while SEA processes can provide considerable opportunities for public involvement, the level of uptake of, and participation in, these processes is often quite limited (McLauchlan and Joao 2012; Illsley et al 2014). Although there may be more time and potential for participation and influence at the strategic level, the public is often less interested in strategic initiatives and issues as compared to specific development projects and their EAs. Indeed, the development and implementation of PPPs and their potential environmental issues may be considered too general, intangible and distant in space and time to spark issues, interest or involvement (Nilsson and Dalkmann 2001; Elling 2009; Fidler and Noble 2012). The public may also not fully understand the nature and purpose of the SEA process (Illsley et al 2014; Rega and Baldizzone 2015) or have the time or interest to participate,

especially if SEA is competing with other concurrent issues, processes and priorities (McLauchlan and Joao 2012). Van Doren et al (2013) for example, found that public participation could not add much value to the Dutch SEAs they reviewed because the issues were too technical and abstract or not directly relevant for the public, although it did have the observed effect of enhancing the perceived legitimacy of the process.

It has also been found that, notwithstanding the potential interactive, deliberative and iterative nature of SEA consultation, it remains primarily at the lower end of the spectrum (Rauschmayer and Risse 2005; Noble 2009) and is characterised by a one way channelling of information rather than a two-way forum of dialogue, learning and collaboration (Bonifazi et al 2011; Gao et al 2013). In some cases SEA consultation in practice has been observed to lack transparency or to provide timely and adequate access to information (Kis Madrid et al 2011; Walker et al 2014), with public participation processes and findings also not being adequately described in SEA documentation (Margato and Sanchez 2014). In any event, it has been noted that the purpose and objectives of public participation initiatives (be it notification, learning or otherwise) need to be clearly defined and understood at the onset, and guide the implementation and conduct of the SEA (Jiliberto 2011). SEA consultation also requires new approaches and methods, ones that are designed to create and stimulate knowledge generation and learning through deliberation, not just information transfer (Partidario and Sheate 2013), and SEA practitioners may need to be more aware of and better trained in these (Slunge and Tran 2014).

As opposed to providing equal opportunities for involvement by multiple, diverse organizations and interests, recent research and reviews have also found that different and often quite separate participation opportunities are afforded to or participated in by government agencies as compared to other stakeholders, resulting in various types, levels and sub-sets of engagement (Bonifazi et al 2011; Illsley et al 2014). This has been attributed to a number of possible factors, including differing obligations or incentives to be involved, variable understanding of and interest in SEA, or possibly even an attempt to centralize and intensify power by planning authorities (Illsley et al 2014). The ideas and outcomes of communicative rationality and the perceived equalizing effect of

discourse and reflection on participants and their power relationships has also been criticized as somewhat utopian in its optimism (Weston 2010). Although there has been little past research on power relations in SEA (Connelly and Richardson 2005), it has been noted that even if equal opportunities to receive information and provide input are provided, participative and collaborative approaches to SEA do not sufficiently recognize and address the issue of power relations between participants, which inevitably affect the ability of different groups or individuals to enter and participate in such processes and influence decisions in an equitable manner (Kornov and Thissen 2000; Richardson 2005; Elling 2009; Morgan 2012; Partidario and Sheate 2013).

At the same time, despite an idealized assumption of engaged and open minded participants on both sides that are seeking optimal, compromise solutions and the associated “notion that people inevitably search for acceptable rational arguments in open and fair debates” (Morrison-Saunders and Fischer 2006: 26), the reality is that SEA consultations may often be characterized by strategic posturing, mistrust and an associated fear of collaboration (Bina et al 2011) rather than meaningful and legitimate attempts at dialogue, cooperation and the resolution of issues (Jiliberto 2011). The transformative potential of SEA may therefore be resisted by its participants (Scott 2011). Even in cases where there is a mutual desire for cooperation and solutions, the reality is that there may also be irresolvable issues and conflicts involved (Weston 2010), and deliberative approaches may have the effect of exposing and potentially magnifying conflicts and deadlocks as opposed to resolving them (Owens et al 2004). The often adversarial nature of collaborative planning, the times costs and potential delays that may occur, and the likelihood and potential risks of same may therefore be a strong deterrent for practitioners and planners to truly open up their planning process to this type and depth of engagement, beyond the minimal amount required by legislation (Weston 2010).

Although public involvement is often required as part of any formalized SEA processes, there is typically little or no direction or prescription on how or when it must take place, and thus, there is considerable flexibility on the part of practitioners in that regard. Consultation has therefore been found to be relatively short and somewhat superficial

in nature (Kis Madrid et al 2011; White and Noble 2013a; Mota et al 2014; Slunge and Tran 2014; Rega and Baldizzone 2015), and to occur at a relatively late stage of planning (Partidario and Sheate 2013; Illsley et al 2014; Walker et al 2014). This may well be due to the above described vagueness of many PPPs and the perceived need to have something concrete to meaningfully analyse and consult on (Lyhne 2011). It has also been attributed to decision-makers wanting to keep the SEA dialogue focussed on a late stage discussion of a proposed PPP, in order to maintain focus and control over the associated discussions and eventual decisions (Dalal-Clayton and Sadler 2005; Beckwith 2012; Rega and Baldizzone 2015), although again, a recent survey of SEA practitioners (Lobos and Partidario 2014) indicated relatively high levels of interest amongst decision-makers in ensuring a proactive and constructive SEA process that includes discussions around strategic options and to use this to influence PPP formulation. It has been recognized that involving people too late or in an otherwise limited way may breed even greater frustration and mistrust that would otherwise be the case, and can actually compound rather than help resolve issues (Partidario and Sheate 2013). These findings have led to calls for strong, legal frameworks for SEA consultation to help ensure that public consultation is planned and implemented in more than a minimalistic way (Wirutskulshai et al 2011; Rega and Baldizzone 2015).

While SEA may be helping to enhance institutional cooperation and to facilitate inclusion, information sharing, openness and transparency, in practice its contribution to the establishment of participatory and deliberative arenas and associated learning and transformative effects seems to be limited (Bonifazi et al 2011), and only very rarely are citizens actually empowered to directly and effectively contribute to planning decisions (Rega and Baldizzone 2015). SEA research and reviews have also indicated that it is often not clear whether or how public concerns and consultation outcomes from SEA have been taken into account in and influenced the planning process (Fischer 2010a; Tetlow and Hanusch 2012; White and Noble 2013a; De Montis 2014).

There has, however, been little empirical study on what actually drives SEA consultation to a particular time, type and level, especially in particular planning situations and contexts. This is especially the case in understanding whether and how any of the

potential (and in many cases theoretical) consultation outcomes are a recognized and desired outcomes of SEA use and thus, how these and any associated benefits, issues, risks and other factors are influential in decision-making about when and how to undertake SEA related consultations, especially in a voluntary capacity and in a corporate setting.

It has also been suggested that the current focus on deliberation and social learning suggests a greater degree of emphasis on SEA processes as opposed to their outcomes (Fischer 2003; Glucker et al 2013), as well as concerns that the trend towards more consultative and participative approaches to SEA may be having the effect of promoting a focus on socioeconomic issues and benefits in planning at the expense of the natural environment (Morrison Saunders and Fisher 2006). The need to remain focused on the overall effectiveness and outcomes of SEA has therefore been reiterated (Retief 2010), as there is no guarantee that broad public participation or addressing public concerns and interests leads to environmentally sustainable and socially equitable decisions (Connelly and Richardson 2005; Bonifazi et al 2011).

2.3 SEA Quality and Effectiveness

As illustrated in the preceding sections, SEA has been the subject of considerable focus, interest and discussion within the EA community for well over a decade. This included an early and initial emphasis on establishing and developing its overall rationale and conceptual basis, as well as defining and then evaluating its various procedural and methodological aspects. In more recent times, there has been an increased focus on overall SEA quality and effectiveness as well as the eventual outcomes of SEA use.

SEA quality and effectiveness have thus become important and recurring themes in the SEA literature. In terms of the former, this has included the development of general SEA principles, guidelines and performance standards (e.g., Bonde and Cherp 2000; Thissen 2000; IAIA 2002), and the evaluation of the characteristics and performance of SEA systems and case studies against such criteria (e.g., Fischer 2002, 2010a; Noble 2003). Whereas some SEA quality frameworks have focussed on the nature and context of the

SEA Report, particularly in terms of its clear and systematic inclusion of key recognized elements of the SEA process (e.g., Fisher 2010), others have included incorporated aspects of SEA's "result components" (Noble 2009: 67) or "output effectiveness" (Retief 2007a: 95) measures, which relate to the eventual outcomes and influence of SEA, particularly the manner in which it has effectively contributed to strategic decisions. Indeed, it has also been recognized that there is a distinction between SEA quality and its effectiveness (Acharibasam and Noble 2014), and some researchers have argued for (Nitz and Brown 2001; Cashmore et al 2004) and observed (Jay et al 2007) a shift in focus away from the traditional preoccupation with procedural and reporting matters to evaluating and improving the overall effectiveness of EA processes, particularly in terms of their outcomes and the degree to which they have fulfilled their objectives and true potential (Fisher 2005; Noble 2009; Stoeglehner et al 2009; Nilsson and Dalkmann 2010; Hansen 2011). Bond et al (2013), for example, recently developed an evaluative framework based on six categories: 1) procedural effectiveness (related to its required characteristics and approaches), 2) substantive effectiveness (outputs and outcomes), 3) transactive effectiveness (process efficiency), 4) normative effectiveness (addressing personal and societal norms), 5) knowledge and learning outcomes, and 6) pluralism, which recognizes that there are multiple, differing views around what effectiveness means within each category.

SEA effectiveness is based on the fundamental question of whether and how it is actually achieving its objective of influencing and improving strategic planning and decision-making (Partidario 2000; Noble 2003; Dalal-Clayton and Sadler 2005). Recent SEA discussions have focused on further defining the role of SEA in this regard and the factors and conditions which facilitate or limit SEA's influence, as well as highlighting the need for further research on this issue (Nitz and Brown 2001; Cashmore et al 2004; Runhaar and Driessen 2007; Retief et al 2008). There have also been associated calls for further SEA follow-up to examine practical experience in SEA and its outcomes (Partidario and Arts 2005; Gachechiladze-Bozhesku and Fischer 2012), which is considered crucial to on-going efforts to learn from experience and seek to continuously improve SEA practice and its overall effectiveness (Partidario and Arts 2005). It is also becoming increasingly recognized that the design, use and evaluation of SEA processes

should be sensitive to the actual characteristics of planning and decision-making processes and situations, and there is growing indication of a relationship between the awareness and consideration of context in SEA and its overall use and effectiveness (Verheem and Tonk 2000; Nilsson and Dalkmann 2001; Nitz and Brown 2001; Hilden et al 2004; Runhaar 2009; Jiliberto 2011; Axelsson et al 2012), including that different SEA elements and approaches may be required to achieve effectiveness in different planning systems and contexts (Bina 2008; Gazzola 2008). SEA context has been a prevalent theme in the literature for some time, and has been defined as the “set of facts or circumstances that have an impact on the chosen approach to SEA [and]...on the outcomes of SEA implementation”, where: 1) approaches refers to the “chosen aim and goals attached to SEA, the expectations put on SEA implementation, the chosen steps in its implementation and its method of implementation in practice”; and 2) outcomes refers to the “effects that implementation of SEA has on the contents of a plan, on decision-making, on the participants in the planning process, [and] on the mode of operation in the organizations taking part in the...process, in both the short and long terms” (Hilding-Rydevik and Bjarnadottir 2007: 668).

As a result of emerging and evolving views about SEA’s fundamental objectives and possible outcomes (as discussed earlier), it is becoming increasingly necessary to reconceptualise how we view, approach and evaluate SEA effectiveness (Stoeglehner et al 2009), with an associated recognition that SEA may have both direct and indirect outcomes (Runhaar 2009; Wallgren et al 2011; Tetlow and Hanusch 2012). This includes both its immediate and tangible effect on the characteristics and implementation of the PPP in question, as well as possible longer-term and more subtle outcomes (Stoeglehner 2010; Acharibasam and Noble 2014).

2.3.1 Direct Influences: SEA’s Effects on Strategic Planning and Decision-making

The underlying value and overall effectiveness of SEA is a function of whether and how it informs, influences and improves strategic planning and decision-making (Partidario 2000) and specifically, the degree to which SEA results are reflected in the eventual PPPs and their implementation (Van Buuren and Nootboom 2009). A number of previous

studies have examined the effect of SEAs on eventual PPP decisions (e.g., Fischer 2002; Therivel and Minas 2002; Aschemann 2004; Hilden et al 2004; Runhaar and Driessen 2007; Noble 2009; Song et al 2011; Phylip-Jones and Fischer 2015), which have primarily involved evaluating any changes to a proposed PPP that were directly attributable to, and readily observable following, an SEA exercise. These studies have shown highly variable and not always particularly conclusive results, with some recent studies and reviews reporting noticeable and positive effects on the final PPP (e.g., Acharibasam and Noble 2014), whereas others have found little or no such influence (e.g., Margato and Sanchez 2014; Silva et al 2014; Phylip-Jones and Fischer 2015). Still other studies have evaluated the perceptions of SEA practitioners and planners in that regard, and these have generally found that SEA was perceived as having a direct and positive effect on PPPs and/or in providing a better understanding of environmental issues and stakeholder concerns (Tetlow and Hanusch 2012; Acharibasam and Noble 2014).

Some authors have also attempted to identify the factors that have influenced the use of SEA results in decision-making (e.g., Fischer 2002; Therivel and Minas 2002; Aschemann 2004; Hilden et al 2004; Runhaar and Driessen 2007). A number of these have been identified, related to SEA approach and outputs (e.g., SEA flexibility and its degree of fit with the planning process; timing of the assessment; stakeholder participation; quality of the analysis); and the characteristics of the planning and SEA processes and their participants (e.g., transparency and effective communication; alignment with decision-makers' preferences or their openness to other views; binding nature of SEA recommendations) (Hilden et al 2004; Runhaar and Driessen 2007), although research has not provided a good understanding of what factors contribute under what conditions (Runhaar and Driessen 2007). Others have referenced, for example, the need for adequate and appropriate institutional and organizational capacity for SEA to ensure its effectiveness and influence (Kis Madrid et al 2011; Slunge and Tran 2014), and for SEA information and findings to be carefully developed to meet the decision-maker's needs, and be concise, clear, sufficiently comprehensive and credible (Croal et al 2010), as well as the required presence of a receptive planning process and decision-makers to receive, consider and utilize SEA results (Eales and Sheate 2011). Runhaar and Driessen (2007) suggest that the specific factors that

influence and determine the contribution of SEA to decision-making (in terms of the extent to which SEA results are considered or incorporated in decisions) are largely context dependent.

There are also recognized challenges associated with determining the effectiveness and direct outcomes of SEA use. As strategic planning processes are often complex and multi-directional and the resulting PPPs can themselves be vague and dynamic with associated time lags (Ortolano and Shepherd 1995; Hilden et al 2004; Bina 2007), it can be very difficult to trace decisions back to SEAs and their influence (Cherp et al 2007; Van Buuren and Nootboom 2009). There are also often variable or ill-defined views amongst researchers or participants around the objectives of EA processes, how they should be conducted and their desired use and outcomes, which often makes such evaluations difficult (Peterson 2004; Cashmore et al 2010; Tetlow and Hanusch 2012; White and Noble 2013a; Zhang et al 2013). In some such cases, SEA may be considered ineffective because a participant disagrees with its findings or because their views were not addressed in the PPP outcomes, rather than the fundamental issue of whether and how the process informed and influenced the planning process (Hansen 2011). An analysis of SEA's effects on decision-making is also particularly challenging in situations where the proposed PPP is not environmentally problematic or contentious or where stakeholder perspectives and environmental-economic preferences are aligned (Hansen 2011; Philip-Jones and Fischer 2015). This is also true in cases where SEA is tightly integrated within the planning process, which may make PPP decisions difficult to identify, discern and trace back to SEA (Acharibasam and Noble 2014).

2.3.2 Downstream Influences: SEA's Effects on Subsequent Decisions and Actions

The objective of SEA is to inform and improve strategic planning, but in doing so, to also influence the decisions and actions that are eventually proposed and implemented in accordance with these PPPs. SEA therefore provides a context and framework for subsequent project planning and implementation (Stinchcombe and Gibson 2001), and in theory an EA at one level of the process helps environmental sustainability to trickle down to subsequent decisions and actions (Therivel and Partidario 1996). There is

therefore an assumed relationship between the various stages of the planning process and the application of SEA / EA to these, and this tiering concept forms the very basis of SEA's perceived rationales and benefits (Arts et al 2011). In order to achieve these downstream environmental benefits, however, an SEA must not only influence the strategic initiative in question, but any subsequent strategic and project decisions must likewise be planned and implemented in compliance with these earlier SEA results and associated PPPs. In addition to directly influencing downstream decisions and actions, an earlier SEA and associated PPP decisions can also, for example, provide direction for subsequent decisions and actions by establishing overall environmental objectives and goals for consideration downstream, as well as providing guidance for project-level planning and design, such as for the siting of associated development activities (Stinchcombe and Gibson 2001). It is also possible for such tiering effects to take place in the opposite direction, where issues that arise in a project EA review may trigger larger policy questions that required SEA (Gunn and Noble 2011).

Although there has been limited follow-up to evaluate whether and how SEAs and associated PPP decisions also inform, influence and improve decisions and actions further downstream, there are concerns about what appears to be a "separation of SEA from downstream decision inputs and assessment activities" in practice (Noble 2009: 66). Differences in, and separations between, PPP development and implementation have been noted in an SEA context by various authors, who have considered this from a bottom up perspective and through the lens of implementation theory which recognizes that PPPs are typically implemented by agents later in the process who often have considerable discretion in PPP interpretation and delivery (Zhang et al 2013; Kornov et al 2015). Therefore, although tiering is considered to be a major driver of SEA and its potential outcomes, and it has been observed in certain situations (Sanchez and Silva-Sanchez 2008; Gachechiladze et al 2009; White and Noble 2013b) there are enduring questions around it and the degree to which such clear, hierarchical relationships between PPPs and projects exist and how any associated trickle down effects actually happen in practice (Arts et al 2005, 2011; Persson and Nilsson 2007; Noble 2009; Gunn and Noble 2011; Fidler and Noble 2012; Thompson et al 2013). In reviewing the Canadian experience with SEA under various systems, Noble (2009), for

example, found that a major limitation of all SEA processes examined was the lack of a tiered system that carried SEA outcomes forward to the next level. Similarly, in their recent review of SEAs in the wind energy sector in the United Kingdom and Germany, Philip-Jones and Fisher (2015) found observed a lack of effective tiering between SEAs and subsequent project-level assessments, with project EAs often not taking into account the findings of previous SEAs, and SEAs also not considering results from previous assessments.

Some of the earliest discussions on SEA suggested that in cases where environmental concerns are adequately addressed at the PPP level, subsequent EAs may be unnecessary (Wood and Dejedour 1992), and indeed an early perceived rationale for SEA was to reduce the number and complexity of project EAs (Wiseman 1997, cited in Fischer 2003). These views notwithstanding, and although some jurisdictions do allow for the exception of projects from EA requirements if there has been an earlier SEA (Stoeglehner et al 2010; Marsden 2011; Campbell 2013), it is generally acknowledged that SEA can and should not replace project EA altogether (Nooteboom 2000; Partidario 2000). While they are clearly related, these two forms of EA serve quite different functions (Fischer 2010b), considering environmental issues at different spatial and temporal scales, to varying degrees of detail, and incorporating environmental considerations into different types and levels planning decisions (Verheem and Tonk 2000). SEAs are conducted early in the planning process, before details are available on the nature, location and timing of specific development actions, and consequently are characterized by a much higher degree of complexity and uncertainty than project-level analysis (Jiliberto Herrera 2007; Zhu et al 2011). SEAs are therefore typically much more general and less technical and “predictive” than project EAs (Noble 2000; Abaza et al 2004; Slootweg and Jones 2011) and usually involve identifying overall environmental issues and attempting to address them through appropriate planning. The resulting PPPs then set the stage for subsequent development decisions and actions, and once individual projects are defined and proposed, project level EA then allows for a detailed review of them and their potential environmental effects.

SEA is, however, still thought to have considerable potential to help improve overall EA effectiveness and efficiency by providing environmental baseline information and mitigation measures for use in later assessments, as well as helping to identify and streamline the environmental issues that require consideration at the next level, thereby allowing later EAs to focus on important site- and project-specific concerns (Lee and Walsh 1992; Wood and Dejeddour 1992; Ortolano and Shepherd 1995; Fischer 1999; Nooteboom 2000; Dalal-Clayton and Sadler 2005). It is therefore intended to both strengthen and complement project-level EA, with SEA / PPP outcomes influencing the eventual identification and proposal of specific projects, as well as providing information and focus to subsequent EAs, which can in turn result in efficiencies and time and cost savings at the project level. Whether and how all of any of these potential and often touted SEA benefits and outcomes actually do occur in practice has yet to be fully investigated however (Marshall and Arts 2005). In the context of this research, the key consideration pertains less to whether SEA can and actually does affect strategic and downstream planning decisions and assessment, but rather, whether and how these potential SEA outcomes are recognized and influential in organizational decisions about its voluntary adoption and use, and if so, the nature and timing of its application. This is an issue that has not been investigated through previous research.

2.3.3 Potential Indirect and Long-term SEA Outcomes

In addition to SEA's potential direct effects on strategic and downstream planning, it may also have other longer-term, indirect or incremental outcomes (Therivel and Minas 2002; Stoeglehner 2010; Wallgren et al 2011; Tetlow and Hanusch 2012; Wang et al 2012). These can include increased awareness and other changes in the values and mindsets of participating individuals and organizations, including the various learning and transformative effects described previously, as well as possible changes in the nature and structure of planning processes and cultures and other institutional changes (Tetlow and Hanusch 2012; Wang et al 2012; Silva et al 2014), SEA has also been seen as a means to help an organisation achieve better alignment and overall compliance with its own relevant policies, mandates or other requirements, as well as to help bring additional structure and efficiency to its planning processes (Acharibasam and Noble

2014). SEA use may also have implications for other, future decisions and planning activities (Bina et al 2011), including the increased future use of SEA itself due to enhanced awareness of it and its role and benefits (White and Noble 2013b).

Current discussions of SEA effectiveness therefore reflect a shift from a “change in PPP” test, based on a purely substantive rationale, to a more process oriented one (Tetlow and Hanusch 2012; Van Doren et al 2013) based on a procedural and deliberative rationale for SEA (Van Buuren and Nooteboom 2009). As this can lead to increases in participants’ understanding of environmental issues, increased environmental governance capacity, institutional changes and social learning (Stoeglehner 2010) there is thus also an associated “transformative effectiveness” aspect of SEA (Cashmore et al 2004; Zhang et al 2013). The realization and recognition of these indirect benefits may again be constrained, however, by the fact that such outcomes are often unplanned, long-term and subtle in nature, especially in relation to the compressed timelines that are often associated with SEA processes and required PPP decisions (Acharibasam and Noble 2014). It has also been noted that as the effects and benefits of EA processes may be intangible and long term, they may be difficult for interested parties, including proponents, to recognize and consider (Morrison-Saunders et al 2015). There has been very limited direct, empirical study of the specific nature, recognition and actual occurrence of these indirect effects of SEA use, however, and these potential outcomes and benefits need to be better understood and more widely communicated (Tetlow and Hanusch 2012), which will require longer term, longitudinal research (Runhaar 2009).

2.4 Voluntary SEA Adoption and Applications

The development and implementation of SEA systems has continued to increase worldwide over the past several decades (Dalal-Clayton and Sadler 2005), with SEAs currently being carried out in well over 50 countries (Tetlow and Hanush 2012; Joao and McLauchlan 2014; Fischer and Noble 2015). Within these jurisdictions, the process is being applied to a wide and varied range of strategic planning processes and initiatives (Pope et al 2013), including sectoral, regional and other, issue-specific PPPs (Therivel 1993; Tetlow and Hanusch 2012). Most SEA use and experience to date has been in

relation to proposed plans and programs, rather than occurring at the policy level (Therivel and Partidario 1996; Renton and Bailey 2000; Axelsson et al 2012), where the required departure from EA principles and techniques is invariably greater (Sheate 2001).

There is also considerable variation in SEA systems and procedures between jurisdictions (Stoeglehner et al 2010), ranging from formalized processes that are carried out in accordance with applicable statutory requirements such as the European Union's (2001) SEA Directive and country-specific implementing legislation, to voluntary and ad hoc approaches in certain areas and sectors (Nootboom 2000; Sheate et al 2003; Dalal-Clayton and Sadler 2005; Chaker et al 2006; Joao and McLauchlan 2014). The growing interest in and use of SEA throughout the world is thought to be both as a result of legislated requirements for it, as well as increasing knowledge and understanding of SEA and its possible benefits (Wallgren et al 2011).

It has long been noted that EA procedures may be adopted and implemented in accordance with legislated requirements or may be undertaken voluntarily or semi-voluntarily by organizations (Bartlett and Kurian 1999). Although most SEA processes and experience thus far has been somewhat formal in nature and driven by legislation or other directives (Retief et al 2008; McGimpsey and Morgan 2013), many of its early initiatives were voluntary in nature (Nootboom 2000; Jay 2010), and in some places SEA practice continues to be non-mandatory and experimental (Rachid and El Fadel 2013; Lobos and Partidario 2014). In other cases, the nature and scope of SEA legislation or procedures have been extended beyond the minimum statutory provisions, such as in Scotland where SEA requirements extend beyond those mandated by the EU Directive by applying to all public sector plans, programs and strategies (Jackson and Illsley 2006, 2007; Wright 2007; McLauchlan and Joao 2012). Current or previous examples of the voluntary adoption and application of SEA processes to public-sector PPPs have also been reported and evaluated in the recent literature, include experience in Brazil and other South American countries (Malvestio and Montano 2013; Margato and Sanchez 2014; Mota et al 2014; Silva et al 2014; Montano and de Souza 2015), Mexico (Montanez-Cartaxo 2014), South Africa (Retief et al 2008), parts of Australia

(Stoeglehner et al 2010; Kelly et al 2012), areas of Europe (Aschemann 2005; Bunge 2005), Greenland (Hansen and Kornov 2010; Hansen 2011), several countries of Southeast Asia (Victor and Agamuthu 2014) and in various other areas (Lemos et al 2012). Others have also evaluated the potential for the voluntary application of SEA in particular areas and situations (McGimpsey and Morgan 2013).

2.4.1 Previous Research Around Voluntary SEA and its Effectiveness

There has been very limited research on SEA use in contexts where it is not formally required, and this is considered to be an important but as yet under explored aspect of SEA theory and practice (Margato and Sanchez 2014). Most of the discussion and analysis of voluntary SEA systems and practice to date has focussed on evaluating the quality and effectiveness of such processes and their outputs and outcomes, similar to recent areas of attention in the overall SEA literature as described earlier. In their recent review of the non-mandatory use of SEA for renewable energy planning in Brazil, Malvestio and Montano (2013) for example, found deficiencies in the definition of SEA objectives, the identification of strategic alternatives, and the description of public participation and follow-up strategies. Margato and Sanchez (2011) found that while voluntary SEAs in Brazil did achieve a relatively good level of technical quality and procedural effectiveness, they showed very low levels of substantive effectiveness by having very limited or no influence on decision-making. Similar observations of procedural, timing and quality issues in voluntary SEAs have been reported elsewhere and for other jurisdictions (e.g., Montanez-Cartaxo 2014; Mota et al 2014; Silva et al 2014). In noting the overall poor quality and performance of voluntary SEA use in the Mexican electrical sector, Montanez-Cartaxo (2014) attributed this to several factors, including: the inability of existing planning processes to incorporate and address environmental information and issues; limited communication abilities amongst planners and practitioners; a fragmentation of planning processes and responsibilities across agencies, and limited planning ability given that key and influential decisions are made elsewhere and by others.

Although flexibility in SEA application and approach has been recognized as necessary to help ensure its utility and effectiveness (Partidario 2000; Nilsson and Dalkmann 2001; Retief 2007b; Jay 2010), some have cautioned that flexible and ad hoc approaches to SEA can often negatively affect its quality and outcomes (Fischer and Gazzola 2006; Gunn and Noble 2009; Therivel 2010). It has therefore been argued by some that a strong legislative basis for SEA, including clear statutory requirements for its application, process, methods, roles and responsibilities and the eventual use of SEA results in decision-making, is an important requirement for SEA implementation and effectiveness (Kis Madrid et al 2011; Song et al 2011; Silva et al 2014; Slunge and Tran 2014), and a key determinant of the behaviour of proponents, practitioners and the competent authority in practice (Stoeglehner et al 2010; Kornov and Wejs 2013). This is evidenced by the observed poor or at least variable quality of voluntary SEA use to date and its limited influence (Retief et al 2008; Margato and Sanchez 2014; Mota et al 2014). Thus, even when there is a recognized need for a degree of procedural and methodological flexibility in SEA, there is often a corresponding realization that its statutory framework must be suitably solid to drive the quality and effectiveness of the SEA process and its use in decision-making (Kelly et al 2012), while at the same time delivering “a workable union of firmness and flexibility” (Gibson et al 2010: 175). Others have countered that the existence of formalized and prescriptive requirements for SEA is clearly no guarantee of its quality or effectiveness (Tetlow and Hanush 2012), as illustrated through the evaluations of SEA practice provided earlier, and that some of the higher quality examples of SEA use have been voluntary and ad hoc in nature (Noble 2009; White and Noble 2013a). In some cases there may therefore actually be an overreliance on structured instruments such as legislation (Victor and Agamuthu 2014), and specific and prescriptive regulatory requirements can result in SEAs being undertaken to meet minimal legal requirements only, with limited interest in or consideration of other approaches and potential benefits (Noble 2009).

2.4.2 Drivers and Challenges for Voluntary SEA Application

As illustrated above, most of the limited discussion of voluntary SEA use to date has focussed on describing recent examples of such processes and practice, evaluating their

quality and effectiveness, and on speculating about the underlying reasons for the observed poor performance. These discussions and SEA research to date have not, however, fully considered or investigated the specific reasons why SEA has been voluntarily adopted and applied in such settings, and especially, why it has been implemented in the manner that it has.

Although there has again been very limited analysis of the key motivations for and other determinants of voluntary SEA use, the literature has generally referenced a number of factors which may affect individual and organizational decisions around whether or not, and if so how, SEA is adopted and applied in particular situations. These include, for example:

- The overall level of SEA awareness, and understanding of its rationale, objectives, methods and potential outcomes and benefits (Roura and Hemmings 2011; Fidler and Noble 2013).
- Organizational acceptance or resistance (Stinchcombe and Gibson 2001; Noble 2004a; Slunge and Tran 2014), including whether or not there is a recognized need for SEA, and the nature of policy making and planning including any associated sensitivities or political factors (Yang 2012; Victor and Agamuthu 2014).
- The likely or perceived time, costs and resources that will be required to adopt and apply SEA (Stinchcombe and Gibson 2001; Therivel et al 2004; McGimpsey and Morgan 2013).
- The particular characteristics of the strategic planning and decision-making process in question, including the degree to which its structure and procedures would allow for and facilitate SEA use (Bina 2007; Wallington et al 2007).
- Whether SEA can be adapted and integrated into existing planning procedures rather than creating an entirely new process and requirement (Wallgren et al

2011), or the degree of change that would be required to use SEA (Jay and Marshall 2005; Roura and Hemmings 2011; McGimpsey and Morgan 2013).

- The nature of an organization's activities and interests, particularly any confidentiality concerns or other sensitivities regarding information or issues (Therivel and Partidario 1996; Therivel and Brown 1999; Gauthier et al 2011), which may be particularly influential around whether and how public involvement is carried out.
- The level of rigidity or flexibility in how the SEA process would work and the eventual use of its results. Voluntary SEA adoption may, for example, require that it be put forward in a "non-threatening" way, as for example an information and advisory tool and not one with binding obligations to adhere to its findings and recommendations (Roura and Hemmings 2011).

Based on the above factors, decisions regarding SEA use and approach may therefore be based on a mixture of need, cost-benefit and risk considerations, overlain by and influenced by the specific characteristics and goals of the organization, including its interests, activities, planning processes and contexts, and other situation-specific factors. Therefore, in choosing to voluntarily adopt SEA, any organization would likely have to perceive that there is a requirement for and/or likely benefit of doing so, and that these outweigh or are acceptable as compared to the time, cost or risks that may be associated with it. In developing and implementing a non-mandatory SEA system, matters of context will therefore likely be key, including organizational, institutional and administrative factors (McGimpsey and Morgan 2013). Again, however, although these and other factors that may be relevant to organizational decisions around SEA use and approaches have been generally alluded to in the literature, there has been very little research into whether and how these enter into and influence decision-making about the voluntary adoption and application of SEA (Victor and Agamuthu 2013), particularly in the specific context that is being investigated through this study.

In a recent study, Joao and Mclaughlan (2014) surveyed 187 planners and practitioners involved in completing SEAs for public sector plans in Scotland and asked them: "If SEA was not compulsory, would you do it?" and why or why not. Of these, the majority (53 percent) answered that they would, 27 percent answered that they would not, and the remainder responded that they were not sure or gave other or multiple answers. A number of reasons were provided, including reference to time, costs and resource issues and constraints, perceptions that SEA may be duplicative with other, similar processes, calls for a less stringent and more flexible and streamlined SEA process, and difficulties in undertaking SEA at lower PPPs stages when key planning decisions are made elsewhere. Although interesting, the results of this study are not directly relevant or particularly insightful for this research, given its focus on public-sector planning and planners who are already undertaking SEA (and thus, its hindsight perspective). The main outcomes of this study therefore appear to be perspectives from public-sector planners and practitioners about SEA implementation experiences and issues and on how they would change existing SEA processes if they could, rather than an investigation of the key motivations and other factors that influence decisions about the new and voluntary use of SEA in a particular context.

Other studies have taken a somewhat more forwarding looking and exploratory approach to investigating the main drivers or issues related to the potential future development and use of SEA systems for public-sector planning. Noble et al (2013) evaluated the potential applicability of SEA in the Canadian Arctic, and conducted stakeholder surveys which identified a number of perceived opportunities and risks. In terms of the former, these included possible enhancements to regulatory efficiency, the availability and quality of regional baseline information and to overall planning practices, as well as improved assessments of cumulative and project-specific effects and a greater degree of certainty for industry. At the same time, a number of perceived risks and shortcomings were highlighted, including the possibility that SEA could prevent or delay future development opportunities, a loss of flexibility in decision making, the potential inefficiency of adding another layer of bureaucracy and process, and general uncertainties and scepticism around such a new and novel tool. In another, more quantitative analysis, Victor and Agamuthu (2013) developed a behaviour-based

theoretical framework for identifying and attempting to explain the key drivers for the non-mandatory integration of SEA in solid waste management PPPs in Malaysia, and tested this model through interviews and questionnaires with public policy makers and implementers. Their study indicated that SEA integration behaviour was influenced directly by several main drivers, including perceptions regarding SEA benefits, barriers and enablers, as well as being indirectly influenced by respondents' environmental attitude and knowledge.

These studies and their results are somewhat useful and certainly interesting, as they provide some general insights into the drivers for current or potential SEA use and the sorts of perceived benefits, risks and others factors that may be considered and influential in formulating views about same. Their focus on SEA use in public-sector planning, and in the case of Noble et al (2013) on regional and multi-sectoral planning and the views of diverse stakeholders and interests, clearly differs from an investigation of decision-making by a corporate entity around the use of SEA in its own business planning processes, however. In addition, neither of these studies has investigated views or decision-making around when and how SEA would be applied and the factors that influence this. Overall, there has therefore been very little discussion - and especially, empirical investigation - of voluntary SEA use reported in the literature, including the specific factors that influence individual and organizational decision-making on the adoption of SEA processes on a voluntary basis, and especially, which determine the nature and timing of, and approaches to, that use. There have thus been calls for further research into whether and why SEA may be considered and voluntarily used in such situations (McGimpsey and Morgan 2013), including suggestions that interviews or surveys be completed to determine people's views about SEA and to determine whether or not they would be willing to use it (Yang 2012).

2.5 Potential SEA Use in Corporate Strategic Planning and Decision-making

Almost all of the discussion around, and experience with, SEA to date – whether formal and mandatory or voluntary in nature - has been in relation to its application by governments and other responsible authorities to “public-sector” strategic initiatives,

such as proposed legislation, national energy policies, trade agreements, regional land use plans or public infrastructure programs. There has been far less consideration or evidence of the use of SEA in industry as a means of aiding and informing strategic business planning and decision-making by corporations (Jay and Marshall 2005; Marshall and Fischer 2005, 2006; Jay 2007, 2010). Although some authors have commented on the potential use of EA approaches and methods in informing and improving overall corporate decision-making from an environmental perspective, this has been primarily in the context of more operational (rather than strategic planning) levels and decisions (Mason et al 1999), or at the “post EA” stages of project planning, implementation and other stages of a project’s lifecycle (Jones and Mason 2002).

Corporate strategic planning has been defined as an organizational activity that is undertaken to establish and specify corporate strategy, where:

Corporate strategy is the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and define the range of business the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers and communities...” (Andrews 1980, cited in Hax and Majluf 1984: 47).

Strategic business planning and associated decision-making around resource use and allocation, process and product development, marketing and finance, the development or use of infrastructure and other corporate activities often give rise to development projects or other actions which may have important environmental consequences, through for example the use of land and resources, industrial processes involving environmental emissions, demands on local labour or community services and other environmental and socioeconomic issues and interactions. SEA has a potential role here, in facilitating the early review of corporate PPPs on the basis of their likely environmental effects, in order to identify and incorporate such issues into planning and decision-making. An SEA approach could therefore provide a systematic process for

identifying, assessing and attempting to proactively manage environmental issues and risks and for engaging with stakeholders, thereby informing and improving decision-making, and in doing so, benefitting the environment and the potentially the corporation itself in the long-run.

Although it does appear to be recognized and generally accepted that SEA principles and approaches may be applicable to corporate strategic planning, and despite previous predictions of its likely increased application in this context (Marshall and Fischer 2005) there is again very little evidence of its voluntary adoption and use by private- or public-sector firms to date (Stinchcombe and Gibson 2001; Noble 2004b). This has been attributed to both the current lack of legislated and statutory requirements for same (Jay and Marshall 2005), as well as limited awareness and understanding of SEA in the private-sector, including a lack of applicable guidance and of any clear demonstration of its successful and beneficial application by corporations (Marshall and Fischer 2005). While there has been some limited yet useful discussion of the subject in the SEA literature (Annandale et al 2001; Noble 2004b; Jay and Marshall 2005; Marshall and Fischer 2005, 2006; Jay 2007, 2010; Banhalmi-Zakar and Larsen 2014), there has been little analysis or empirical investigation of potential corporate SEA use, particularly in terms of its relationship to key aspects of current SEA theory and practice. Important issues and questions therefore remain around whether, why, when and how SEA approaches might be voluntarily adopted and applied by corporations, including the motivations, enablers, deterrents and other factors that would influence decisions around its acceptance or rejection, and if adopted, the nature and particular timing, methods and other characteristics of its use.

Although the main purpose and potential benefit of SEA is environmental protection through the direct integration of environmental considerations into strategic planning, achieving this is obviously dependent upon its widespread adoption and use, including in areas and situations where it is not yet or likely to become mandatory. This, in turn, requires that SEA be recognized by corporations and other organizations as a valuable, effective and efficient tool for aiding and improving planning, which means that the benefits of SEA will need to be more clearly demonstrated, communicated and

understood (Marshall and Fischer 2005; Jay 2007; Noble 2009; Roura and Hemmings 2011; McGimpsey and Morgan 2013). SEA in general is under increasing pressure to “prove its worth” (Wang et al 2012), particularly in unregulated contexts where its value to decision-makers and stakeholders must be further demonstrated (Margato and Sanchez 2014). There have therefore been calls for further research to provide a better and more detailed understanding of whether, when and how proponents view EA processes as beneficial (Annandale and Taplin 2003), including for further research that explores and explicitly demonstrates their benefits to proponents (Morrison-Saunders et al 2015).

It has thus been suggested that in a business context, a decision to adopt and apply SEA is unlikely to be based purely on a corporation’s environmental principles and goals, but rather will need to be based on wider business interests and objectives including understanding and accepting the possible commercial and competitive advantages of SEA use (Jay 2007). It is therefore considered necessary that SEA be planned and implemented within the context of an organisation’s overall objectives, requirements, governance, activities and environmental responsibilities and issues (Jay and Marshall 2005), which may take any number of forms. SEA could also involve for example, its use as a means of providing insights and early signals to corporate planners about environmentally acceptable or problematic strategic options and opportunities, which may be identified initially by technical, economic or other business led factors and initiatives (Jay 2010). In any event, the potential drivers and desired benefits of environmental proactivity by a corporation can range from those based solely and directly on economic factors and motivations (such as improved efficiency and the prevention of costly environmental problems) to those which recognize and consider more indirect and long-term outcomes (such as the benefits of involving stakeholders and increasing transparency) to other, more principled environmental and/or social motives based on a purely or partially ethical rationale (Section 3.2). At the same time, and as described earlier for SEA in general, there are potential procedural and institutional issues, time and cost concerns, and other uncertainties and risks which may be relevant to corporate decisions around exposing its strategic planning processes to

increased environmental analysis and scrutiny, as well as possibly opening it up to review, input and possible pressures from external stakeholders.

Interestingly, and of particular relevance to the nature and focus of this study, much of the previous discussion of corporate SEA use in the literature has been focussed on the electricity sector (Jay and Marshall 2005; Marshall and Fischer 2005, 2006; Jay 2007, 2010). It has been suggested that this industry may for various reasons be considered an ideal candidate for SEA use (Jay 2010), and it has been noted that SEA could thus be adopted and applied voluntarily by an electrical corporation rather than simply as a matter of regulatory compliance (Jay and Marshall 2005; Jay 2010). Although a relatively limited aspect of the overall SEA literature to date, a number of potential rationales, benefits, issues and other considerations related to voluntary SEA use by electricity utilities or other corporations have been put forward in the literature, as summarized below.

2.5.1 Rationales, Motivations and Potential Benefits

In terms of the potential need for and outcomes of SEA use by corporations, its key, perceived objective in this regard is to allow for the more proactive and comprehensive identification, consideration and management of environmental concerns and associated risks in corporate planning (Marshall and Fisher 2005; Silva et al 2014), including associated environmental problems and requirements (Noble 2004b) as well as areas of possible public controversy and associated reputational risk and exposure (Banhalmi-Zakar and Larsen 2014). It has also been noted that SEA can therefore provide early insights about the likely environmental social and political acceptability of different strategic options (Marshall and Fischer 2005), and therefore help in improving and ensuring the feasibility, acceptability and deliverability of the final PPP, including increasing the likelihood that the strategic initiative will eventually be accepted (Noble 2004b).

Through SEA, the early identification and management of environmental issues in PPP development can also lead to eventual development projects or other business

activities that have fewer environmental issues and problems and require less mitigation than would otherwise be the case, with associated time and cost savings for the corporation (Marshall and Fischer 2005). These may also therefore require less analysis and review at later regulatory stages. It can therefore allow for more focused, efficient and expedited downstream regulatory processes, including a streamlining of (or even exclusion from), subsequent project level EA or permitting requirements, as well as providing useful and relevant environmental information to these processes with associated time and cost savings (Noble 2004b; Jay and Marshall 2005; Jay 2007; Stoeglehner et al 2010). Indeed, there are potential incentives for proponents to participate voluntarily in SEA where legislation allows for subsequent project level activities to be exempt from EA requirements, although they may also be reluctant to do so if this means having to go through two assessment processes (Stoeglehner et al 2010).

It has also been suggested that SEA can help improve the overall nature and quality of corporate planning and overall governance processes, both as an outcome and benefit in and of itself, as well as associated enhancement of corporate reputation amongst regulators and stakeholders. SEA approaches can, for example, bring additional and improved structure, rigour and discipline to existing corporate planning processes, particularly with regard to environmental issues and their management. This can also help facilitate better internal discussions, result in better (and auditable) documentation of decision-making processes, outcomes and rationales, which is in keeping with the corporate governance structures developing in many industries, as well as improving the overall defensibility of decisions (Marshall and Fisher 2005, 2006). Its use can also help widen the scope of corporate planning from a solely or primarily technical and economic focus to full consideration of environmental and socio-cultural issues, including a challenging of key assumptions and the associated identification and inclusion of viable alternatives that might not otherwise be considered (Marshall and Fischer 2005). SEA can also be used to help achieve and demonstrate compliance with applicable environmental regulations, standards and commitments, and allows for these requirements to be proactively and rigorously considered and incorporated at the earliest stage of planning (Noble 2004b; Jay 2007). It can also help demonstrate

corporate environmental policy and commitment, leading to enhanced image and reputation and possibly the attraction of investment (Noble 2004b; Jay and Marshall 2005; Marshall and Fischer 2005, 2006).

The potential learning and transformative effects of SEA related consultations and their associated benefits to the corporation have also been referenced in the associated literature. Public and stakeholder engagement can, for example, help inform and improve PPP alternatives and decisions while also increasing the transparency and credibility of decisions, and potentially, the understanding and acceptance of these by stakeholders (Jay and Marshall 2005; Jay 2007). This includes the previously described potential learning and transformative effects of SEA related consultations on their participants (Jay 2007, 2010), including a possible “bridging of diverse values through consultation and participation” and a “changing [of] the hearts and minds of actors and stakeholders” (Marshall and Fischer 2006: 295). In his case study review of a previous SEA for the development of the Belgian transmission system by Elia (a privatized, regulated utility), Jay (2010) found that the utility had voluntarily expanded the scope of the assessment beyond that required by legislation to include larger sustainability considerations, including environmental, social and economic issues and objectives, which was suggested to have been “intended to bridge diverse values and change the hearts and minds of stakeholders in favour of high voltage grid development” (Jay 2010: 3494). SEA processes and outcomes may also help justify the selection of a particular strategic planning option to external decision-makers, such as helping to convince regulators of the need for and appropriateness of implementing a particular alternative in order to address environmental or stakeholder concerns (Jay and Marshall 2005).

In a recent review of industry-led SEA practice, Mota et al (2014) examined several recent and voluntary SEAs in Brazil, including one that was led by a mining company. They concluded that companies have in some cases conducted SEAs due to pressures from international development and lending agencies to do so, as a result of public interest and concern, or potentially as a means for industry to supplement and enhance inadequate public sector planning and to give comfort to regulators that they can allow development to occur. In other cases, companies appear to have resisted completing or

participating in SEA initiatives due to the time and costs involved. In this case study, SEA practice was found to be of poor quality overall, and the authors express concerns about the inability of private sector SEAs to influence public sector planning (although it is not clear that this would be an objective of voluntary corporate application of SEA processes in most instances). These and other potential issues that may facilitate or impede corporatize adoption and use of SEA are discussed in the next section.

2.5.2 Potential Enablers and Challenges

The SEA literature has also alluded to a number of factors and characteristics that may facilitate or impede its potential adoption and use by corporations. SEA is considered most likely to be accepted and used when, for example, a company is familiar and has had positive experiences with EA or other similar processes, and where corporate management and planning processes and cultures already include environmental considerations and procedures that are embedded within the business practices, planning processes and economic basis of the organisation (Marshall and Fischer 2005). The degree of fit of SEA and existing corporate planning processes has also been referenced as a potential determinant of its adoption and use, in that it is more likely to be accepted where it can be integrated into existing corporate planning and decision-making processes, rather than being an entirely new and separate exercise (Jay and Marshall 2005; Marshall and Fischer 2005). In their case study analysis of the application of SEA by Scottish Power in the UK, for example, Marshall and Fisher (2005) suggested that the main factors that influenced SEA use by the utility pertained to its existing familiarity and comfort with EA integration into its development planning, its already on-going initiatives towards the adoption of better and more systematic environmental management and governance programs, and the company's previous recognition of the need to consider environmental issues in its planning and design processes.

Conversely, the geographically extensive and dispersed nature of some corporation's business activities and interests and the often dynamic nature of same can complicate attempts at long-term, comprehensive and structured strategic planning of the type that would be conducive to SEA (Jay 2007), and the potential for SEA use is considered

to be greatest for companies that have sole responsibilities and possible monopolies within a defined geographic area and market (Jay and Marshall 2005). This issue is even further compounded as companies move into more diverse and highly competitive business activities and environments, especially in an international setting (Jay and Marshall 2005). In some cases, a corporation's strategic planning activities and decisions may also be strongly influenced by other parties and processes (such as governments or regulators), which limits its planning abilities and options. In such situations it has been noted, however, that a corporation can use SEA to provide information and insights to these authorities about the most feasible and acceptable options open to them, including the results of their associated dialogues with customers and identified stakeholder concerns and preferences (Jay 2007).

Corporate SEA use and its effectiveness may also be constrained by industry fragmentation and an associated lack of centralized planning processes and responsibilities. Any use of SEA by corporations will probably be focused on planning and decision-making within individual companies and is not considered likely to occur across corporate boundaries (Jay and Marshall 2005). It may therefore help improve strategic planning by particular companies, but this would limit consideration or management of overall and cumulative effects across business entities, regions and sectors. As noted above, in some cases larger and influential policy and planning decisions are made separately by other authorities, and the lack of vertical integration in the electricity sector in many jurisdictions means that many utilities have specific and focussed mandates, and they must respond to specific industry requirements as they arise. This may include, for example, the development of transmission infrastructure in a particular and specific place and time in support of a new generating facility that is being planned and developed by a separate business entity. These industry structures are often not conducive to comprehensive and long-term strategic planning (Jay and Marshall 2005).

SEA may also be viewed by corporate representatives as a costly and time-consuming exercise, and as an administrative burden and unnecessary procedural add on that will require a commitment of substantial resources (Marshall and Fischer 2005; Jay 2007;

Mota et al 2014). Considerably advocacy is therefore likely to be required in order for SEA to be accepted by a firm's management and executive (Jay and Marshall 2005). The often quite dynamic nature of strategic business planning, interests and activities may also have implications for the usefulness and "shelf life" of SEA information and analysis, and so it may therefore have to be a rolling process that requires continual updates with associated time and costs involved (Jay 2007). Strategic business planning is typically an internal and commercially confidential process, not given to external consultation of the kind required and contemplated by SEA (Jay 2007). There may also be concerns about the possible negative effects of SEA use on corporate image, through the identification and documentation of environmental issues and problems which may lead to a company's activities being perceived as environmentally harmful (Jay 2007).

2.5.3 Summary: Current State of Knowledge on Corporate SEA and the Requirements for Further Research

Although these previous discussions of corporate SEA use in the literature (as summarized above) have provided good, initial overviews on this subject, they have consisted primarily of an interest in and informed speculation about the possible applicability, use and outcomes of SEA in this context, including referencing a number of possible benefits, drivers and associated enablers and challenges. The associated literature and very limited research on this subject to date has not, however, looked at actual, real-time corporate decision-making about SEA use, nor has it attempted to empirically investigate the specific motivations, deterrents, situations and other factors that influence individual and corporate decisions around whether, when, why and how to voluntarily adopt and apply SEA. This includes the degree to which the various considerations related to SEA need and its potential outcomes, benefits or challenges (including those summarized above and possibly others) are recognized and influential in such decisions and in particular contexts.

It is not currently known, therefore, whether corporate decisions to voluntarily apply SEA would be motivated by its potential direct economic benefits (e.g., the prevention or reduction of downstream environmental problems or regulatory requirements) or any

more indirect and long-term outcomes (such as in identifying and addressing stakeholder concerns and expectations and associated reputational improvements), associated improvements to the nature and scope of corporate planning and governance structures, or some combination of these or other motivations. It is also not known whether there are particular drivers for SEA acceptance by corporations, such as certain types and levels of perceived environmental issues or interests that are considered to require early analysis and proactive management at the PPP level and upon which any such SEA use would therefore be focused. It is likewise unknown whether and how these or other influential factors are present or are enhanced in particular situations or contexts, and how the potential need for and benefits of SEA use are considered and evaluated against the perceived challenges, costs or potential negative outcomes that may be associated with it.

Voluntarily adopting SEA in corporate strategic planning would also involve decisions around the timing and focus of that use and the particular methods used in its application. It is not currently known, however, whether and how the particular factors that might drive a corporate towards SEA acceptance might then translate into associated determinations about the specific planning stage(s) at which SEA would then be applied (including in the evaluation of PPP objectives and alternatives) and the particular environmental and/or socioeconomic issues upon which it would focus, as well as whether the objectives and focus of SEA use might be consistent or variable at different planning levels. There would also be associated decisions about whether SEA would be applied solely as an analytical exercise for the evaluation of proposed or alternative PPPs, as a process involving external consultation at defined stages in the review of a PPP, or as a more open, participative and deliberative exercise through which a corporation seeks to involve stakeholders in early and fundamental stages of PPP formulation. There is a need for further insights into corporate decision-making about potentially engaging the public and relevant stakeholders in any such voluntary SEA use. This includes identifying and understanding the specific factors and situations that would influence such decisions, whether the potential (and in many cases, theoretical) consultation outcomes are recognized and desired outcomes of such engagement, and how the various potential benefits and risks of any such engagement

are considered and influential in such decisions as well as in determining the timing and nature of any such engagement in certain contexts.

A decade ago Marshall and Fischer (2005) stated that there was a vital need to further evaluate how corporate strategic planning and decision-making processes, operating with commercially orientated and shareholder-driven organisations, could and should apply SEA, with an associated call for more empirical evidence around how SEA could and would function within this context. Since that time, there have been continued and recent calls for further investigation of why and how SEA may be applied to corporate strategic planning (Mota et al 2014).

3 CORPORATE ENVIRONMENTAL GOVERNANCE AND PROACTIVITY

This chapter provides a review and analysis of available and applicable literature related to corporate environmental governance, with a particular focus on the proactive adoption and implementation of environmental protection initiatives by corporations. This includes identifying and reviewing existing theory and previous research related to the motivations, deterrents, enablers, impediments and potential outcomes of corporate environmental proactivity, in order to investigate and evaluate their relevance to, and implications for, the research topic, objectives and questions that are the focus of this study.

3.1 Corporations and the Environment: Strategies and Approaches

Due to increased awareness of environmental issues and responsibilities, the regulatory and liability concerns and public interests that are often associated with these, and a recognition that environmental incidents and issues can have important, negative financial consequences for their business (Gao and Zhang 2006; Benn et al 2009), corporations worldwide are adopting processes and implementing measures to improve their environmental performance and the overall sustainability of their current and future business activities (Agarwala 2005; Hoffman and Georg 2013; Welford 2013). These environmental initiatives may include specific environmental protection measures to avoid, reduce or fix environmental effects resulting from a company's operations, larger processes and systems that are designed to more effectively and systematically integrate environmental considerations into the overall business, and consultative mechanisms through which companies provide information to and communicate with stakeholders about their current or planned business activities, environmental or social performance and other matters. Environmental management and planning initiatives are becoming an increasingly important and integrated part of the governance structures and processes that administer and direct corporations and their actions (Clark and Salo 2008; Tang et al 2012; Walls et al 2012; Dahlmann and Brammer 2013; Epstein 2014).

A corporation's environmental strategy is defined as one that is developed and implemented in order to "manage the interface between its business and the natural environment" (Aragon-Correa and Sharma 2003: 71). Such environmental planning, mitigation and consultation initiatives are often undertaken by corporations in response to specific legislative and regulatory requirements or other such directives, but in some cases are proactively and at times voluntarily adopted in order to address current, anticipated or potential environmental concerns. Indeed, environmental protection approaches and activities by companies have evolved considerably in recent decades, from the previous regulatory driven "command and control" measures developed and enforced by governments, to an increased emphasis on business-led environmental initiatives (Khanna 2001; May 2005; Annandale et al 2007; Backer 2007; Gouldson 2008; Blanco et al 2009; Paulraj 2009; Liu et al 2010; Prakash and Potoski 2012). These types of initiatives have likewise moved beyond specific "end of pipe" mitigation measures aimed at preventing, reducing or otherwise addressing environmental emissions and other such interactions, to larger, corporate and system-wide approaches that involve improving a company's overall processes and products from an environmental perspective (Mason et al 1999; Buysse and Verbeke 2003; Lozano 2012).

A classification of the various types of voluntary environmental practices that may be implemented by corporations is provided by Gonzalez-Benito and Gonzalez-Benito (2006), which include:

- 1) *Planning and Organizational Practices*: Including the establishment of corporate environmental policies and objectives, as well as processes and systems for identifying and implementing environmental practices and evaluating their outcomes. These may include, for example, the development and use of an environmental management system (EMS) or other such plans and procedures;
- 2) *Operational Practices*: Including changes in a company's production systems or other operational procedures to address environmental issues, including product-related (e.g., those which reduce resource consumption or enhance

recyclability) or process-related (e.g., those which reduce air or water emissions during manufacturing) environmental protection measures; and

- 3) *Communicational Practices*: Initiatives through which a company voluntarily develops and provides information to stakeholders and the general public on its business activities and environmental protection or social responsibility activities and performance.

These types of voluntary initiatives may be established and implemented through, for example, corporate participation in non-mandatory environmental programs that are developed and administered by others (such as governments), bilateral agreements or other arrangements undertaken by a corporation in cooperation with one or more other organizations, or as unilateral and independent initiatives that are designed, adopted and implemented by the corporation itself (Khanna 2001; Anton et al 2004; Uchida and Ferraro 2007; Gouldson 2008).

The adoption and implementation of non-compulsory environmental measures by corporations may also be reactive or proactive in nature. In terms of the former, this can include, for example, the voluntary clean up and rehabilitation of an industrial site to a degree greater than that required by legislation, or the disclosure of corporate environmental performance and social responsibility information by a company following an environmental incident (Deegan et al 2000). Proactive measures, on the other hand, are adopted and implemented in order to address environmental issues before they and/or their negative consequences occur. These may again include implementing a specific environmental mitigation to prevent a certain type of environmental emission or effect from occurring as a result of some aspect of the company's operations, or the proactive establishment and implementation of larger environmental policies and management systems to seek to improve a company's overall environmental performance (Morrow and Rondinelli 2002; Potoski and Prakash 2005; Darnall 2006; Johnstone and Labonne 2009).

Corporate environmental strategies and activities have thus been categorized along a continuum or spectrum, ranging from passive or reactive approaches to more advanced and proactive ones (Ghobadian et al 1995; Buysse and Verbeke 2003; Garce's-Ayerbe et al 2012; Murillo-Luna et al 2011), between which a variety of intermediate strategic postures and approaches exist (Pondeville et al 2013; De Fatima Teles and de Sousa 2014). Roome (1992, cited in Ghobadian et al 1998) identified a four stage continuum of various types and levels of corporate environmental commitment and strategy, ranging from noncompliance with environmental regulations and requirements, to regulatory compliance, to compliance plus, to situations where firms seek to be identified as environmental leaders. A typology put forward by Wartick and Cochran (1985, cited in Buysse and Verbeke 2003) identified the following four generic, firm-level approaches to corporate environmental performance and social responsibility: 1) reactive (deny responsibility, do less than is required), 2) defensive (admit responsibility, do the minimum that is required), 3) accommodative (accept responsibility, do all that is required) and 4) proactive (anticipate responsibility, do more than is required), which are considered to reflect increasing levels of proactivity and strategic initiative by a company, as well as an increased focus on external (and especially, societal) issues and concerns and their management (Clarkson 1995). A proactive corporate environmental strategy has therefore been defined as a company's systematic approach to anticipating and addressing environmental issues that voluntarily goes beyond the organization's legal obligations, including the associated implementation of practices aimed at improving environmental performance (Hojat et al 2010). Sharma and Vredenburg (1998: 733) further state that a firm's environmental strategy is proactive if it exhibits "a consistent pattern of environmental practices, across all dimensions relevant to their range of activities, not required to be undertaken in fulfilment of environmental regulations or in response to isomorphic pressures within the industry as standard business practices".

Environmental proactivity can also be manifested through a variety of types and levels of initiatives by corporations (Berry and Rondinelli 1998; Lozano 2012). It has also been observed that as such environmental behaviours are often corporation and context-specific, they are therefore somewhat variable and idiosyncratic in nature, particularly

as compared to environmental initiatives and activities that are undertaken in response to formal legal requirements and regulations (Aragon-Correa and Sharma 2003). As illustrated through the examples and classifications discussed above and described in greater detail in the sections that follow, environmentally proactive behaviours can include the adoption and implementation of more operational and “downstream” types of environmental initiatives by corporations, including specific environmental protection measures or overall management systems designed to address particular environmental problems or improve overall corporate environmental performance. Corporate environmental proactivity may also occur through more “upstream” approaches and initiatives, including in the identification, consideration and management of potential environmental issues and risks in an earlier and more comprehensive manner as part of corporate planning and management (Gonzalez-Benito and Gonzalez-Benito 2006; Reyes-Rodriguez et al 2014). This could include, for example, the potential voluntary adoption and application of SEA in identifying and managing environmental issues at the earliest stages of a corporation’s strategic planning and decision-making processes, which would likely represent one of the earliest and most comprehensive forms of environmental proactivity that could be undertaken by a corporation.

Whatever the nature, level and timing of environmental proactivity by a corporation, there is a vast and growing body of literature related to the motivations and other factors that influence whether and how corporations may choose to adopt and apply such approaches and practices.

3.2 Rationales for Proactive Environmental Behaviour by Corporations

The traditional, economic view of environmental protection requirements and initiatives by corporations is that these have an associated cost, and are therefore a necessary trade off that inevitably result in a degree of reduced revenue or other negative economic implications for the company (Blanco et al 2009; Lee et al 2014). From this point of view, corporations are viewed as being focussed primarily and directly on maximizing profits, and in doing so, on minimizing any costs and other adverse

effects of environmental protection on same. They therefore react somewhat passively to environmental issues and associated regulatory requirements as an unfortunate but recognized cost of doing business (Khanna and Speir 2013), and often implement the minimal effort required to comply with their legal requirements.

As described earlier, however, these perspectives and assumptions are evolving, as corporations continue to proactively and at times voluntarily adopt and apply environmental protection processes and measures. Indeed, many companies are seeing it as being in their self-interest to do so (Khanna et al 2007; Khanna and Speir 2013), as such initiatives can help improve both their environmental and economic performance by, for example, reducing resource and energy consumption and waste generation, or in preventing or minimizing costly environmental problems. Corporations have also recognized that society is increasingly aware of, interested in and concerned about environmental issues and the associated performance of corporations, including that environmental issues are often socially constructed (Davidson and Frickel 2004) with a resulting need to understand and address societal concerns and expectations in planning and undertaking their business activities or risk the negative repercussions of not doing so (Green and Hunton-Clarke 2003). Social perspectives and pressures are therefore considered to be particularly influential in corporate decisions and actions around any proactive and voluntary environmental initiatives (Kagan et al 2003), as companies strive to ensure that their activities are considered to be socially acceptable and legitimate, and in doing so to mitigate any associated negative effects and risks to their markets and the more intangible corporate assets such as reputation (Clark and Salo 2008; Puncheva 2008) and to build and maintain relationships with key stakeholders (Hillman and Keim 2001).

Companies are therefore increasingly viewing proactive environmental management approaches as an opportunity to not only reduce the costs associated with environmental issues and regulatory compliance, but also to identify and control overall risk, lower operating costs, increase revenues and profitability, manage and respond to stakeholders and increase their competitive advantage (Schaltegger et al 2012; Ervin et al 2013). In that regard, it is also recognized that the proactive and voluntary adoption

of environmental strategies and practices by organizations may be influenced by a variety of direct and indirect considerations and drivers (Dummett 2006), including economic motives and institutional and societal influences (Sangle 2010; Faggi et al 2014; Windolph et al 2014), and as outlined in the sections that follow, research has shown that a mixture of motivations and other factors are often considered in associated corporate decisions and actions in particular contexts.

The sub-sections that follow initially provide an overview of a number of key, existing theories that are often cited and used in understanding and seeking to explain corporate environmental behaviours. This is followed by a short section outlining some of the associated, specific objectives and outcomes of corporate environmental initiatives that are linked to the various economic, institutional, societal and ethical rationales and motivations that are reflected in these larger theories. The section then concludes with an analysis and evaluation of the relevance and applicability of each of these theoretical perspectives to the topic of corporate decision-making about potential SEA use.

3.2.1 Current Theoretical Perspectives and Associated Research

In exploring and attempting to explain the key determinants of proactive environmental strategies and behaviours by corporations, scholars have drawn upon a number of theoretical perspectives (Prakash 2001), ranging from those which emphasize purely economic drivers and motivations for such decisions, to those which recognize and integrate the institutional and socio-cultural dimensions of corporations and their planning and decision-making activities and environments, to those which assume an ethical rationale for environmental protection and stakeholder involvement (Garriga and Mele 2004). The following sections provide an overview of a number of existing theories that have been extensively discussed and evaluated in relation to this subject.

3.2.1.1 Efficiency-based Theory

At one end of the spectrum, efficiency-based theories, particularly those based on traditional (neoclassical) economics, view corporations as being primarily if not

exclusively motivated by the desire to maximize profits and shareholder value (Prakash 2001; Steurer et al 2005). These have also been referred to as instrumental theories by Garriga and Mele (2004) as they view such behaviours by corporations as a mere means to an end that focuses exclusively on profits. This view of corporations suggests that they will only adopt policies and practices that they consider will likely increase revenues or decrease costs, with decision-makers evaluating potential courses of action in a knowledgeable and purposive manner in order to attempt to optimize overall economic returns. Traditional economic theories would therefore describe a firm's decision to voluntarily and proactively implement environmental measures as being based on maximizing an expected utility function (Bouvier 2009), through rational planning and decision-making that considers the probability and likely significance of an environmental problem and the costs of taking action to prevent it as compared to reacting to it later or even not at all (Rorie 2015). Decisions to implement proactive and voluntary environmental practices would therefore be based on a consideration and determination of whether there is likely a business case for doing so (Schaltegger et al 2012), and especially, if they will likely provide a net economic benefit (Prakash 2001) such as increased operational efficiency and cost savings, as well as the specific type and level of environmental measure that may be required to generate such a business benefit (Blanco et al 2009). In emphasizing the profit maximizing role and outlook of the firm, this efficiency-based perspective considers the sole societal responsibility of a corporation as being to maximize shareholders' wealth (Friedman 1970).

A large number of studies have investigated the relationship between environmental proactivity and corporate financial performance with some researchers finding significant, positive relationships whereas others have reported limited or even negative relationships (see reviews by Lopez-Gamero et al 2009; Fischer-Vanden and Thorburn 2011; Endrikat et al 2014). Although research findings on the relationship between environmental and financial performance have therefore been mixed (Tang et al 2012), and the reasons for these discrepancies remain largely unclear (Calza et al 2014), it has been suggested that whether and how corporations may benefit financially from environmental initiatives is very much case and context specific (Blanco et al 2009), to the point that in some situations a firm may decrease costs or increase revenues from

such an approach, whereas others may be better off keeping their environmental protection measures to the legal minimum (Aragon-Correa and Rubio-Lopez 2007). Also, given the often very complex (Salzmann et al 2005), indirect and long-term nature of any such benefits they are considered difficult to detect or define based on conventional economic cause and effect relationships (Schaltegger et al 2012). Whatever the eventual financial outcomes of such environmental strategies and behaviours, however, research has shown that associated corporate decisions typically include at least some degree of consideration of the likely, overall economic outcomes of doing so (Sangle 2010; Babiak and Trendafilova 2011; Orlitzky et al 2011). In some cases these must be seen to generate likely and often immediate net economic gains for firms to adopt them (Blanco et al 2009), with an associated tendency for corporate managers to selectively adopt and implement measures that have a perceived business case (Blumberg and Lin-Hi 2015).

Other relevant theories suggest that firms are not necessarily profit maximizers, but rather that their environmental strategies and actions reflect a range of other factors and considerations (Prakash 2001), including other internal and external issues and pressures and the potential indirect and longer-term outcomes and benefits of improving their environmental performance.

3.2.1.2 Institutional Theory

Institutional (or neo-institutional) theory focuses on the ways in which organizations interact with and are influenced by their settings, including how external pressures from market and non-market forces shape a firm's environmental approaches and activities (Liu et al 2010; Ervin et al 2013). It is based on the idea that organizations often make decisions and take actions in order to attempt to conform to the prevailing (both explicit and tacit) rules and norms that have been defined by the institutional settings in which they exist and function (DiMaggio and Powell 1991). The theory suggests that particular organizational structures, processes and practices may be introduced through innovation or are derived from relevant institutional entities and traditions, some of which eventually become recognized as appropriate and expected characteristics and

behaviour for organizations operating within that environment. Eventually, these may reach a level of legitimization and societal expectation where failure to comply with them is considered perilous and irrational, at which point organizations will adopt or adhere to these norms even if they do not necessarily provide direct and tangible economic benefits. This perspective on organizational behaviour therefore broadens the view of the firm from being a purely rational actor driven objectively by economic cost and benefit considerations to one that is influenced by multiple and often interacting motivations stemming from normative factors and beliefs, a desire for conformity and associated socio-political influences (Khanna and Speir 2013).

Institutional theory is therefore concerned with how organizations attempt to better secure their positions, legitimacy and ultimate survival by conforming to the established rules and norms of their institutional settings rather than focusing directly and solely on efficiency-seeking behaviour. DiMaggio and Powell (1983, cited in Moll et al 2006) suggest that organizations will often adopt such approaches and practices as a result of: 1) coercive pressures, or those which stem from legal requirements or as a result of their dependence upon support from external parties; 2) mimetic pressures, where in situations of uncertainty or ambiguity organizations copy the practices of others that are considered to be successful; or 3) normative pressures, which come from professional associations and other standardising influences. They also suggest that as organizations strive and take decisions and actions to conform to the rules, expectations and belief systems prevailing in their environments, this can lead to a degree of institutional isomorphism.

Informed and influenced by this theoretical perspective, institutional pressures are considered to be an important factor in the adoption of environmental strategies and practices by corporations (Paulraj 2009; Liu et al 2010; Tatoglu et al 2014). Sangle (2010), for example, found institutional pressure to be the most significant determinant of the adoption of proactive environmental strategies by corporations in India, with other factors such as the perceived business case and productivity benefits of such initiatives and managerial attitudes also being important. Liu et al (2010) similarly found

external pressures and associated mimetic responses to play a significant role in the adoption of proactive environmental management approaches by Chinese firms.

Environmental strategies and practices that can result from such institutional influences may include, for example, corporate participation in industry-wide environmental research or monitoring initiatives, or the implementation of non-mandatory but widely recognized and implemented environmental measures to reduce air or water emissions, waste or energy consumption. In this context, coercive isomorphism therefore entails taking measures to ensure compliance with applicable environmental standards or other industry guidelines, mimetic isomorphism involves the implementation of the most common environmental practices in the sector or those of other leading and successful companies, and normative isomorphism involves the adoption of environmental practices that are used or endorsed by applicable industry groups or other influential organizations (Lannelongue et al 2014; Singh et al 2015).

Institutional theory has, however, also been criticised for placing too much emphasis on an assumed homogeneity of organizations and their responses to institutional characteristics and pressures (Prakash 2001; Gunningham et al 2003; Delmas and Toffel 2004; Liu et al 2010; Khanna and Spier 2013), with an associated recognition of the need to consider how differences in organizational responses to similar institutional pressures may result from internal or other characteristics or other forces that impede change. Delmas and Toffel (2008), for example, note that while institutional theory can help to generally explain why some firms adopt practices that go beyond regulatory requirements, it does not address the fundamental question of why firms that operate in comparable settings and are subject to the same types and levels of external pressures often adopt and implement very different strategies and approaches. They go on to suggest that the manner in which companies perceive and respond to these pressures depends upon various internal and contextual factors, and that the differing responses reflect variation in objective and perceived pressures. As discussed further in a later section, these are influenced by the firm's recognition of and perspectives on the potential effect of these various institutional forces on their firm's financial or

environmental performance, as well as associated internal attitudes towards environmental protection and responsibility (Cordano and Frieze 2000; Prakash 2001).

3.2.1.3 Legitimacy Theory

Legitimacy theory is also based on the idea that organizations seek to function within the bounds and norms of the settings and societies in which they exist and operate, and in doing so, they continually strive to ensure that their activities are perceived as being acceptable and legitimate (Dowling and Pfeffer 1975). This theory maintains that there is an implicit social contract or licence to operate between an organization and society, that defines the various expectations that society has about how such organizations should function. Legitimacy is therefore a condition or status, which is an outcome of society's collective perception about an organization and its activities (Lim et al 2009). It is thought that society allows an organization to continue to exist and function as long as it continues to be perceived to generally meet these expectations and the terms of its social contract. Failure to comply with these defined (and at times dynamic) expectations may, however, lead to sanctions being imposed by society, such as legal restrictions, public opposition and protest or reduced demands for its products or services (Deegan 2000, cited in Newson and Deegan 2002).

Dowling and Pfeffer (1975) also noted that organizations will therefore continuously take actions to attempt to ensure that their activities are perceived to be legitimate, and thus to establish congruence between the societal values that are associated with their activities and the norms of acceptable behaviour in the larger social system of which they are a part. They go on to outline various means through which an organization may seek to legitimize its activities, including: 1) changing and adapting its goals and activities to conform to the prevailing societal definitions of legitimacy; 2) attempting to alter, through communication or other activities, society's definition of legitimacy so that it better conforms with the organization's goals and practices; or 3) attempting to become identified with symbols, values or institutions that have a strong sense of legitimacy. Similarly, Lindblom (1994, cited in Deegan 2006) states that an

organization can utilize various legitimization strategies in response to public pressures, which include:

- 1) Seeking to educate or inform stakeholders regarding recent or planned changes by the organization to improve its performance;
- 2) Attempting to change the perceptions of stakeholders regarding issues or events without actually modifying corporate behaviour;
- 3) Diverting attention from the issue of concern by focusing on a positive symbol or activity not linked with the issue; or
- 4) Attempting to change stakeholders' expectations regarding the company's performance.

A number of authors have proposed or investigated legitimacy theory as a means of explaining environmental behaviours and initiatives by corporations. A range of studies have shown that organizations that perceive pressure from communities and stakeholder groups to improve their environmental performance and social responsibility, and which have an associated desire to improve their relations with stakeholders and seek external acceptance and support, are more likely to adopt voluntary environmental practices (Henriques and Sadorsky 1996; Florida and Davison 2001; Zhang et al 2008; Huang et al 2014). Singh et al (2015), for example, present a survey of 104 industries from various sectors in India, and found that comprehensiveness of their adopted environmental management practices was positively influenced by relational motivations as firms consider their image, regulatory compliance and prevention of environmental incidents as significant drivers to implement such practices, whereas their results also showed that these firms did not consider economic factors (cost savings or innovation) as a significant motivation for same. Huang et al (2014) found that wastewater treatment facilities that perceive stricter environmental regulation and greater attention from the public and environmental groups were more likely to voluntarily adopt environmental

management systems. In their recent analysis of the main drivers for voluntary environmental actions amongst Argentine forestry companies, Faggi et al (2014) found that enrichment of company image and increased market access were the major motivations, along with other external drivers such as legal compliance, meeting the ecological demand of customers and personal satisfaction also being important, with considerable interactions also being noted between these factors.

Legitimacy theory has also been particularly referenced in relation to voluntary communicative practices by corporations, such as associated environmental information disclosures (O'Donovan 2000; Wilmshurst and Frost 2000; Emtairah and Mont 2008; Archel et al 2009; Cormier and Magnan 2013). Research has found, for example, that companies that have had important recent environmental issues or incidents have often increased the type or volume their environmental information disclosures in order to attempt to seek increased societal acceptance of their activities and thus, to be perceived as legitimate (Deegan et al 2000, 2002; Magness 2006), although other studies have failed to confirm legitimacy theory as the primary explanation for such reporting in certain instances (Guthrie and Parker 1989).

As summarized at the end of this section, while legitimacy and other such theories have been used and promoted extensively to explain corporate environmental proactivity and social responsibility behaviours, it has also been noted that they do not provide an overall and multi-dimensional perspective on such decisions and actions by corporations and other organizations. This includes the manner in which other objectives, requirements and realities are also influential in that regard, and how various economic, institutional and societal pressures are considered, integrated and potentially reconciled in associated decisions and actions.

3.2.1.4 Stakeholder Theory

Stakeholder theory is also based on the idea that organizations plan, undertake and adapt their activities in response to pressures from a variety of sources, including those that are both internal and external to the organization itself. Stakeholders have been

defined as individuals or groups that can affect the achievement of an organization's goals, or who are affected by the organization's decisions and actions towards the achievement of its objectives (Freeman 1984, cited in Clarkson 1995). They may therefore include a wide range of persons and groups both within and outside of a corporation, including shareholders, suppliers, customers, employees, governments, industry and interest groups, communities and others, who may in turn try to influence corporate decisions and actions in a multitude of ways (Delgado-Ceballos et al 2012).

Stakeholder theory maintains that an organization will seek (albeit, often selectively) to understand and address the requirements and expectations of its various stakeholders in order to continue to exist and function (Alam 2006). This theory also recognizes, however, that the nature and degree of an individual or group's interest in, and influence upon, an organization and its activities may vary considerably between stakeholders. Clarkson (1995), for example, distinguishes between primary stakeholders, or those without whose participation and support the organization cannot survive (e.g., regulators, customers, suppliers), and secondary stakeholders, who can affect or be affected by an organization's activities but which are not directly involved in transactions with it and whose support is thus not immediately essential for its survival (e.g., local communities, environmental interest groups). It is also recognized that even within these broad categories, the types and levels of stakeholder interest and influence will often vary considerably. As stakeholders are a socially constructed concept, and individuals and groups and their interests are often non-homogenous and are somewhat dynamic (Gao and Zhang 2006), it has therefore been recognized that the interests and perceived importance of stakeholders is therefore relative, can change over time and is often issue-specific (Buysse and Verbeke 2003; Paloviita and Luoma-aho 2010).

Through the lens of stakeholder theory, it is thought that organizations may attempt to involve stakeholders and address their views and concerns in the planning and implementation of their environmental strategies and activities, in the hope that they will obtain valuable support from these persons or groups in exchange for doing so and for ultimately improving their environmental performance (Sharma and Vredenburg

1998; Delgado-Ceballos et al 2012). In exploring the various perspectives and motivations associated with an organization's dealings with its stakeholders, Deegan (2002) defined both a normative (ethical) approach and a positive (strategic management) approach. The normative approach is based on the view that all stakeholders have the right to be heard and treated fairly by an organization, in which case corporate decision-makers seek to plan and undertake their business activities for the benefit of all. In contrast, the strategic management approach indicates that corporate decision-makers will consider the perceived, relative importance of each stakeholder and the need for its support for the continued existence and functioning of the firm, and this will determine the degree of effort that it will invest in attempting to manage and satisfy a given stakeholder and its interests.

Ullmann (1985, cited in Elijido-Ten 2007) notes that stakeholder power (through their control of critical resources or required support) and the strategic posture of the firm (as reflected in its passive or active approach to shaping its relationship with stakeholders) and its economic performance (which determines the relative weight of social demands and its financial ability to address these demands) will therefore determine and explain a corporation's perspectives and actions about addressing stakeholder concerns in its decisions and actions. Mitchell et al (1997) similarly indicate that organizational decisions on whether and how to address stakeholder needs and expectations will therefore depend on the following three factors and attributes: 1) the stakeholder's power to influence the firm (such as through some degree of required support or associated risk of negative outcomes); 2) the perceived legitimacy of the actions and claims of the stakeholder group; and 3) the degree of urgency of the stakeholder's claims (the critical or time-sensitive nature of the issue), which all collectively determine stakeholder salience (Buysse and Verbeke 2003). In this way, the degree of influence of a stakeholder on corporate decisions and actions will depend on the organization's perceived requirement for, and thus the likely benefit of, addressing their concerns and expectations.

There are clear overlaps between legitimacy theory and stakeholder theory, as "both theories conceptualize the organization as part of a broader social system wherein the

organization impacts, and is impacted by, other groups in society” (Deegan 2002: 285). Whereas legitimacy theory considers the overall values and influence of society as a whole on organizational decisions and actions, stakeholder theory recognizes that different groups will have different interests and views, as well as varying degrees of power and influence over an organization and its decisions and actions. It also suggests that these issues will be considered in corporate decisions around whether or not, and if so how, to attempt to engage and satisfy individual groups and interests through appropriate means and processes.

Stakeholder theory has also been widely investigated and promoted as a means of explaining corporate environmental and social responsibility and reporting practices (Roberts 1992; Donaldson and Preston 1995; Polonsky 1995; Prakash 2001; Garriga and Mele 2004; Singh et al 2014). Indeed, in an important and detailed review of the literature to identify the key determinants of corporate environmental proactivity, Gonzalez-Benito and Gonzalez-Benito (2006) found stakeholder pressure to be the central influential factor, with all other variables serving to affect either the intensity of this influence or the company’s ability to perceive or address it.

Harvey and Schaefer (2001) studied six UK water and electricity companies and found that their approaches to dealing with their environmental stakeholders was influenced by each group’s perceived influence and stances, including such factors as whether they held an institutional power base, the potential for direct retaliation, and those which were perceived as a source of corporate social legitimacy, with stakeholder salience being determined largely by managers’ experiences and intuitions. Husillos and Alvarez-Gill (2008) found that stakeholder pressures and salience, managerial strategic posture and resource availability collectively served to explain the environmental activities of small and medium sized Spanish firms. Brower and Mahajan (2013) conducted a longitudinal, multi-industry analysis of nearly 500 US firms and found that companies that faced a higher degree of scrutiny or risk from stakeholder action and diversity of stakeholder demands, and who were particularly sensitive to stakeholder views as a result of their strategic emphasis on marketing and value creation, showed higher levels of corporate social responsibility initiatives and performance. In their recent analysis of

corporate social responsibility initiatives by Australian firms, Taghian et al (2015) found that key groups such as employees and the public were perceived to be important stakeholders and were particularly influential in associated corporate decisions and actions, whereas regulatory influences and agencies were not viewed as important or influential in that regard. Other studies have found that a lack of stakeholder recognition and perceived salience and influence have resulted in corporations adopting and implementing minimal environmental efforts. In their recent analysis of the environmental activities of oil and gas companies operating in Nigeria, for example, Hassan and Kouhy (2015) found that weak regulatory powers and a non-recognition of local communities and the public as powerful and legitimate stakeholders resulted in low levels of environmental accountability and performance by such firms.

Again, however, stakeholder theory has likewise been criticized for its perceived “stand alone” nature, and for not reflecting how stakeholder concerns (and even, the indirect economic consequences of not addressing them) represent just one pressure that must be considered alongside other requirements and realities in corporate decision-making. Jensen (2001), for example, suggests that stakeholder theory in itself is not a legitimate contender for economic (value maximization) theories because it fails to provide a complete specification of corporate purpose or objective function. He also suggests that in situations of multiple and competing stakeholder interests and requirements, decision-making between different and incompatible demands and pressures will typically be made with a view to maximizing the long-term value of the firm. It has also been noted that while this theory reflects that stakeholder can be perceived as important and influential by corporations who may attempt to engage them and address their concerns (based on their perceived and relative power and influence), it does not account for differences in organizational and stakeholder power in eventual engagement processes and associated decisions (Benn et al 2009).

3.2.1.5 Overview Summary of Existing Theoretical Perspectives

The above described theoretical perspectives have been extensively discussed and evaluated in attempting to understand and explain corporate decisions and actions

regarding proactive environmental behaviours and practices, and have formed the basis for a large volume of previous research on this subject. Each of these theories take somewhat different perspectives regarding what motivates and drives such decisions and behaviour, but they are somewhat similar in that they assume that corporations will strive to take decisions and actions that they perceive will help to advance and achieve their objectives (whether directly or indirectly), and to ensure their overall success and long-term survival. They may do so with a primary or sole focus on likely direct and immediate economic returns, or with recognition of the overall and long-term benefits of improving their environmental performance and meeting the expectations of society. Theories also vary in their emphasis on the influence of specific factors on organizational actions, ranging from adherence to institutionally derived norms, to attempting to achieve legitimacy by identifying and complying with the expectations of society as a whole, to engagement with and strategic management of their various stakeholders based on their perceived importance, or for purely ethical reasons (Garriga and Mele 2004). These theories can, however, be seen to assume some degree of rationality on the part of corporate decision-makers, even if of a somewhat bounded nature (Prakash 2001), in that they suppose that their decisions and actions are taken with a view towards obtaining utility and the achievement of the organization's objectives and goals, which in some cases is based on the recognized need to understand, consider and address institutional and societal issues and expectations in order to function and endure over the long-term.

Notwithstanding the demonstrated or potential relevance of each of these theoretical perspectives, it has also been recognized that no one such theory can, in and of itself, serve to fully explain whether, why and how corporations voluntarily implement environmental practices and processes. Indeed, and as reflected in the examples given above, research completed to date suggests that such organizational decisions are often influenced by a variety of overlapping and interacting economic, institutional and social issues and other factors (van Aaken et al 2013).

Babiak and Trendafilova (2011), for example, found that amongst surveyed corporate executives in North America, strategic motives were the primary reasons for the

adoption of environmental and social responsibility practices, followed by legitimacy motives and, to a lesser extent, institutional pressures. Khanna and Spier (2007) found that managerial attitudes and beliefs ranging from environmental responsibility to an expectation that improved environmental performance will have long-term financial benefits had a strong influence on corporate decisions to implement voluntary environmental management practices. Moon and de Leon (2007) found that firms choosing to adopt voluntary environmental behaviours did so both as a strategic response to market pressure and to improve competitiveness, as well as in response to institutional pressures and to obtain increased legitimacy. Also, in their study of environmentally proactive behaviour in Spanish industrial firms, Garce's-Ayerbe et al (2012) found that the degree of proactivity was greatest when managers perceived stakeholder pressure regarding environmental matters, which was moderated by their perspectives and expectations about the competitive advantage outcomes that would likely be achieved by undertaking such initiatives. The particular manner and techniques through which corporations may choose to address environmental issues can also vary, ranging from doing so as part of formal procedures and systems within the company to less specific and relatively informal means, with different motivations and areas of emphasis being present in different parts of a corporation and its associated systems. In their interviews with representatives of four large corporations in North America, Epstein et al (2015) for example, found that while corporations' informal systems have a strong promotion of sustainability, their formal systems remained very much more focussed on financial considerations and performance.

The above described "theoretical overlap" is also becoming increasingly recognized in the development and refinement of organizational theory and models (Aguilera et al 2007), including those related to environmental approaches and behaviours by organizations and individuals. Ransom and Lober (1999) also used a combination of theories and models of organizational change to explain the voluntary establishment of environmental performance goals by firms, who they contend will set such goals in an effort to respond to regulators and other factors in their institutional and stakeholder environments, with this goal setting likely to be enhanced if it can be tied directly to economic benefits such as cost savings. This in turn will promote organizational learning,

leading to improved environmental behaviours and performance in the long run. Ervin et al (2013) also suggest that in seeking to explain corporate environmental proactivity, the economic and institutional approaches are complementary rather than conflicting, and together can create a more comprehensive view of firm behaviour based on economic theory and strategic management response to institutional pressures. Following their review of the various existing theories and approaches, Garringa and Mele (2004: 51) note that these can be classified according to their focus on profits, performance, social demands or ethical values, and they suggest a need to develop “new theory on the business and society relationship, which should integrate these four dimensions”.

3.2.2 Associated Objectives and Potential Outcomes of Corporate Environmental Proactivity

Based on and linked to these larger theoretical perspectives and as defined through associated empirical research, the literature has identified and described a number of specific, associated motivations, deterrents and other associated factors that are considered to influence whether and how corporations adopt and implement proactive environmental strategies and initiatives. This has included exploring the perceived rationales for, and potential and desired outcomes of, such actions and the resulting motivations for environmental proactivity - which have been defined as a company’s “beliefs about which effects and results the implementation of environmental management practices can and should have” (Gonzalez-Benito and Gonzalez-Benito 2005b: 462). This section discusses and provides some specific examples of the various associated objectives and outcomes of corporate environmental initiatives that are linked to the rationales and motivations reflected in these larger theories.

It has again been recognized that corporations may proactively and voluntarily adopt environmental and social practices and attempt to improve their performance on these matters for a variety of reasons (Ditlev-Simonsen and Midttun 2011; Faggi et al 2014), which may be related to commercial (productivity, competitive), relational and/or moral concerns (Gonzalez-Benito and Gonzalez-Benito 2005b; Schaltegger et al 2012; Ervin et

al 2013), and the associated recognition and management of threats (environmental risks, stakeholder pressures, reputational issues, legislation and standards) or to capitalize on opportunities (cost reduction, access to markets and financing, competitive advantages, employee recruitment and retention) (Valentine 2009). Bansal and Roth (2000), for example, distinguish a number of categories of incentives for environmental initiatives, including: 1) ethical motivations; 2) competitive motivations, including the search for financial and differentiation advantages; and 3) relational motivations, or the desire to achieve legitimization and better relationships with stakeholders. Faggi et al (2014) indicate the following five motivational mechanisms for corporate environmental behaviours: 1) economic, 2) legal, 3) moral, 4) learning and 5) signalling, each of which are included and described in the discussion that follows.

As discussed above, traditional economic perspectives centre on corporate motivations to maximize revenue, decrease costs and therefore obtain utility. Environmental initiatives may therefore be viewed and used as a means of reducing construction or operational costs, increasing overall efficiency and productivity, influencing and capturing new markets and potentially obtaining higher prices for one's products or services or to capitalize on available technical or financial subsidies or other incentives (Khanna 2001; Schaltegger et al 2012; Ervin et al 2013). They can also be a means of avoiding or reducing environmental issues and associated risks, including the time, costs and resources that are required to react to and address environmental problems later. It has been suggested that there may even be competitive opportunities and advantages associated with environmental management, in that environmental issues and requirements can trigger innovation within firms that would not otherwise have occurred, and which might eventually offset the costs of compliance (Porter and Van der Linde 1995). Environmental issues and management approaches may also be viewed by some corporations as opportunities and used as a means of gaining competitive advantage (Ransom and Lober 1999; Aragon-Correa and Sharma 2003; Lopez-Gamero et al 2009; Mondejar-Jimenez et al 2013; Reyes-Rodriguez et al 2013) where innovators attempt to capture markets, build capacity and disadvantage their competitors (Aragon-Correa and Sharma 2003) such as by raising their costs (Lyon 2003, cited in Liu et al 2010). Proactive environmental initiatives may therefore be part of a

firm's differentiation strategy (McWilliams et al 2014), or conversely they may be undertaken in response to competitive pressures introduced by others (Khanna 2001; Anton et al 2004). Proactively and comprehensively addressing environmental issues and public concerns may also help to reduce risks for shareholders and lenders and therefore help attract investment (Ervin et al 2013; Jones 2013).

In interviewing representatives of 12 multinational firms, Hockerts (2015) for example found that the main determinant of decisions to invest in corporate sustainability initiatives was the perceived business case for such initiatives, which included various considerations and potential sources of competitive advantage: risk reduction, efficiency gains, brand building and new market creation. Reyes-Rodríguez et al (2014) conducted repeated surveys of Danish manufacturing firms over 14 years, and found that these companies have increasingly deployed environmental initiatives that are associated with both lower costs and a differentiation dimensions of competitive advantage, and that strategic intent has been the main driver when adopting such initiatives.

Corporations may also proactively and voluntarily adopt and implement environmental initiatives as a means of avoiding or reducing government interference and oversight (Bondy et al 2004; Hojat et al 2010), including reducing the possibility of new or revised regulatory requirements or otherwise influencing and helping to shape these (Ghobadian et al 1995; Hutchinson 1996; Lyon and Maxwell 1999; Khanna et al 2009; Khanna and Speir 2013). They may also be used by a corporation to seek to achieve compliance with existing and anticipated environmental regulations more efficiently and cost effectively (Ghobadian et al 1995), such as by identifying innovative approaches to address these requirements as part of existing operational processes (Khanna 2001; Anton et al 2004; Khanna and Speir 2013). Environmental initiatives may also be viewed and used as a means of helping to formalize, improve and standardize a company's internal processes and behaviours with respect to environmental issues and their management (Bondy et al 2004) and in doing so, for making these more effective and efficient (Gonzalez-Benito and Gonzalez-Benito 2005a).

As also reflected in several of the theoretical perspectives outlined in the preceding sections, the proactive adoption of non-mandatory environmental practices by corporations may also be related to, and influenced by, stakeholder interests and associated pressures from these and other external forces (Khanna 2001; Uchida and Ferraro 2007; Delgado-Ceballos et al 2012). By improving their environmental performance and more closely aligning their operations with societal concerns and expectations, corporations may seek to enhance their reputations and to obtain legitimacy through greater public understanding and acceptance of their business activities (Bansal and Roth 2000; Liu et al 2010; Tang et al 2012; Lannelongue et al 2014).

By establishing and maintaining positive, long-term relationships with stakeholders, corporations often seek greater support for, at least less opposition to, their decisions and actions, which may indirectly result in overall benefits such as time and cost savings as well as reduced uncertainty and risk for the corporation in the long run (Gouldson et al 2007). Addressing stakeholder interests and building and maintaining corporate reputation can also help increase and expand a firm's markets and market share, particularly in attracting and keeping customers that are motivated by buying green products and services (Singh et al 2014) and those that are produced by environmentally and socially responsible firms. Stakeholder engagement can also help firms generate new information, knowledge and generate innovation in the development and implementation of their environmental strategy (Buysse and Verbeke 2003) which may in turn have commercial and competitive benefits. It can thus help corporations identify and seek to address environmental issues early, and identify innovative solutions to stay ahead of environmental problems, and possibly, their competitors (Delgado-Ceballos et al 2012). Stakeholders and their views and influences can therefore transform how firms approach and perceive the costs and benefits of environmental protection by influencing the economic and institutional setting in which firms operate, which may result in eventual and tangible benefits (Auld et al 2008).

Finally, it has also been recognized that some corporations may choose to implement environmental measures for purely normative or ethical reasons to attempt to "do the right thing" and satisfy their own standards or perceptions of environmental

responsibility (Judge and Douglas 1998; Gunningham et al 2005; Delgado-Ceballos et al 2012; Jones 2013), even if there is a known negative financial effect of doing so (Dutta et al 2012). It has been suggested that there is, however, an overall lack of evidence for “profit sacrificing” behaviour by corporations that are solely in the interest of the environment or society, and that in most cases corporations undertake voluntary environmental initiatives because of a belief that they will likely pay off in some overall manner and degree in the long run (Reinhardt and Stavins 2010).

Gunningham et al (2005: 289) recognize the existence and inter-play of multiple motives and the influence of contextual factors on the environmental behaviour of corporations, in stating that that “there are various, often interwoven, strands that must be taken into account in understanding what motivates corporate environmental behaviour”, as well as that how these play out depends very much on the characteristics of the company and its operating environment. It has therefore been noted that further insights into the specific factors that influence decisions to adopt and implement particular types of environmental initiatives is required (Prakash and Potoski 2012), including internal and external factors and the relative importance, interrelationship of these and other factors, and their presence, recognition and influence in particular situations and contexts (Gonzalez-Benito and Gonzalez-Benito 2005b).

3.2.3 Summary and Applicability to this Research

Although each of the previously described theories and associated past research have been used to investigate and seek to explain corporate environmental proactivity in general, these are not considered to provide an appropriate theoretical basis to understand (and particularly, to hypothesize about) corporate decisions about potential SEA adoption and application. In particular, these theories are not considered adequate to explain why a corporation would opt to assess and attempt to manage environmental issues at the strategic planning level through SEA, or especially, to capture the full range and complexity of potential motivations, deterrents, outcomes, challenges, risks and other factors that may be influential in corporate decisions about possible SEA use, including their presence and influence in certain contexts. In addition, if SEA is accepted

by a corporation, these or other theories likewise do not address associated decision-making about when and how it might be applied.

In terms of the potential economic benefits of corporate environmental proactivity and the associated efficiency theories referenced above, given that any associated benefits of SEA are likely to be relatively longer-term, indirect and somewhat uncertain at the stage of initial decisions about its potential use, it is considered unlikely that a corporation would choose to implement SEA solely on the basis of direct and immediate cost-benefit considerations. Although SEA use decisions may well be linked to overall, long-term economic benefits, such as seeking to prevent future environmental issues, regulatory delays or stakeholder opposition during PPP implementation, these theoretical perspectives do not explain whether and why corporations might choose to do so at such an early and sensitive stage of their planning processes through SEA as opposed to later, when environmental issues, interests and requirements are likely to be far more clearly defined. They likewise do not help in understanding how the various potential benefits, costs, challenges and risks associated with SEA use, and the likely ability of this specific tool in helping a corporation to address such issues and provide tangible benefits, are recognized and influential in such decisions. This is clearly different from other, more downstream forms of environmental proactivity, where the required mitigation, its costs, effectiveness, outcomes and benefits (whether economic or otherwise) are likely to be more immediate and readily understood by a corporation in making such decisions.

From the perspective of institutional theory, the voluntary application of SEA by corporations would be such a new and novel practice that is considered unlikely to be viewed an institutional norm or societal expectation to the extent that corporations would feel pressured to adopt and implement it for such reasons. Although certain aspects of SEA may be becoming more common in a particular area or sector, such as an overall trend towards increased environmental analysis or a degree of stakeholder engagement by corporations, this theory likewise does not explain why a corporation might choose to address these institutional pressures (if they do in fact exist) at the strategic level through SEA as opposed to at other levels of corporate business planning

and decision-making or through other means. Even if there were recognized institutional pressures to assess and consider environmental issues and engage with stakeholders at the corporate strategic planning level, the theory also does not provide insights into how these pressures might be perceived and considered against the possible costs, benefits and risks of SEA use, nor how these various motivations and other considerations translate into corporate decisions about whether, when and how SEA analysis and/or consultation would be implemented.

Finally, in terms of the previously described legitimacy and stakeholder theories, a corporation's decision to voluntarily subject its strategic planning and decision-making processes to earlier and increased levels of environmental analysis and public input may well result from a perceived need to achieve a greater understanding of and congruence with societal concerns and expectations, and thus to engage with relevant stakeholders in corporate planning and decision-making. Indeed, generating and maintaining legitimacy (Elling 2009; Jiliberto 2011; Salomons and Hoberg 2014) and stakeholder participation (Runhaar and Driessen 2007; Gauthier et al 2011; Rega and Baldizzone 2015) are considered to be amongst the most important objectives, aspects and outcomes of SEA.

It is not known, however, if seeking legitimacy and stakeholder support would be the sole or primary motivation for voluntary SEA use, or particularly, what the impetus would be for attempting to achieve this at the strategic planning level as opposed to later in the planning or PPP implementation process or even beyond. If increased legitimacy and stakeholder support are indeed motivations for SEA use, it is also not clear what particular strategy would be adopted at the strategic level through SEA, which legitimacy theory suggests can range from seeking to improve planning decisions through environmental analysis and consultation, to attempting to alter societal views on legitimacy and acceptability to be more in keeping with the organization's planned strategic initiatives and business activities. These issues are relevant to the potential learning and transformative objectives and outcomes of SEA use as discussed previously (Section 2.2.5), but existing theoretical perspectives and previous research have not provided an understanding of the main drivers of one such approach or the other,

particularly at the strategic level and in a corporate context. In terms of stakeholder salience and selection, although there are associated discussions in the SEA literature around the potential inclusive or selective nature of stakeholder involvement in such processes and the implications for SEA quality and outcomes (Jackson and Illsley 2007; Dietz and Stern 2008; Bonifazi et al 2011; Salomons and Hoberg 2014; Rega and Baldizzone 2015), it is not clear from existing theory and past research how stakeholder relevance and importance (power, legitimacy, urgency) would be determined and influential at the strategic level. In particular, these do not explain how particular SEA motivations, objectives, challenges, risks and other issues and contextual influences will factor into corporate decisions about whether and how to conduct SEA related stakeholder engagement, including its associated focus, timing and participants.

In summary, therefore, although each of the above described theories have been used to investigate and understand corporate environmental proactivity in general and have some potential applicability to the research topic and questions that are the focus of this study, these are not considered to individually or collectively provide an adequate theoretical basis related to corporate decisions about whether, why, when and how to adopt and apply SEA. The current lack of an appropriate existing theoretical framework for this research topic has led to this study adopting a qualitative and largely exploratory approach, as discussed in further detail in Chapter 4.

The next section provides a discussion of some of the key organizational (internal) and contextual (external) characteristics and factors that have been found to influence corporate environmental strategies and behaviours, as additional background and context for this research.

3.3 Organizational and Contextual Determinants of Corporate Environmental Proactivity

Whatever the underlying rationale for or timing of a corporation's environmental strategy and behaviours, its associated decisions and actions around whether or not, and if so how, to adopt and apply environmental practices may be influenced by a

variety of contextual factors (Ghobadian et al 1998; Desarbo et al 2005), including those that originate and exist both within and outside the firm. Scholars have therefore identified and categorised the main drivers for or barriers to corporate environmental proactivity as being internal or external in nature (Gouldson 2008; Howard-Grenville et al 2008; Hojat et al 2010; Liu et al 2010; Calza et al 2014; Reyes-Rodríguez et al 2014; Singh et al 2014).

Through his detailed review of the associated literature, Valentine (2009), for example, presents a typology and framework for describing the key determinants of corporate environmental strategy, which includes various “layers” of external and internal factors and influences. These include: 1) macro level forces (political, economic, social and technological factors and constraints); 2) key stakeholders (creditors, regulators, interest groups, the general public, educators, and unions); 3) industry characteristics (sector type, associated environmental issues and risks, media exposure, customer pressure, supplier incentives, competitive practices); 4) firm-level characteristics (ownership, firm size, financial health, age of assets, environmental reputation); and 5) functional activities (corporate strategies around positioning, financial matters, brand protection, quality, and cost control). It has been recognized that corporate environmental behaviours are typically the result of multiple internal and external factors and often complex and situation-specific interactions and interrelationships between them. Gouldson (2008), for example, states that a change in a corporation’s environmental strategy and behaviour is most likely to occur where there are various external pressures that resonate with each other, coupled with the existence of receptive corporate cultures and adequate organizational capabilities. As a result of these multiple influences, inherent complexities and context-specific drivers, it has also been noted that associated corporate decisions often do not appear to conform to standard decision-making models (Ghobadian et al 1998) or necessarily present as clearly rational decisions (Backer 2007).

The voluminous and growing literature and associated research on this subject has explored whether and how internal and external factors also influence (motivate, deter

and mediate) such decisions and actions as well as the eventual outcomes of proactive environmental behaviour by corporations, as summarized in the sections that follow.

3.3.1 Corporate Characteristics and Activities

Internal characteristics and conditions are important and influential in corporate environmental decision-making, as these inform and shape the firm's recognition and interpretation of environmental issues and external pressures, as well as define the firm's potential and eventual responses to them (Sharma et al 1999; Howard-Grenville et al 2008). Annandale et al (2004) for example found that, in contradiction of the prevailing view in the literature that external (and particularly, stakeholder) pressures exert the most influence over the environmental responsiveness of firms, internal factors such as organisational culture had the greatest influence on the environmental practices of various Canadian and Australian mining companies. Similarly, in their exploratory study that involved interviews with environmental managers at various industrial facilities in the United States, Howard-Grenville et al (2008) found that internal factors were key determinants of corporate environmental behaviour, including managerial incentives for environmental protection, organisational identity and organisational self-monitoring behaviour, as these shaped both managerial interpretations of associated issues and pressures and organisational responses to them.

A number of specific corporate characteristics have been found to influence whether and how firms respond to environmental issues and requirements, with the size of the company being amongst the most commonly referenced such feature (Bowen 2000; Khanna et al 2007; Haddock-Fraser and Fraser 2008; Zhang et al 2008; da Silva Monteiro and Aibar-Guzman 2010; Reverte 2009; Liu et al 2010; Gallo and Christensen 2011; Gamerschlag et al 2011; Singh et al 2014, 2015). This has been attributed to the fact that larger corporations often have more available resources to devote to environmental initiatives, and therefore, have greater technological and financial capacity to develop and implement non-mandatory measures and to absorb such costs through associated economies of scale (Waddock and Graves 1997; Darnall 2006; Uchida and Ferraro 2007;

Khanna et al 2009; Lopez-Gamero et al 2009; Liu et al 2010; Endrikat et al 2014). Larger firms are also often more interested in expanding their markets and market shares through the attraction of environmentally aware customers, as well as considering themselves to be more visible thereby attracting more attention and scrutiny as a result of their environmental actions or lack thereof (Nikolaeva and Bicho 2011; Jones 2013; Tatoglu et al 2014; Singh et al 2015). Others have suggested, however, that larger firms can in fact be more passive in terms of their environmental strategies, as they are inherently more bureaucratic, guarded and pessimistic in nature (Clemens et al 2008). It has also been suggested that smaller firms often have more efficient systems and internal communications and are more nimble and flexible in their decisions and actions, which can facilitate a higher degree of environmental proactivity (Aragon-Correa et al 2008).

There have also been observed differences in the presence and degree of environmental proactivity between companies in different industry sectors (Banjeree 2001; Aragon-Correa and Sharma 2003; Eljido-Ten 2007; Singh et al 2014), with, for example, firms in natural resource sectors being found to be more likely to have an environmental plan as compared to those involved in manufacturing and service activities (Henriques and Sadorsky 1996). In their investigation of the relationship between various firm characteristics and environmental disclosure amongst Greek companies, Galani et al (2012) also found evidence that firms with higher degrees of environmental proactivity presented a statistically significant larger size and belonged to more environmentally sensitive industries. The age of the firm (Singh et al 2015), its organizational structure (Khanna et al 2009), corporate ownership and shareholder structure (Eljido-Ten 2007; da Silva Monteiro and Aibar-Guzman 2010; Gamerschlag et al 2011) and board of directors composition (Post et al 2011; Walls et al 2012) have also been found to be influential.

In addition, firms with a higher percentage of government ownership also often exhibit greater environmental proactivity (Gouldson 2008; Calza et al 2014), as public sector entities typically respond more to direct environmental demands from public and political pressures and are less driven by market conditions, dynamics and competition,

although there has been very limited analysis of voluntary environmental behaviour by public sector corporations overall (Huang et al 2014). A company's position in the value chain and its resulting proximity to the market and direct interaction with consumers also influences its visibility, and thus, the nature, degree and influence of associated public and stakeholder concerns and pressures (Haddock-Fraser and Fraser 2008; Haddock-Fraser and Tourelle 2010). The particular type of business activities involved and the market setting within which the firm operates, for example, can also determine whether and to what degree an environmental issue and associated mitigation will affect a firm's products, prices and revenues, including the degree to which its customers are able and willing to pay a premium for a green product (Singh et al 2014).

3.3.2 Types and Levels of Environmental Issues and Associated Mitigations

The specific nature of the business, including its associated environmental issues and the type and level of measures that would be required to address these are also relevant to corporate decisions about whether, and if so what, voluntary environmental initiatives will be implemented. This includes the type and intensity of environmental issues or risks that are faced or perceived by the organization (Ghobadian et al 1995; Banerjee 2001; Reverte 2009; Lopez-Gamero et al 2009; Tatoglu et al 2014), as influenced by the firm's past environmental performance (Khanna 2001) and any recent environmental incidents (Hutchinson 1996; Magrini and Santos Lins 2007), as well as existence or threat and degree of possible environmental liabilities (Khanna 2001; Anton et al 2004). Henriques and Sadosky (1996) for example, found that firms that view environmental issues as being important in the next five years more likely to have an environmental plan, whereas those that do not foresee important environmental challenges in the near future are less likely to adopt a proactive strategy.

The particular characteristics of the organization and its business activities and market setting may also restrict the types and range of environmental protection options that are available to it (Rivera-Camino 2012). The known or supposed costs and benefits of the environmental initiative in question (Nakamura et al 2001; Kagan et al 2003; Eljido-Ten 2007; Ervin et al 2013), its overall technical and economic feasibility (Khanna 2001),

and the corporation's technical and financial capabilities to adopt and implement it (Aragon-Correa and Rubio-Lopez 2007; Delgado-Ceballos et al 2012) are also key determinants, as well as the likely implications of a particular environmental initiative for a firm's products and prices (Singh et al 2014), and its overall degree of compatibility with the business and its activities and interests (Hutchinson 1996).

3.3.3 Corporate Cultures, Knowledge and Capabilities

Internal corporate cultures, capacities and other characteristics are also relevant, with each firm typically having its own philosophies, approaches, systems and organizational structures for defining and implementing its environmental strategy and actions (Lee et al 2014). Relevant factors may therefore include, for example, the corporation's underlying environmental goals, values and commitment, and the overall degree of strategic proactivity amongst corporate decision-makers and the firm in general (Aragon-Correa and Rubio-Lopez 2007). The competitive nature of the business and its environment, including associated pressures and the intensity of competition (Tatoglu et al 2014) and the firm's underlying desire for and approach to obtaining competitive advantage (Khanna and Anton 2002a) are also influential characteristics which may drive or impede environmental proactivity. Some firms may see environmental matters as opportunities (Liu et al 2010) rather than as threats or constraints to their business. Prior experiences and associated learning and capacity development have also been found to be relevant to corporate environmental decisions and behaviour. Some studies have, for example, found that experience in complex (e.g., international) business settings results in firms being exposed to new forms of knowledge and creates new environmental and societal awareness and values which, based on the firm's capacity for organizational learning, can enhance the identification and adoption of proactive environmental strategies (Aguilera-Caracuel et al 2012; Singh et al 2014).

A proactive environmental strategy inevitably requires corporations and their representatives to make decisions and often to take risks (Sharma 2000). Corporate decisions and actions related to environmental issues, activities and outcomes are very often characterized by a high degree of uncertainty and risk (Vecchiato 2012), whether

real or perceived (Aragon-Correa and Sharma 2003; Ashill and Jobber 2010). This and the multiple and often conflicting interests can create significant and unique complexities and challenges for firms who must balance this against technical and economic requirements and realities (McWilliams et al 2014). In a widely cited classification, Milliken (1987) defined three types of perceived uncertainty about an organization's external environment that may affect its strategic planning and actions: 1) State Uncertainty, or uncertainty about the current condition or state of the external environment; 2) Effect Uncertainty, or a perceived inability to predict what the impact of environmental events or changes will be on the organization; and 3) Response Uncertainty, or a lack of knowledge about associated management options or an inability to predict the likely consequences of a particular response option. Aragon-Correa and Sharma (2003) similarly distinguish a number of types of such uncertainty in the context of corporate environmental behaviours, which include situations where environmental conditions, issues or requirements are perceived to be unpredictable or are difficult to understand, or where there is a perceived inability or risk in predicting decision outcomes in certain situations.

Whereas high degrees of uncertainty may in some cases increase the perceived need for proactive and innovative environmental systems and procedures (Aragon-Correa and Sharma 2003), in other situations this can result in the corporation adopting a "wait and see" attitude (Vecchiato 2012; Pondeville et al 2013), especially where the need for and likely results of a voluntary environmental measure are unclear and its costs may therefore not be justified. Pondeville et al (2013), for example, surveyed 256 manufacturing companies and found that those that perceived greater uncertainty were less inclined to develop a proactive environmental strategy or engage in other types of voluntary environmental initiatives, and they suggest that this may be due to the perceived unpredictability of changes in green markets and environmental legislation, and the resulting difficulty in identifying and developing specific environmental procedures. In their survey of US steel industry corporations, Clemens et al (2008) found that when firms were unsure about how changes in their business environment (emerging environmental regulations) might affect them or how effective their responses might be, they tended to favour a more passive strategy. Overall,

therefore, the generally proactive or reactive nature and posture of the firm can likewise influence its environmental strategy.

Corporate resources and capabilities have also been found to influence the possible outcomes of such environmental proactivity, including the potential for the firm to realize benefits from same. In particular, a firm must have the appropriate capability and capacity to implement the environmental initiative in question (Delgado-Ceballos et al 2012), as well as to realize tangible benefits from it in a competitive business environment. The potential for, and nature and degree of, these outcomes can therefore vary according to situation specific factors and other contextual elements. The resource-based view of the firm, for example, suggests that not all companies can benefit equally from a proactive environmental strategy (Aragon-Correa and Sharma 2003). Rather, corporations will differ in the competitive advantage that they might gain from such practices, depending on their internal capabilities to define and implement them, as well as the characteristics of their external environments (Khanna and Spier 2013; Tatoglu et al 2014) which can serve to moderate the competitive value of such a proactive strategy (Aragon-Correa and Sharma 2003). This theory therefore suggests that corporate strategy will only lead to sustainable competitive advantage if it is supported by applicable firm-level competencies and resources (Buysse and Verbeke 2003), and specifically, where the capabilities creating the advantage are not easily duplicated by competitors (Clarkson et al 2011).

Hart (1995) extended the resource-based theory in developing a natural-resource-based conceptual framework related to corporate environmental strategies and the various competitive advantages they can create through improved efficiency, enhanced reputation and in influencing future environmental standards. This theoretical perspective is likewise based on the premise that not all firms can realize these benefits to the same degree, which he notes also often require substantial investment and long term commitments, including adequate financial resources and management capabilities in order to gain these competitive advantages. In their survey of managers in 448 Spanish companies Lopez-Gamero et al (2009) found that that a firm's resources and competitive advantage act as mediator variables for a positive relationship between

environmental protection and financial performance. This issue and its recognition has also been observed to be a consideration in and determinant of corporate environmental behaviour. Through empirical research on Danish power generation firms, Tutore (2013) for example found that while environmental regulation and ethical motivations often represent the initial drivers that push firms towards improving their environmental performance, this is translated into a strategic initiative if this is considered likely to improve the firm's competitiveness through cost reduction or product differentiation and where the company already holds complementary resources and capabilities.

The main focus of discussion in the literature to date has been on the positive drivers of proactive environmental strategies, and there has been considerably less consideration of possible factors that may deter corporations from undertaking voluntary environmental initiatives. Internal barriers originate within the organization itself and are often firm-specific (Murillo-Luna et al 2011) and include such factors as: overall attitude and perceptions towards environmental issues and requirements; a lack of understanding, awareness and commitment, and an overall unfavourable corporate culture; past practice; poor communications; a lack of resources; and other technical and informational barriers (Post and Altman 1994; Hillary 2004; Shi et al 2008; Chan 2008, all as cited in Murillo-Luna et al 2011). Corporations may fear, for example, that voluntary environmental initiatives or information sharing could lead to greater visibility and exposure, stakeholder concerns and risk of opposition (Liu et al 2010) or to them being more vulnerable to legal challenges (Langpap 2015), or there may be other aspects of perceived risk associated with such initiatives (Stoeckl 2004). There may also be other factors that can serve as potential barriers to environmental proactivity and which cannot be directly controlled by the firm, including: overall uncertainty and complexity regarding environmental issues, requirements and potential solutions or even an absence of environmentally acceptable and economically viable mitigation options, as well as possible regulatory impediments, market barriers or competitive pressures that prevent the adoption of certain environmental practices (Murillo-Luna et al 2011).

3.3.4 External Pressures and their Recognition, Interpretation and Response

As illustrated in the various theoretical perspectives and previous research described earlier, external factors and influences may also have implications for corporations' environmental strategies and actions (Liu et al 2010). External influences are particularly relevant in situations which involve real or perceived pressures from important and influential stakeholders for corporations to take action to improve their environmental performance (Buysse and Verbeke 2003; Pondeville et al 2013). In some cases, it may be that a corporation does not have or see a need to increase or formalize its environmental protection or social responsibility activities, as it perceives that relevant stakeholders are not concerned about environmental issues or the firm's activities in general (Aragon-Correa and Rubio-Lopez 2007), or that it currently enjoys a high level of social capital with stakeholders (Bondy et al 2004). In other cases, and as reflected in the institutional, legitimacy and stakeholder theories and associated research described earlier, external pressures may be a key driver for, and determinant of, proactive environmental initiatives by corporations. A corporation's recognition and interpretation of environmental issues and requirements, stakeholder interests and concerns, societal expectations and norms, and the resulting need for environmental proactivity is therefore considered to be particularly relevant to its environmental behaviours, and the often subjective manner in which these are perceived and acted upon may help to explain the often variable and diverse environmental strategies and responses of individual companies (Liu et al 2010).

Previous research on corporate environmental behaviours has been criticized for neglecting the more subjective and cognitive considerations and drivers, and it has been noted that there is a need to disentangle corporate and individual level explanations (Rorie 2015) as well as for more attention to be given to individual-level factors and traits that may influence such decisions and actions (Orlitzky et al 2011; Papagiannakis and Lioukas 2012; Lulfs and Hahn 2014). Voluntary and proactive environmental approaches are considered more likely to be developed and implemented by corporations when such matters are the responsibility of managers with high levels of discretion and power (Aragon-Correa et al 2004), and it is the individual managers'

recognition and interpretation of environmental issues, requirements and pressures that often conditions their choice of environmental strategy, including decisions about whether and how to proactively adopt and implement environmental measures (Sharma 2000; Prakash 2001; Banjeree 2001; Rivera-Camino 2012; Mondejar-Jimenez et al 2013; van Aaken et al 2013). Some of the more recent literature and research in this field has therefore focussed on the role of the individual manager and the influence of his or her personal views and other characteristics in determining corporate environmental strategy and approach (Sharma et al 1999), as managers and other influential persons within a firm have the power to influence the direction and degree to which environmental initiatives are introduced and implemented (Prakash 2001).

Managers' perceptions about environmental issues and requirements and their associated response strategies and behaviours can be determined and influenced by many factors (Banjeree 2001; Hill and Thompson 2006), including their individual views, attitudes and approaches (Kagan et al 2003; Rorie 2015) which may in turn be influenced by multiple, interrelated factors such as their knowledge, values, biases, past experiences, learning capacity and other characteristics (Jones 2013; Hockerts 2015). The theory of planned behaviour, for example, states that attitudes, subjective norms (or perceived social pressures) and perceived behavioural control (or the supposed ease or difficulty of performing the possible action in question) collectively shape an individual's behavioural intentions and eventual behaviours (Ajzen 1987, 1991 cited in Papagiannakis and Lioukas 2012). This theory is often cited in the context of individual manager's decisions about voluntary environmental initiatives (Cordano and Frieze 2000; Khanna and Speir 2013; Lulfs and Hahn 2014; Reyes-Rodríguez et al 2014) and has been used as a theoretical bridge between managers' characteristics and corporate environmental behaviour (Papagiannakis and Lioukas 2012). In this context, the theory suggests that a manager's personal values and perceptions about environmental issues and requirements influence their attitudes, which in turn affect their potential support for and decisions about engaging in voluntary environmental initiatives, including the potential conversion of external pressures into positive and proactive environmental actions (Papagiannakis and Lioukas 2012; Colwell and Joshi 2013).

As noted above, in some cases managers may therefore perceive that environmental issues or stakeholder concerns are not important and there are no associated issues or risks associated with the firm's current or future business activities that would necessitate increased environmental management (Aragon-Correa and Rubio-Lopez 2007). In cases where stakeholder concerns and pressures are present and influential, however, managerial perceptions are also critical to determining stakeholder salience, and thus, whether and what measures may be taken to address their concerns (Buysse and Verbeke 2003; Pondeville et al 2013). Also influential are managers' views about their likely ability to respond to and address environmental issues or stakeholder concerns through a particular voluntary initiative, and their perceived ability to obtain benefits or other utility for engaging in strategic and proactive environmental behaviour (Jones 2013), whereas some may be deterred due to the effort involved in doing so, thereby viewing the environmental protection measure in question simply as an added workload (Delgado-Ceballos et al 2012).

Previous research has supported the idea that managers' understanding and awareness of, and views and attitudes towards, environmental issues and protection and of stakeholders and their interests are key determinants of corporate decisions about environmental management and proactivity (Bansal and Roth 2000; Cordano and Frieze 2000; Banjeree 2001; Gonzalez-Benito and Gonzalez-Benito 2006; Sangle, 2010; Ervin et al 2013; Khanna and Spier 2013), including that these factors often have important moderating influences for other decision-making considerations around such initiatives (Aragon-Correa and Sharma 2003; Jones 2013). In their survey of 142 Greek companies, Papagiannakis and Lioukas (2012) found that managers' personal values influenced their environmental activities indirectly by shaping their environmental attitudes, as did subjective norms and stakeholder expectations, and their perceived ability to handle environmental issues. Rivera-Camino (2012) studied a large sample of managers from eleven firms and found that their environmental behaviours were determined largely by social judgments and perceptions. In their study of Spanish firms, Carballo-Penela and Castroman-Diz (2014) showed that managers' attitudes and motivations towards the environment were strongly correlated with environmental proactivity amongst the studied companies. Also, using survey data from a diverse set of facilities in six major

industries, Ervin et al (2013) showed that management attitudes toward environmental stewardship, along with cost considerations, company ownership and institutional forces all affected environmental practices and pollution prevention activities. Khanna and Speir (2013) analysed survey data on voluntary environmental practices from 689 industrial facilities in Oregon within various sectors, and found that perceived regulatory pressures and managerial attitudes had a significant impact on their adoption. Individual views and characteristics can therefore influence whether and how influential managers and other corporate decision-makers recognize, filter, interpret and prioritize the signals they receive from their external settings and act upon these by undertaking proactive environmental initiatives (Jones 2013). It is therefore important to recognize that the characteristics of, and complex interactions between, the institutional environment, organizational characteristics and dynamics and managerial attitudes shape corporate environmental behaviour (Khanna and Speir 2013).

Although, there are again important differences in the nature and timing of SEA as compared to other more specific and downstream environmental initiatives such as those which have been the focus of most research to date, the study reported herein has attempted to identify and understand all of the various internal and external factors that may influence corporate decisions about SEA use. These include, for example, the above noted issues around corporate characteristics and activities, their associated environmental issues and required mitigations, corporate cultures and capabilities, and the presence, recognition and interpretation of external pressures regarding environmental issues, as well as other factors and influences as relevant.

The environmental actions and performance of companies are therefore often the result of a complex set of motivations, deterrents, characteristics and conditions both within and outside of the organization (Lulfs and Hahn 2014), and there are also a wide range of potential approaches and measures through which environmental proactivity may be implemented and achieved (Bansal and Roth 2000; Lozano 2012). The next section focuses in upon a number of “higher end” techniques that have been or may be applied by corporations in anticipating and managing environmental issues or social concerns. These included a number of analytical, management and consultative

approaches that have been referenced in the literature, and which may be more akin to SEA use than many of the more specific and downstream environmental protection measures referenced above.

3.4 Analytical and Consultative Approaches for Addressing Environmental Issues and Risk

Corporations adopt proactive environmental strategies and initiatives to anticipate and address environmental issues or requirements before they or their negative consequences for the company occur. These can include environmental problems that are imminent or those that can be foreseen and are considered to create issues and risk for the corporation in the near or long term. These types of environmental initiatives can include the adoption and implementation of more operational and downstream types of environmental protection measures by corporations, including specific mitigations designed to address a particular environmental problem as described in the preceding sections of this chapter. Although corporate environmental initiatives (and the associated literature) have been largely focussed on individual and immediate measures as opposed to more comprehensive and longer-term initiatives (Faulkner et al 2005), environmental proactivity may also occur through more comprehensive and upstream approaches and initiatives, including in identifying, considering and addressing potential environmental issues and risks in an earlier and more comprehensive manner as part of overall corporate management and planning processes (Gonzalez-Benito and Gonzalez-Benito 2006; Reyes-Rodriguez et al 2014).

The potential integration of environmental objectives and initiatives into overall corporate governance systems (Gouldson and Bebbington 2007) is the approach that would be most relevant and analogous to the potential use of SEA approaches in corporate strategic planning, and it is this type and level of corporate environmental proactivity that is the focus of the remainder of this chapter. This approach touches generally upon two of the previously identified categories of environmental approaches as described by Gonzalez-Benito and Gonzalez-Benito (2006), namely the Type 1 (Planning and Organizational) and Type 3 (Communicational) practices, although as

illustrated and discussed in this section, SEA still represents an earlier and more comprehensive approach to environmental proactivity compared to the environmental measures which are envisioned within this classification and upon which most research on associated corporate decisions and actions has thus far focused.

Similar to the various rationales for and approaches to SEA previously discussed (Chapter 2), it has also been noted that corporate approaches for assessing and managing environmental issues and risk in their planning and decision-making processes may take the form of modernistic, analytical and technocratic (and primarily, internal) methods, or more communicative and consultative approaches which involve a degree of engagement with stakeholders as part of corporate decision-making processes (Gouldson et al 2007). Each of these is discussed further in the sections that follow.

3.4.1 Analytical Tools and Management Systems

A variety of techniques have been developed, promoted and applied to help corporations identify, analyse and manage environmental issues and risk as part of their overall business decisions and actions. Many of these approaches are based largely upon a technical-rational approach to corporate decision-making, with focus on the development and presentation of scientific and technical information as a means of informing and improving decision-making outcomes (Gouldson and Bebbington 2007), and an associated emphasis on increasing the structure and rigour of the processes through which this information is generated and used. This includes a number of analytical approaches and techniques, including such tools as cost-benefit analysis (CBA), risk analysis and management tools such as enterprise risk management (ERM) and others, life-cycle analysis (LCA), PEST (Political, Economic, Social and Technological) analysis and others (Jones and Mason 2002; Welford 2013). There are also related approaches for incorporating environmental considerations into overall corporate processes and systems, such as Environmental Management Systems (EMSs) pursuant to ISO 14000 series standards or otherwise and other such tools (Khanna and Anton 2002b; Morrow and Rondinelli 2002; Burstrom von Malmborg 2002; Lozano 2012;

Epstein 2014), which provide a more comprehensive, systematic and integrated framework for developing, implementing and tracking a corporation's environmental objectives, obligations and initiatives across its various business units and activities. In addition to helping improve corporate processes and performance from an environmental perspective and potentially providing associated business benefits as a result, these methods and systems may also be perceptible by regulators and stakeholders which can provide other benefits in terms of enhanced corporate reputation and confidence (Gonzalez-Benito and Gonzalez-Benito 2006).

The literature has suggested that there is a particular emphasis on the analysis, consideration and management of environmental issues in corporate planning and organizational process at the strategic level (Judge and Douglas 1998; Quazi 2001; Magrini and Santos Lins 2007; Reyes-Rodriguez et al 2014). The associated examples and evidence that are provided by these authors have, however, focussed primarily on highly industrial firms and their activities, and the implementation of environmental initiatives into the highest levels of their operational (rather than strategic) planning processes to improve their overall environmental performance. This has involved the use of various analytical tools and management and reporting systems such as those outlined above, including LCAs, eco-efficiency principles, environmental auditing procedures and other such methods, and the associated incorporation of environmental objectives and protection measures into the design and implementation of industrial processes and outputs with the objective of lowering costs, improving productivity and efficiency and obtaining competitive advantage (Reyes-Rodriguez et al 2014).

Fraj-Andres et al (2009), for example, conducted a recent survey of 235 Spanish industrial firms to identify why they chose to incorporate environmental protection into the strategic planning, and found this to be linked to competitive motivations and managerial views and commitment related to environmental protection. The focus of these "strategic decisions" was, however, around such issues as the potential purchase of a new and more environmentally friendly production technologies, the use of greener distribution systems, the eco-design of products and processes and other such measures which, while strategic for those types of industrial companies, remained

primarily operational in nature. These authors go on to recognize the limitation of their study in terms of its exclusive focus on the industrial sector, and they call for other types of companies and contexts to be investigated with regard to the incorporation of environmental considerations in corporate strategic planning.

Even in cases where environmental issues and measures are incorporated into overall corporate governance structures and management processes, this often takes the form of creating environmental policies, objectives and strategies for the business and the associated definition and assignment of internal roles and responsibilities, procedures and resources for their implementation, as opposed to the early and direct integration of environmental matters into overall corporate strategic business planning and decision-making (Banerjee 2001), such as that which would be associated with SEA use. The consideration and management of environmental issues in larger corporate governance structures and processes has thus far primarily taken the form of the creation and implementation of environmental policies, objectives and plans as part of a separate environmental strategy, as opposed to the early and integrated consideration of environmental issues in the development and implementation of overall corporate strategic planning, including the various policies, plans and other strategic initiatives and decisions that are associated with their overall business activities.

3.4.2 Consultative and Deliberative Approaches

Corporations are again also recognizing that society is increasingly aware of, interested in and concerned about the environmental performance of corporations and their activities, with an associated need to understand and address societal concerns and expectations in planning and undertaking their business activities (Green and Hunton-Clarke 2003). The previously described shift away from government legislation and regulatory frameworks towards more corporate-led environmental responsibilities and initiatives (Gouldson 2008) has resulted in the traditional, institutional sources of authority and legitimacy being increasingly challenged by a more engaged, risk adverse and reflexive public (Benn et al 2009) – a “risk society” (Beck 1992, cited in Schnieder

and Scherer 2015), where the public is increasingly anxious about the environmental consequences of human development activities and sceptical about the ability of institutional processes, science and experts to address these risks. As part of obtaining and maintaining their social licences, and thus to prevent any negative societal repercussions or sanctions against the company and its activities, corporations are increasingly aware of their need for their activities to be perceived as legitimate, and as part of that, the requirement to at times engage and involve stakeholders in particular issues and decisions and to build and maintain relationships with such organizations (Hillman and Keim 2001). These consultative processes and associated environmental and social responsibility measures are therefore often undertaken to attempt to address or alleviate societal concerns about a corporation's activities, as well as for the corporation itself to seek to make the social environment more understandable and controllable (Backer 2007) and to reduce the perception of risk and associated anxiety within the organization about social pressures (Solomon 2005).

Social perspectives, expectations and pressures are therefore often particularly influential in decisions and actions around corporate environmental behaviours (Kagan et al 2003), where environmental issues and responses that go beyond legislation and regulatory compliance requirements are considered to provide space for "discursive struggles" between corporations and their stakeholders (Hajer 1995, cited in Prakash 2001). New approaches have therefore emerged as an alternative to closed and technocratic approaches to corporate decision-making, which facilitate more open, inclusive and participatory approaches through which corporations choose to engage and involve stakeholders in decision-making processes around relevant environmental issues (Gouldson and Bebbington 2007). Similar to the "communicative turn" that has been observed in public sector planning and decision-making contexts and in SEA (Richardson 2005: 341, see Section 2.2.5), the adoption and use of stakeholder processes by corporations similarly emphasizes the potential learning and transformative outcomes of such engagement, drawing upon the Habermasian concept of communicative rationality (Habermas 1984, cited in Hilden et al 2004). Under such an approach, decision outcomes are not necessarily based on the interests or power of the individual actors, but the power and influence of ideas and discourses, as "the power

of a good idea can transcend the power of the different actors” and where “interactions between actors are guided by communicative rather than instrumental rationalities” (Gouldson and Bebbington 2007: 10). This can involve the provision of information and insights from stakeholders to corporate decision-makers and associated organizational learning (Roome and Wijen 2006; Welp et al 2006), as well as learning on the part of stakeholders and the general public regarding corporate requirements, decisions and actions which may in turn enhance the perceived legitimacy of the company and its activities (Gouldson et al 2007).

In cases where corporations choose to engage and involve stakeholders in such a manner, there are a variety of times, types and levels at which they may opt to do so. Some corporations may, for example, make a specific decision that stakeholders are only to be engaged in project level or issue-specific decisions, and not at the level of overall corporate strategic planning (Backer 2007) nor at subsequent phases of the project implementation lifecycle (Boer et al 2003). In terms of the various possible types and levels of such engagement, Green and Hunton-Clarke (2003) classify corporate engagement with their stakeholders as being informative, consultative or decisional in nature, which reflect increasingly levels of involvement and input into decision-making, with each type potentially also having very different outcomes and risks involved. They go on to note that companies only very rarely use open and participatory processes, and where such stakeholder engagement is undertaken, this is often not comprehensive or particularly structured or systematic in nature (Green and Hunton-Clarke 2003). Others have noted that while some companies do not engage or involve their stakeholders outside of statutory requirements to do so, some establish consultation policies and principles to attempt to achieve a perception of transparency and legitimacy but do not implement these procedures, while others may reluctantly engage to fulfil requirements or policies but with these processes having little or no influence on decisions (Backer 2007). In such voluntary engagement initiatives, the corporation also often has discretion to determine what types of issues will be focussed upon, with research showing, for example, that corporate representatives often see their primary responsibilities to stakeholders being to avoid significant negative environmental effects and risks as opposed to optimizing social benefits (Cragg and Greenbaum 2002).

It has been noted that identifying and engaging appropriately with stakeholders also requires certain corporate characteristics, capabilities and resources to be present, as well as internal aptitudes and values that facilitate a desire and ability to listen to and learn from others and to develop collaborative relationships with stakeholders to find acceptable environmental solutions (Sharma and Vredenburg 1998; Buysse and Verbeke 2003; Delgado-Ceballos et al 2012).

The ideas and potential outcomes of communicative rationality and the perceived equalizing effect of discourse and reflection has again also been criticized as being somewhat utopian in its optimism (Weston 2010), particularly where the corporation has the ability to determine stakeholder salience and involvement (Green and Hunton-Clarke 2003), to establish the type and level of engagement and determine whether and how stakeholder perspectives will be considered in decision-making. Gouldson and Bebbington (2007) note that this may involve, for example, a corporation providing greater opportunities for more pragmatic stakeholders to participate, which may help to legitimize their activities, while at the same time limiting or preventing the role of the more radical stakeholders. There may thus be tendency for such processes to be approached and designed to seek to legitimize rather than inform or influence decisions. They go on to note that there may be a middle ground between purely optimistic and pessimistic views on communicative approaches to corporate environmental governance, and predict that companies and stakeholders are both likely to open up and engage in such discursive struggles partly as a way of furthering their own interests, and in order to learn more about issues and how they may be addressed. They also suggest that each party is therefore likely to approach such engagement in a somewhat tentative and experimental way (Gouldson and Bebbington 2007).

There is again a limited number of documented cases of corporations voluntarily engaging with stakeholders on environmental issues as part of their decision-making processes (Green and Hunton-Clarke 2003; Gouldson et al 2007), and even fewer examples of empirical research that has investigated the specific reasons why corporations have opted to move towards more open, inclusive and deliberative approaches. In one exploratory study, Gouldson et al (2007) conducted semi-structured

interviews with representatives of six corporations in Britain and Sweden to determine why these organizations had chosen to take the first steps towards more open and communicative approaches in engaging with stakeholders about their business activities, and specifically, to discuss matters related to environmental risk. These researchers found that corporate representatives were generally aware of the need to consider both real (technical) and perceived (societal) risks, although most would have been happier and more comfortable if the latter was not required. The results of this study indicate that the key perceived benefits of stakeholder engagement related to an overall process of establishing and building relationships and trust with key stakeholders, which it was hoped would provide overall business benefits to the company in terms of time and cost savings in the long run, the potential streamlining of subsequent regulatory approval processes, and the potential for less negative reaction if incidents were to occur. There were also identified concerns about the potential challenges and negative outcomes of engagement with stakeholders, including: the time and costs involved; the likelihood that only the most negative and vocal stakeholders would choose to participate and that their views and expectations would be unreasonable and not representative of society as a whole, nor relevant to the company's actions and responsibilities; the likely difficulty of conveying complex technical information and the associated potential for information and issues to be misunderstood or misrepresented; and the potential for matters of disagreement and conflict to actually be escalated through such processes or later, if negative effects did occur after trust was established. This study also found that while there was often considerable uncertainty about the benefits of such engagement initially, corporations needed to see that the likely long term benefits outweighed any short term costs and risks, with past experiences and lessons being particularly influential in that regard. The study also showed a progressive evolution of consultation approaches and outcomes, where in the short term issues and mistrust may actually have increased before overall relationships were established, and where the consultation methods evolved from a primarily "information out" approach to a progressively greater degree of two way dialogue.

The findings of the above described exploratory study, while important and informative, are not directly relevant to the topic and objectives of the present research for a number of reasons. Firstly, it has focussed on a relatively downstream and somewhat reactive aspect of corporate environmental governance, namely the communication and discussion of environmental risk about some aspect of a corporation's existing and on-going operations. At these more downstream and operational levels, there is a clearer indication of environmental issues, interests, requirements and mitigation approaches that would be the case at the strategic level, as well as less or at least different types and levels of consultation challenges and risks as compared to engaging as part of overall strategic business planning by a corporation. In addition, this study represents an "after the fact" review of why corporations have done what they have done, as opposed to a real time analysis of decision-making about whether, why and how to undertake such engagement, where respondents' views were also therefore likely coloured by their experiences as opposed to just their initial views and objectives that led to the decision to consult. Finally, the study focussed only on companies that did opt to undertake stakeholder engagement, but did not include companies that have decided not to engage with stakeholders so as to determine what prevented or deterred them from doing so.

3.5 Summary of Existing Theory and Previous Research and their Applicability to this Study

Although existing theory and previous research have sought to understand and explain why corporations may decide to proactively and at times voluntarily undertake environmental initiatives, such as environmental management systems, environmental protection measures, or the public disclosure of certain types and levels of information on their activities and environmental issues, there are important differences in the nature, timing and other characteristics of these measures and SEA. These, in turn, suggests a potentially very different and likely more complex and multi-dimensional decision-making process with regard to the voluntary use of SEA as compared to those for other, previously investigated environmental initiatives by corporations which have formed the basis of existing theory and been the focus of previous research.

By way of illustration, a corporation's decision to proactively implement a particular environmental protection measure as part of its operations may be taken as a direct and calculated response to an existing or likely environmental issue. The voluntary installation of air emission reduction technology at a thermal electrical generating plant, for example, would be one that has a very specific, direct and known cost, and which, if implemented, will likely completely address a recognized environmental problem or societal concern. Similarly, the development and implementation of a corporate environmental management system, while potentially proactive and linked to overall corporate environmental governance procedures, would similarly represent an operations focussed and primarily internal process for developing environmental policies, goals, targets and procedures for a company's business activities, as opposed to the early and direct integration of environmental analysis and management into overall corporate strategic business planning and decision-making. As described throughout this chapter, existing theoretical perspectives and previous research have attempted to understand and explain corporate motivations for voluntarily adopting and implementing these types of more downstream and operational environmental initiatives, including the various internal and external factors and other contextual elements that influence such decisions and actions and their outcomes.

SEA is, however, by its very nature a quite different type and level of environmental initiative, and arguably represents one of the most proactive, comprehensive and integrated forms of environmental analysis and management that could be adopted by a corporation. A corporation's decision to voluntarily adopt and apply it would represent one to systematically and proactively identify, analyse and consider environmental issues, and to potentially involve external parties, at the earliest, formative and likely sensitive stage of its overall strategic business planning and decision-making activities. Any associated potential public and stakeholder engagement components may involve both an "information out" and an "information in" approach, possibly with some degree of direct engagement with stakeholders and their viewpoints early in business planning, rather than just the strategic release of formulated information, from a distance and after the fact, or even focussed stakeholder engagement on a project- or issue-specific basis.

As also described in Chapter 2, there are a variety of potential positive outcomes of, and therefore rationales and motivations for, corporate SEA use, including its role in proactively and systematically identifying and addressing environmental considerations early in strategic business planning. In doing so, SEA may help a firm to manage environmental issues, risks and stakeholder concerns and to obtain enhanced acceptance of and support for its decisions and actions, potentially resulting in associated benefits for the company. On the other hand, there are a number of potential issues, risks, costs and other considerations that may deter or prevent a corporation from deciding to adopt and apply SEA, as also referenced above and which are likely different in nature or degree from other types of environmental initiatives. Given its relatively early timing, SEA use is likely to be characterized by much less direct and clear outcomes than other specific and downstream environmental practices. Indeed, at the strategic planning stage, corporate decisions and actions are somewhat far removed in process and time from subsequent and specific business decisions and actions, including individual development activities and their environmental effects, and therefore, so too are many of the potential reasons for, and possible benefits of, SEA use. Unlike most other such initiatives, there is also relatively limited knowledge of, or experience with, SEA use and its results amongst corporations. The particular motivations for, objectives of, deterrents to, enablers of and impediments for SEA use by corporations, and the degree to which they are present, recognized and influential in corporate decisions about SEA in particular contexts, are largely unknown however, and these have not been explained through existing theory or investigated in associated research completed to date.

In addition to the option of applying SEA as part of its strategic business planning processes, a company will also typically have various other ways and times through which it may attempt to address environmental issues and requirements. This includes having considerable discretion in deciding whether, when and how to assess and attempt to manage certain types of issues at different stages of its business planning or implementation activities, and there are certainly any number of other possible practices that could be implemented to try to improve environmental performance and/or public acceptance at later stages of its planning or operational activities. It is not

currently known what might lead a corporation to seek to identify and address environmental issues and risks at the early stages of corporate strategic planning through SEA, as opposed to later or through other means, including waiting until later and somewhat less sensitive stages of its business processes when there is more clarity and certainty on issues, interests, possible mitigation approaches and likely outcomes beyond and outside of PPP selection. The overall rationale for an organization choosing to adopt such a “strategic posture” and to conduct environmental analysis and possibly public engagement in such an early and active manner, including the manner in which the various potential objectives, perceived benefits, challenges and risks of SEA use are recognized and influential in such decisions, is not currently known and has again not been addressed through existing theory or research.

Should a corporation decide to voluntarily adopt an SEA approach, based on some rationale and in order to seek to obtain some desired outcome, it is also interesting to consider its associated decision-making about the particular nature, level and timing of that SEA use. This relates to a number of important issues and on-going debates in the SEA literature (see Chapter 2), particularly with regard to analytical and technocratic vs. consultative and deliberative approaches to SEA, as well as the timing and depth of the SEA process. The result is a spectrum of possible SEA approaches, ranging from, for example, a purely technical and internal review of a proposed PPP, to SEA processes with limited and passive stakeholder engagement at specific junctures, to SEA processes characterized by, “direct, early and deep” integration, analysis and stakeholder participation (such as in PPP objectives setting, alternatives identification and evaluation). Each of these approaches will likely have its own rationale, potential outcomes, benefits, challenges and risks, but it is not known from existing theory and past research how these are present and influential in associated decisions-making and in particular contexts. Also, from a deliberative and “learning / transformative” perspective, an organization may apply SEA for various reasons, ranging from seeking to improve decision-making through analysis and consultation, to attempting to alter societal views on environmental acceptability, to using EA approaches to attempt to obtain planning process legitimacy. In addition to overall questions around what might motivate or deter corporations from choosing to voluntarily use SEA in general, there

has been no investigation of what factors influence how and when it is applied, including the particular motivations or deterrents for particular rationales and approaches at the strategic level and in certain situations.

As a result of the above described issues and considerations, and the need to consider and investigate the full range and complexity of the various determinants of corporate decision-making about SEA use, this study has again adopted a qualitative, inductive and largely exploratory approach. The rationale for this approach and the specific methods used are described further in the chapter that follows.

4 APPROACH AND METHODS

This chapter describes the research approach and methods that have been adopted and utilized in planning and undertaking this study. This includes an initial reiteration of the study's purpose, followed by a description of the overall approach used, including its qualitative, inductive and exploratory nature and the rationale for this in view of its key characteristics, underlying purpose and objectives and intended outcomes. The chapter then identifies and describes the industrial sector and jurisdictions upon which the research and its associated data collection have focused (namely, Canadian electricity utilities) and provides some background information on this industry and the various corporations involved. This is followed by a description of the data collection methods used, including the selection and size of the research sample, and the design, conduct, recording and reporting of the interviews themselves. The chapter concludes with a discussion of the approach and techniques used for data analysis and interpretation, the detailed results of which are subsequently presented in Chapter 5.

4.1 Study Purpose, Approach and Planned Outcomes

The purpose of this research is again to investigate whether, why, when and how corporations may choose to voluntarily adopt and apply SEA as part of their strategic planning and decision-making processes, including the key factors and situations that influence such decisions. In doing so, the planning and conduct of the study has been shaped and guided by a number of specific objectives and associated research questions, which were presented earlier in Section 1.3.

In investigating this subject and addressing the associated research objectives and questions, the study has adopted a qualitative, inductive and largely exploratory approach. This is due primarily to the lack of previous research on this particular subject, as well as the overall inapplicability and inadequacy of existing knowledge, theory and other past research to understanding and explaining corporate decision-making about SEA use (Chapters 2 and 3). This approach also helps to ensure that its methods are able to capture the full range and richness of potential corporate views and perspectives on

this issue. The nature of and rationale for the research approach and methods used are outlined further in the sections that follow.

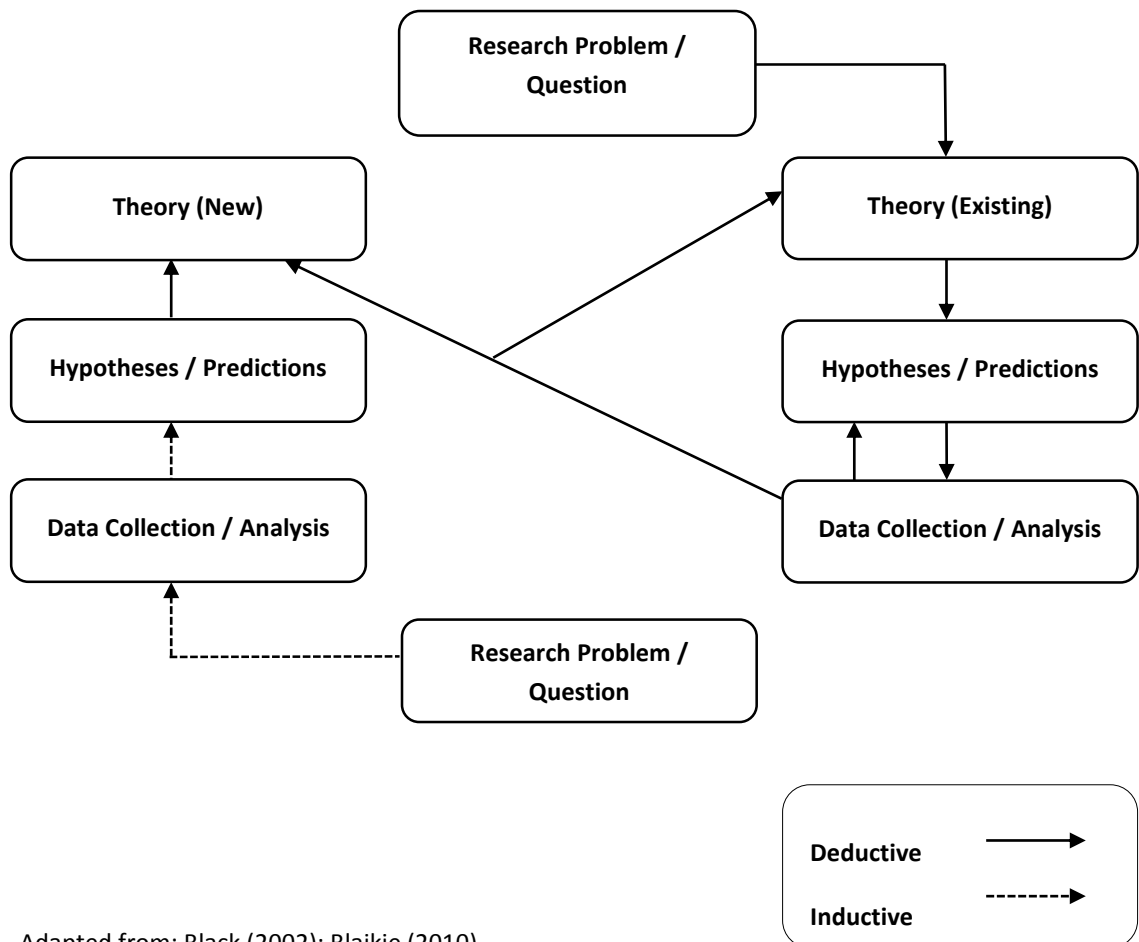
4.1.1 Research Approaches and Methods

The overall purpose and underlying objective of research is to seek to obtain knowledge, generally an explanation of how some relevant aspect of the natural or human environments work. This often takes the form of a theory, which is a systematic, generalized framework for understanding, explaining and making predictions about some aspect of reality (Webster and Sell 2007). Through associated research, the phenomena, circumstances and explanations that are represented in a theory are reproduced and analysed through observation or experiment, and the outcomes in a particular situation are evaluated and possibly measured. This process may involve some or all of the following components and stages, the presence and ordering of which depend on the particular nature and objectives of the research itself (Figure 4.1):

- 1) Identifying and defining a study topic (problem) and associated research question(s);
- 2) Gathering and evaluating existing information that is relevant to the research topic and questions (including existing and applicable theory and previous research);
- 3) Developing and proposing one or more hypotheses (or, suggested explanations of the phenomenon) and associated testable predictions;
- 4) Designing and performing an experiment or series of observations to test the hypotheses, including the associated (and controlled and replicable) collection and analysis of data; and

- 5) Interpreting the research results to draw and present conclusions, which may then serve as a starting point for new or modified hypotheses or the eventual development or refinement of theory.

Figure 4.1 Key Research Components and Stages and Possible Approaches



Adapted from: Black (2002); Blaikie (2010)

When study outcomes reflect and support the relationships and explanations that are represented abstractly in the theory, they increase confidence in it, with the ultimate goal of research therefore being the creation or refinement of theory (Webster and Sell 2007). Black (2002: 25) states that:

[T]heories should be considered as explanations of how something functions or why events occur. These are based upon discoveries and data collection resulting in tested hypotheses, which can be considered to be proposed relations and expectations. Theories are presented to explain facts (accurately or inaccurately) but are not facts themselves. They are not absolute answers and

are continually subject to new, often conflicting, hypotheses. While sometimes research results in refuting an existing theory, more often the consequence is a refinement of the explanation which enhances the power of prediction when applying them. In any case, we are talking about models of reality, not reality itself; therefore it is not a matter of being 'right' or 'wrong', but degrees of quality in establishing the best explanation (model) for what we see.

This reflects both the iterative and cumulative nature of research and knowledge, where some theories endure on-going testing due to their robustness and utility, others do not survive, and others are modified and improved as they are applied to new situations and analysis (Wellington and Szczerbinski 2007).

Theory may thus be considered both a starting point for, and the eventual and desired outcome of, most research initiatives, and as reflected above the pursuit of knowledge through such inquiry is an on-going process that involves a number of interrelated components and activities (Figure 4.1). A key question in the planning and conduct of scientific research is therefore not whether – but rather, when and how - theory should make its entry, which depends entirely on the subject being investigated and the characteristics and objectives of the study itself (Wellington and Szczerbinski 2007). In the social sciences, a number of different research approaches and methods may be employed, again depending on the particular topic, phenomena and questions involved, and particularly, the current state of knowledge on the subject. These factors inform and influence the specific objectives and desired outcomes of a study, with the two main methodological approaches in the social sciences being either confirmation or exploration (Stebbins 2001).

Deductive research, for example, takes a characteristically “top down” approach and works from the general and abstract to the more specific, seeking to understand and explain a particular situation through deduction from a general statement about the phenomena of interest (Gibbs 2007; Myers 2013). It often begins with the identification and presentation of an overall theory about the research subject and questions, from which specific hypotheses and testable predictions can be derived about conceptual

relationships (Strauss 1987). Quantitative techniques may then be used for the systematic gathering of numerical data through observation or experimentation and its analysis, in order to test (confirm or contradict) the hypotheses, and thus, the existing theories that they were based upon. This approach therefore reflects a positivist tradition for the development of knowledge, based on cause and effect thinking, reduction to specific variables and hypotheses, the use of measurement and observation to generate statistical data, the testing of hypotheses and the evaluation and possible refinement of existing theories (Cresswell 2003).

Inductive research tends to work in the opposite (“bottom-up”), direction and is therefore inherently more exploratory in nature (Hammersley 2006; Myers 2013). It involves the gathering of information and insights related to a particular subject and situation, in order to seek to develop general explanations related to the topic or problem (Gibbs 2007). Exploration and inductive reasoning are considered to be important and valuable elements of research, as deductive inquiries alone cannot uncover new ideas and explanations (Stebbins 2001; Hammersley 2006). This approach is therefore used in research that is focused on new and as yet un- (or under-) investigated topics, for which there is inadequate theory upon which to posit a specific, explanatory relationship (Shields and Rangarjan 2013) that can be tested through quantitative techniques, numerical data and the hypothetico-deductive (theory testing) approach described above (Cresswell 2003, 2013). The purpose of this type of research is therefore to seek to obtain initial information and a preliminary understanding of a new topic or phenomenon or acquire new insights into it, which will then be helpful in the development of working hypothesis or other general propositions that may then be subject to further (potentially quantitative) investigation in the future (Boyatzis 1998). Inductive approaches therefore emphasize the development of general conclusions and the associated building (rather than the testing) of theory based on the collection and analysis of information (Gibbs 2007; Alvesson and Kärreman 2011; Cresswell 2013), usually through the use of qualitative methods (Cresswell 2003).

Qualitative research is utilized in a variety of academic disciplines, often (but not exclusively) in the social sciences. This includes studies such as that reported herein,

where a lack of existing, applicable or adequate theory prevents the use of more deductive approaches and necessitates a research approach that focuses on an initial exploration of the subject matter under investigation (Cresswell 2013). The primary value of inductive, qualitative research therefore lies in its ability to uncover and understand new ideas and dimensions related to the topic under analysis, and especially, to do so in an exploratory and relatively unrestricted way. Qualitative methods are also considered to be particularly useful for obtaining an initial and in-depth understanding of human characteristics, views, values, experiences and behaviours (Myers 2013). Their focus is thus often on studying and seeking to understand these phenomena in a more holistic manner and in context (Marshall and Rossman 2014), including how people view and interpret their situations and experiences and the meaning they attribute to these (Miles and Huberman 1994; Snape and Spencer 2003; Merriam 2006), as well as how these factors influence their decisions and actions. It therefore emphasizes a more open and interpretative approach to social research (Boyatzis 1998; Levering 2002; Myers 2013), which acknowledges that reality is often subjective and socially constructed (Wellington and Szczerbinski 2007). Many qualitative techniques are therefore aimed at the collection of open-ended, textual information on socio-cultural phenomena and issues through tools such as interviews, focus groups, participant observation and other methods (Denzin and Lincoln 2008).

Creswell (2013) summarizes a number of situations in which qualitative approaches and methods should be used, including: where a problem or issues needs to be initially explored due to a lack of existing and applicable theory or models; where we are seeking a detailed understanding of complex social phenomena and behaviours; where we want to understand the contexts and settings for the social phenomena of interest; and where we want to give a voice to participants in order to understand their views, behaviours and the meanings they ascribe to these. In the context of this study, adopting a deductive and quantitative approach would have been difficult and not particularly meaningful, both because of the overall lack of previous research and existing and applicable theory related to the research questions and objectives, but particularly because of the relatively focused and restricted nature of such inquiry as compared to that which was considered to be required and most relevant and useful

for this study. In planning, designing and undertaking this study, and based on the previously reviewed literature (Chapters 2 and 3) it was considered likely that SEA related decision-making by a corporation would involve multiple, complex and potentially interacting issues and considerations that may be somewhat situation-specific, and may therefore be beyond the scope and explanatory power of any particular theoretical perspective(s). A key consideration and concern was therefore that the use of deductive and quantitative research approaches and techniques to test specific hypotheses would have inappropriately restricted the scope of the investigation and prevented it from exploring and understanding all of the various factors, dimensions and the full richness and complexity of such perspectives and decisions about SEA use.

The research approach, methods and analytical framework used in this study are therefore based on a primarily exploratory (qualitative and inductive) approach, in order to take full advantage of the abilities of this research paradigm in uncovering and understanding complex and often subjective social views and behaviours. As noted as part of the study's research objectives outlined in Chapter 1, however, this also includes an eventual evaluation of the study's findings against current theoretical perspectives about the overall purpose, function and outcomes of SEA and corporate environmental proactivity in general, to re-evaluate their relevance and relationship to decision-making about the voluntary adoption and use of SEA in a corporate context, and especially, the implications of the results of this research for the further development and advancement of same. Such an approach allows for the findings of inductive research to contribute to both the development of new theory, as well as (through an "analysis of fit" with existing theoretical perspectives) to help contribute to the continued refinement and strengthening of existing theories through an associated dialogue between these and inductively derived empirical knowledge (Ritchie and Lewis 2003, cited in Rouillard 2012).

Where qualitative research approaches are adopted and used, the planning, design and conduct of such studies require consideration of, and determinations regarding, a number of associated philosophical issues and components. These include considerations related to: 1) *ontology*, or views and beliefs about the nature of the social

world and what can be known about it); 2) *epistemology*, or the nature and scope of knowledge and how it can be acquired; and 3) associated *methodological* considerations and approaches (Guba and Lincoln 1994; Snape and Spencer 2003; Cresswell 2013). Given its focus on identifying and understanding the views and perspectives of corporations (and particularly, of corporate representatives) regarding SEA use, including the various individually perceived motivations, deterrents and other determinants of their associated decisions about whether, why, when and how they might choose to apply it, this study has taken constructionism as its ontological stance. This perspective considers reality and meaning to be individually and socially derived and constructed, and thus based on people's own views, values, characteristics, interpretations and other often individual-specific factors. It therefore maintains that there is no single, correct and captive reality in the social world (Blaikie 2010), but rather that any such "reality is only knowable through the human mind and socially constructed meanings" (Snape and Spencer 2003: 23). In doing so, the study also adopts interpretivism as its epistemological position, which is often linked to and combined with constructionism (Cresswell 2013). Unlike other forms of scientific inquiry based on positivism, this approach focuses not on conducting entirely objective and value free inquiry that seeks to define law-like regularities in human behaviour. Rather, it recognizes the typically subjective and often value laden nature of human perspectives and behaviours. Interpretivism therefore seeks to understand the social world and associated, socially constructed meaning and realities through interaction and reflection involving both researchers and their subjects, and recognizes that "a social researcher has to explore and understand the social world through the participants' and their own perspectives, and explanations can only be offered at the level of meaning rather than cause" (Snape and Spencer 2003: 23).

The particular research methodologies that have been used to carry out this research in accordance with these research paradigms and approaches are described in further detail in Section 4.3.

4.1.2 Study Outcomes and Contributions to Knowledge

This study is intended to contribute towards the development of new theoretical perspectives that help explain the motivations for, deterrents of, and other factors that influence corporate decisions around the adoption and use of proactive environmental planning tools such as SEA. As outlined earlier in Section 1.3, the overall, planned outcome of the study is therefore the development of a conceptual framework related to corporate decision-making around SEA use, including whether it would be adopted, and if so, the particular timing and other characteristics of its application.

A conceptual framework is an organizational and analytical tool that is used to identify, arrange and illustrate ideas in a research study, and is comprised of various elements including: 1) *concepts*: the so called building blocks of theory, which consist of terms or phrases that represent or describe abstract (and not readily observable or measurable) objects or phenomena (Jabareen 2009; Perri and Bellamy 2012); and 2) *relationships*: the understood or suggested associations between concepts (Strauss 1987; Black 2002; Maxwell 2012). Blaikie (2010: 130) refers to conceptual frameworks as mid-level theories that present “a systematic image of the world” and which “lend themselves to the development of propositions about relationships between concepts, and are intended to apply to a wide range of situations”. Depending on the objectives and characteristics of a particular study, a conceptual framework may be either prospective or retrospective in nature (Cooksey and McDonald 2011, cited in Berman and Smyth 2015), and can therefore be the starting point for, or an intended outcome of, research. In the case of the former, an early stage in most (especially deductive, explanatory) research is often the development of a conceptual or theoretical framework that initially identifies, evaluates and organizes existing and applicable information and theoretical perspectives that pertain to the subject matter and research questions being investigated (Marshall and Rossman 2014). This is useful for helping place the study in its larger context, thereby conceptualizing the study in the relevant knowledge bases (and gaps) that develop and justify the problem statement and research questions (Rocco and Plakhotnik 2009). Miles and Huberman (1994: 18) define a conceptual framework as something that “explains, either graphically or in narrative form, the main

things *to be studied* - the key factors, concepts, or variables - and the presumed relationships among them” (emphasis added). It can therefore be considered a “tentative theory” for the research, which is constructed from the “modules” of existing theory and past research and forms a system of concepts, assumptions, expectations, beliefs, and theories that informs, supports, scopes and guides a research study and is a key part of its design (Maxwell 2012; Green 2014), including the associated development of testable hypotheses as well as informing the selection and use of research methods.

Alternatively, in the case of inductive (qualitative, exploratory) research being carried out in situations of inadequate or inapplicable existing theory, a study may result (and culminate) in the development and proposal of a conceptual framework. In this context, Jabareen (2009: 51) defines a conceptual framework as “a network, or a ‘plane’, of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena”, further adding that these frameworks “can be developed and constructed through a process of qualitative analysis”. A conceptual framework is therefore developed from the qualitative data gathered through the study in question, and may be considered to be a preliminary or partial theory that seeks to explain the phenomenon that is being studied, including the various concepts that are associated with the subject and situation and suggested relationships between them. Jabareen (2009) goes on to clarify that rather than being causal, analytical or deterministic in nature (such as a quantitative model) a conceptual framework provides an interpretative tool for understanding rather than predicting social reality. At the conclusion of a qualitative study, a resulting conceptual framework can then be put forward as one or more theoretical propositions or working hypotheses (Shields and Rangarjan 2013), which can form the basis for, and be tested through, further (quantitative) investigation and eventually, contribute towards the development or refinement of theory (see Figure 4.1). Rocco and Plakhotnik (2009: 126) note, however, that even in qualitative research that is searching for emergent theory, an initial “conceptual framework is necessary for situating the study” as it “grounds the study in the relevant knowledge bases that lay the foundation for the importance of the problem statement and research questions”.

The exploratory nature of the current study and the associated use of qualitative (interview) methods (Section 4.3) was intended to facilitate a direct, in-depth and “real time” identification and analysis of the primary considerations in, and determinants (motivations / deterrents) of, decision-making by corporate representatives around whether or not to voluntarily adopt SEA, including how, to what degree and in what situations these factors influence such decisions. The intent was therefore to define the key concepts that influence decision-making about SEA use (determinants and contextual factors) and any identified relationships between them. These are to be presented in the form of an empirically derived conceptual framework that is intended to contribute to the development of associated theoretical propositions for possible future investigation and testing.

4.2 Selection of Industry and Area Upon which to Focus the Data Collection

An important and early consideration in the design and conduct of this study related to identifying and selecting the type and location of corporations that would be included in the research sample and eventual data collection exercise. This included initially ensuring that the industrial sector and corporations selected and involved would have strategic planning processes, structures and business activities to which SEA would at least potentially be applicable.

Although there has been very limited discussion or analysis of corporate SEA use to date, a number of issues and considerations have been identified in the SEA literature that are relevant to whether and how organizations may choose to voluntarily adopt and apply SEA, as discussed previously in Section 2.4. These include, for example, issues of confidentiality and commercial sensitivity (Therivel and Partidario 1996; Therivel and Brown 1999; Gauthier et al 2011), which can often preclude the disclosure of information related to an organization’s planning processes and its business activities and the involvement of external parties in same. This was considered to be particularly important and relevant in the case of corporate SEA use, where companies operating in competitive business environments will likely be somewhat restricted in their willingness or ability to disclose information or to involve outsiders in their business

planning. Another consideration related to the nature, focus and geographic extent of corporations and their activities, which today are often characterized by activities and interests throughout the globe, such as is the case for large multi-national resource development or manufacturing companies. Strategic business planning by such corporations often involve initiatives across multiple and often quite dispersed jurisdictions, with, for example, one or a limited number of proposed activities in any one region. This may result in SEA processes being somewhat inapplicable to a corporation's strategic planning process (Jay and Marshall 2005; Jay 2007), due to the associated lack of a single, comprehensive and/or geographically and temporally focused PPP which may be subject to SEA review.

It was considered necessary to incorporate and attempt to address these issues in the identification and selection of the research sample, to help ensure that most or all respondents did not immediately reject SEA adoption for one or both of these reasons alone, thereby allowing the study to probe into other, deeper determinants of such decisions. Sample design therefore sought to partially control for the potentially dominant influences of commercial confidentiality factors and other aspects of corporate planning in SEA decision-making, while at the same time exploring them. In doing so, it therefore sought to focus on an industrial sector that included both public and private sector corporations and which included a mix of market types and environments (monopolies, partial monopolies and open and competitive markets) and planning processes (single and multiple jurisdictions), in order to investigate the potential influences of these (but also other) factors and characteristics. As also described in Section 3.3.1, previous studies have also suggested that corporate environmental practices and the main drivers and decision-making behind them may be influenced by company characteristics (both internal and external to the firm). They may, for example, differ considerably between companies operating in different industrial sectors, and which have different types and levels of environmental concerns or public interest associated with them. It was therefore also considered beneficial to attempt to focus the data collection and analysis on corporations of similar types, and especially, those operating in the same industrial sector (Sharma et al 1999), in order to

attempt to control for as many such factors as possible while at the same time helping optimize comparability within the data set itself as part of the analysis.

As a result of these potential issues and considerations, and as outlined further below, the study has focused on electricity utilities in Canada.

4.2.1 Current and Potential SEA Use in the Electricity Sector

The use of SEA in strategic planning and decision-making in the energy sector has been the subject of review and discussion by various authors, including its past, current and potential application in the electricity industry (Byron and Sheate 1997; Finnveden et al 2003; Jay 2007, 2010; White and Noble 2013a). These have included SEAs or SEA-like reviews of, for example, national and regional energy policies, potential investments in and implementation of new energy technologies, the development and expansion of electrical grid systems to address anticipated energy demand within a particular area and period, and others (see Jay 2010 and White and Noble 2013b for reviews). While a number of authors have concluded that SEA has received relatively little attention within this sector to date (Therivel et al 1992; Lyhne 2011), some more recent literature suggests that interest in and experience with SEA in the electricity industry has increased considerably over the past number of years (Josimovic and Pucar 2010; Bjorklund 2012; Finnan et al 2012; White and Noble 2012, 2013b; Geißler 2013; Malvestio and Montano 2013; Oldreive 2013; De Montis 2014; Phylip-Jones and Fischer 2015). Indeed, there are previous examples of its application to strategic plans in the electricity industry in Canada, including for example the 1989 EA review of Ontario Hydro's Demand Supply Plan under the province's EA legislation (Mulvihill et al 2013).

Whatever the nature and extent of practice to date, it has also been suggested that the electricity industry could be an ideal candidate for SEA, given the important and long-standing environmental issues that are often associated with its activities, and because its developments and their effects are typically geographically extensive and commonly experienced, and therefore lend themselves to being considered and addressed at the strategic level (Jay 2007). The often relatively structured, hierarchical and long-term

nature of strategic planning by electricity utilities, through which they attempt to address energy supply and demand requirements in multi-year plans, may also help facilitate the application of SEA (Jay 2007, White and Noble 2013b). The perceived, early lack of SEA application in this sector has been attributed in part to the relatively fragmented nature of the electricity industry in some jurisdictions, which can make strategic planning less centralized and therefore limit planning options (alternatives) and abilities (Byron and Sheate 1997; Marshall and Fischer 2005; Jay 2007, 2010). Also, the predominantly and increasingly private-sector nature of the electricity industry, particularly in the UK and elsewhere in Europe, has also been seen to be a key reason for the observed lack of SEA application to this sector (Byron and Sheate 1997; Marshall and Fischer 2006), as the focus of SEA legislation and processes have been primarily on large scale public sector plans and programs (Jay 2010). This latter issue does, however, help make this sector a good focus for investigating whether and how corporations might choose to voluntarily adopt and apply SEA approaches, outside of formal and legislated requirements to do so.

4.2.2 Overview of the Canadian Electricity Industry

Canada is a major producer, user and exporter of most forms of energy, including electricity (Goodman 2010), with this sector being an integral and longstanding component of the country's economy. Total electricity generation in Canada in 2013 totalled 611.31 terawatt hours (Twh), of which approximately 63 percent came from hydroelectric generation, 16 percent from thermal (conventional steam), 15 percent from nuclear facilities, and the remainder was produced by other generation types (including various types of combustion, tidal, wind and solar power) each of which accounted for less than five percent of the country's total electricity production in that year (CEA 2014a). The electrical outputs from Canada's numerous electrical generation facilities are transmitted and distributed to consumers across nearly 80,000 km of transmission line (CEA 2014b) as well as additional distribution lines and other electrical infrastructure throughout the country.

The electricity sector accounts for approximately two percent of Canada's overall gross domestic product (GDP) (CEA 2014b) and creates over 100,000 jobs (CEA 2013a). In 2013 the industry saw total capital investments of \$20.8 billion CAD (Statistics Canada 2013, cited in CEA 2014b), including over \$1 billion CAD annually in expenditures (capital and operating) related to environmental management and protection in recent years (Statistics Canada 2010, cited in CEA 2014b). International electricity imports and exports are also a key aspect of this sector, with some inter-provincial movement of electrical energy with parts of the country (Goodman 2010). All provinces that border the United States (US) also have major transmission interconnections with that country (CEA nd, 2013a, 2014b), and in recent years, Canada has been a net exporter of electricity (NRCan 2014), transmitting and selling approximately 63 Twh to US jurisdictions in 2013 which resulted in trade revenues of \$2.44 billion (CEA 2014a).

The generation, transmission and distribution of electricity in Canada are areas of provincial responsibility, as part of their overall jurisdiction over natural resource development and management (CEA nd, 2014b; NRCan 2014). The country's electricity sector was traditionally characterized and dominated by large, government-owned (crown) corporations that were vertically integrated and therefore had overall responsibility for the generation, transmission, and distribution of power (Trebilcock and Hrab 2006; NRCan 2014), and which functioned as regulated monopolies (Iacobucci et al 2005). Depending on the jurisdiction, there has also been varying types and levels of private sector involvement in the industry, such as in the development and operation of electricity generation facilities by some large industrial consumers to meet their own requirements (NRCan 2014).

Recent years have seen significant changes in the organization and structure of the electricity sector across the country, the nature and degree of which has differed considerably between individual provinces and territories. This has led to a variety of industry, market and utility types and characteristics in different parts of the country, an overview of which is provided in Table 4.1. In some Canadian provinces and territories, the sector continues to be characterized and dominated by the presence of large, vertically integrated crown corporations operating as regulated monopolies,

although some jurisdictions have unbundled the generation, transmission and distribution functions of these crown utilities into separate organizations or have moved towards some elements of competition and privatization (Black 1999). This has included the establishment of open wholesale markets in some areas (Trebilcock and Hrab 2006), in which the private sector now plays an increased role in the generation and sale of electricity to utilities or others as independent power producers (Goodman 2010; NRCan 2014). In other cases, crown corporations remain the sole or primary generator and/or transmitter of power and sell this electricity to investor-owned or public distributors for sale to consumers, while in other regions, a privately owned and operated utility has been granted a regulated monopoly for power generation and transmission. In many provinces and territories, the electricity sector includes the involvement of other (often municipal) utilities that buy and then sell electricity to customers in their service areas, some of which also have their own generating and transmission infrastructure (Table 4.1).

Two Canadian provinces, Ontario and Alberta, have opted to deregulate their electricity sectors and establish energy markets in recent years, but have done so in different ways and to varying degrees (Dewes 2005; Trebilcock and Hrab 2006). In Ontario, the provincial government authorized the establishment of an electricity market system in the late 1990s, and unbundled the former vertically integrated utility (Ontario Hydro) into a number of separate crown companies as it prepared to move towards a deregulated electricity industry. The Ontario electricity sector is currently characterized by a wholesale and retail open access system (CEA nd), based on a complex hybrid regulation and competition model (Nelles 2003; Iacobucci et al 2005; Goodman 2010). This includes the involvement of an Independent Electricity System Operator (IESO) that is responsible for administering and operating the province's power system, including securing sources of supply and overseeing the electricity wholesale market, as well as various crown (generation and transmission) utilities, independent power producers and distribution utilities. In Alberta, the provincial government restructured the electricity industry in 1996 (Trebilcock and Hrab 2006) and established a system where the generation sector is market based and competitive while the transmission, distribution and sale of power are rate-regulated. The Alberta Electric System Operator

(AESO) leads the planning and operation of the province's interconnected power system, and facilitates the competitive wholesale electricity market. Generators sell their power through the AESO, which functions as an open-access competitive market, with the operator also managing the planning and operation of the province's (multi-party) transmission system for eventual distribution and sale to consumers based on their choice of competitive (unregulated) rates from sellers or a regulated rate option (Table 4.1).

In all cases, Canadian provinces and territories have established regulators to administer the relevant aspects of their electricity industries, including utilities' rates, operations and expenditures (Table 4.1). Depending on the jurisdiction, and thus the nature of the electricity industry and its regulation and participants, utilities' planning, decisions and actions regarding the development and operation of their systems and other activities may also be influenced by a range of applicable government policies, plans, legislation and other directives. Given the above referenced provincial jurisdiction over energy resources, much of this direction comes from the provinces, including with regard to environmental issues and associated targets for air emissions and renewable generation, which have been led primarily at the provincial rather than federal level (Liming et al 2008; Goodman 2010). The federal government does, however, have responsibility for regulating some aspects of the electricity industry, such as inter-provincial and international trade, potential environmental effects involving areas of federal responsibility (such as fish and fish habitat and migratory birds) and nuclear safety, as well as some shared responsibility for environmental issues such as air pollution and greenhouse gas emissions (CEA nd, 2014b).

Table 4.1 An Overview of the Canadian Electricity Industry by Province and Territory

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
<p>Newfoundland and Labrador (NL)</p>	<ul style="list-style-type: none"> • The generation, transmission and distribution of electricity in the province is undertaken by two regulated utilities. • Nalcor Energy is a vertically integrated crown corporation, with various, diverse lines of business. These include NL Hydro, the traditional electrical generation (almost 1,800 MW total capacity, including hydroelectric, oil-fired, gas turbine, and diesel plants) and transmission utility which provides power to industrial, utility and residential customers. The utility is primarily a wholesaler of power, but distributes electricity directly to customers in some areas. The corporation's other business units are focussed on existing and new large hydroelectric developments in Labrador, oil and gas development and associated infrastructure, and energy marketing in both Canada and the United States. • Newfoundland Power (a subsidiary of Fortis Inc) is an investor-owned utility that operates an integrated system throughout the Island of Newfoundland. The utility is the primary distributor of electricity on the Island, most of which it purchases from NL Hydro, but the company also owns and operates a number of small hydroelectric, diesel and gas turbine generating facilities and some associated transmission infrastructure. • Both utilities and their rates, activities and expenditures are regulated by the Newfoundland and Labrador Board of Commissioners of Public Utilities. 	<p>Nalcor Energy</p> <p>Newfoundland Power</p>
<p>Nova Scotia (NS)</p>	<ul style="list-style-type: none"> • Nova Scotia has a vertically integrated monopoly system. • Nova Scotia Power (formerly a crown corporation, now a publicly regulated private company) generates, transmits, and distributes most of the province's electricity. A number of independent power producers also generate electricity and sell it to the utility. • The utility is a subsidiary of Emera Inc, an international energy and services company based in Nova Scotia that is involved in energy generation, transmission and distribution in Canada, the US and the Caribbean. • There are also six small municipal electric utilities in the province that primarily buy electricity from Nova Scotia Power and sell it directly to their customers. 	<p>Nova Scotia Power / Emera</p>

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
	<ul style="list-style-type: none"> Utilities are regulated by the NS Utility and Review Board, which determines the amount of capital they can invest and the amount of profit they can earn. 	
New Brunswick (NB)	<ul style="list-style-type: none"> NB Power is a vertically-integrated (and recently reintegrated) crown corporation that owns and operates generation (nuclear, hydro, coal, oil and diesel) stations, transmission infrastructure and distribution lines throughout the province. It also has power purchase agreements in place with various privately owned renewable and natural gas-powered facilities. The utility also exports electricity to Quebec, Nova Scotia, Prince Edward Island and New England (US). The NB Energy and Utilities Board regulates the rates charged by NB Power. Saint John Energy is a municipal utility reseller of power purchased from NB Power. 	<p>NB Power</p> <p>Saint John Energy</p>
Prince Edward Island (PEI)	<ul style="list-style-type: none"> Maritime Electric (a subsidiary of Fortis Inc.) is an investor-owned integrated utility serving most of the province. Most electricity in the province is imported via submarine cable from NB Power generation facilities in that province. The City of Summerside has a municipal electric utility that purchases and distributes power in that community. The Island Regulatory and Appeals Commission (IRAC) regulates utility electricity rates, operations and expenditures. 	<p>Maritime Electric</p> <p>City of Summerside</p>
Québec (QC)	<ul style="list-style-type: none"> Hydro-Québec is a large, vertically integrated provincial crown corporation. The company has four divisions that are focused on electricity production (36,643 MW installed capacity), transmission, distribution, and infrastructure development. It also has long-term power purchase agreements in place (totalling nearly 10,000 MW) with various independent power producers and others. The utility also transmits and sells electricity to various other jurisdictions, through interconnections with neighbouring systems. The Régie de l'énergie (Québec's Energy Board) regulates the distribution and transmission of electric power in the province. Brookfield Renewable Energy Partners is a Québec-based privately owned company that develops and operates renewable generation facilities throughout North America, Latin America and Europe. 	<p>Hydro Quebec</p> <p>Brookfield Renewable Energy Partners</p>
Ontario (ON)	<ul style="list-style-type: none"> In the late 1990s, the provincial government authorized the establishment of an electricity market system in the province, and unbundled 	<p>Ontario Power Authority / Independent</p>

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
	<p>the former vertically integrated utility (Ontario Hydro) into a number of separate crown companies, as it prepared to move towards a deregulated electricity industry.</p> <ul style="list-style-type: none"> • The Ontario electricity sector is currently characterized by a wholesale and retail open access system, based on a hybrid regulation and competition model. • The IESO (recently merged with the Ontario Power Authority) is a crown corporation that administers the province’s power system, by: balancing the supply of and demand for electricity in Ontario and directing flow across the province's transmission lines; planning for medium- and long-term and region-specific energy needs; securing sources of supply to meet these needs; and overseeing the electricity wholesale market. • Ontario Power Generation (OPG) is a provincial crown corporation that is responsible for more than half of the electricity generation in the province. Its facilities include nuclear, hydroelectric, biomass, thermal and wind power generators (totalling almost 17,000 MW in capacity). • Hydro One is a provincial crown corporation that is the largest electricity transmission and distribution company in Ontario, owning and operating almost the entire electricity transmission system in the province. Through various subsidiaries, the corporation’s distribution system also delivers electricity to consumers in some areas. Ontario's high-voltage transmission grid also has multiple connections to neighbouring provinces and states, and the province is currently a net exporter of power. • There are also over 80 electric distribution utilities in the province (some municipally owned) that sell electricity directly to their customers in specific areas and communities. • The Ontario Energy Board oversees and regulates the electricity sector in the province by setting rates and licensing its participants including the IESO, generators, transmitters, distributors, wholesalers and retailers. • A number of Ontario-based electricity corporations are also involved in energy developments and operations in Canada and internationally. Algonquin Power, for example, is a non-regulated generation business that owns or has interests in a portfolio of North American based contracted wind, solar, hydroelectric, and 	<p>Electricity System Operator</p> <p>Hydro One</p> <p>Ontario Power Generation</p> <p>Horizon Utilities Corp (Cities of Hamilton and St. Catharines)</p> <p>Hydro Ottawa</p> <p>Oakville Hydro</p> <p>Orillia Power Corporation</p> <p>St. Thomas Energy</p> <p>Thunder Bay Hydro Toronto Hydro Corp</p> <p>Algonquin Power and Utilities Corp</p>

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
	natural gas powered generating facilities (of more than 1,150 MW of installed capacity).	
Manitoba (MB)	<ul style="list-style-type: none"> Manitoba Hydro is a provincial crown corporation responsible for the generation, transmission and distribution of electricity in that province. The company owns and operates generation stations (almost 5,500 MW total capacity, mostly hydro, but also nuclear, coal, oil and diesel), transmission infrastructure and distribution lines throughout the province. The utility has power purchase agreements in place with various privately owned renewable and natural gas-powered facilities. The corporation also exports electricity to wholesale markets in Canada and the mid-western US. The utility is regulated by the Public Utilities Board of Manitoba. 	Manitoba Hydro
Saskatchewan (SK)	<ul style="list-style-type: none"> Sask Power is a crown corporation responsible for the generation, transmission and distribution of electricity in Saskatchewan. The utility owns and operates generation stations (hydro, wind, coal, natural gas, totalling 3,338 MW capacity), transmission infrastructure and distribution lines throughout the province. It also has power purchase agreements in place with various independent power producers in the province, and exports electricity to several jurisdictions. Two municipal utilities (Saskatoon Light & Power and the City of Swift Current) distribute power to customers in their respective municipalities. The Saskatchewan Rate Review Panel advises the Government of Saskatchewan on rate applications proposed by Sask Power and other public utilities. 	Sask Power Saskatoon Light & Power City of Swift Current
Alberta (AB)	<ul style="list-style-type: none"> Alberta restructured its electricity industry in 1996 and established a deregulated market system. The AESO leads the planning and operation of the province's interconnected power system, and facilitates the competitive wholesale electricity market. The AESO provides open and non-discriminatory access to Alberta's grid for generation and distribution companies and large industrial consumers. The price of electricity generation in the province is no longer regulated, and generators sell their power through the AESO, which functions as an open-access competitive market. A large number of companies generate and supply electricity into the grid, the largest of which are: ATCO Power, Enmax, Capital Power Corporation, TransAlta and TransCanada. 	Alberta Electric System Operator AltaLink ATCO Electric ATCO Power Capital Power Corp Enmax Epcor Utilities Fortis Alberta TransAlta

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
	<ul style="list-style-type: none"> • The province’s transmission system is owned in sections by various companies (including AltaLink, ATCO Electric and others) and carries electricity to wholesale electricity buyers or retailers. The AESO oversees the design and operation of the transmission system to ensure fair market rates, non-discriminatory access for all market participants and the safe and reliable operation of the system. The AESO contracts with transmission facility owners to acquire transmission services and with other parties to provide fair and timely access to the system, and administers transmission tariffs. The industry regulator (see below) approves the costs for transmission facility owners to provide their services, and the regulated costs of the transmission companies are passed along to the AESO, which recovers the cost of operating the system and the transmission companies’ costs through the transmission tariff which is also set by the regulator. • Electricity distributors (which may be municipally owned, rural electrification associations or investor owned companies such as FortisAlberta) distribute the electricity, which is then sold to the end customer by a retailer. • Energy retailers purchase electricity through a combination of long-term contracts with the generation companies and short-term purchases through the power pool. Customers have the option to buy electricity at competitive (unregulated) rates from sellers or under the regulated rate option through their local utility (such as Enmax or Epcor). • Some corporations own a combination of electrical generation, transmission and/or distribution facilities and assets in Alberta. • The Alberta Utilities Commission regulates relevant aspects of the utilities sector, including electricity markets in the province. This includes utilities’ rates and terms and conditions of service, including investor-owned electric utilities and some municipal ones. The commission also oversees the tolls, tariffs and service regulations of energy transmission, and has jurisdiction over the siting of electrical generation and transmission facilities. 	<p>TransCanada</p> <p>City of Medicine Hat</p> <p>City of Lethbridge</p> <p>City of Red Deer</p>
<p>British Columbia (BC)</p>	<ul style="list-style-type: none"> • BC Hydro is a provincial crown corporation and the main supplier of electricity in the province, with a mandate to generate, purchase, distribute and sell electricity. The utility operates generating stations (31, mostly hydro with some thermal) and thousands of kilometres of transmission and 	<p>BC Hydro</p> <p>Fortis BC</p> <p>Columbia Power Corporation</p>

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
	<p>distribution lines. The corporation distributes and sells power directly to customers in some parts of the province. It obtains a portion of its electricity from Independent Power Producers and other sources, and exports electricity to several markets.</p> <ul style="list-style-type: none"> • FortisBC is a private electric power distribution and retail company that provides power to customers throughout south-central British Columbia, as well as providing wholesale power to municipal utilities in various communities. The utility owns and operates approximately 7,200 km of transmission and distribution power lines and four hydroelectric generating plants. • A number of small, municipal utilities purchase and distribute power to customers in their respective communities. • Columbia Power Corporation is a provincial crown corporation that develops, owns and operates hydroelectric power projects in the Columbia River Basin. The company owns three operating hydro power facilities (450 MW) and is involved in other infrastructure development and project proposals in the area. The power from its facilities are transmitted to the provincial grid and sold to other utilities. • Utilities are regulated by the British Columbia Utilities Commission. 	<p>City of New Westminster</p> <p>City of Penticton</p>
<p>Yukon Territory (YK)</p>	<ul style="list-style-type: none"> • Yukon Energy Corporation is a crown corporation that generates most of the electricity in the territory, and distributes power to a portion of the population. The utility's generating capacity of 132 MW comes from hydro facilities, diesel generators and wind turbines. • A private, investor-owned utility, ATCO Electric Yukon, buys wholesale power from Yukon Energy and sells it to retail customers in several parts of the territory. This utility also generates and distributes its own electricity in a number of communities using fossil fuel-fired generators and a hydro plant. • Both of these utilities are regulated by the Yukon Utilities Board. 	<p>Yukon Energy Corporation</p> <p>ATCO Electric Yukon</p>
<p>Northwest Territories (NWT)</p>	<ul style="list-style-type: none"> • The Northwest Territories Power Corporation (NTPC) is a wholly owned subsidiary of NT Hydro, which in turn is owned 100 percent by the Government of the Northwest Territories. NTPC's facilities include hydroelectric, diesel, and liquefied natural gas generation plants (totalling 113 MW in capacity), transmission systems and numerous isolated distribution systems in communities throughout the territory, as well as 	<p>Northwest Territories Power Corporation</p> <p>NT Energy</p> <p>Northland Utilities</p>

Jurisdiction	Electricity Sector and its Corporate Participants	Corporations Identified and Invited to Participate in the Study (See Section 4.3)
	<p>several alternative energy assets. NTPC distributes electricity to end-use consumers in most communities in the territory and supplies electricity on a wholesale basis to distributors. NT Hydro also owns NT Energy, NTPC's sister company, which is responsible for pursuing new energy options for the region.</p> <ul style="list-style-type: none"> • Northland Utilities, an investor-owned utility (and subsidiary of ATCO), is a retail distribution utility that delivers power to several communities in the territory. The company own, operates and maintains distribution lines and other infrastructure in these areas, as well as substations and several diesel plants. • Each of these electricity utilities is regulated by the NWT Public Utilities Board. 	
Nunavut Territory (NU)	<ul style="list-style-type: none"> • Qulliq Energy Corporation is a crown utility that serves the communities of Nunavut, and is the only generator, transmitter and distributor of electrical energy in the territory. The utility operates diesel plants in 25 communities (with a total installed capacity of 84 MW), each of which has its own independent electricity generation and distribution system. • The utility and its energy pricing is regulated by the Utility Rates Review Council of Nunavut. 	Qulliq Energy Corporation
<p>Sources (in order of their use in the table above): CEA (2015); Nalcor Energy (2015); Newfoundland Power (2015); NL DNR (2014); NS DOE (2015); Nova Scotia Power (2015); Emera (2015); NB Power (2014); Maritime Electric (2015); City of Summerside (nd); Hydro Quebec (2015); Brookfield Renewable Energy (2015); IESO (2015); OPG (2014); Hydro One (2015); Horizon Utilities (2015); OEB (2015); Algonquin Power (2015); Manitoba Hydro (2015); Sask Power (2014); AESO (nd); AUC (2015); BC Hydro (2015); Fortis BC (2015); Columbia Power Corporation (2015); Yukon Energy Corporation (2015); ATCO Electric Yukon (2015); NTPC (2014); Northland Utilities (2015); Qulliq Energy Corporation (nd)</p>		

The study's focus on the Canadian electricity sector has therefore allowed for a variety of corporations and market types to be included and investigated, while at the same time helping to address other issues and challenges which may be associated with attempting to look at companies across multiple industries. From a corporate and business perspective, it could be suggested that focussing on a sector that is still largely dominated by crown corporations and full or partial monopolies may be removing some of the business and market factors and forces that could be relevant to corporate decisions about their environmental strategies and actions, including potential SEA use. As discussed further in Chapter 6, the various crown and private sector companies

represented in the study are, however, still very much directed and motivated by their legislated mandates and associated responsibilities to their shareholders and/or regulators to minimize their development and operating costs and optimize their revenues and dividends. As a result, and as discussed earlier and reiterated by others previously, the electricity industry represents a good and very useful context in which to investigate potential SEA use, both in terms of the nature of its associated strategic planning and development activities, as well as by controlling for some of the purely commercial issues that may entirely preclude SEA use while at the same time including business characteristics and motivations that may be relevant and influential in that regard.

4.3 Methods of Data Collection

A variety of techniques are available and used for conducting qualitative research in the social sciences, including some that involve the review and analysis of existing information (such as case studies) and others that include the direct collection and interpretation of data from human subjects (such as observation, questionnaires, interviews or focus groups) (Wellington and Szczerbinski 2007). The research methods utilized for this study included a series of semi-structured interviews with representatives of electricity utilities in Canada who are responsible for or involved in strategic planning activities. The following sections describe the rationale for using this method, as well as the planning, design and conduct of the interviews themselves.

4.3.1 Interviews

An interview is a conversation with a purpose (Burgess 2002) involving two or more people where questions are asked by the interviewer to draw out facts or perspectives from the participant. Interviews are the most commonly used method in qualitative research (Legard et al 2003; King 2004), and provide an opportunity for the researcher to collect qualitative (textual) information through direct contact and interaction (meeting or other dialogue) between the interviewer and interviewee(s) (Davies 2006). This methodology therefore seeks to gather or construct knowledge through

interactions between two people in the interview setting and situation (Kvale and Brinkmann 2009), by listening to and interpreting what people say and the manner in which they say it (May 2002). There is thus a key focus on understanding participants' views and experiences and the meaning that they place on these (Seidman 2013) which is a hallmark of qualitative research in general as described previously. Interview data are often considered to be co-constructed rather than collected (Roulston 2014), where the interviewee is a participant in meaning rather than a source from which information is retrieved, and so this approach encourages the participant to share rich descriptions of phenomena while leaving the interpretation or analysis to the investigator (DiCicco-Bloom and Crabtree 2006).

As a qualitative research method, interviews are therefore often considered to be the richest source of knowledge about people's views and understanding of themselves, their situations and surroundings and their experiences (Wellington and Szczerbinski 2007). They are therefore particularly useful for qualitative social research that is focused on understanding human perspectives and behaviours, particularly where these are complex, interrelated, intangible or subtle and socially constructed. Interview techniques can therefore be used to gain deep insights into people's views, values and perceptions, including how these are interpreted and influential in their decisions and actions. Unlike other data gathering methods, the interview process allows the researcher to tailor and adjust questions and the manner in which they are asked to the respondent, in order to seek to obtain a more detailed and in depth understanding of his or her perspectives on the topic at hand than might otherwise be the case through other (especially, quantitative) methodologies. This can include helping to motivate the respondent and seek or provide additional information, including clarification on a particular item, and to probe further as required and to resolve any apparent contradictions (Horton et al 2004; Davies 2006; Wellington and Szczerbinski 2007; de Leeuw 2008). The individual interview also has a number of benefits as compared to similar data collection methods in group environments (such as focus groups) as they allow for exploring and probing an individual's thoughts and perspectives in a private setting, as opposed to group situations where participants may not be as comfortable, open and honest, and where the discussion (and associated results) may tend to be

dominated by one or a few personalities (Kitzinger and Barbour 1999; Krueger and Casey 2000; Rabiee 2004).

There are a number of interview types that may be used in social sciences research, which differ primarily in terms of the degree of firmness or flexibility involved in the interview questions and procedure (Bechhofer and Paterson 2000; Davies 2006; DiCicco-Bloom and Crabtree 2006; Alvesson 2011). A structured interview, for example, makes use of a single, standardized list of questions that are presented to all respondents in exactly the same way, so that the interview questions are always asked and answered in the same order and context. These are essentially face to face questionnaires, and given the high degree of structure involved they may be used to collect qualitative or quantitative data (Wellington and Szczerbinski 2007). The advantages of this relatively high degree of structure is the focus and efficiency it brings, helping to ensure that interviewees address the rather specific questions and expectations of the researcher, which also then facilitates the eventual handling and analysis of the resulting data (Alvesson 2011) and helps ensure greater compatibility and thus comparability of information between respondents within the sample (Bechhofer and Paterson 2000). The main disadvantage of this structured approach is that it can restrict the discussion and thus the responses provided, as it does not provide an opportunity to fully explore, probe and understand each participant's views and perspectives on a particular theme. For this reason, highly structured interviews rarely provide much in the way of new, interesting or rich results or stimulate the identification and exploration of new issues (Alvesson 2011).

A semi-structured interview is one that employs a certain degree of organization, typically a framework of themes to be explored and covered, but which allows for flexibility in the way (manner and order) in which questions are asked and responded to (Legard et al 2003). Semi-structured in-depth interviews are the most widely used interviewing format for qualitative research (DiCicco-Bloom and Crabtree 2006), and typically involves the use of open-ended questions (Wengraf 2001) (often through an associated interview guide) which have no specific and prepared response choices, and which allow for other issues and questions to emerge from the dialogue as it progresses.

This format enables the interviewee to provide any and all information and perspectives that he or she feels is relevant to the topic, thereby producing information from the respondents that has greater detail and depth (Horton et al 2004). It also allows for questions and the way in which they are asked to be adjusted by the interviewer as required, to provide clarification and delve deeper into a particular topic where appropriate, as well as allowing new ideas to be brought up and investigated as a result of what the interviewee says (de Leeuw 2008).

Although the semi-structured interview is typically conversational, flexible and somewhat fluid in format and style, the use of this technique requires considerable advanced planning and a solid design, in order to guide respondents through their views, experiences and associated meanings in an efficient and orderly way that meets the requirements of the research (May 2002). Conducting semi-structured interviews also requires considerable skill and discipline on the part of the interviewer, to ensure that questions are clear and not ambiguous, and to help ensure that the respondent and their contributions stay on topic while also probing deeper or exploring new and unanticipated issues and directions as required and relevant. At the same time, the interviewer must be careful to not unnecessarily and inappropriately restrict the conversation, and thus the information and insights provided by the respondent. They must be able to refocus and probe the respondent as required, and guide them towards particular questions and themes but not present questions or issues in a leading manner that in any way biases the resulting information (Legard et al 2003; King 2004; Rapley 2004; Wellington and Szczerbinski 2007; Kvale and Brinkmann 2009). There are also concerns that the presence and involvement of the interviewer can potentially influence responses and cause unwanted interviewer effects, especially when sensitive issues are being discussed (de Leeuw 2008). This requires that a comfortable, trusting and respectful relationship be established and maintained throughout the interview process (Rapley 2004; DiCicco-Bloom and Crabtree 2006).

The lengthy, detailed and at times unstructured nature of participant responses in such interviews can also make their results somewhat more time consuming and complex to analyse as compared to the often more succinct and organized data that results from

surveys or structured interviews. Indeed, semi-structured interviews can require the transcription, review and analysis of lengthy documentation including irrelevant information and unproductive dialogue that must be processed and filtered as part of the analysis (Alvesson 2011; Seidman 2013). These issues notwithstanding, there are clear methodological benefits associated with semi-structured interviews, particularly in terms of their flexibility and resulting ability to obtain a greater detail, depth and richness of information from respondents, and thus to facilitate an exploration of important (and often intangible) items and issues that influence human decisions and actions.

Semi-structured interviews are therefore particularly well suited to research topics and questions such as those which constitute the focus of this study, which in this particular case is seeking to identify, document, analyse and understand decision-making by corporate representatives about the possible voluntarily adoption and application of SEA. As illustrated and discussed through the literature review presented in Section 3.3, an individual's personal views, attitudes, characteristics and experiences has been shown to influence whether and how corporate decision-makers view and potentially implement voluntary environmental initiatives. This can include whether and how they perceive, recognize, filter, interpret and prioritize the signals they receive from their surroundings and act upon these by undertaking proactive environmental initiatives (Khanna and Speir 2013; Jones 2013), and the characteristics of, and complex interactions between, the institutional environment, organizational characteristics and dynamics and managerial attitudes are thought to be key factors that help shape corporate environmental behaviour (Khanna and Speir 2013).

4.3.2 Research Sample (Size and Selection)

In qualitative research, the development of a sampling strategy and the eventual recruitment of participants very much depends on the nature and specific purpose of the study itself (King 2004). In particular, the sampling process must provide an efficient way to explore and seek to answer large questions through discussions with a relatively small group of people (May 2002), and it is important to try and get a full range and

variety of views and perspectives on the topic (Rapley 2004; Alvesson 2011). Sampling in qualitative research tends to be purposive (and nonprobabilistic) rather than random in nature (Miles and Huberman 1994; Guest et al 2006), where participants are identified and invited to take part according to predetermined criteria relevant to the particular research topic and objective (Guest et al 2006) and specifically, from amongst a group of individuals with relevant characteristics that make them appropriate sources of information for the study topic and questions at hand.

The study has focused on identifying and understanding the views, perceptions and decision processes of individual corporate representatives regarding possible SEA use, through individual interviews with corporate (utility) representatives to explore whether, why and how they would support the adoption and use of SEA by their organization. It is recognized that eventual corporate decisions about SEA would not be made unilaterally by any one such individual, but rather would involve larger organizational decision-making processes. These would be influenced by relevant corporate characteristics and dynamics, which would collectively and eventually determine whether and how the views and interests of an individual are or are not eventually turned into corporate decisions and actions. Although this is an important and relevant consideration, and a topic that would benefit from subsequent research (see Section 7.4), it is important to first understand how relevant individuals within a corporation perceive SEA and its potential use and outcomes. As described in the previous literature review (Section 3.3), recent literature and research around corporate environmental proactivity has therefore focused on the role of the individual manager and the influence of his or her personal views and other characteristics in determining corporate environmental strategy and approaches. Managers and other influential persons within a firm have the power to influence the direction and degree to which environmental initiatives are introduced and implemented, suggesting that the individual manager is therefore the appropriate unit of analysis for such research (Prakash 2001). Sample selection for this study therefore involved the identification and recruitment of representatives of electricity utilities in Canada at the managerial level or above who are responsible for or otherwise involved in corporate strategic planning activities. It focused on the full range of professionals and occupations that are involved

in such strategic business planning and did not, for example, centre exclusively or primarily on environmental personnel, as these may have particularly one-sided motivations or biases towards environmental issues and activities (Prakash 2001).

The following sections describe the various procedures and associated materials that were involved in the initiation and completion of the research fieldwork, from initial identification and recruitment of the sample, to arranging and conducting the interviews themselves. An overview of the study and a copy of all associated correspondence and interview materials was sent to the University of Dundee's Ethics Committee prior to the initiation of data collection, and approved on December 17, 2012 (see Section 4.3.6 below).

Relevant corporations across Canada and relevant representatives (potential interviewees) within them were identified through a general search of available information, such as utility websites, industry publications and directories (e.g., CEA 2013b), general internet searches, as well as using other personal and general professional networks (such as LinkedIn ©). A brief overview of the research and its objectives and methods were also sent to key industry organizations, such as various managers and committees of the Canadian Electricity Association (CEA) for distribution, along with a request that any relevant and interested persons contact the researcher.

A key challenge associated with identifying and inviting potential interviewees was that most corporations do not publish their company directories, or otherwise make the names of, and contact information for, their employees publicly available. It was therefore often quite difficult to use corporate websites or other means to identify relevant personnel, or even to obtain contact information for a particular individual that was identified through other sources. As described below, all potential interviewees were contacted and invited to participate by email (rather than by telephone or other means), which was considered necessary given the overall size and distribution of the population, and in order to ensure consistency in approach for all contactees. Sending the invitation by email allowed all individuals to receive the same type and level of (written) background information on the study, in the same manner, and to review,

consider and respond to this in their own time. In many cases, getting in touch with an identified corporate representative therefore involved attempting to determine (guess) that person's email address (using the corporation's standard format), which often involved multiple attempts. An invitation to participate was assumed to have reached the individual in question if no automated "undeliverable" message was subsequently received from the corporation's email server.

Based on the outcomes of the continuous search process described above, invitations to participate in the study were sent by email to 430 identified corporate representatives between October 6, 2013 and January 1, 2014. All but 28 of these were successful in reaching the intended recipient by email, through the process described above. This therefore resulted in a total of 402 potential interviewees in 48 corporations across Canada (Figure 4.2) being contacted directly and invited to participate in the study. This initial correspondence (Appendix A) included a brief overview of the nature and purpose of the study and the planned interview approach, and asked that they respond and indicate whether they would be willing to participate in it. In order to help identify additional potential participants, a "snowball" type approach was also used, where those contacted were also asked to identify other potential interviewees to the researcher (Olsen 2012), an approach that is particularly useful in situations such as this where the overall size and extent of the population cannot reasonably or reliably be known (Black 2002). All respondents were therefore asked to suggest any other persons within that or another Canadian electricity utility that they felt may also be a potential participant. Reminder emails were sent at approximately two week intervals as required (Appendix A), with up to two short follow-up reminders (as recommended by Meho 2006) provided to each person contacted.

Of the 402 potential interviewees that were contacted, reached and invited to participate in the study, responses were received from 147 persons (37 percent). Of these, 61 (41 percent) originally agreed to participate in the study and 86 (59 percent) declined, for both stated and unstated reasons. Of the 61 persons who agreed to participate in the study, five subsequently decided to withdraw prior to an interview being set up, leaving an initial sample size of 56 participants. The most common reasons

given for declining the invitation or for later withdrawing was that the individual felt that they did not have time to participate in the interview process, or they felt that the nature and focus of their position and responsibilities within the company was not relevant to the focus and objectives of the interviews. Those that agreed to participate in the study were sent a follow-up email (Appendix A) which thanked them for doing so, and provided a further overview of the nature and purpose of the study. That correspondence also provided the associated "Informed Consent Form" (Appendix A) and requested them to complete and return it, and sought to set up a time to conduct the telephone interview. In some cases, this request was resent several times before a response was received and an interview time was established. Despite continued follow-up, two of the respondents who originally agreed to participate did not reply to repeated requests and attempts to set up an interview time.

This resulted in a final sample size of 54 interviewees, which included representatives of 25 Canadian electricity utilities and ranging from one to eight participants per corporation (Figure 4.2). The utilities involved provide a good, overall coverage of Canadian jurisdictions (all but two Canadian provinces / territories were represented) and especially, of the various types of utilities and regulatory jurisdictions (ranging from small distribution utilities, to large integrated crown corporations with regulated monopolies, to investor owned utilities that operate in particular jurisdictions and market types, to areas with unregulated industries and structures). A summary of the sample, including an overview of the various types of corporations that were represented in it and the positions of the 54 interviewees, is provided in Table 4.2.

Figure 4.2 Number of Corporations and Personnel Invited to Participate in the Study and Those Comprising the Research Sample, by Canadian Province and Territory

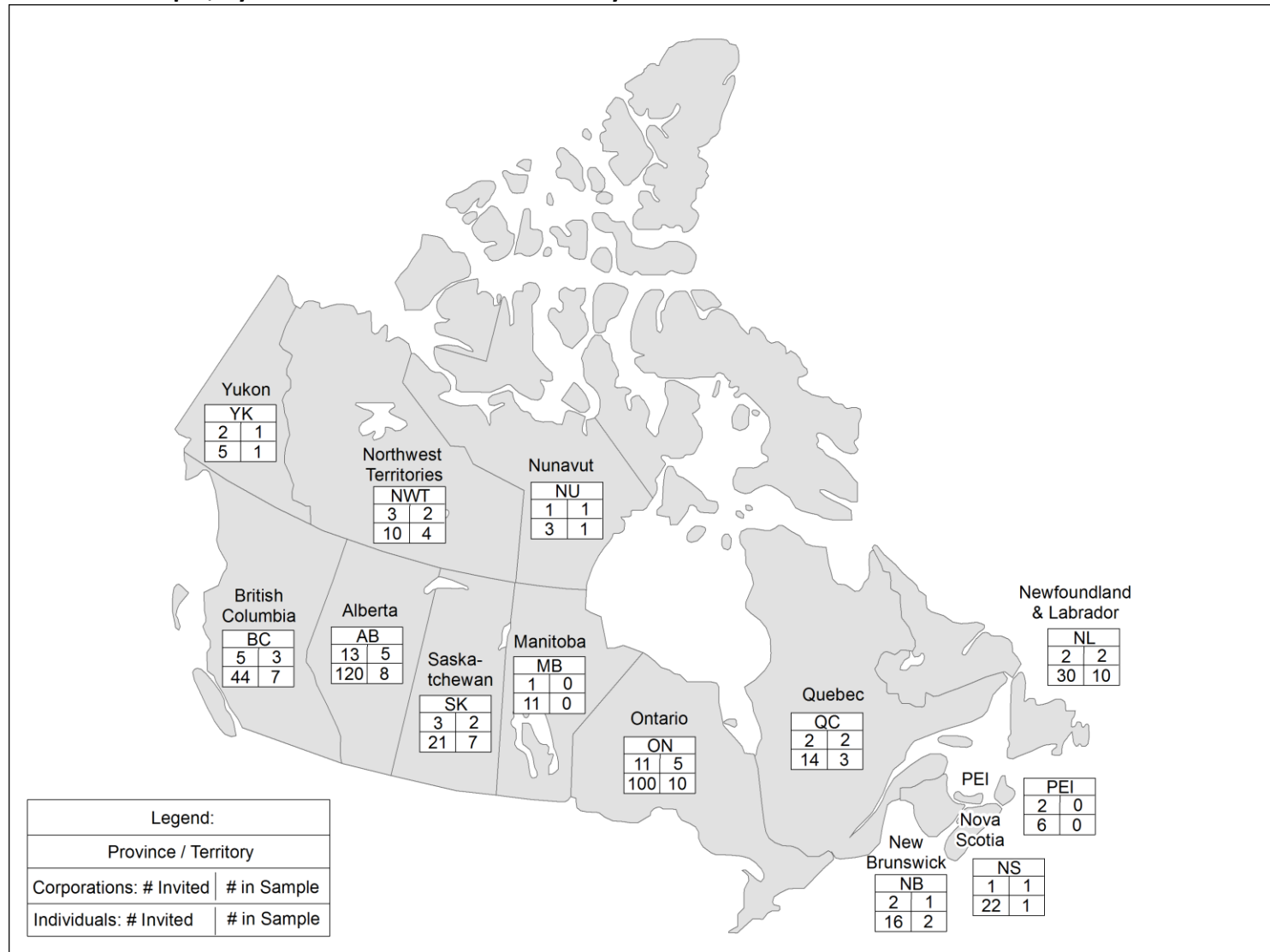


Table 4.2 Summary Overview of Corporations and Personnel Included in the Research Sample

Utilities (Types, by Primary Focus) ¹	Interviewees (Position) ²
<ul style="list-style-type: none"> • Crown Corporations, Integrated: 9 • Crown Corporations, Generation or Transmission Focus: 3 • Municipal Distribution Utilities: 3 • Electrical System Operators: 1 • Private Corporations, Integrated: 2 • Private Corporations, Generation Focus: 4 • Private Corporations, Transmission or Distribution Focus: 3 <p style="text-align: right;"><i>Total: 25 corporations</i></p>	<ul style="list-style-type: none"> • Vice President, Supply and Development • Vice President, Strategic Planning and Regulatory • Vice President, Strategic Planning • Vice President, Strategic Initiatives and Planning • Vice President, Policy and Planning • Vice President, Policy and Communications • Vice President, Planning • Vice President, Grid Operations • Vice President, Energy Supply and Regulatory Affairs • Vice President, Electrical System Planning • Vice President, Business Development • Vice President, Business Development • Director, Technical Analysis and Planning • Director, System Planning and Development • Director, System Planning • Director, Supply Planning and Integration • Director, Supply and System Planning • Director, Public and Stakeholder Relations • Director, Policy and Regulatory Affairs • Director, Planning and Analysis • Director, Environmental Affairs • Director, Engineering and Program Execution • Director, Corporate Planning • Director, Community Relations • Director, Business Development and Strategy • Director, Business Development • Manager, Utility Planning • Manager, Energy Supply • Manager, Policy • Manager, System Integrity and Sustainability • Manager, Strategic Planning and Development • Manager, Strategic Planning • Manager, Risk Management and Marketing • Manager, Resource Planning and Integration • Manager, Regulatory and External Affairs • Manager, Project Execution • Manager, Power System Operation • Manager, Power Supply and Infrastructure • Manager, Policy and Risk Management • Manager, Marketing and Business Development • Manager, Infrastructure and Asset Planning • Manager, Generation • Manager, Environment and Sustainability • Manager, Engineering and Project Execution • Manager, Energy Supply Planning • Manager, Energy Supply • Manager, Development and Marketing • Manager, Business Development • Manager, Transmission Planning • Chief Operating Officer

Utilities (Types, by Primary Focus) ¹	Interviewees (Position) ²
	<ul style="list-style-type: none"> • Supervisor, Infrastructure Planning and Management • Senior Manager, Transmission System Planning • Senior Advisor, Sustainability • Coordinator, Environmental Affairs <p style="text-align: right;"><i>Total: 54 interviewees</i></p>
<p>¹ In several cases, utilities have been grouped in such a way as to help ensure anonymity and confidentiality</p> <p>² Personnel titles have been reworded slightly in all cases to ensure interviewee anonymity and confidentiality</p>	

Figures 4.3 to 4.7 also illustrate the general relationship of the research sample (54 interviewees) to the total number of corporate representatives (402 invitees) that were asked to participate, based on the following characteristics: 1) jurisdiction (province or territory); 2) utility type; 3) size of corporation (which, given the diversity of corporate types, focuses upon number of employees as a representative metric applicable to all companies); 4) individual's position; and 5) individual's area of focus / involvement in corporate strategic planning. Given the inherently and necessarily purposive and nonprobabilistic (rather than random) nature of the sample and the associated manner in which potential interviewees were identified and contacted, it clearly cannot be assumed that the 54 interviewees or the 402 Canadian utility representatives that were invited to participate are necessarily representative of the overall characteristics of the population as a whole in terms of the relative proportions that exhibit each of these specific traits. As noted in the graphs, the sample does, for example, reflect a relatively high proportion of potential interviewees from certain provinces, for example, as well as from larger, integrated public utilities and persons at the managerial as opposed to executive levels. Some of these trends can likely be explained by, for example, the location of the researcher (Newfoundland and Labrador, see Figure 4.2), or the potential for persons in public corporations to be more able or willing to discuss their corporate planning and activities than those in a private and competitive setting. In addition, corporate executives in many cases represented an artificially high proportion of invitees as it is often only this level of employees whose names and contact information are posted on corporate websites.

As also illustrated, however, the sample does provide a good, overall cross section of the Canadian electricity sector and involves representation from a full range of utility types and sizes, business activities, roles and responsibilities, jurisdiction and market types and other industry characteristics. While it is again not the objective or intention of this study to attempt to “test” specifically for whether and how SEA decisions and perspectives are similar or variable between interviewees according to these characteristics (especially given its qualitative nature), the analysis has included identifying any associated, key and clear trends that were evident in the qualitative data, particularly in terms of whether key SEA drivers, deterrents and approaches appeared to be more prevalent amongst certain types of corporations and markets (Chapter 5).

Figure 4.3 Summary of Study Invitees and Participants by Jurisdiction (Province / Territory)

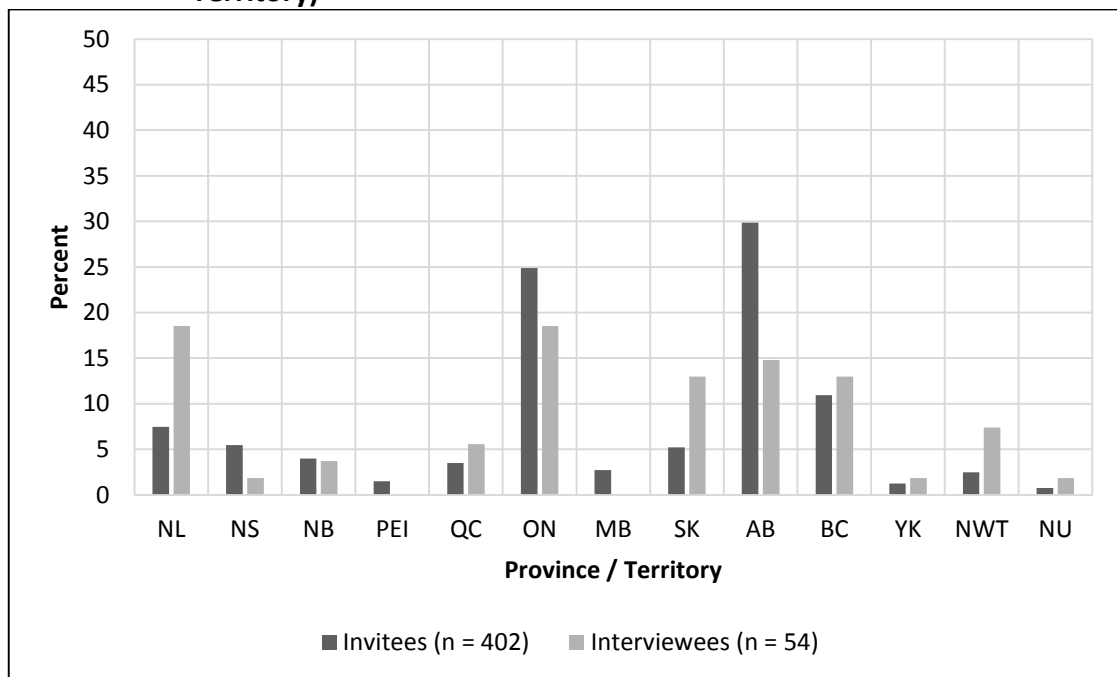


Figure 4.4 Summary of Study Invitees and Participants by Utility Type

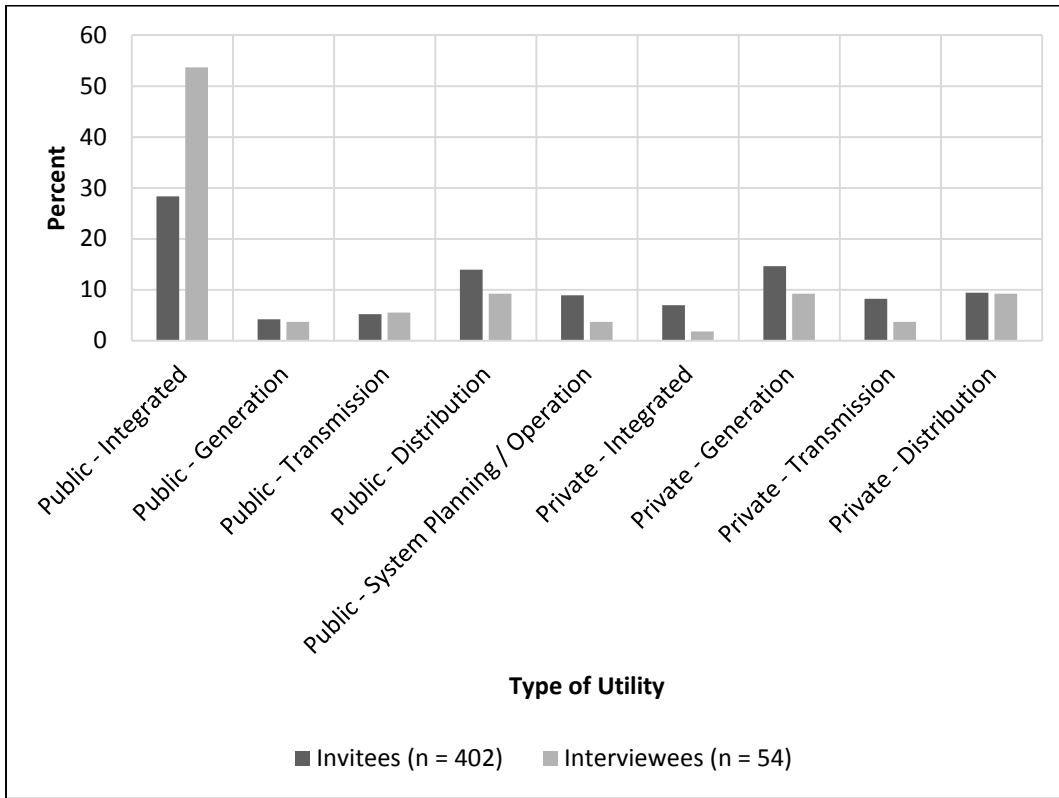


Figure 4.5 Summary of Study Invitees and Participants by Size of Corporation

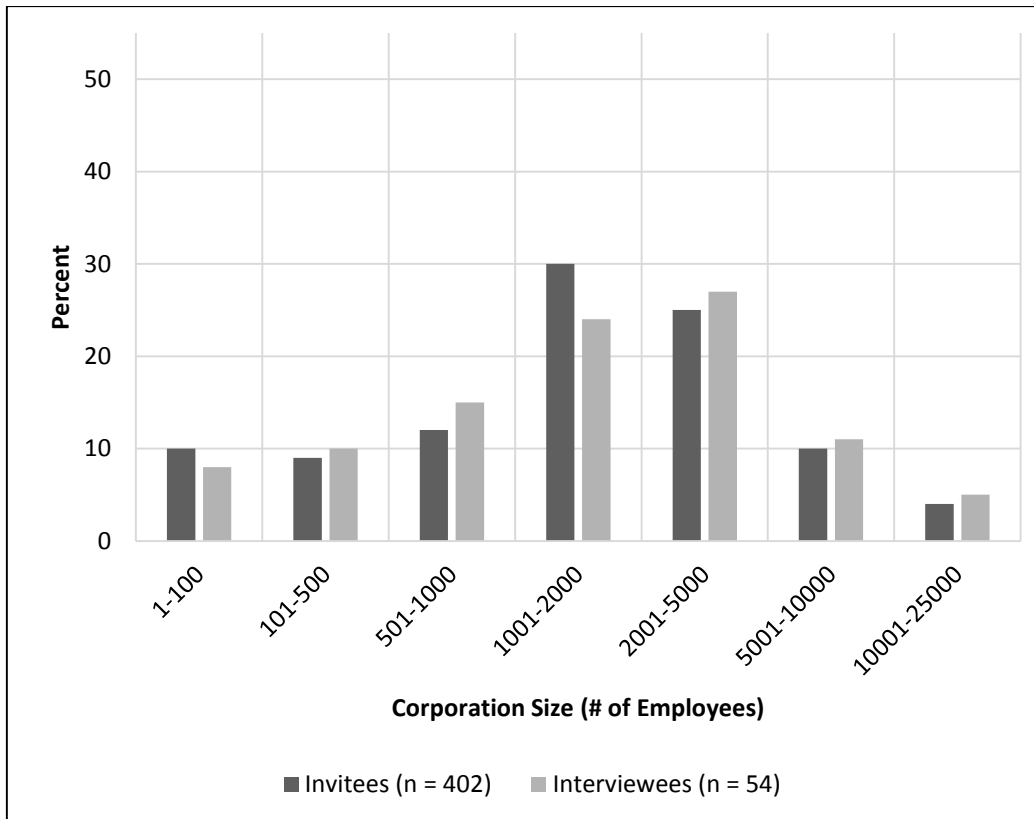
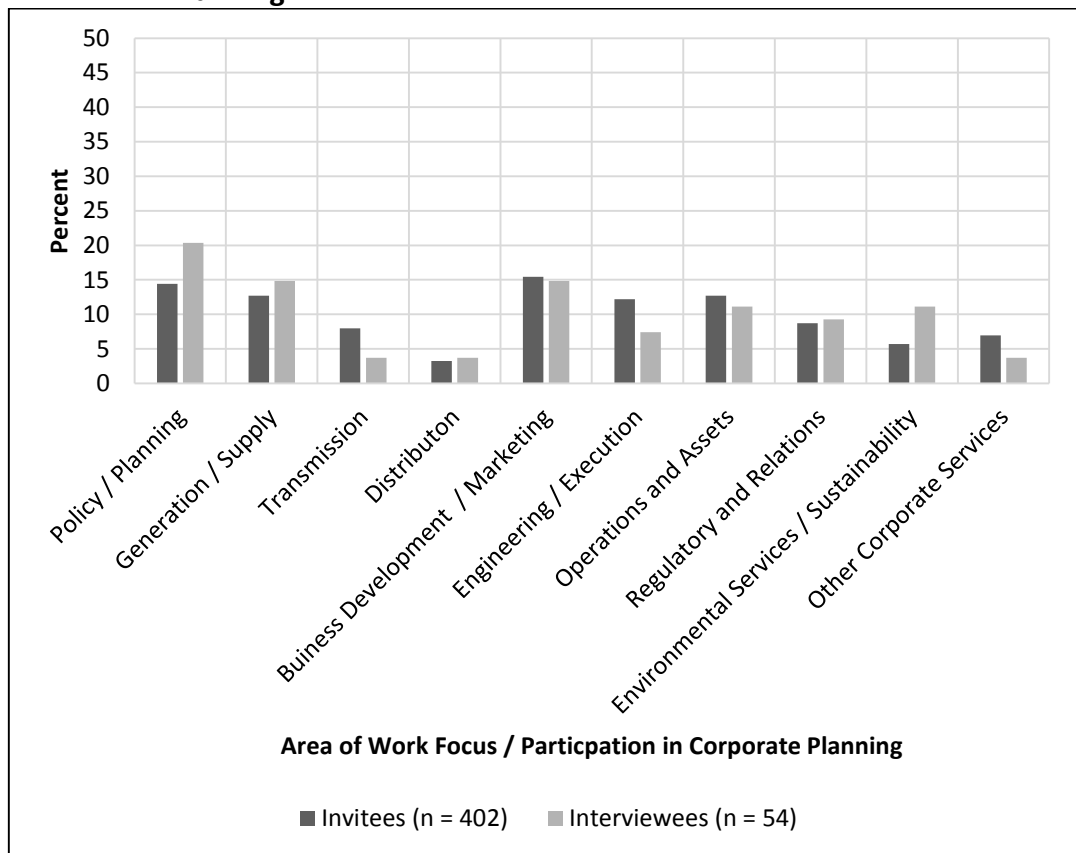


Figure 4.6 Summary of Study Invitees and Participants by Position



Figure 4.7 Summary of Study Invitees and Participants by Area of Responsibility in Planning



4.3.3 Interview Design and Content

The planning and design of the interview questions and script for this research was completed with full consideration of, and therefore informed and influenced by, the nature and objectives of the study itself. These were developed to seek information and insights from the respondents that would address each of specific research questions identified previously. The final interview script and associated questions that were used during the interview process are provided in Appendix A at the end of this document, which included the various components and overall structure described below.

The interview began with an initial preamble (one page bullet list) that provided some introductory and further background information on the study, which was generally discussed with the respondent at the onset. This included a brief overview of the study, reiterating its nature and purpose, as well as describing the planned format of the interview and its associated questions. Some of the key elements and objectives of this introduction included again assuring all interviewees that complete anonymity and confidentiality would be maintained, including that the respondent's name or affiliation would not be identified in the research results. It was also noted that the information provided would not be used for any purpose other than this research, and that the participant could choose to withdraw themselves and their responses at any time. This initial discussion was considered to be particularly important in seeking to ensure that the nature of and basis for the collection and eventual use of the data was clearly defined and understood, as well as to seek to establish a comfortable and respectful setting and rapport for the interview, which can be an important prerequisite for obtaining complete and reliable data through such processes (Rapley 2004; DiCicco-Bloom and Crabtree 2006; Wellington and Szczerbinski 2007).

In conducting interviews, participants may also feel that they need to give correct and socially acceptable answers, or they need to be interesting, novel or dramatic in their responses (Rapley 2004). In conducting interviews, it is therefore considered important to point out that there are a wide variety of possible and legitimate answers, and that any or all of these may be reasonable and are welcomed (Wengraf 2001). The interview

preamble therefore included reiterating to the interviewee that there were absolutely no right or wrong answers or perspectives on this subject, with an associated request that they answer all questions completely and truthfully. The exploratory nature of the research and the semi-structured format of the interview was also re-emphasized by encouraging participants to not feel constrained by time or limited to the specific questions asked, and to feel free to provide any information or input that they felt may be relevant. The participant's permission to record and transcribe the interview was also sought, with associated assurance of confidentiality and data security. The interview preamble concluded with an invitation for the participant to ask questions or provide any comments prior to proceeding to the interview questions.

The opening questions of the interview (Questions 1-3) were designed to obtain some additional, background information about the interviewee and his or her corporation, including the nature of its business activities and the individual's position and role within it, as well as the corporation's strategic planning processes and outputs. These initial questions also investigated whether and how those strategic planning processes already considered environmental issues and included associated public and stakeholder consultation initiatives, and whether the respondent has seen or anticipated environmental issues or public interest in relation to its current or future plans. The insights obtained through these preliminary questions was intended to help the interviewer focus and tailor the specific wording of subsequent questions and discussion about potential SEA use to the specific characteristics of the corporation and its activities and planning, using terminology and examples that would be recognizable and meaningful for the respondent. They were also intended to allow for an evaluation of the degree to which SEA-like processes and activities were currently reflected in the company's planning and decision-making processes, in order to investigate (through the eventual analysis of the interview data) whether and how particular corporate characteristics and contexts, and respondents' experiences and expectations regarding environmental issues and public interests, may have influenced their perspectives about possible SEA use. With this background and context established, the remaining interview questions then explored participants' views about the possible applicability of SEA as part of their corporation's strategic planning and decision-making processes,

including investigating the main reasons why, and the situations and timing in which, they would or would not support or recommend the use of SEA approaches as part of the corporation's future planning activities.

In terms of the potential use of SEA analysis, this involved a series of questions (4-6) that involved presenting the interviewee with information about possible SEA approaches, including associated procedures and objectives and various possible timings and outcomes of SEA use. This served as an overall basis for the discussion, as well being intended to allow for an eventual analysis of corporate decision-making about SEA use in relation to key areas of current theory and practice, particularly with regard to the timing of and methods for SEA initiatives (see Chapter 2). This was followed by specific questions that initially investigated how different these approaches would be from the corporation's current planning processes, and then whether or not the respondent would choose, support or recommend the adoption and application of the SEA approach outlined previously and the main reasons for this. The next questions were intended to probe further and deeper into the key reasons for (determinants of) the respondents' decision on whether or not to adopt the SEA approach provided. Specifically, in the case of a "no" response, the respondent was asked (in Question 6a) whether there were any situations in which they might choose to use SEA. Alternatively, those who answered that they would support SEA use were asked (in Question 6b) to elaborate on the reasons why they perceived SEA to be necessary, what they hoped it would achieve and its likely benefits, and to identify any particular factors or situations (internal or external) that contributed to their acceptance of SEA use.

In terms of the potential consultative elements of SEA, Question 7 involved asking the respondent about potential engagement with stakeholders and/or the interested public as part of its strategic planning process through SEA. This included presenting the interviewee with a number of possible consultation approaches (types, levels and possible timing) for discussion. The intent again was to provide these options as overall basis for discussion, as well as to allow for an eventual evaluation of corporate perspectives and decisions about the use of various potential types and levels of SEA consultation that are often referenced in the literature (Chapter 2). This was again

followed by questions that inquired about whether the corporation's current planning processes included such engagement, and then whether or not the respondent would choose, support or recommend the adoption and application of one or more of these consultation approaches through SEA. Those who answered that they would adopt or support SEA consultation were then asked to describe why they perceived it to be necessary and beneficial and its anticipated results, and in all cases respondents were asked to identify any specific considerations (internal or external) that contributed to their decision.

The final interview question involved asking respondents whether, even if they had chosen to support or recommend SEA use, there were any possible negative issues or outcomes that they also thought about when making that decision. This question was purposefully placed at the end of the interview so as to not influence the earlier discussion about their overall SEA decisions. The interview script finished with a few concluding statements by the researcher, which invited the respondent to provide any further information (questions or comments) that they might wish to add, and which then thanked them for their interest, time and perspectives, and invited them to contact the researcher at any time should they wish to discuss any aspect of the interview further.

A pre-test of the interview procedure and materials was conducted prior to the commencement of the fieldwork. This was carried out by conducting individual "mock interviews" with two persons in comparable positions and organizations as the sample, but outside of the Canadian electricity industry (both of whom were manager level professional acquaintances of the researcher). These pilot tests were completed (by telephone) in order to ensure the overall utility and understandability of the questions, but the responses provided do not form part of the data set and results of the study. No material changes to the interview questions or preamble script were required or made as a result of this pre-testing. That being the case, however, the pre-test exercise did provide some very important and useful insights into a number of key items related to the conduct of interviews, and allowed for these to be addressed during the eventual implementation phase. This included, for example, highlighting the need to speak slowly

and clearly during the telephone interviews, including in the initial background discussion and in presenting the various potential SEA approaches for respondents to evaluate and respond to. In particular, it was clear that as some or all respondents would not have a good, previous understanding of SEA, they would therefore require considerable and clearly presented background explanations on it as part of the interview process.

4.3.4 Interview Conduct and Reporting

The interviews themselves were conducted between November 22, 2013 and January 28, 2014. Separate interviews were completed with each of the study participants, except in the case of two individuals who represented the same company and requested to be interviewed at the same time and together. Of the 53 individual interview sessions, four were undertaken in person and the remaining 49 were completed by telephone. The overall size and distribution of the sample (across Canada) prevented the conduct of face to face interviews for all participants, and so telephone interviews were used. Although in person sessions can have the advantage of providing both verbal and visual channels during the interview process, which in the case of the latter can help enhance communication, probing and data collection based on visual cues (Davies 2006), they can be more costly and time intensive to complete for large and geographically dispersed samples, as well as resulting in less flexibility in terms of interview scheduling. Telephone interviews have the advantage of being much less costly and logistically challenging, allowing more people to be reached in less time as well as offering greater flexibility in terms of timing, and interviewer effects are generally less of a concern over the phone than for face-to-face interviews (de Leeuw 2008). The nine interviewees that were based in the same location as the researcher (St. John's, Newfoundland and Labrador, Canada) were given the option of conducting their interviews in person or by telephone, based on their schedules and preferences. Of these, four were undertaken in person and the remaining five were by telephone.

The final interview script and list of questions (Appendix A) was provided to all interviewees in advance (as a pdf file, by email), several days prior to the scheduled

interview time. Providing the interview materials in advance helps participants understand and agree to the specific questions that will be asked of them prior to commitments being made and before starting the interview process (Meho 2006). It is also a way of letting interviewees think about and work through the questions in advance for a more fulsome discussion, as well to help establish the researcher's overall credibility (expertise and understanding) of the subject matter (Horton et al 2004). In this study, a copy of the interview questions was requested by some in the original recruitment process or interview set-up correspondence, as background for deciding whether they would participate or to help them prepare for the eventual interview. This information was provided to all participants in order to help ensure consistency, and allowed all interviewees to review and generally familiarize themselves with the issues and questions to be discussed, to think through their views and positions in advance, and then for use as an overall written guide during the interview process.

All of the 53 interview sessions were audio recorded, as explained to, discussed with and agreed to in advance by the participants. Recording interviews is a common practice in qualitative research where time and resources allow, and it provides an accurate record of the discussion that results in detailed transcripts which make the eventual analysis and interpretation work more precise, as well as allowing exact quotations to be extracted and presented in the write-up (Alvesson 2011). Without a recording, the analysis of semi-structured interviews can be strongly limited, and the original first-person narrative is altered and potentially corrupted when it is condensed and converted into a third-person narrative through the taking of brief notes by the interviewer (Olsen 2012). The possible disadvantages of recording interviews relate to the time, costs and resources that are required to transcribe and then review and analyse the resulting (and often voluminous) text (Hayes and Mattimoe 2004; Alvesson 2011).

There may also be a degree of interviewee discomfort associated with the presence of a recording device and the known, eventual existence of a verbal recording of the conversation, which could potentially result in anxiety and nervousness by the participant, discouraging openness and honesty and therefore, influencing the results

(Rapley 2004; Wellington and Szczerbinski 2007; Flick 2009). The potential for recording of the interviews (with the interviewee's permission) was referenced in the initial scheduling correspondence (Appendix A), and as noted previously, the preamble to the interview script itself sought permission to record and transcribe the interview, with associated reassurances of confidentiality and data security. Although whether and how these issues were present and influential in these interviewees cannot be known or determined with absolute certainty, there was no evidence of such discomfort amongst the interviews and none of them expressed the least bit of concern, hesitation or resistance to being recorded when asked. One participant simply asked for eventual email confirmation once his recording had been transcribed and deleted, which was provided.

Recording was commenced after the generic introductory / preamble portion of the interview was completed, and following the interviewee's concurrence with the recording and transcription process. This resulted in a total of approximately 2,100 minutes of taped interview discussion from the 53 interview sessions, ranging from about 10 minutes to 70 minutes per interview. All of the interviews were subsequently transcribed by a professional transcriptionist (working under a signed confidentiality agreement), resulting in over 1,500 pages of interview transcripts being produced. Detailed, written notes were also taken electronically by the researcher during each interview to help supplement and back-up the recordings and transcripts (particularly, should there be technical or quality issues with the recording), as well as to allow any key issues and thoughts to be identified and noted throughout the data collection process.

The identification and attempted recruitment of potential study participants was an on-going exercise that extended from mid 2013 to early 2014, and continued during (and in parallel with) the interview process described above. By January 2014 few if any new contacts were being identified through the exercise and networks described above, and the on-going and iterative process of data collection and review was indicating that no new information or ideas were being presented through the interviews. This is referred

to as saturation (Strauss 1987; Guest et al 2006), signalling that data collection is complete (DiCicco-Bloom and Crabtree 2006).

4.3.5 Some Observations on the Interview Process

As illustrated in the subsequent, detailed presentation and discussion of the study's results (see Chapters 5 and 6), the interview process yielded a large amount of information and a very diverse range of responses from participants. This included very interesting and informative input about, and good insights into, their perspectives and associated decisions about potential SEA use. That being said, however, there were a number of aspects of the interview processes which, while not presenting concerns about the overall quality or validity of the results, are worth highlighting in this section.

One consideration and observation associated with interview process was that while respondents were generally very well versed in their corporate activities and associated planning processes, and were quite interested in discussing the potential application of SEA to these, SEA itself was not something that many were familiar with or had ever given much thought to. Unlike other types of qualitative research in the social sciences, which may for example involve asking people about their life experiences or personal situations, it was apparent that thinking and making decisions about the use of a tool such as SEA in their professional life was not necessarily something that came naturally or intuitively to most people. Therefore, and even with the provision of background information and the interview script to all interviewees in advance, the interview process typically involved spending considerable time explaining the concept of SEA in general, as well as how it might be applied and function. In doing so, it was particularly necessary to ensure that all participants had sufficient (and consistent) information, while at the same time not being inappropriately detailed, prescriptive or leading in that regard. In most cases, the interview thus involved the participant identifying and evaluating the possible pros and cons of SEA use "in real time", and the discussion therefore involved a degree of learning, reflection and reflexivity amongst the participants. This was considered to be a positive characteristic of the research methods overall (Section 4.1) and to be in keeping with the exploratory approach and

constructionist perspective that forms the basis for the study, which allowed the researcher to truly get inside such decision-making through direct contact and discussion with the interviewee as these factors were being identified and evaluated. It did, however, also at times lead to a lack of a definitive response and final decision about SEA adoption and use by individual respondents, as there was often considered to be no one single or perfect answer to the question, although even in such cases the interviews allowed for the identification and documentation of the main considerations in such decisions.

In addition, and although this varied considerably amongst interviewees, it was also somewhat difficult and challenging to keep some respondents focused on the specific topic or question at hand, as there was at times a tendency for interviewees to want to move into a detailed discussion of their own particular area of interest and responsibility, as opposed to providing directly (and clearly) relevant views on potential SEA use. As described earlier, this issue required considerable care on the part of the researcher, in order to keep the interview focused and productive, while at the same time not unnecessarily and inappropriately cutting off a relevant discussion without fully exploring it or leading the respondent away from or towards an issue or viewpoint. Finally, given the diversity of the firms involved and their respective planning processes, it was also found that participants were at times describing the potential use of SEA to, for example, their 5-year strategic plan or in the context of project options or alternative project designs. While all of these represented good and useful areas of discussion, it was necessary to ensure that the interviewee was very clear about what type and level of corporate planning they were referring to.

4.3.6 Ethical Considerations and Associated Measures

As most research in the social sciences involves some degree of interaction with human subjects, there is a typically a great deal of emphasis placed on ensuring that all such studies are planned, undertaken and reported in a principled and ethical way. This study was no exception, with a number of associated measures being taken and upheld in planning and completing the research in order to ensure that it was undertaken in this

manner. As was noted in a previous section, as part of the preparatory work for this study, an overview of the planned research and a copy of all associated correspondence and interview materials was sent to the University of Dundee's Ethics Committee prior to the initiation of data collection, and approved on December 17, 2012.

Blaikie (2010: 31) presents a number of general principles and items that are relevant to ensuring ethics in social sciences research, which are outlined below along with a number of examples of how these were addressed through this research study:

- 1) *Voluntary participation*: In the initial and all subsequent correspondence and discussions with potential and confirmed interviewees (Appendix A), they were made aware that participation in the study was completely voluntary. It was also stated and reiterated that those who agreed to participate could choose to withdraw themselves and their responses at any time.
- 2) *Obtaining informed consent of research participants*: An overview of the purpose and nature of the study, and the manner in which its eventual results would be used, was likewise provided in such correspondence. Those persons who were contacted and eventually agreed to participate in the study were also sent an associated "Informed Consent Form" (Appendix A) which they were asked to sign and return prior to their interview.
- 3) *Protecting the interests of the research participants*: At the initial contact and in all subsequent correspondence and discussions, study participants were assured complete confidentiality and anonymity. This was again reiterated at the beginning of the interview, including that the respondent's name or affiliation would not be identified in the research results. It was also confirmed that the information provided would not be used for any purpose other than this research, and that no disclosure of commercially sensitive or confidential information about their company and its activities was required or being requested (Appendix A). At that time, the participant's permission to record and transcribe the interview was also sought, with associated assurance of

confidentiality and data security including the manner and timing in which the audio recording would be erased. Each of these items were strictly adhered to during and since the completion of the interview process (see, for example, Table 4.2), and will continue to be.

- 4) *Researching with integrity*: The researcher has endeavoured to ensure that the study has been undertaken in accordance with acceptable standards of practice, and has been completed with no issues related to fraud, deception or dishonesty. The study did not involve questioning or otherwise interacting with any particularly sensitive or vulnerable members of society, nor did it require or involve misleading or in any way negatively affecting the well-being (physical, mental, emotional, economic or otherwise) of the respondents. Moreover, the subject matter of the study and associated questions were not considered or found to be at all difficult or stressful for the interviewees.

All of the above described principles, requirements and measures were strictly adhered to during and since the completion of the data collection process.

4.4 Data Analysis and Interpretation

The semi-structured interviews were designed to obtain information and perspectives from the participants about what might motivate or deter a corporation from voluntarily applying earlier and increased levels of environmental analysis and public engagement in identifying and addressing potential environmental issues related to their business. In particular, what would make a corporation (and specifically, a corporate representative) choose to do so through increased environmental analysis and/or consultation early in their planning process, using SEA, as opposed to doing so at other (later) times, or using other available environmental management approaches and tools or not at all? The interview questions and associated analysis were aimed at investigating these issues and potential determining factors in several ways – including through direct and specific interview questions (and associated probing) that attempted to identify the main determinants of SEA use decisions, as well as through an analysis of

possible trends and relationships between key concepts that relate to participants' views around possible SEA use and associated contextual factors.

Like many qualitative research methods, interviews typically result in the generation of vast amounts of textual information, which the researcher must then manage, condense and interpret (Denzin and Lincoln 2008). This involves a process of reviewing, identifying, selecting, focusing, simplifying, abstracting and transforming the detailed data (Miles and Huberman 1994), with a key function of qualitative data analysis being the identification and analysis of patterns to produce explanations (Gibbs 2007). The analysis and interpretation of qualitative data is therefore often one that involves multiple layers of analysis and levels of abstraction, from particulars to general trends and findings (Cresswell 2013). This involves a progressive reduction of the data set in order to identify, distil and interpret the key findings, removing irrelevant or repetitive statements and highlighting the central ideas that get to the essence or meaning of participants' descriptions, guided by the underlying purpose of the research (Roulston 2014). The eventual interpretation of these findings is also at the heart of qualitative research, where the data gathered often pertain to people's views, feelings, thoughts, values, experiences, and practices which need to be reviewed and analysed for meaning and significance (Willig 2014). Moreover, interview material needs to be carefully and critically assessed for potential use as a building block for the production of knowledge (Alvesson 2011). The specific objectives of, and theoretical orientations and interests that the study is based on will therefore, in part, help define the manner in which the resulting data are recorded and analysed, including the questions the researcher will ask of the data (Rapley 2004).

4.4.1 Approaches and Outputs

While there is no single, correct way to analyse qualitative (including interview) data, several authors have identified and described the main stages involved. Miles and Huberman (1994), for example, define the key aspects of qualitative data analysis as: 1) data reduction; 2) data display, and 3) drawing conclusions and verification. Roulston (2014) defines the primary steps associated with analysing and representing interview

data as: 1) Reducing data to locate and examine phenomena of interest; 2) Reorganizing, classifying, and categorizing data; and 3) Interpreting and writing up findings. In qualitative research there is also often no clear separation of data collection and analysis (Gibbs 2007), and the continuous and often iterative nature of such research often means that these activities occur in parallel and simultaneously (DiCicco-Bloom and Crabtree 2006).

In this study, the analysis and interpretation of the interview data (transcripts and detailed notes taken by the researcher), involved the various components and activities outlined below, which are adapted and summarized from various sources, including Miles and Huberman (1994), May (2002), Rapley (2004) and Roulston (2014).

- 1) *Preliminary Review and Analysis*: An initial and carefully reading (and re-reading) of the interview transcripts and associated notes multiple times, with the objective of becoming more and more familiar with the nature and general content of the information. This exercise was also used to initially identify and highlight any key and recurring themes emerging from the data, including making notations throughout to highlight relevant topics and potential concepts for the subsequent, detailed analysis of the data.

While the benefits and advantages of producing detailed written transcripts from interview audio recordings are recognized and were summarized earlier, one potential issue with audio files and written transcripts is that while the words are recorded, there context is not (Wellington and Szczerbinski 2007). There are thus potential dangers associated with moving from the spoken context of an interview to a typed transcript and later coding and extraction, as this leads to an element of decontextualization and removal of aspects of the respondent's account and the larger conversation (Gibbs 2007). To attempt to address this potential issue, detailed notes were also taken during the interview process (as described earlier), and the audio recordings themselves were listened to during the above described reading of the transcripts.

- 2) *Identification and Development of Analytical Codes*: Following these initial reviews of the interview transcripts and notes, data analysis continued with the development and refinement of the coding structure that would be used to analyse the qualitative information produced. The generation of themes via coding and categorization is considered to be the most common analytic approach taken by qualitative researchers when using interviews (Roulston 2014).

A code is a summary term which helps the researcher to highlight, categorize and eventually retrieve and sort key aspects of the data in the eventual analysis and interpretation (Gibbs 2007; Olsen 2012). Based on the above described initial reviews, and with specific consideration of the study objectives and research questions, a coding scheme was developed that reflected the identified themes and the various types of potential responses (including categories and subcategories as relevant). Codes are then used (and refined progressively) during the detailed review and analysis of interview transcripts, in order to identify and highlight key themes, and to categorize them for later extraction, sorting, and merging into larger ideas (themes or categories), to eventually begin to identify relationships and patterns concerning the phenomena of interest (Roulston 2014). The generation of concepts is one of the most frequently mentioned aspects of qualitative data analysis (Bryman and Burgess 1994), and the creation and use of codes often drives the development of concepts for use in the conceptual framework (Gibbs 2007).

- 3) *Detailed Review and Coding of the Data*: The interview transcripts and notes were then re-reviewed in detail based on the coding structure developed, which was used to identify, highlight and categorize the specific aspects of the data (text) that pertain to each theme and question being considered, with the relevant coding applied to each directly on the printed copy of the transcript.

It should be noted that all data analysis for this study was undertaken manually by the researcher. Although there are software programs available for use in the

review and analysis of qualitative information, there have been concerns raised that the use of such tools, while helping considerably in coding and sorting processes, can encourage shortcuts and discourage the researcher from considering the context of the coded excerpts as well as diverting attention away from the overall dataset itself (Spencer et al 2003). It is therefore considered important that the researcher get fully immersed in, and therefore not too detached from, the data itself (O'Dwyer 2004; DiCicco-Bloom and Crabtree 2006).

- 4) *Extraction, Organization, Analysis and Interpretation of the Data*: At this stage, highlighted / coded data were extracted from the detailed interview transcripts, and re-assembled, summarized, organized and sorted into a table format. This summary format allowed for the detailed analysis and interpretation of these data, including any key findings, relationships and other associated patterns and trends that were relevant to the research topic, objectives and questions. This was a continuous and iterative process of identification, analysis, evaluation, rechecking and revisions to these findings to reach the final conclusions and research outputs.

4.4.2 Focus Groups

The research methods that were selected and used in undertaking this study involved semi-structured interviews with representatives of Canadian electricity utilities, for the reasons and using the procedures outlined earlier in this chapter. Notwithstanding the overall applicability and benefits of interview techniques for research types and topics such as this one, an important challenge that is often associated with them is that they typically result in a very large volume of information being produced, which then requires considerable analysis and interpretation by the researcher to identify and highlight key results, trends and other findings. This was certainly the case for this study, which resulted in over 2,000 minutes of taped interview discussion from the 53 interview sessions and over 1,500 pages of typed interview transcripts which were analysed and interpreted through the exercise described in the preceding section.

Although a structured and systematic approach, and considerable care, were applied in the design and conduct of the interviews (Section 4.3) and in the eventual data analysis and interpretation (Section 4.4.1), it was considered appropriate to take additional steps as part of the analysis to help further ensure the overall validity and reliability of the study's results. Therefore, as the above described data analysis exercises were proceeding, it was decided to add an additional step to the research methods as a way of validating the study's results, but also and especially, of ensuring an appropriate focusing of the analysis and accurate interpretation of the data as this progressed.

A number of approaches may be used to ensure or test the validity or reliability of qualitative data in the social sciences. This can include, for example, triangulation or the use of multiple stages or methods of data collection and analysis within a single study, either in parallel or in sequence (Golafshani 2003; Myers 2013). These individual methods can be applied to either address different aspects of the research that are more relevant to one methodology or the other, to provide a more complete picture of the phenomena under investigation, or more often, to compare study results obtained separately through each of the methods as a test of validity and reliability (Blaikie 2010; Myers 2013). In the case of this study, and as discussed in Section 4.1, with the exception of semi-structured interviews no other available quantitative or qualitative methods were considered to be applicable or appropriate for the inductive and exploratory nature of the research, and especially, for the associated need to explore and probe participant's thoughts and perspectives through individual, one-on-one conversations. Moreover, as noted above, the impetus for and objective of this additional exercise was not to triangulate or attempt to replicate the study's findings through the separate use of another methodology, but rather, to undertake an interim review of the analysis and preliminary results to help determine whether the focus and findings to date were appropriate and generally on the right track.

The chosen and implemented approach for undertaking this interim review was therefore to conduct a series of focus group sessions with other representatives of Canadian electricity utilities, in order to attempt to ensure and confirm the validity and reliability of the data analysis and results. Although less useful than individual interviews

in gathering detailed, personal accounts from participants, focus group sessions offer considerable efficiency advantages by allowing for discussion with multiple participants at the same time. In addition, the interactions between their participants can allow for the prompting of in-depth and enriched discussions and the generation of new ideas and perspectives as participants are exposed to one another and their ideas (Finch and Lewis 2003). At the same time, however, such sessions may again tend to be dominated by one or a few personalities and the group setting may discourage open dialogue (Kitzinger and Barbour 1999; Rabiee 2004). The planning and conduct of focus group sessions therefore requires that the researcher recruit appropriate and qualified participants, create and maintain a comfortable and safe environment for the conversation, and carefully and skilfully moderate the discussion and record and analyse the resulting data (Krueger and Casey 2000) in order to address the above noted potential issues while at the same time capitalizing on the benefits of this methodology in particular situations.

For this study, the focus groups were again planned and undertaken so as to involve other representatives of Canadian electricity utilities at the managerial level or above that are involved in their corporation's strategic planning activities. Unlike the original interviews, the objective of the focus group session was not to obtain detailed insights into each participant's views and decisions about the potential use of SEA by their corporation, and for the reasons outlined above it was recognized that focus groups methods would not be an optimal approach for this. Rather, the objective was to present them with some of the initial findings from the study and to seek their views on these, including whether they seemed to be accurate and reasonable, to be generally in keeping with their own views and perspectives, and if there were any new or different ideas that came out of these discussions that would require further investigation or prioritization as part of the on-going analysis of the interview data.

In planning and undertaking these focus groups, the challenges of identifying, organizing and coordinating groups of individual industry representatives from across the various companies, jurisdictions and geographies involved were recognized from the onset. Therefore, these were undertaken in conjunction with a number of existing

organizations involved in the Canadian electricity industry, and involved attempting to coordinate focus group sessions as part of existing and established forums that involved their membership (such as annual meetings, workshops or others). This approach was intended to not only assist with the above described logistical challenges of identifying and securing individual participants and then coordinating their involvement in a group setting, but to also establish a process whereby qualified participants did so because of their involvement through a pre-existing forum as opposed to a separate, individual decision to do so or not. This was intended to help ensure a lack of “volunteer effect” or “self-selection” bias in the sessions, where individuals may choose to participate because they are especially interested in aspects of the subject matter or have strong feelings about it one way or another, which may create issues with regard to the overall representativeness of a study’s results (Eysenbach and Wyatt 2002). Although there was no evidence of such issues or biases in the original interview sample and associated data (Section 4.3), in that the study results have included a full and very diverse range of views and perspectives on SEA use (positive, negative, undecided and neutral, see Chapter 5), this aspect of the study allowed for these potential issues to be controlled as part of the design.

In October 2014, an initial list of relevant industry associations and other such organizations in the Canadian electricity industry was identified and compiled, and each was sent a short overview of the study and the intended nature, focus and outcomes of the planned focus group sessions. As part of that process, contact was made with the following nine organizations, which included a mixture of national and regional level organizations (the latter where such organizations existed at the provincial level), as well as organizations and their members which represented a variety of corporate (generation, transmission and distribution utilities) and jurisdiction and market types:

- 1) Canadian Electricity Association (CEA);
- 2) Canadian Hydropower Association (CHA);
- 3) British Columbia Electrical Association (BCEA);
- 4) Independent Power Producers Society of Alberta (IPPSA);
- 5) Association of Power Producers of Ontario (APPrO);

- 6) Ontario Energy Association (OEA);
- 7) Ontario Electricity Distributors Association (EDA);
- 8) CAMPUT (Canada's Energy and Utility Regulators); and the
- 9) Centre for Energy Advancement through Technological Innovation (CEATI)

Throughout the October 2014 to June 2015 period, multiple inquiries were made to these organizations in order to attempt to secure their interest and to identify a relevant forum and time at which to conduct a focus group session. Overall, responses were received from five of these groups, and subsequent correspondence with them then involved reminders, attempts to set up a session and the provision of additional information on the study for their members as required and requested. Eventually, focus groups were able to be set up and conducted with relevant groups of industry representatives through three of the organizations listed above, on the dates and with the numbers of participants listed below:

- *June 23, 2015*: Six participants
- *June 25, 2015*: Five participants; and
- *July 8, 2015*: Six participants.

Although the names of the specific organizations involved and the various participating individuals and their affiliations are being kept confidential, it is worth noting that the focus groups involved representation from a variety of utility (crown and private-sector) and activity (generation, transmission, distribution, integrated) types and associated jurisdictions and market types across Canada. All of the focus group sessions took the form of a teleconference meeting, each of which was approximately one hour in duration according to the length of time at the particular meeting that was allocated for this purpose. None of the focus group participants were part of the original research sample of 54 corporate representatives that were interviewed as part of the study.

As part of the planning of and preparation for the focus group sessions, a short overview of the study and its preliminary results as of that time was prepared and provided to the organization for distribution to participants. This was considered necessary in order to

provide appropriate background on the study and the various items to be discussed, which given the teleconference format and approximately one hour duration was helpful to enhance efficiency and to provide a written basis and structure for the discussion. In preparing and circulating the background documentation, it was also clear that the relatively short time available for the sessions would not permit a comprehensive presentation and discussion of all of the detailed results of the study, including all of the various factors that were found to influence corporate decisions about whether, why, when and how they might choose to adopt SEA. It was therefore necessary that this comprise a relatively short overview that gave some general background on the study and then presented a select number of key and largely representative initial findings, in order to seek to prompt reflection, reaction discussion from the participants as opposed to a detailed, item by item overview of all findings. It was then the role of the researcher to identify and probe deeper into these or other factors, based on the nature and direction of the associated discussion. A copy of the final circulated background document is also provided in Appendix B.

The focus group sessions were planned and implemented based on the same research ethics considerations, principles and approaches as those described previously for the interviews. As the sessions were arranged through a single representative (employee) of each organization such as its Executive Director or Committee Chairperson, the researcher did not have direct contact with the participants in advance of the meeting. In all cases, however, a short overview of the nature and purpose of the focus group and the manner in which the resulting information would be used was provided to the organization contact for distribution (Appendix B). This information was reiterated by the researcher verbally at the beginning of each session, along with the associated reminder that participation was voluntary. This included both their overall participation in the call, as well as their ultimate discretion in deciding whether and when to speak and contribute to the group discussion. All participants were also assured complete anonymity including that their names, positions and affiliations would be kept confidential, and they were given the opportunity to provide individual feedback by contacting the researcher directly if required and desired. This aspect of the study likewise did not involve questioning or otherwise interacting with any particularly

sensitive or vulnerable members of society, it did not require misleading or in any way negatively affecting the well-being of the respondents, and the subject matter was again not considered or found to be at all difficult or stressful for the participants.

At the beginning of each focus group session, the meeting chairperson provided a short overview of the nature and purpose of the discussion, and there was a round of introductions with all participants introducing themselves and their affiliations and positions. After that, the researcher provided a short overview of the study and then proceeded to walk the focus group participants through a brief discussion of some of its preliminary results, using the previously described summary document as a basis for doing so. The focus group session then moved into a detailed discussion of each of the select and representative preliminary findings of the study that were presented in the overview document. Given the group format and the multiple participants involved, the focus groups were not recorded, but rather detailed notes were taken by the researcher during each session.

The following chapter provides a detailed overview of the key outcomes and findings of the research, as obtained through the above described processes of data collection and analysis. A summary of the main results of the study, including the resulting conceptual framework (see Chapters 6 and 7), was provided to all interviewees and focus group participants by email, and is included as Appendix C.

5 RESULTS

This chapter presents the key results of this research, as obtained through the previously described processes of data collection, analysis and interpretation. These are outlined and summarized in the sections that follow, which are organized according to the research questions (Section 1.3) and associated themes upon which the study has focused as well as presenting further insights into corporate decisions about SEA use that were otherwise evident from the data.

As described in Chapter 4, the processes of data collection and analysis involved reviewing and interpreting the interview results to identify and explore any key findings, relationships and other associated patterns and trends that were relevant to the research topic, objectives and questions. This included, in particular, highlighting any recurring ideas and perspectives that were put forward by interviewees as being important and influential in their decisions and views about potential SEA use, as well as any notable areas of variation or inconsistency between individual interviewees in their associated responses. As described in the previous chapter, these key (and recurring) themes were identified through the detailed review and analysis of the interview transcripts and the associated development and application of an analytical coding structure, which was central to the data analysis and which continued to evolve as the results were identified, analysed, evaluated (Section 4.4.1), and progressively sorted and “rolled up” into the main findings of the research. This eventually formed the basis for the presentation and analysis of the study’s key outcomes, as reported in this chapter and reflected in the overall organization and structure of the various sections and subsections that follow (Table 5.1):

Table 5.1 Key Themes Included in the Research Results, their Relationship to the Research Questions, and the Associated Structure of their Presentation in this Chapter

Key Themes / Chapter Sections	Relevant Research Question(s)	Key Themes / Chapter Subsections
5.1 Overall Acceptance or Rejection of SEA	Q1: Would corporations decide to voluntarily adopt and implement an SEA approach?	
5.2 Key Determinants of SEA Acceptance or Rejection	<p>Q2: What are the main considerations in, and determinants (motivations / deterrents) of, corporate decisions around whether or not to voluntarily adopt SEA, and how and to what degree do these factors influence such decisions?</p> <p>Q3: Are the various determinants of corporate decisions around SEA use derived from or influenced by particular contextual elements (including internal and/or external factors)?</p>	<p>5.2.1 Nature of Corporation's Business Activities and Associated Environmental Concerns and Interests</p> <p>5.2.2 Diversity and Distribution of Corporation's Activities</p> <p>5.2.3 Available Strategic Planning Options and Latitude</p> <p>5.2.4 Associated Environmental Issues, Uncertainty and Risk</p> <p>5.2.5 Perceived Need and Rationales for Proactively Addressing Environmental Risk through SEA</p> <p>5.2.6 Other SEA Outcomes and its Perceived Applicability and Effectiveness</p>
5.3 SEA Timing, Focus and Approaches	Q4: If a corporation were to decide to voluntarily adopt SEA, what factors then influence its decisions about the SEA approach to be used (including the stage of planning to which it is applied, and the analytical and/or consultative methods to be used)?	<p>5.3.1 Stage of Planning and PPP Development</p> <p>5.3.2 Focus and Scope of Strategic Planning and SEA Application</p> <p>5.3.3 Consultation</p> <p>5.3.3.1 Perceived Ability, Need and Challenges</p> <p>5.3.3.2 Potential Benefits, Enablers and Effectiveness of SEA Consultation</p> <p>5.3.3.3 Consultation Timing and Participation</p> <p>5.3.3.4 Focus of SEA Consultation</p>

It should again be reiterated here that the interviews themselves were often characterized by a degree of reflection and reflexivity on the part of respondents, as they learned, thought and responded about potential SEA use in essentially real time. As a result, and even with consistency in questioning and associated probing by the researcher, not all interviewees had specific and stated views about all aspects and all issues related to SEA and associated decision-making about its potential use. Conversely, and in keeping with the exploratory nature of this research, in many cases there were other associated issues and perspectives that flowed out of the questions and discussions (e.g., participants often had related views on the particular types of environmental issues to be considered through SEA or further downstream) which have formed an integral part of the study's results.

In addition, and as discussed in Section 4.3, while the interview sample provided a good representation of the various utility types and sizes, business activities, jurisdictions, market types and other industry features that characterize the Canadian electricity sector, it was not the objective of the study to test specifically (and quantitatively) for similarities or differences in SEA views and responses based on these or other such traits. Rather, the intent was to help ensure that the interview sample provided as full and rich a view as possible of the various motivations, deterrents and other factors that may influence corporate decisions about SEA use. The presentation of the study's results does, however, include identifying any associated, key and clear trends that were evident in the qualitative data, particularly in terms of whether particular determinants of SEA use decisions, and any observed similarities or variations in these, were stated or appeared to be linked to certain types of corporations and market settings.

5.1 Overall Acceptance or Rejection of SEA

Q1 Would corporations decide to voluntarily adopt and implement an SEA approach?

As described in Chapter 4, after obtaining some general background information on each interviewee's corporation and its business activities and planning processes,

participants were presented with information on possible SEA approaches, including various associated objectives, procedures and possible outputs and their use. The interview questions then investigated their views about the possible applicability of SEA as part of their strategic planning and decision-making processes, including whether they would or would not choose to adopt and apply SEA as part of their corporation's future planning activities.

When each of the 54 interviewees were asked whether they would implement, support or recommend SEA adoption and application:

- 24 (44.4 percent) stated that they would implement, support or recommend SEA;
- 17 (31.5 percent) stated that they would not implement, support or recommend SEA; and
- 13 (24.1 percent) were unsure or vague in their views and responses.

The interview questions then probed further into the key reasons for, and determinants of, each respondent's decisions and perspectives on whether or not to adopt and apply SEA. Some select and illustrative reasons given by interviewees for their interest in and acceptance of SEA, or for their rejection of it, are summarized in Table 5.2 below, as initial and general background for the detailed presentation and analysis of the study results that follows in this chapter. As indicated therein, the reasons given for SEA acceptance by those that supported it included reference to both the rationale for, and anticipated and desired outcomes of, SEA as well as situations and other factors that were considered to influence its need, applicability and potential benefits. The Table also summarizes some of the overall reasons given by interviewees for rejecting SEA or for having very limited, conditional or cautious interest in it, which again related to various considerations pertaining to the perceived need for and purpose of SEA use, as well as its potential applicability and utility in corporate strategic planning and the potential outcomes of its use.

Table 5.2 Summary of Some Key Reasons Given for SEA Acceptance or Rejection by Interviewees

SEA Acceptance	SEA Rejection
SEA Need and Purpose	
<ul style="list-style-type: none"> • Allowing for a more direct, comprehensive, holistic and rigorous identification, analysis, consideration and incorporation of important environmental issues in strategic planning and eventual decisions, particularly as compared to the corporation's current planning processes. • More proactive identification of environmental issues, requirements and potential opportunities in corporate planning, and the possible management of associated uncertainty and risk prior to significant and often irrevocable decisions and expenditures being made. 	<ul style="list-style-type: none"> • There are limited known or likely environmental issues or concerns associated with the corporation's current and planned business activities, or no perceived need to give them more prominence in strategic planning and decision-making. • The corporation already has adequate and appropriate processes and mechanisms in place for the analysis and management of environmental issues and concerns. • The corporation feels that it already has a good knowledge of, and overall comfort regarding, the various potential developments, technologies, environmental issues and stakeholder interests that will be associated with its strategic planning and eventual decisions and activities, and therefore does not need SEA to further understand or manage these. • The utility does not currently see a need for increased public or regulatory acceptance or support. People seem to be generally satisfied with the corporation, understand the reasons and need for its planning decisions and actions, or the corporation has a monopoly and is not trying to win over customers in a competitive environment. • At a high level and on a regional basis, environmental issues are multi-sectoral and have to be assessed, evaluated and managed more holistically and by governments or other parties and not by individual corporations.
SEA Applicability / Utility and Potential Outcomes	
<ul style="list-style-type: none"> • Addressing environmental issues and risks earlier in planning may help pave the way for moving ahead with eventual PPP implementation, with associated time and cost savings and reduced implementation issues. This was considered preferable to attempting to react to environmental issues later when there is more exposure and risk to the company during the "heat" of project sanction and implementation. • Identification and management of important new or changing environmental regulations and other requirements, and an enhanced 	<ul style="list-style-type: none"> • The corporation has a limited and restricted range of alternatives available to it in its strategic planning, due to technical and economic factors, industry structure, mandates, legislative requirements or government directives, or the available options have similar and relatively low levels of associated environmental concern. • The corporation's business activities and interests are diverse and geographically dispersed, with individual projects and activities typically occurring in separate and widespread areas. There is therefore no single region (jurisdiction or receiving

SEA Acceptance	SEA Rejection
<p>ability to proactively address and potentially influence these.</p> <ul style="list-style-type: none"> • Increased structure in, and consistency between, existing corporate processes and planning inputs (analytical methods and data) and across diverse and often competing planning considerations (environmental, technical, economic, other). This would help create a more level playing field between all of these planning considerations, and may lead to better integration of these matters in decision-making. • Improvements to internal understanding and documentation of environmental issues, information and analysis, for use in corporate planning discussions and eventual decision-making. • Helping to achieve and demonstrate more thoroughness, rigor, openness and due diligence in strategic planning with regard to environmental issues, potentially resulting in enhanced corporate reputation, improved stakeholder relationships and trust, and associated defensibility of planning processes, decisions and actions. • The development and use of information, analysis and engagement mechanisms to facilitate early regulator and stakeholder learning, understanding and potential support for the corporation's strategic planning and associated activities. • Making strategic planning decisions stronger and more resilient, replicable and well documented, reducing exposure and risk and potentially protecting the corporation and individuals if issues arise or situations change in the future. 	<p>environment) or interested and potentially affected public associated with the corporation's overall strategic plan and activities.</p> <ul style="list-style-type: none"> • A view that environmental issues cannot and should not be looked at separately from technical, economic and political considerations in strategic planning, which is considered to limit the utility and appropriateness of SEA as a perceived stand-alone exercise and planning input. • Environmental issues and requirements are considered to be too general, vague, dynamic and unpredictable at the strategic planning stage to attempt to assess or manage them at that level of decision-making. Concerns that SEA is potentially too rigorous and analytical whereas planning is much more high level and nebulous. • The required costs, resources and time that will likely be associated with SEA use are considered to be significant, prohibitive and not worth it overall. Adding an SEA process could unnecessarily slow things down and cut into revenues, and may reduce overall planning options and competitiveness. • SEA would likely result in large amounts of unnecessary and likely unused information being generated, which will have a finite and limited shelf life due to a dynamic industry and planning environment which will require it to be continually redone. • The corporation is operating in a commercially competitive business environment, which would prevent it from releasing information on its strategic plans and activities or discussing these with outside parties prior to a project being formally identified and proposed. • There are other perceived risks and possible negative outcomes associated with voluntarily releasing information and engaging with stakeholders early in corporate strategic planning.

Although a wide and at times varied range of perspectives and decisions about potential SEA use were provided by interviewees, a number of key and recurring themes, concepts and trends were evident in the interviews and have emerged through the data analysis that are relevant to the various research questions being addressed in this study. These are described in the sections that follow, both through general summaries and discussions of the study's findings, as well as through the use of direct quotations (excerpts) from the interview transcripts in cases where relevant and concise quotations were available and useful in further illustrating these findings through representative responses. These direct quotes are provided as separate indented and italicized text, and are anonymously referenced by interviewee number (based on the order in which the 54 participants were interviewed) and the date of the interview in question. In some cases, shorter terms (words and phrases) used by one or more of the interviewees and/or focus group participants to highlight a relevant point are also incorporated in the main text in quotation marks (in a non-attributed manner) for general context and illustrative purposes.

5.2 Key Determinants of SEA Acceptance or Rejection

Q2 What are the main considerations in, and determinants (motivations / deterrents) of, corporate decisions around whether or not to voluntarily adopt SEA, and how and to what degree do these factors influence such decisions?

Q3 Are the various determinants of corporate decisions around SEA use derived from or influenced by particular contextual elements (including internal and/or external factors)?

As summarized above, the primary reasons given by interviewees for having an interest in, and their overall acceptance of, SEA related to a perceived need for an earlier and more comprehensive and rigorous identification and analysis of environmental issues and requirements in corporate strategic planning and decision-making. This included the potential benefits of taking a more proactive and integrated approach in identifying, considering and potentially managing such issues and associated risks through planning.

These general findings are well in keeping with the overall nature of, rationale for and desired outcomes of SEA in general (Chapter 2), and so it was not surprising that interviewees considered these factors in their decision-making about potential corporate SEA use. A key focus of this research has, however, been on investigating whether there are particular motivations, deterrents and other determinants of SEA acceptance or rejection by corporations in specific situations, including whether and how these factors influence decisions around whether or not to take such a proactive planning approach as that which would be represented and facilitated by SEA use.

As illustrated in the following sections, the results of this exploratory study indicate that corporate SEA use decisions are initially and fundamentally influenced by a number of important considerations and associated contextual factors that determine overall SEA need and applicability, which relate to particular aspects of the corporation's business activities and overall setting. From there, strategic planning situations that give rise to increasing numbers and types of planning options, and thus to associated levels of environmental uncertainty, variability and risk between these alternatives, were found to contribute to the perceived need for SEA, along with respondents' views around the potential outcomes (benefits and risks), utility and applicability of SEA methods in addressing these in a particular situation and context.

5.2.1 Nature of Corporation's Business Activities and Associated Environmental Concerns and Interests

Interviewees' perspectives and decisions about possible SEA use were found to be strongly and initially influenced by the overall nature of the corporation's business activities and interests. In general, where respondents felt that their current or planned activities were such that they had little or no important environmental issues or concerns associated with them, there was no perceived need to address these earlier in planning through the use of tools such as SEA. This was primarily the case for representatives of smaller, electricity distribution utilities that are involved in the development and routine maintenance of infrastructure in specific locations and communities, as well as several others whose roles within larger and somewhat more

diverse utilities were focused mainly or exclusively upon planning related to this type or scale of activity.

I don't think so...We don't feel that we have a big impact on the environment. There's nothing new coming at us there, so its ... pretty standard stuff... Again I just don't think our business is [such] that we would need to put in place much more than what we've got now... I just don't see our types of projects being that ... complex with respect to environmental impacts, such that we would need a more sophisticated tool to help us assess it and to put forward the right pieces in our planning. (Interviewee #23, December 11, 2013)

When we do go through our planning processes, I would say our footprint is quite low. As a result, we don't have to deal with very many environmentally related issues from the perspective of third parties coming to us and saying you should be doing something differently, or when we do propose something, that we have customers and stakeholders that are significantly impacted. (Interviewee #25, December 11, 2013)

There's no contentious issues or opposition...so it's hard to see the value in a more formalized planning from an environmental point of view. (Interviewee #18, December 9, 2013)

There's not a lot of opposition, I don't think...People realize there has to be something, it can't all be renewable generation, so there has to be some gas. The new gas plants are fairly unobtrusive, so you don't expect there to be a problem. (Interviewee #16, December 6, 2013)

This was also found to be the case in situations where interviewees noted that although there were environmental considerations associated with their business activities, these were and would likely continue to be an area of relatively low focus and priority in their corporation's strategic planning and associated business decisions.

To be honest, I wouldn't see us doing any more than we do now. For any new developments that would have an environmental component, we would tend to look at reductions in greenhouse gases, and that's the biggest directive that we've been given... I would say the priorities would be the economics and the technical viability, and then once that's all resolved...making sure we comply with environmental regulations. (Interviewee #14, December 6, 2013)

I'd really need to be sold on that. Right now, the environment is just one of many competing criteria, and to what extent you want to leverage more on that, or to have specific mechanisms to get a different look at it from that perspective, it's kind of hard to see the value in that at this point in time... (Interviewee #18, December 9, 2013)

Relative to say economics or other agendas...I'm not sure that [environmental issues] would be the driving force that we would tie our strategy around... (Interviewee #31, December 18, 2013)

I can't say that I see the real tangible benefit of it corporately. ... I don't know what weight we would put on it. Although they like to hear about environmental benefits.. the bottom line still ... with our senior administration is economic. (Interviewee #35, December 20, 2013)

[Our Board of Directors]...see their fiduciary duty as a director being to ensure the economic future viability of the company. They've said that, while all that environmental stuff is okay, we want you to do an economic screen first, and if it passes the economic screen then you can look at all the other stuff. (Interviewee #44, December 24, 2013)

In the long term strategic plan, we identify a bunch of key drivers. Obviously, some of those social issues are in there, as are environmental issues. In our industry, we're very cognizant of that...It's something we're very aware of. But is it a key driver - No, it is not. (Interviewee #30, December 18, 2013)

5.2.2 Diversity and Distribution of Corporation's Activities

In addition to the above described considerations, the overall diversity and geographic distribution of a corporation's business activities were also found to influence participants' views about the need for and applicability of SEA. As discussed in Section 4.3.2, this potential issue was identified early and considered in the overall design of the study, including in the selection of the industry sector and set of corporations that would comprise the research sample. In particular, the inclusion of a wide range of diverse corporations, jurisdictions, business environments and planning contexts in the sample was intended to allow for an investigation of the potential influences of this and other factors on respondents' views about SEA use.

The interview results showed that where SEA use was accepted by interviewees, this was primarily in cases where their corporation operates exclusively or primarily within a single jurisdiction or other definable region, and thus, where its overall strategic plan and associated projects and activities will likely occur within a single area, affect a defined "environment", and may be of interest to a single and discernible set of stakeholders. SEA use was typically rejected by corporations with business activities and interests that are diverse and occur in separate and widespread jurisdictions. Similarly, SEA was found to be of limited interest in corporate planning situations that involve a single jurisdiction but where the region is large and remote and individual projects and stakeholders are separate and geographically dispersed, such as in the Canadian North. In both such cases, respondents noted that the individual project level remained the most appropriate stage of planning and decision-making at which to assess and attempt to manage environmental issues.

It's difficult to see how we could do a strategic environmental assessment for our projects, that are so diverse and so distributed. Clearly, we do take into account environmental considerations when we're evaluating a country, the opportunities there, the risk, and of course at the project level we're very much engaged in environmental planning and approvals. I think the very nature of our company...is such that it would be challenging for us to try to do this on a

corporate basis because of our diversity... While I think it's a great tool, it's probably not a tool that would have a lot of application for our business.
(Interviewee #6, November 29, 2013)

An apparent exception to or variation of this finding occurred in several cases where corporations were reportedly considering entering into multiple, new jurisdictions with important but as yet unclear environmental requirements or societal interests that had recognized, potential implications for the overall feasibility and profitability of doing business in those areas. This often resulted in planning situations (similar to that discussed in the next section), where there are multiple, diverse strategic directions (in this case, jurisdictions) available with potentially important, different and uncertain environmental issues and potential risks associated with them, and strategic planning therefore involves understanding and ultimately picking between these. It was also noted, however, that in many cases companies do not take these sorts of overall decisions and actions through an overall strategic plan or program per se. Instead, they will often identify and move forward with a relatively small, individual project in a new area in order to “test the waters” and gather intelligence from that experience before deciding whether to continue or increase their activities there. It was therefore suggested that these often incremental and project-specific approaches to moving into new jurisdictions and markets would likely limit the applicability of SEA to such decisions.

5.2.3 Available Strategic Planning Options and Latitude

One of the other most direct and recurring findings from the interviews was that the perceived need for SEA, and thus interest in its adoption and use, is strongest in strategic planning situations where there are a relatively large and varied range of strategic planning alternatives available to the corporation. This factor was found to drive overall decisions and perspectives about SEA use for almost all respondents, both as a stated reason why and condition where they were interested in adopting SEA, and conversely, where a lack of this planning characteristic was often given as a reason why SEA use would not be required, possible or useful.

In our business there tends not to be a lot of options around what we can do. It's really just a question of are we prepared to live with whatever the environmental consequences are... and most of our projects in the big picture of things are pretty small. (Interviewee #14, December 6, 2013)

Through the interviews, a number of contextual factors were identified as determining or influencing the nature and variety of planning options available to a corporation (in this case, a Canadian electricity utility), and thus its potential need for and interest in SEA. These included:

- The presence, applicability and degree of specificity of relevant government policy or other directives that the corporation's strategic planning and business activities must adhere to and comply with (especially, but not exclusively, in the case of crown corporations).
- The corporation's mandate and the nature, type and degree of industry regulation involved. For example, some utilities reported having a legislated requirement to provide safe, reliable and least cost power, and regulatory approval of their strategic plans is based primarily if not exclusively on economic (power rates) considerations.
- The integrated or fragmented nature of the electricity sector in a particular jurisdiction. Larger, vertically integrated utilities are typically able to consider more, diverse generation and transmission options to meet future electricity requirements than those that have a business focus and mandate that is focused on either generation, transmission or distribution activities only.
- The presence of other important and unique technical or economic factors and constraints that may limit development alternatives. For example, the large geography, harsh climate, lack of interconnected transmission grid and small and dispersed communities in Canada's northern regions often restricts available energy technologies, and thus, strategic development planning options.

- Situations where a corporation's strategic plan and associated activities within a particular time period are comprised of or largely dominated by one large development project as opposed to an overall program and mixture of activities.

The requisite nature and variety of strategic planning options that would require and facilitate SEA use were also noted by many interviewees to occur primarily in relation to longer-term strategic planning by corporations. This was said to be due to the nature of the electricity sector itself, where the often long lead times associated with the development of energy infrastructure and the operational lifespans of these assets once they are developed means that the range of available planning options is typically much greater for "far future" strategic planning and decision-making. It was also noted that the existence and diversity of available planning options can also increase in situations where the company is entering into a period of growth and planned diversification in its business activities, particularly where the corporation has good capital availability and the overall fiscal means to pursue expansion and diversification of its business. Several interviewees noted that changing market conditions and regulatory circumstances were also resulting in new technologies becoming more and more viable, and thus, an increase in the availability of strategic planning options for their corporation. A number also stated that although they would not recommend or support SEA for their standard corporate planning and overall business given a lack of options or associated environmental concerns, they would be interested in applying it in longer term planning or in situations where significant future growth or diversification was being undertaken, where there would be additional and more diverse planning options available.

In the shorter term, the number of options that are available to the supply development folks are pretty limited because of the lead times to produce different supply options. So for the short term, the five to ten years, I believe they're limited to pretty conventional things which don't tend to be as environmentally invasive as what could be available in the longer term.
(Interviewee #16, December 6, 2013)

I could see it being a little more useful when you're [considering] the longer term and with more options, when you're comparing nuclear to hydro, to clean coal to large scale imports. I think it would be more relevant for that because now you have very diverse options, and an...assessment of the environmental impacts might have some more meaning, have some more value. (Interviewee #39, December 20, 2013)

Our plans for the next five years are pretty well fixed. We're already negotiating contracts with people, we're doing the environmental impact studies, so our ability to influence the next four or five years is very limited. Those plans are in place and some of them are already underway. It's sort of the longer term that there's probably an opportunity to influence things, and where some of the more interesting things will probably be happening. (Interviewee #24, December 11, 2013)

Certainly if the government wasn't there in terms of being fairly prescriptive in terms of the kind of technologies and approaches, I mean, certainly there it would make a lot of sense when you have sort of a clean slate, and then you really want to be more strategic and one of the filters you would look at is really...what are the implications from an environmental perspective, what are the challenges...Perhaps other companies are in that position, in which case there could be value in taking a broader environmental perspective. (Interviewee #18, December 9, 2013)

Several interviewees also indicated that although their corporation's activities are relatively routine and environmentally benign (and thus, SEA would not likely be required for its typical strategic planning) they would be interested in applying SEA in relation to larger, upcoming policy decisions that have multiple and potentially environmentally contentious options and issues associated with them. This included, for example, several utilities' upcoming decisions around whether or not (and if so, how) to decommission and remove ageing electrical infrastructure throughout their regions, or for important operational issues such as potential changes to their overall vegetation

management procedures. In these cases, respondents noted that these activities and options may have a number of important environmental considerations associated with them which may require additional analysis and consideration in strategic planning through the use of a tool such as SEA.

When it comes time that we can no longer maintain ... our existing old small hydro projects... I think we're going to have to sit back and before we finalize that plan think about...what would be acceptable and what's not...You may need a more sophisticated tool to help you see it through..That's an example that certainly could have application and be beneficial..We're going to have to think it through from a couple of perspectives - can we maintain these, should we even put it forward to decommission them, or just go forward and say, look, we've got to replace these because there's no other environmentally acceptable option. Again I'm not sure if that problem will present enough options or alternatives that you would have to evaluate that you would need a more sophisticated tool, but it might. (Interviewee #23, December 11, 2013)

Several interviewees also discussed this issue with respect to SEA consultation (see Section 5.3.3), noting that if the utility has a limited range of options available to it or other factors restrict its planning latitude, it is often not useful or appropriate to engage with stakeholders at that level of planning. This was said to be the case because the corporation would have no real ability to consider and address most issues through its planning processes, which would likely frustrate people and could negatively affect the corporation's perceived credibility.

That planning...already started from a place where there wasn't actually a lot of choices left...because a lot of it was directed by government. That makes things quite a bit more challenging for us to credibly approach any SEA type work because how do you tell the people that we want to hear your views, but we can't change anything because it's all directed. So that puts us sometimes into a tenuous position. (Interviewee #41, December 23, 2013)

It was also noted that strategic planning in the electricity industry is often characterized by unclear and somewhat overlapping mandates, and so corporations would be very wary about using SEA or engaging with stakeholders on energy policies and plans that were developed and directed by other parties. This would include strategic directions developed and imposed by governments or other planning authorities, as utilities would not want to be seen as being responsible for these (restricted) options and any associated environmental issues and societal concerns.

5.2.4 Associated Environmental Issues, Uncertainty and Risk

Related to the above issues, it was also evident from the interviews that a larger number and variety of available planning options (especially in longer-term scenarios, where these may be less understood and well defined) typically has the effect of creating higher levels of uncertainty, risk and variability around the number, nature and scale of environmental issues that may be associated with these alternatives and their possible implications for the corporation. The section that follows describes these perspectives as raised by interviewees, and for clarity and consistency utilizes the following terminology and definitions (as derived and adapted from Anon 2015):

Issue: A problem or difficulty. A point or matter of discussion, debate, or dispute. A matter of public concern or objection.

Uncertainty: A condition of not being able to know, describe or predict an existing condition, a future occurrence or a possible outcome.

Risk: A situation of uncertainty where possible outcomes may result in loss, harm or some other undesired effects.

Several interviewees noted that the industry is currently undergoing profound changes and is very dynamic in nature, with a general trend towards new and different development options and technologies, along with an associated increase in uncertainty and risk in corporate planning. These heightened levels of environmental uncertainty

and variability were found to generally result in a greater perceived need for SEA, in order to better understand and manage any potential risks. Some even felt that SEA analysis may thus also help the corporation to identify and consider planning options and opportunities that would not otherwise be apparent or considered.

I'm as comfortable as one can be with the engineering on anything, but...our one biggest unknown and challenge or risk right now is on the environmental side...(Interviewee #53, January 27, 2014)

Our experience is that we've had a pretty good handle on what the options and issues are around here.... I can see how you could sort of drill deeper into the socioeconomic and environmental impacts that new technologies could have...and that the trade-offs need to be examined, and where we don't necessarily have that good a handle on exactly what those alternatives entail. (Interviewee #51, January 22, 2014)

I think it's important to get a sense of whether there are any issues that are of such importance that could be sort of below the waterline... It could offer tremendous opportunity [to] look at them at a higher levelI think if you look just at your projects then you may lose those sort of higher level perspectives. (Interviewee #9, November 29, 2013)

A number of other factors and circumstances were also found to create situations of increased environmental uncertainty and risk, and thus a perceived need for additional information and analysis through SEA to help address this. These included situations where the corporation is moving into new and unfamiliar areas of business, such as new jurisdictions (as discussed earlier) or from a primarily operational mode with relatively small projects and routine activities, to an upcoming requirement to construct and operate different or larger scale development activities with new and somewhat unclear environmental issues and requirements. Other examples provided by participants included situations where the corporation foresaw the need to incorporate new and relatively imprecise environmental issues and requirements into their overall strategic

planning, such as evolving government policy directions or to consider future climate change and its possible implications for the company's infrastructure and operational processes in the long-term. It was also apparent in cases where the corporation feels that it has enjoyed a relatively low level of regulatory or public interest or opposition to date, but anticipates an upcoming change in environmental concerns, requirements, interests and expectations related to the corporation's processes and activities.

Right now we have a very good handle on what the environmental regulations and the future look like here...I will say what would help is if we ever were to go into regions that we didn't have as good information. And understanding the local environmental regulations and laws, they're very different by region, and also to have that lobbying impact...I think that would probably be a good tool to use if we were not familiar with the market. (Interviewee #13, December 5, 2013)

When it comes to public policy or public perceptions and stuff, [people here] seem to lag the rest of the country by a few years. They've been, I think, traditionally more forgiving of what the utility does. .. I don't think that's going to continue... there's going to be some significant pushback...Let's face it, environmental requirements, the socioeconomic side of stuff... the public perception, that's only going to get harder as time goes on. (Interviewee #46, January 2, 2014)

There are examples of things that happen that would be a paradigm shift that you wouldn't see on an annual basis, so there's no need to do a scan because you're expecting that if you know your industry, and you know your business, and you are engaged with your stakeholders at all levels, you see incremental changes. But every once in a while something like that changes or happens that requires, okay, we've now got to rethink this completely. (Interviewee #31, December 18, 2013)

These findings were again further reinforced by the fact that in other cases a lack of such issues and situations resulted in SEA not being considered necessary or of interest to respondents. As summarized at the beginning of this chapter, the adoption and

application of SEA was often rejected by interviewees who felt that the corporation and its business activities had little in the way of important environmental issues or concerns associated with it, including no important environmental issues or differentiators between planning options in that regard, nor any anticipated changes in environmental issues or interests in the future which would necessitate a greater emphasis on these in their strategic planning.

Even in situations where a corporate representative was aware of environmental concerns and requirements pertaining to their strategic planning activities and options, existing knowledge and comfort were found to be a key tempering factor with regard to the perceived need for SEA. Specifically, where interviewees felt that they already have adequate and appropriate environmental systems and processes in place, and have extensive and long-term experience working in these areas which has provided a good knowledge of the various potential developments, technologies, environmental issues and stakeholder interests that would be associated with its future activities, their interest in SEA was typically found to be far lower. These situations of corporate knowledge and comfort in strategic planning were also found to be present for other reasons, such where the key environmental issues are defined and driven primarily by existing environmental regulations and standards, in which case companies often felt that they have a good idea about the issues and needs and can plan and design their associated business activities accordingly. There were also cases where interviewees felt that even through their corporate planning and future activities involved new directions and alternatives, their business activities are “naturally” moving towards more environmentally and socially acceptable options (e.g., going from coal to hydro or other more environmentally friendly technologies), and so the lack of associated environmental uncertainty and risk would diminish the need for SEA. In addition, where it was felt that regulators and stakeholders already have a good understanding of the industry, associated environmental considerations and constraints, and the need for a mix of power supply types, there was no perceived need for additional, early analysis or planning to improve or change this.

Our company has a fairly mature experience on environmental issues. We've been at this quite a while and have been a leader in a number of areas. We look at environmental issues as simply another major business imperative...kind of like operational decision making, and so we factor environment realities into our strategic planning processes in the same fashion. It's the responsibility of people like me and others to identify such issues – But, it's not like they're new issues. (Interviewee #36, December 20, 2013)

Most large utilities or energy infrastructure companies will have a very good handle on environmental issues because of the compliance issues around it. So a lot of that information is available to most companies...that are in this space....especially the larger ones who are involved and are consulted at a governmental level on environmental policy and energy policy.. Would I say is it helpful? – Yes. Do I need it? – Yes. Do I need to do it through an SEA? - The answer is no, because we tend to go through that already and internally. (Interviewee #31, December 18, 2013)

If I wasn't getting any indication...that would suggest that there's going to be tighter environmental restrictions, then I would say, well I understand the current landscape quite well ... then my risk profile would say that there's nothing there that would cause me to need to do a deeper dive into that because I'm not seeing any signals at this point (and obviously, you've got to make sure you're well plugged in) that would cause me to say I need to do a deeper dive into this. (Interviewee #53, January 27, 2014)

The results of the study also indicate that for corporations that recognized a need for SEA and had an interest in its adoption and use, social concerns and interests were often considered to be the primary driver for, and focus of, any such SEA application in corporate strategic planning, as these were perceived as being amongst the greatest sources of perceived uncertainty and risk for the corporation's business activities (see Section 5.3.2). The results therefore indicate that corporations that accept SEA will often tend to view and use it as a means of providing additional definition and clarity around

such issues and required measures for addressing them, both through internal analysis as well in potentially gathering additional intelligence on public and stakeholder concerns and the likely social acceptability of various PPP options through SEA related consultations (Section 5.3.3).

In summary, therefore, the presence of strategic planning situations characterized by: 1) a wide and varied range of available and potential planning options and associated planning ability and latitude by the corporation, and 2) anticipation of important upcoming environmental issues, requirements and risks, with associated uncertainty and variability in these between the available planning alternatives, were found to be important contextual drivers for respondents choosing to adopt and apply SEA.

5.2.5 Perceived Need and Rationales for Proactively Addressing Environmental Risk through SEA

As illustrated above, situations where corporate strategic planning is characterized by the availability of planning options and associated environmental uncertainty, risk and variability between these alternatives were found to increase participants' perceived need for and interest in SEA. In these cases, SEA was recognized as a means of allowing the corporation to know well in advance if a PPP option was likely to be environmentally feasible or problematic, and to allow time to prevent or otherwise mitigate any identified (and particularly, "showstopping") environmental issues through appropriate planning. Notwithstanding the overall contextual drivers and apparent pre-requisites for voluntary SEA use highlighted and discussed in the preceding sections, an important focus of this study has also been to investigate what specifically would motivate a corporation to take such a proactive planning stance. Specifically, why would a corporation choose to attempt to assess and manage environmental issues at the earliest stages of planning through the voluntary use of a tool such as SEA, as opposed to taking a more "wait and see" attitude, and possibly addressing any such environmental issues later (if they arise), through the use of other approaches and measures, or even not at all?

The interview results indicate that while key drivers for corporate environmental proactivity through SEA relate to the specific nature of a company's business activities and the environmental issues, risks and uncertainty associated with these, respondents that accepted SEA showed a clear consideration of the probability, manner and degree to which any such unknown and/or unresolved environmental issues may have material, negative implications for the corporation. For some, this resulted in an associated recognition of a need to more comprehensively and proactively identify and manage these risks through SEA.

It's the things that I don't know that I don't know that frighten me the most... and with this process you've got a greater probability of identifying and dealing with those things that you didn't know were out there that could cause you the most trouble. (Interviewee #32, December 18, 2013)

It's quite possible that you would identify issues or problems or different ways to do things prior to wasting your money on something that shouldn't have been pursued in the first place. (Interviewee #48, January 7, 2014)

Any work we can do on that strategic EA, it helps further along down the road as the plan flows into projects and developments. What we do at the planning stage can feed into and help guide the work that's done on the project stage, and the earlier you can identify those environmental and social issues, the better chance you have to manage them or avoid the impacts later on. (Interviewee #41, December 23, 2013)

I think historically that's where we've come from, we've been very reactionary. We need to get more proactive and having a strategic sort of environmental assessment program, and I'm not 100 percent sure what it would look like, but to me at a high level it says ok in this particular...geographic zone here are the big risks, the main stakeholders, the big stumbling blocks or the big hurdles, here's what's easy here, here's what's difficult over here. I think in the long term it makes everybody's job a little bit easier. (Interviewee #46, January 2, 2014)

In particular, in presenting their views about SEA adoption and use, these interview participants spoke of situations of uncertainty and resulting discomfort about environmental issues and their implications, and an associated evaluation and consideration of the possible “consequences of being wrong” in corporate strategic planning.

A related and recurring consideration was also around the perceived degree to which any such environmental problems would be manageable and potentially reversible during subsequent plan and project implementation stages. In particular, it was noted that the presence and influence of these factors would vary considerably according to the type of company and its business activities, and indeed, there were noted differences in participants’ responses and perspectives on this issue depending on the type of corporation and jurisdiction involved.

In the case of smaller, electricity distribution companies, for example, it was suggested by several interviewees that any important but unforeseen environmental issues can often be reacted to and managed at the project level through design changes or even subsequent infrastructure modifications, with relatively limited public fallout or negative economic or technical implications for the company. Some companies may therefore even identify any such environmental issues in their overall planning, but do not try to address these until the project design or implementation stage. This was said to often be a quite different situation for some larger generation or transmission utilities, whose eventual activities often comprise large, capital intensive development programs and projects with very long planning, design and implementation lead times that would often prevent important and unforeseen environmental issues from being reacted to and addressed (reversed) later without significant negative economic and other effects. The typically long term nature of these development projects and the resulting duration of any associated risk exposure for their operators was also said to lead to a desire for more analysis and understanding of these issues and their proactive management. Conversely, where companies do not undertake the construction and operation of development projects but rather are involved primarily in the procurement and sale of energy for fixed terms (after which the attachment to the asset and any

associated environmental risk is “shed”), the level of perceived risk exposure and associated need for SEA was said to be considerably less.

The interview results also indicate that in such cases of perceived environmental risk and uncertainty in planning and possible negative impacts, corporations will often seek to increase the comprehensiveness and analytical rigour of the organization’s planning process, and in doing so, the volume, quality and utility of the associated information that informs such decisions. Indeed, in cases where respondents indicated that they would choose to adopt and apply SEA, the underlying rationale for (and anticipated outcomes of) its use were found to be linked to perceived requirements to enhance and improve internal corporate procedures – through better environmental analysis and associated rigour and documentation, particularly where existing corporate processes are considered inadequate in that regard. SEA was also seen to be more readily accepted where respondents had experienced or observed past situations where there were negative consequences of not taking a more proactive and analytical approach to dealing with environmental issues, including having seen things go wrong in other organizations, jurisdictions or situations. Similarly, previous and positive experiences with SEA-like processes in some cases appeared to have a positive effect on interviewees’ interest in SEA.

Therefore, a perceived need for SEA to proactively address environmental uncertainty was often found to be linked to a resulting desire to enhance and improve internal systems and processes (analysis, data, integration, reporting, protection) reasons. Interviewees referenced the following desired outcomes and anticipated benefits of SEA in that regard:

- Environmental issues and requirements being better understood, and therefore more directly, deliberately and comprehensively assessed, considered and reflected in planning decisions. Existing corporate processes and methods are considered to be too general and ad hoc.

- Environmental analysis and strategic planning becoming more structured, effective and efficient, leading to better integration of environmental considerations with other aspects of planning (technical, economic) through the use of similar methods and data, and an enhanced ability to compare, contrast and integrate across issues and disciplines.
- Better and more complete environmental information being available for internal discussions, leading to enhanced corporate understanding of (and deliberations about) environmental issues, risks, requirements and tradeoffs for decision-making.
- Environmental analysis, issues and strategic planning decisions becoming stronger and more resilient, replicable and well documented, reducing exposure and risk and potentially protecting the corporation and individuals if issues arise or situations change in the future.
- More direct documentation and incorporation of corporate environmental knowledge and past experiences and lessons and learnings into future strategic planning.
- Through the above, there is increased clarity, stability and overall corporate comfort with associated strategic planning decisions and actions, and better preparation for eventual implementation. Corporate personnel get more confident and comfortable with any environmental issues and risks and their decisions, and by project implementation these would be more “familiar territory”.

The above described situations of environmental uncertainty and risk and the resulting perceived need for better internal methods and processes to address these are reflected in the following select quotations from interviewees.

I would hope that it would help me not miss the things that I should be picking up on. Again with rigor you're...making sure that you've considered all the key items....Sometimes when you get caught up in driving a project forward, you miss the forest for the trees... (Interviewee #32, December 18, 2013)

I feel we would certainly benefit from a higher degree of structure in the process from an environmental perspective. I think the process today probably does rely on people that have the word "environmental" in their job title to bring forward the environmental pieces of the strategy, or to make sure the environmental pieces get considered appropriately. It would be better if there was a more formal and defined process that forced the whole strategic planning team to rigorously consider those aspects. (Interviewee #34, December 18, 2013)

Just like you've done long term economic analysis where you're looking at the commercial, you're looking at the risk of regulatory developments and strange things happening...If we did the same or at least similar levels of analysis in a little more systematic way you would actually I think enhance the resilience of your strategic plan. (Interviewee #33, December 18, 2013)

There's always a tension between where a company's acceptability is...to try new things versus what is required....Those step changes either come because of a failure in internal process and it's quite evident that a change needs to happen, or it's externally driven by a regulator or stakeholders or other risks. Those things have to line up sometimes to make the foundation and the acceptability for that change to happen more readily, I guess. (Interviewee #49, January 10, 2014)

SEA was also at times recognized as a means of helping to achieve a better integration of environmental, economic, technical and other diverse issues in strategic planning and analysis. By providing increased structure in, and consistency between, existing corporate processes and planning inputs (analytical methods and data) and across diverse and often competing planning considerations, it was felt by some that this may lead to a reconciliation of these issues in decision-making. At the same time, it was

typically recognized that any such integration of diverse technical, economic and environmental factors will always be challenging, even with better information and analytical tools.

A company that adopts that more rigorous approach forces consistency, and the biggest benefit is you get a level playing field amongst all of the competing resources and competing ideas that are out there. You have a more fulsome discussion. (Interviewee #32, December 18, 2013)

It's currently more ad hoc - you do a scan, these are some of the threats environmentally, these are some of the threats socially that are coming down, but then how do you analyse it and put it all on the same scale as an economic analysis? (Interviewee #33, December 18, 2013)

If you don't have a tool that allows you to compare environmental considerations between options and across criteria, it's very, very difficult to deal with the issues. (Interviewee #39, December 20, 2013)

Several interviewees noted that in dealing with situations of uncertainty and risk at the planning stage and in the potential use of new and unfamiliar tools such as SEA, there is always an inherent tension in deciding between doing too much analysis and not doing enough, based on a need to provide adequate and appropriate information without unnecessarily adding time, costs and possible negative effects to one's business.

I see that there's a lot of potential benefit in more rigorously approaching the analytical piece on the environmental assessment side, at least equivalent to sort of the technical analysis... I think earlier on in the process is the way to do it. I think you do need to find that sweet spot in terms of how much analysis needs to be done at that early stage. (Interviewee #41, December 23, 2013)

I certainly see tremendous value in getting the environmental aspects of any decision you're making on the table right up front at an early a stage as you can, with equal face time with the Board or with decision makers as you would spend discussing the economic aspects. I guess, what's not clear to me is how much work and effort is reasonable to expend in identifying environmental aspects of whatever decision you're trying to make. (Interviewee #44, December 24, 2013)

A key driver towards acceptance of SEA was therefore often a perceived need to bring more internal structure, rigour, information, documentation and integration to corporate strategic planning with regard to environmental issues. For those that accepted it, SEA was often seen primarily as a means for the corporation to increase its internal analytical capabilities to better understand, cost, discuss, document, consider and incorporate environmental issues and requirements in its strategic planning and decision-making processes.

As discussed later (Section 5.3), this included a desire amongst some to better understand important and potentially showstopping environmental issues so that these could be addressed through PPP selection and therefore proactively managed at the early stages of strategic planning. In other cases, however, this seemed to be based on the more general objective of using such additional analysis and rigour to provide a greater degree of understanding and comfort around such issues as the company made its strategic planning decisions and proceeded into their eventual implementation:

If you build your plan based on that, I would bet that chances are when you get into ... the traditional type of issues that companies and stakeholders find themselves in regarding any kind of projects, you'd be in more familiar territory and better prepared to take these on. You would have been thinking that way already. (Interviewee #36, December 20, 2013)

It's basically part of your risk planning, risk mitigation strategy...I guess, in terms of strategic environmental assessment, I would say that the higher it is and earlier it is, that can give a company an edge in understanding its risk, so that its

able to take on risk more cost effectively as it proceeds...(Interviewee #52, January 24, 2014)

Giving ourselves more time to prepare for it. So again, whether it's the process you're talking about or something different, looking further ahead than just that year ahead for a project. I think right now in today's current climate around environmental issues there's a lot of benefits. I can see potentially what you're talking about migrating into our company. (Interviewee #26, December 12, 2013)

Still others thought that SEA could provide a means to help evaluate and implement eventual projects against larger and more specific planning outcomes, and especially, to ensure that they fit within established corporate planning objectives and PPPs.

5.2.6 Other SEA Outcomes and its Perceived Applicability and Effectiveness

It was also repeatedly stated by interviewees that any decisions to use or support SEA would be all about perceiving and demonstrating overall value to the corporation, particularly in terms of its likely ability to help save time and money or reduce risk in the long run. As described above, the key rationale for, and desired outcome of, SEA amongst those respondents that accepted it related to its perceived ability to provide a more direct, specific, comprehensive and rigorous identification, analysis, consideration and incorporation of environmental issues and requirements in strategic planning processes and eventual decisions, thereby allowing for a more proactive identification, analysis and possible management of environmental risk. In all cases, this was usually coupled with related considerations around the time and costs that would be associated with adopting and applying an SEA approach, and ultimately, whether it would likely provide a net benefit to the company.

Would this process be worth the cost of developing such a process?...So what is it, and what is in it for us as a company? Does it cost us time and money, or does it save us time and money? (Interviewee #25, December 11, 2013)

If we're going to include an...SEA or whatever you want to call it into the planning process, that's work that has to be done, and the burden of that - Can it slow down the planning process itself or does it actually enable the planning process?
(Interviewee #32, December 18, 2013)

If the organization wanted to be perceived as doing the right things, that sounds like one of the right things to be doing, but it's easy enough to say that, but...again it all comes back to time and money, resources, and the bottom line is what additional cost does that add to the finished product? (Interviewee #3, November 25, 2013)

For the most part, the potential time and cost savings that may be associated with SEA use, and which were noted by and of interest to participants, related to those that might be achieved if negative environmental issues and stakeholder concerns were proactively addressed (avoided or reduced) at the planning level such that they did not create costly delays at the PPP implementation stage. In a few cases, respondents also felt that there may also be efficiencies and resource savings by dealing with certain environmental issues once at the early stages, rather than doing so separately for each individual project or activity. In one case an interviewee in private company operating in a competitive market environment mentioned that early intelligence on environmental issues and their mitigation may provide a competitive advantage by allowing the company to manage environmental issues and risk better than its competitors, although there were also concerns that the risks of SEA use (and especially, any public consultation, see Section 5.3.3) would instead create a competitive disadvantage for the company.

Several others stated that in their jurisdictions there were upcoming requirements for their corporation's strategic planning processes to include and document detailed environmental analysis and consultations, and so adopting an SEA approach would help the corporation to meet these requirements and demonstrate compliance with them. Even outside of formal requirements for such processes, some felt that the adoption and use of SEA methods would help give regulatory authorities and others greater

confidence in the company and its environmental processes, measures and decisions, including that it was being more proactive and sophisticated in its approaches. An associated, stated rationale for increasing and enhancing the type and level environmental analysis (rigour and documentation) in corporate strategic planning was therefore the achievement and demonstration of additional thoroughness and due diligence in planning, resulting in enhanced corporate reputation and the overall defensibility of processes and eventual decisions for regulators, stakeholders or the public.

It's quite possible that having a strategic approach could possibly also have the effect of giving the regulatory bodies a level of confidence that we are not just reactive and driven by the needs of legislation, but rather that we are taking a more proactive approach and looking at ways to address the environmental impact of the work that we do in a more sophisticated way. (Interviewee #42, December 23, 2013)

Others suggested that the analytical outputs and more complete and detailed information that would result from SEA could help form the basis for more meaningful discussions with regulators and stakeholders, as well as allowing for more specificity in strategic planning and its PPP outputs from an environmental perspective.

In terms of other contextual factors that were noted as potential enablers for SEA use, overall corporate culture and the potential compatibility of SEA with existing corporate processes, initiatives or directions were widely referenced in this regard. SEA was, for example, readily accepted by a number of interviewees who noted that their overall corporate culture was increasingly adopting procedures and systems that involved increased levels of analysis and documentation, which in some cases included a move towards more proactive and systematic approaches in planning.

How does SEA or any kind of other strategic tool fit into what we have in our current system, as opposed to re-inventing our current system? ... Our company is all about frameworks, so if...that would ensure that all options are evaluated

consistently...I think it would be where we would go. You know that front end engineering curve on cost, and how you spend your time where you can control your costs and all of those things. I mean, putting your time, energy, and effort in on that front end piece is very much an internal philosophy for us.... That whole concept of "front end loading", and I think that's what SEA would be all about.
(Interviewee #15, December 6, 2013)

Finally, in some cases respondents accepted SEA in order to increase the specificity and analytical rigour of their corporate strategic planning processes without having any stated or apparent specific reasons for wanting to do so. This did not appear to be linked to any particular environmental issues or uncertainty, or desired improvements in corporate procedures or plans for the reasons described above. In several instances, interviewees seemed to want to get to more analysis and rigour through better systems and documentation because they felt that the industry overall was moving towards this, or for no other reason than it is something they think is a good thing and which they appeared to naturally strive for.

Conversely, in some cases even where there were recognized environmental concerns, uncertainties and risks associated with a corporation's strategic planning and business activities, interviewees rejected SEA due to stated concerns about its perceived ability to help understand and address these. There were also a variety of other issues raised related to its perceived costs, benefits and overall utility, or even in some cases the potential negative effects of SEA use. In these cases, respondents' views and statements appeared to be particularly influenced by their individual values, preferences, past experiences, biases and other somewhat subjective factors.

The potential use of SEA was, for example, often rejected (or not definitively accepted) when interviewees were of the view that although the corporation has structured strategic planning processes over various time horizons, planning objectives and requirements usually either come up so quickly and intermittently, or conversely are so static and unchanged over long periods of time, that SEA would be of limited utility. Others maintained that environmental issues and requirements are far too vague,

subjective, dynamic and unpredictable at the level of strategic planning to be assessed and managed through SEA. It was therefore considered impossible to determine what the environmental effects of a PPP would be as part of long-term planning, and therefore, SEA was not considered likely to help address these issues at that stage of planning nor provide tangible benefits to the business.

I think the answer would be, no, there would be little value for that ... because of the nature of the business that we operate in from an energy infrastructure [perspective]. There are very long lead times before there's fundamental change. It's a dynamic industry in certain respects, but things don't change on a dime if you will. So to go through a...process like this, not enough changes in your strategy to justify anything along that kind of a deep dive on a regular basis. (Interviewee #31, December 18, 2013)

To ramp it up more, it almost provides no value...What the environmental outlook will look like... in five years is so uncertain, additional grinding and churning...creates the illusion of accuracy where none exists.... The extreme uncertainty around environmental regulations and costs and all that kind of stuff is a big risk, and we are tremendously aware of it, but to try to evaluate it, because it's so unknown, we deem of little value. (Interviewee #30, December 18, 2013)

There were also concerns that environmental issues and their perceived magnitude and importance may be magnified and artificially inflated if they are given additional analysis and focus at the strategic level, which at times led to a rejection of SEA by respondents. There were therefore stated apprehensions about a possible “analyse and paralyze” effect as a result of SEA use, which may unnecessarily restrict the company’s activities and have overall negative effects on the business. There was also a perceived risk that additional analytical rigor in planning with regard to environmental issues may actually lead one in the wrong direction, in which case the planners could really get things wrong (even by orders of magnitude). This was suggested as a reason to stay general and high

level on environmental issues at the strategic planning level, through a qualitative scan rather than additional, detailed environmental analysis.

There's lots and lots of stuff that one has to keep in mind and juggle to come up with the ultimate corporate strategy. The key thing for me is how do you do that, how do you get the right amount of focus on it without having one ball become more important than any other, not because it necessarily is or isn't but because you've used a tool that makes it more important... It gives it more material or more subject matter, so you could talk more about it because that ball just has had more homework done on it. (Interviewee #9, November 29, 2013)

Some interviewees also maintained that it is impossible to compare across and between diverse planning options (if they exist) on the basis of environmental issues, as these are typically very different in nature and degree between different development approaches and scenarios which would limit the overall utility and effectiveness of SEA. It was also often stated that environmental issues cannot and should not be looked at separately from technical, economic and political considerations in strategic planning, which was considered to limit the utility and appropriateness of SEA as a perceived "stand-alone" exercise and planning input. Whereas integration of diverse issues in planning was seen by some as a key SEA benefit by some (as described earlier), others saw the perceived standalone nature and separate environmental focus of SEA as a problem which would preclude achieving this required integration, and was thus a reason for not accepting it.

I would find it hard to understand how a tool that was designed to dig deeper into environmental analysis and strategy would work in our case where that environmental strategy is dealt simultaneously with business realities. (Interviewee #36, December 20, 2013)

I don't know if it would make sense ever to isolate it at a strategic level for environmental issues... Trying to translate that level of analysis into a strategic

review, there's so many different issues that affect strategy it's hard to isolate just the environmental piece to it. (Interviewee #31, December 18, 2013)

I don't think we would want to separate it out and do it as a separate exercise. I think we want to keep it as an integrated part of what we do, again looking at more analytically, what markets and what regions present good potential from a commercial and market standpoint that have sites that are developable and environmentally permissible.... I don't think we would be inclined to separate out the environmental piece of it into a different, more structured exercise. (Interviewee #6, November 29, 2013)

Our investments are rated against all of the risks that confront the corporation in terms of achieving its corporate strategic plan, [not] focused really strictly on environmental and social concerns. We have a variety of other risks and I'd only say that we would be interested in the SEA approach is if that would improve our environmental and social factor review that goes into the corporate strategic plan. But there's no way that we would ever abandon our approach and just pick up SEA and follow what that says. (Interviewee #12, December 5, 2013)

A number of respondents that rejected SEA use also stated that they did not need or want to add another layer of analysis and review in their planning through the use of such a tool, and expressed concerns that SEA use could have the effect of unnecessarily slowing down the corporation's activities. Others stated that the required costs, resources and time that would likely be associated with SEA use are not considered to be worth it overall. It was also suggested by some that an SEA process would generate a large amount of unnecessary information and documentation, that would overload corporate systems and is unlikely to inform planning or even be read by decision-makers. Some were also of the view that even if the information provided by SEA is useful and relevant, environmental issues not likely to be key considerations for corporate decision-makers and so the SEA outcomes will not materially inform or influence planning and decision-making (as discussed earlier). There were also concerns that an SEA would have a finite and limited "shelf life" due to the dynamic nature of the

industry and the planning environment, and thus, it would have to be continually redone with associated time and cost requirements.

And frankly, I would just see it as an added layer of the written word in nifty graphs and pictures, and another report that people would have to either spend time wading through or looking at the cover and saying that's nice, and putting it to the side and getting to the meat of what we have to look at in order to make our decision... So it's either going to add a layer of time or not be looked at all, and either way it's going to cost us...money to produce on a regular basis.... Let's face it, if you're going to do this you're not going to do it once. It's going to have to be something that's done and then updated as frequently as your strategic planning cycle is updated, correct?...If you're going to do it, you're going to have to update it otherwise it's stale dated the next time you do your next strategic plan. (Interviewee #19, December 9, 2013)

What's it going to cost me now to go out and do a strategic environmental assessment upfront, and if I do it now, what does it buy me in five years' time or ten years' time, do I have to go out and do it all over again? How quickly does it go stale? (Interviewee #1, November 22, 2013)

Finally, in a number of cases interviewees' previous experiences with the use of such tools and in the consideration of environmental issues in planning was found to contribute to their lack of interest in SEA. Several respondents suggested that the past use of detailed environmental analysis and methods by the corporation was not successful, or has not found any real differences between planning options, so additional (SEA) analysis is probably not warranted. One also referenced previous situations where he felt that good planning options and projects had been unnecessarily and prematurely dismissed due to environmental issues and fears, which he would not want to see repeated or enhanced through the use of SEA. A number of interviewees also opposed SEA use by their company due to their perspective that at a high level and on a regional basis, environmental issues are multi-sectoral and have to be assessed,

evaluated and managed more holistically and by governments or other parties, not by individual corporations.

In my role in the planning process, I haven't grown to the stage where I look back from an environmental perspective and say, well, we shouldn't have done that differently or whatever. We may even have thrown stuff out, we may have dismissed projects ... for environmental reasons that we shouldn't have.
(Interviewee #3, November 25, 2013)

I think this...is a government issue. There are environmental issues in the province, and how do people agree or disagree about environmental impacts...needs to be broader than being about energy projects. It needs to think about oil and gas, mining, forestry and what not. I think really that next step needs to be with government. If we were to take another step, we'd be changing policy and that's not [our company's] role. (Interviewee #4, November 25, 2013)

5.3 SEA Timing, Focus and Approaches

Q4 *If a corporation were to decide to voluntarily adopt SEA, what factors then influence its decisions about the SEA approach to be applied (including the stage of planning to which it is applied, and the analytical and/or consultative methods to be used)?*

As reflected in the above cited research question, an important focus of the data collection and analysis was also on exploring the factors that determine the particular stage(s) of planning at which corporations would choose to apply SEA. The interviews also yielded some very useful and informative insights into corporate perspectives and decisions about the particular types of environmental issues that would be dealt with at the strategic level through SEA use.

5.3.1 Stage of Planning and PPP Development

Corporate decisions about the particular timing and stage of planning at which SEA would be applied relate to two separate but somewhat inter-related considerations: 1) the stage in the development of a particular strategic initiative at which SEA would be applied (i.e., the identification and evaluation of planning objectives and PPP alternatives, or the environmental review of a proposed PPP); and 2) the particular stage of the strategic planning hierarchy (policy, plan and/or programme) at which to apply SEA.

In terms of the former item, interviewees that accepted SEA at the strategic levels of corporate planning typically saw it being applied at a relatively early stage of PPP development, and particularly, in the initial identification and analysis of alternatives. Indeed, SEA use was primarily if not exclusively seen by these respondents as a means of providing environmental information and analysis to assist in the corporation's internal evaluation of available planning options and for eventually choosing between them. This was viewed as a means for these issues to be considered on par with, and in a similar manner to, technical, economic and other factors.

In terms of the type and level of strategic initiative(s) to which SEA would be applicable and applied by a corporation, it was also apparent from the initial (background) interview questions that while all of the represented corporations engaged in fairly structured and hierarchical strategic planning processes (e.g., high level 20 year plans, 5 year strategic plans, annual capital and operating programmes, individual development projects and activities), there was an associated ability to be somewhat selective in terms of deciding at what level(s) SEA would be used. In some cases where interviewees expressed support for increasing the type and level of EA-like analysis and documentation in their corporate planning and decision-making, they noted that a key consideration would be around determining the level of the planning process at which to consider and address any particular environmental issue or risk. Moreover, it was also clear that some respondents were only interested in seeing this take place at particular stages of their corporation's planning processes. At one extreme, several interviewees

were of the view that environmental matters should be assessed and addressed solely at the project level. It was suggested by one respondent, for example, that as all environmental issues and risks cannot be identified and managed at the strategic planning stage, he would prefer to deal with such issues only once, during project design and project-specific EA reviews. At other (higher) end of policy and planning, SEA was also rejected in several instances where respondents felt that this type and level of environmental analysis and decision-making would be going beyond the ability and responsibility of a corporation and its planning. In these cases it was noted that larger, regional environmental issues are multi-sectoral in origin, and that assessing and managing them are the responsibility of governments or other parties, but not individual corporations as discussed above.

In many of the cases where SEA was of interest to and accepted by interviewees, they described its potential application to their regular (typically five year) strategic plans, which set out the corporation's planning objectives and requirements over the time period in question and its overall planned courses of action to achieve these goals. Respondents again saw a primary rationale for SEA use being to proactively identify and address environmental issues and risk early in planning. As discussed in Section 5.3.2 below, this was primarily the case for larger and "plan wide" issues and concerns, and SEA analysis was intended to help in identifying and selecting environmentally feasible PPPs and steering planning decisions away from those with associated fatal flaws from an environmental perspective. There was, however, little or no evidence of a perceived clear and linked hierarchy in planning, where particular environmental effects could be addressed at an early stage of planning through PPP formulation as a means of making things easier or better at the project level through an associated "trickle down" effect. For some interviewees, therefore, strategic initiatives and any associated environmental analysis and decision-making appeared to be viewed (either directly or implicitly) as being somewhat different and discreet from downstream planning and implementation stages, including eventual projects and their environmental issues.

There's certainly a separation between that high level planning and once you get down to a project level. (Interviewee #54, January 28, 2014)

This perceived separation was even further reflected in the fact that, even though the SEA literature has continually touted the potential focusing and streamlining of subsequent project EAs as an important potential SEA outcome and benefit (Section 2.3.2), there was very little recognition or mention of this as a possibility. In particular, there was no indication that this potential outcome was in any way a key driver or recognized advantage of SEA that led respondents towards an interest in, and acceptance of, SEA use.

Finally, in a number of cases, interest in SEA by interviewees was clearly and solely focused on the more downstream stages of corporate planning only, namely the identification and evaluation of project options or design concepts such as alternative development types, siting or routing decisions, etc. This would involve the application of EA like tools and analysis on a project-specific basis, but at a stage after PPP development and implementation but prior to an individual project being selected, defined, and put forward for EA review and permitting. As noted by interviewees, such an assessment would involve an analysis of alternative project concepts, such as to meet a specific, required need to have # MW of additional power at Location X, where options include a transmission line, development of a nearby small hydroelectric site, or the installation of additional on-site thermal generation. It could also involve an analysis and consideration of environmental issues and their management in the very early planning and design stages of a particular project (e.g. transmission line routing, or the siting of multiple, individual wind towers from amongst numerous options).

There's been a fair amount of discussion within the company about how far down you drive [environmental issues], and whether you drive it down as far as doing planning that's sort of a precursor to either specific projects or portfolios of projects...(Interviewee #54, January 28, 2014)

Right now ..I'm responsible for the strategic plans and our engineering department is responsible for the detailed design of projects, but we're kind of missing that middle function. I don't have enough time to take a look at the project options and neither does engineering because they're trying to keep up

with the detailed project design. I want to look at the environmental impacts that we have at a strategic level, and we're still trying to investigate where that, say, project option person functions. (Interviewee #48, January 7, 2014)

This potential “post PPP / SEA but pre Project EA” approach was identified and specified by several interviewees. This was primarily in planning and development situations where there are a limited number and range of strategic planning options available, or where their strategic plan is dominated by one or a limited number of large projects rather than an eventual program of multiple projects of similar size, scale and associated environmental considerations, especially where most of the options and associated environmental risk and variability come in terms of project design and siting decisions. It was also found to be raised in circumstances where environmental issues and social interests were considered more likely to be evident and mitigable through available and technically and economically viable project options and/or design alternatives at the individual project level.

5.3.2 Focus and Scope of Strategic Planning and SEA Application

It was also evident from the interviews that respondents often saw important differences in the types of environmental issues that could and should be assessed and considered early in strategic planning (potentially through SEA), as opposed to later in planning or in eventual project design and implementation. Indeed, several interviewees noted that any corporate SEA process would have to allow considerable flexibility to identify and focus in on a select number of important and relevant environmental considerations at that level, with the ability to scope and screen out those that are less so. It was also thought that the type and level of required analysis would vary between issues, commensurate to their importance and relevance to overall planning and decision-making.

To me the exercise is one where you're really trying to balance breadth and depth. You want to be as broad as you can, but you want to have enough depth so that you're not just guessing, but you don't want to have so much depth in a

given area that...suddenly it's all about pick one thing, but you're missing other things and then you really miss the bus. (Interviewee #9, November 29, 2013)

In some cases, interviewees' preferred and specified focus in considering environmental issues and risk in corporate strategic planning was related to achieving overall compliance with relevant environmental legislation and regulations, as well as with internal corporate environmental requirements and objectives (where they exist). This therefore involves determining whether and how environmental compliance can likely be achieved for each planning option, and if so, at what (comparative) costs, as well as evaluating the likelihood of eventually receiving the required environmental regulatory approvals for each. Some respondents therefore saw corporate strategic planning having a clear focus on "hard" environmental issues for which there were associated regulatory requirements and compliance standards, which would have implications for overall plan feasibility and for which there would be associated (and likely, quantifiable) technical and economic implications that would vary between the available planning options. These included, for example, compliance standards related to environmental emissions associated with particular development types and technologies, as well as those related to eventual development projects that might have material implications for overall PPP costs and schedule (such as project-level habitat compensation requirements that are based in legislation). In some cases it was noted that existing corporate processes, cultures and planning tools have led to this focus on environmental regulatory compliance, including cases where existing company objectives and directives specify this to be the main driver and objective.

A lot of our environmental work is driven by a need to comply with legislation. (Interviewee #42, December 23, 2013)

Alot of the environmental issues, to be honest, [pertain to] regulatory compliance requirements and licensing so as far as we're concerned that tends to be the driver, and for most of them things are underway. (Interviewee #14, December 6, 2013)

The primary environmental concern .. at this point is climate change and GHG emissions and that's where they focus most of the attention. We have a 93 percent clean requirement...and so what you end up doing then is you're saying air emissions and specifically GHGs are the key issue. The other land, water, marine impacts really become secondary. (Interviewee #4, November 25, 2013)

The economic side of the equation is that we deliver our services at a price that is considered reasonable and fair and affordable by the customer base, and the environmental one is that we fully comply with regulations and statutes, and then how much further beyond that we go is the subject of lively debate. (Interviewee #5, November 29, 2013)

In describing and rationalizing their preferred focus on matters of environmental compliance, some participants noted that it was difficult if not impossible to anticipate and address other environmental issues in the planning and selection of strategic options at that early stage, with the cost of different technologies and other development alternatives and associated regulatory adherence usually being so relevant and variable that this will almost always trump any other, “softer” environmental issues and considerations. It was apparent that these factors would often force the consideration of these softer environmental issues, which do not have specific environmental statutory requirements and which would have less direct and immediate costs associated with them, to other (lower) stages of the strategic planning and implementation process, after a feasible and environmentally compliant PPP is identified and adopted by the corporation.

Interviewees were also often of the view that it would also be difficult, if not impossible, to try and assess and compare planning options based on very different types and levels of environmental issues, direct and indirect outcomes and costs, some of which have applicable regulations and standards and can be quantified and modelled, while others cannot. It was suggested that a corporation should not even try to do so, as this would make the SEA analysis too cumbersome, complex and spread so thin that everything will “be a wash” and the results will therefore not be useful. These interviewees’ views that

planning should focus primarily if not exclusively upon matters of environmental compliance was also reflected in their stated views about the potential negative implications of not maintaining this focus. As discussed previously, it was suggested that there is a potential for certain types of environmental issues and their perceived magnitude and importance to be artificially inflated if they are given additional analysis and focus at the strategic level. One respondent suggested that this was especially likely to be the case for the more softer and subjective types of potential environmental effects, which was another stated reason for keeping strategic planning focused upon specific, technical and quantifiable issues such as adherence to environmental regulations. There were also concerns that the consideration of other types of environmental issues at that level of planning could be incorrectly interpreted by regulators or the public as a sign or even a guarantee that the corporation would be willing to go beyond environmental regulatory compliance in its planning and development activities, which may create additional costs, issues and constraints at the implementation stage.

Where interviewees' main focus in strategic planning was on achieving and maintaining environmental regulatory compliance, they typically rejected SEA. This was usually the case as they felt that regulatory requirements were typically quite clear and well understood, and so corporations typically have a good understanding of these issues and requirements to the point that additional analysis through SEA would not be required. Many also noted that where environmental regulations were relevant to their strategic planning and associated business activities, their corporation currently had and employed appropriate analytical tools and other techniques (such as for modelling and quantifying air emissions) for that purpose. In a few cases where corporations reported using environmental modelling and analysis tools for their planning, SEA was considered to be a means to supplement this with additional information and insights on relevant environmental issues and requirements.

For some respondents, SEA was also considered to be a means of helping identify and understand any forthcoming new or changing environmental legislation or other directives that would have to be complied with. Several interviewees stated that while

they would not see a need for SEA for their typical and regular strategic planning, they would probably choose to do so if they saw signals of important, upcoming changes to environmental policy or regulations that would affect their business. In a number of cases of somewhat extreme proactivity through SEA, a number of respondents noted that they would then want to use this intelligence about upcoming new or revised regulations to try and influence them through associated lobbying efforts or other such initiatives.

If the government gave signals that they were going to regulate that particular fuel type tighter in the future than they are today...I'm going to be engaged in that discussion and try to influence that policy today. [However], if there was nothing on the horizon that's going to be problematic then I'm less inclined to get into more detail through SEA, I'll do a more cursory review of it. (Interviewee #53, January 27, 2014)

We'd look at possible changes in regulations. In general, we assume that in the future there will be a requirement for additional environmental work than what we currently do, both in terms of maintaining existing environmental permits and certainly in obtaining any new ones. (Interviewee #44, December 24, 2013)

It's very important that we're able to shape environmental policy, and not just be the receiver of legislation and rules. I think the day we're just the receiver of that is not a good day for our company. (Interviewee #34, December 18, 2013)

In cases where interviewees were interested in applying SEA to their corporate strategic planning processes, they usually saw any such analysis including and considering environmental issues outside and beyond those that were linked to specific environmental compliance requirements. As described above, this primarily included situations where the corporation saw the possibility of important and possibly “show stopping” environmental issues and social concerns a result of their future planning decisions and activities that are characterized by a relatively high degree of uncertainty and risk. This uncertainty was also said to often be greatest in relation to “softer” (non

regulated) types of issues and interests, which are more vague, nebulous, subjective and typically do not have specific standards or thresholds that you can “pin” decisions to. In these circumstances, some interviewees expressed clear interest in using SEA to help understand important issues, requirements and expectations in situations where no standards exist, particularly in situations where existing corporate processes are considered inadequate in that regard.

I think there is value in doing that. I think we could benefit from more ... rigorous analysis and then ... documenting that. I don't believe we do a good job around that. We do a good job around the other stuff, the compliance aspects, and analysing and documenting those aspects, but not the softer side at the strategic level. Certainly we do more of that at the project level, but not at the strategic level, so I think there would be value in a different approach. (Interviewee #47, January 3, 2014)

I think you've got to do both. I think we would look at it from both perspectives, from a modelling perspective, and how that would kind of impact your earnings really and your cash flow, in particular, and we also look at it from a qualitative perspective. (Interviewee #13, December 5, 2013)

It's not going to be a hard science. It's going to be a very, very soft science. Some of this is very, very soft stuff and it's very subtle, and it's weighing one [issue] against the other. (Interviewee #45, December 30, 2013)

Sometimes I wonder if we don't kind of lose the forest for the trees with the focus on legislative requirements, I just wonder if maybe we'd be able to get a better picture if we stopped to look at the overall picture, you know. (Interviewee #42, December 23, 2013)

Several interviewees again indicated that these types of “softer” issues and considerations were much more relevant to their early and overall business planning, as environmental compliance requirements are typically well documented and

understood and often relevant in project-specific design, whereas the company typically require more of an early and overall understanding of whether there was likely to be a “friendly” regulatory environment or public. Several interviewees noted that these sorts of environmental issues and expectations are rarely clear or specific, and so it is up to the corporation to find ways to understand requirements, identify and evaluate options, and then implement them. A number of interviewees also indicated that while their existing planning processes and associated methods and tools were currently focused primarily or exclusively upon matters of environmental compliance, they were feeling increasingly uncertain and therefore vulnerable about other types of environmental issues and interests, including several cases where respondents had witnessed important environmental issues being missed or insufficiently addressed because of this “modelling” focus.

In many of the cases where there was an interest in using SEA to attempt to understand and possibly to manage these types of environmental issues in planning, there was an associated recognition that these are often project driven and site specific and are therefore much more vague and unpredictable at the strategic level (i.e., they are often influenced by project location, scheduling and other specific factors that cannot usually be known at the early stages of planning). Several interviewees therefore maintained that they would see ramping up their environmental analysis through SEA for select issues only, particularly where there is key uncertainty and which pose material risk to the corporation. It was suggested that these would primarily be social issues related to overall community support at the PPP level, rather than specific environmental issues or effects per se (as described in the next section).

5.3.3 Consultation

In addition to questions about the potential adoption and use of SEA overall, interviewees were asked whether they would choose to implement, support or recommend associated public and stakeholder consultation activities as part of their corporation’s strategic planning and decision-making processes. Of the 54 corporate representatives that were interviewed:

- 15 (27.8 percent) stated that they would implement, support or recommend SEA consultation;
- 24 (44.4 percent) stated that they would not implement, support or recommend SEA consultation; and
- 15 (27.8 percent) were unsure or vague in their views about SEA consultation.

A majority of respondents therefore either did not accept conducting SEA-related consultation as part of their strategic planning processes, or were unable or unwilling to state specifically and categorically that they would choose to do so. A number of reasons were given by interviewees for rejecting SEA consultation, including concerns about the potential applicability, risks or utility of such engagement initiatives as outlined in the next sub-section.

5.3.3.1 Perceived Ability, Need and Challenges

SEA consultation was most often rejected by interviewees whose corporations operate in a commercially competitive environment, which it was stated would preclude the release of information on its strategic plans and activities and discussing these with outside parties. It was also noted that there would almost certainly be a degree of organizational resistance to (and possible resentment of) any potential opening up of a corporation's strategic planning process to outside parties, interests and scrutiny.

No. Our strategic planning is an in-house activity. We don't, and I can't foresee why we would, consult with stakeholders as part of that. (Interviewee #30, December 18, 2013)

I would say not. Our corporate plan as far as the growth activity is concerned is very confidential, so it would only be at that point that we would probably get a contract and plan to build something that we would actually go into the community. (Interviewee #13, December 5, 2013)

We don't today use much, if any, public input processes or stakeholder processes to develop our corporate strategy. We've tried that in the past. It hasn't been entirely successful for us, and some other companies have had the same experience. So we'd treat strategy as pretty internal, proprietary, and as an internal business issue. (Interviewee #36, December 20, 2013)

I know right now there would be a tremendous amount of resistance to that at that the Board level because they feel that in a lot of ways that is their responsibility, that's what they're around to do. (Interviewee #33, December 18, 2013)

There's a disconnect between the actual technical planning and strategic planning and the need for consultation. There's an impatience to wait for the consultation before you start planning, and that is the biggest challenge now for companies. It's, we know how to run our business, we know what's best, that's why we're here, that's why we're paid, this consultation seems to be letting third parties in to look over our shoulders and give their opinions as to whether or not we're doing the right thing. That's a very difficult thing for a management team to accept. (Interviewee #10, December 4, 2013)

As was found for interviewees' views and decisions about SEA use in general, in situations where they felt that their company's current or planned business activities had little or no important issues or stakeholder concerns associated with them, there was little or no perceived need to consult with such interests as part of strategic planning through the use of tools such as SEA. Some respondents also felt that their company can and does obtain the necessary type and level of information on public issues and perspectives through other, existing means and mechanisms such as local media tracking or other established engagement forums and networks, which further resulted in less of a perceived need for SEA. Others also stated that SEA consultation would not be required or beneficial because the corporation did not need or want to identify and address societal concerns at that level of planning, given that it is not involved in activities and areas that have strong public interest associated with them.

Some also noted that their company is not trying to please or educate anyone through direct engagement, as there are no known contentious issues or because the corporation has a monopoly and is not trying to convince people to buy their products. Several of the interviewees that preferred that their strategic planning continue to focus exclusively upon environmental regulatory compliance (as discussed above) noted that compliance is a public expectation and assumption, and public interest usually only comes where there is a perceived need to go beyond this. It was noted that in most such situations there would therefore be nothing to talk about or seek people's views on, and thus, no need for SEA or associated consultations. Several interviewees also stated that their corporation's Board of Directors is diverse in composition, and is considered to represent all relevant interests and issues for the purposes of strategic planning by the company.

There were also a number of important perceived challenges and risks associated with SEA consultation and the associated release of information and engagement with stakeholders early in corporate planning, which in some cases led interviewees to state that they would not support its use. Some noted that they considered there to be a very low level of public and stakeholder interest in or understanding of the electricity industry, which would reduce the value of any such consultation in corporate strategic planning. It was also suggested that most people will not likely be interested in an overall PPP, as well as associated concerns that it will be impossible to stay focused on high-level strategic considerations as these discussions would inevitably gravitate toward project and site-specific issues. The inevitable lack of definition on development types, locations, times and other factors at the strategic planning level was also considered to preclude any meaningful discussion on environmental issues with the public at that stage, and there were stated concerns that there would be far too much tendency for people and organizations to raise issues that were not relevant to the company and its business activities in any such high level discussions.

My honest opinion is I think the broad public or stakeholders really don't have enough literacy on these issues...I think the public and stakeholders don't have

the knowledge to speak from an informed perspective that really could be concrete and actionable. (Interviewee #49, January 10, 2014)

I don't know that the general public would understand everything that's going on..., that they would really understand the implications. In one sense you could say it's our fault because we haven't explained it to them. On the other hand, I don't know that a lot of people would really care. (Interviewee #29, December 18, 2013)

What we have found is that public don't get too interested until it's in their backyard, and you start talking about things, and too high a level would be too general. They'll sit back, may have some broad comments, but they won't likely start organizing and opposing until they know something is likely to end up in their backyard. (Interviewee #43, December 23, 2013)

Our industry, the electric utility industry, is totally taken for granted. Most people don't give it a second thought, they're not that interested in it, it's background, they don't want to be interested in it, they just expect their toaster to work in the morning ... and how that power gets there, most people couldn't care less. They also want it to be as cheap as possible. So you've got some real barriers in terms of promoting a decent discussion of planning options. (Interviewee #5, November 29, 2013)

There was also a perception amongst many of the interviewees that rejected SEA consultation that most of the people and groups that would chose to participate will be largely negative and opposed, and not interested in a productive discussion or in cooperatively identifying and resolving issues and finding solutions through discussion and compromise. As a result, it was often considered better to keep planning internal to the corporation, and just “fight any battles” later. It was also noted that an early and preliminary discussion of possibilities, generalities and nebulous planning options has greater potential for issues, concerns and misunderstandings amongst consultees than a later stage discussion of project specifics. Interviewees also noted that there is often

a tendency for people to get more upset, anxious and opposed at the early stages of planning, when discussing and debating possibilities and concepts without any details or specificity on development plans and activities. Several of the interviewees that rejected SEA consultation also feared that early consultation (information and dialogue) in strategic planning would just give those who are opposed more time and information to prepare and mount an attack against the corporation's plans and activities.

There's always that risk that you're just going to stir up and you'll bring out the naysayers and those who deem it to be a negative. Those who aren't concerned by it or even think it's a good thing, you probably won't get much reaction from those. There's that risk that you may be just making a rod for your own back by bringing it up. (Interviewee #23, December 11, 2013)

We would be stirring up more anxiety than is required. I think at the strategic level, through your planning process, talking about possibilities and projections...that may not ever transpire, there is a potential for stirring up more concerns than may actually be warranted going down the line. (Interviewee #47, January 3, 2014)

I think your attitude should be open and honest, that you're looking at options and at opportunities. As a negative, you could in fact tip off somebody. If they're going to fight it all the way, you're just giving them more time to get ready. (Interviewee #27, December 13, 2013)

There's always the dissenters, the loud minority. If you're out there early...you're giving them more ammunition to shoot you with. (Interviewee #46, January 2, 2014)

Some interviewees also expressed concerns about setting unrealistic public expectations through SEA consultation, and in unnecessarily placing restrictions around the company's planning options by consulting. Specifically, it was suggested that if consulted at the strategic planning level, people may assume that all potential options

are on the table and are possible when they may not in fact be. It may then become difficult to manage people's perceptions and expectations after such an early and general discussion, and to get people to move off of certain alternatives that they "latch onto". It was stated that some corporations would not want to make public comments or commitments on PPP options or preferences at that early stage, and that consulting early in planning may also limit the company's ability to identify and move forward with other, different options later if requirements or circumstances change. It was suggested that in cases where consultees' preferred or assumed strategic option is not eventually implemented, SEA consultation may actually have the effect of increasing opposition at the implementation (project) stage over that which would otherwise have been the case. Others said that while consultees may be generally in support of a PPP in concept and feel involved in its development, they may then get even more upset if the eventual implementation of it (such as individual projects) end up being located in their backyards.

The concern I'd have is that the public stakeholders would see all of these options as what [we] intend to do, and the ones that may be the least likely that we would pursue would probably grab the most attention in the stakeholder process. ...We'd get a whole bunch of people upset about something that was a really remote possibility that we would ever do, and not focus in on, okay I don't like that one but this one is a lot better. They wouldn't focus in on the ones that are a lot better, I would fear...they'll get attached to the ones that we weren't going to do. (Interviewee #19, December 9, 2013)

One challenge I would pose is elevated expectations of communities. It depends on what the consultation looks like. If a consultation is going to be open forum meetings and town hall meetings and all of that, and yet you're not ready to go ahead with anything, you elevate expectations of the community and then you have to manage that. (Interviewee #17, December 6, 2013)

Once you do that, you're automatically limiting yourself to that set of options. (Interviewee #18, December 9, 2013)

Potential challenges and risks that would be associated with SEA consultation were raised and discussed by all interviewees, even those who accepted and supported it. An important consideration was therefore when, why and in what situations were the perceived need for and likely benefits of SEA consultation considered to outweigh the associated issues, risks and costs.

5.3.3.2 Potential Benefits, Enablers and Effectiveness of SEA Consultation

In cases where interviewees accepted and supported SEA consultation, it was typically recognized that the important and relevant issues that may be associated with a strategic initiative and which would create uncertainty and possible risks for the corporation are often societal in nature and origin. The identification and consideration of these in corporate planning may therefore require some degree of engagement with interested individuals and organizations, as it was recognized that internal analysis cannot necessarily provide all of the required information and intelligence required to identify, understand and manage such issues. This was again said to be particularly the case when a corporation is moving into new areas where it may not have a lot of information or experience, such as new jurisdictions, technologies or other situations of added uncertainty and risk where there is a need for greater insights into public concerns and expectations. SEA and its associated consultation components was therefore seen by some as a means of obtaining information and insights from stakeholders on these issues, and in particular for getting a feel for what is likely to be environmentally and societally acceptable.

I think it's about very careful consultation, but I do think that the value of that far outweighs the risk with respect to identifying your issues that you may have not thought of... So there's an extreme value and a cost saving measure that you will always gain by early consultation, and that's because you know a lot more.
(Interviewee #17, December 6, 2013)

If you're not having the right conversations with the right members of the community at the right time, then your reputation goes down the tube when you

eventually show up at the doorstep and you say we're developing a project and you've missed a whole lot of big scary monsters that are in the closet that all these residents knew about. (Interviewee #15, December 6, 2013)

The reason I say it could probably help us is because I recognize that we increasingly need to have strategies and business plans that are societally acceptable, particularly as we move more and more into growth. [We] went through a period in 2000s where growth was fairly modest and we didn't really have to worry about that, but it's in the growth area that we really start to see stakeholder issues, so we generally have pretty strong ongoing relationships with the communities around our existing operations, and those are managed day to day. But when you're in a growth mode it's a different kettle of fish. I would say there's likely some benefit there. (Interviewee #36, December 20, 2013)

If we could engage the public in a smart way, I think we'd end up with a better plan because the public could help us shape that plan and maybe we don't understand our customers as well as we should, and we could also help educate our customers in what our environmental constraints are, and maybe they have a better idea of how we can solve a problem. (Interviewee #34, December 18, 2013)

An important stated rationale for SEA consultation (where it was accepted) was therefore to provide information regarding the company's strategic planning and business activities, and in doing so, to educate the public and stakeholder groups on corporate planning requirements and realities. Indeed, the potential learning / transformative effect of SEA was repeatedly identified and raised as a primary reason for, and anticipated benefit of, SEA consultation, and was by far the most commonly stated desired outcome of SEA consultation amongst those that supported it. In particular, it was hoped that engaging with relevant organizations and individuals could help facilitate early regulator and stakeholder learning and understanding of the key issues, requirements and challenges that often apply to development planning in the electricity sector. This included those issues and constraints that may limit the

availability of feasible planning options, influence the implications and costs of different alternatives and technologies and the inherent tradeoffs involved, and the resulting need to often pursue and possibly implement development options which are not necessarily the most environmentally acceptable or socially preferred. This included a number of types and levels of such stakeholder transformations, ranging from for example, a gradual process of stakeholder awareness and an “easing in” to PPP decisions and eventual actions, to a more complete learning process that seeks to change mindsets, values and possibly achieve overall PPP support.

It would have to be done very well, but if we could engage the public we could at least educate those that want to be educated on what it takes to bring electricity to their light switch with the environmental constraints that we face. (Interviewee #34, December 18, 2013)

I think consultation is important, as well as getting feedback, but sometimes even just making sure that stakeholders understand some of the implications of what the corporation has to do into the future, given that we are a province that isn't doing very well economically. We have to look at different ways to supply our customers in the future, so even making sure that they're educated to the point to know that we have a fairly difficult job because we need to find ways to produce electricity that are not going to add too much to the already fairly large environmental footprint that the province has...I don't know how good a job we've done just educating the public or stakeholders on how difficult this is going to be in the future. (Interviewee #16, December 6, 2013)

Also having them understand how we approach the process [and that] we use structured decision making processes...So they start making trade-offs with us in saying, okay you really want renewables but the land impact for wind is “x” ... You're engaging them in the business process and it's interesting when you really get them involved in it, how they shift in terms of their perception and biases as to what really is workable. (Interviewee #49, January 10, 2014)

We now are much more aware of having to secure public support for what we're doing, so that people, even if they don't fully agree with what we're doing, at least they understand why and can accept the fact that we often have to make trade-offs. They may not like the trade-off, but at least they know that their perspective has been taken into account and listened to, and that we've been empathetic and understanding of that point of view and it's at least in the mix, even if it's not part of the final answer to whatever the issue might be.
(Interviewee #5, November 29, 2013)

A number of interviewees again suggested that a lack of available planning options by a corporation would make SEA consultation challenging and risky, as the corporation would have no real ability to consider and address most issues through its planning processes, which may frustrate people and could negatively affect the corporation's perceived credibility. Conversely, others felt that seeking public support through SEA consultation would be most useful in situations where there are limited options available, and there is an associated need to educate and inform about planning realities and required tradeoffs.

Well, for sure a better informed stakeholder and public would be one of the benefits, and, I guess, to get a feel for what will be acceptable, and even how we might have to go ahead moving forward to gain support for something that may be required in the future just because we have limited options. (Interviewee #16, December 6, 2013)

The perceived benefits of SEA consultation and any resulting stakeholder learning also related to overall improvements in corporate image and reputation due to more openness and inclusion in strategic planning, which some respondents felt would generally help in inspiring confidence in the corporation and its planning procedures and outcomes. This was also said to be about building relationships and trust with key stakeholders, and establishing an environment where stakeholders feel involved and that their views and concerns are respected as opposed to there being a rush to "ram it down people's throats" once decisions have already been made.

Personally, I think it's more of a public relations and relationship building process than anything else. And inspiring confidence with the public that we are trying to balance everyone's best interest. (Interviewee #3, November 25, 2013)

As for SEA use in general, a perceived benefit of identifying and addressing public and stakeholder concerns early in planning through SEA, and for obtaining stakeholder support and understanding through SEA related consultation, was the potential for these outcomes to ultimately reduce time, costs and other PPP implementation risks for the corporation.

Some interviewees also hoped that any public and stakeholder input and support obtained through SEA consultation could help educate and potentially convince other parties whose approval of or support for a PPP may be required. In the case of a regulated utility, for example, this would include providing analysis and information to help convince the applicable regulator of the need to implement development options that are not necessarily the least cost, but which are preferred for environmental or other reasons. It was suggested that SEA consultation may result in the public communicating these issues and their preferences directly to the appropriate regulators or other government agencies, which would lend further support for same. This was considered to be more likely to occur if the company can demonstrate that its planning was done in a comprehensive, systematic and transparent manner, such as through the use of SEA approaches.

Probably the biggest challenge facing regulated utilities in Canada is the regulator. The single biggest impediment for us is being able to incorporate non-financial aspects into our strategic planning and decision making...Utilities can propose decisions that may cost more, and if they get enough support from customers, from stakeholders, the regulator may say yes. (Interviewee #44, December 24, 2013)

Even in cases where interviewees apparently recognized the need for and possible benefits of engaging with the public and stakeholders and potentially obtaining

additional understanding of and support for their strategic plans, there were stated concerns about the perceived effectiveness and outcomes of SEA consultation that resulted in them rejecting or being undecided about its adoption and use. In particular, interviewees' views and decisions about SEA consultation in these instances were found to be very much influenced by whether or not they felt that any such engagement would be productive and effective, including the likelihood of reasonable and open minded consultees that would engage in meaningful dialogue in the spirit of cooperatively identifying and resolving issues and finding solutions through discussion and compromise (and thus, who had at least the potential for learning through such a process). Again, respondents' views and statements in that regard were found to be influenced by their individual perceptions, past experiences and other somewhat subjective factors, as well as their knowledge of and current relationships with relevant stakeholders.

I still think it's going to just end up to be an emotional kind of gut feel in terms of the public response, and so I wonder, just because of the sheer complexity of the issues, whether there is a lot of value in a public consultation process. ... At the end of the day people just throwing up their hands and saying this is so complex, I don't know, all I know is that I hate nuclear, or I hate hydro, or I like gas, or I don't like coal, or whatever, and that's my feedback because that's my emotional reaction. (Interviewee #39, December 20, 2013)

The issue we've got right now that is a huge problem (that is by no means restricted to the electric utility world), is that...expertise is distrusted and not believed. I can make some public announcements regarding electrical power generation issues, and there will be a lot of people who will not believe me because I come from the power utility and surely everything I say is lies... I don't know how you could have a meaningful discussion when everybody is just calling everybody else a liar. (Interviewee #5, November 29, 2013)

Corporations and individuals can be highly naïve about this stuff as well. They go in and take an idealistic view of what consultation could look like, really only to

get the crap beat out of them by a bunch of activists who have only one end in mind, which is to destroy a particular pathway. (Interviewee #8, November 29, 2013)

Any time you engage someone outside your business and you start sharing your plans, it's always a concern that someone who doesn't understand what you're doing or is not in agreement with where you're going can take that early information and be able to build a campaign against something that you're trying to do, either rightly or wrongly. That's always a risk. I guess it depends on your knowledge and the level of trust with your stakeholders going into this process. (Interviewee #26, December 12, 2013)

One interviewee noted that SEA consultation would not necessarily just be about trying to educate, convince or transform anyone, as it would sometimes be useful just to “get the topic out there” and observe the resulting debate, as this can help at least learn where the key issues and sensitivities are in order to go forward more informed and prepared. It was also stated that any such consultation initiatives may not eventually result in agreement or support, but it is better to have transparency and open debate than to try to plan and implement the corporation's activities in an environment of suspicion and mistrust. In cases where it was considered unlikely that public issues and opposition would be addressed through SEA, another stated benefit of such consultation was that it would allow the corporation to be able to refer back to these earlier engagement processes and the associated opportunities for stakeholders to provide input, especially where there is an anticipated future need to defend unpopular planning decisions and actions.

I'm not sure if there's any level of engagement before that point which would prevent those sorts of negative voices coming out at the project stage. But being there and being able to point back in retrospect and demonstrate that anybody who wanted could have had access to all the information and data that we had leading up to the decision and had opportunities to influence the decisions

leading up to this point – that would be golden. (Interviewee #41, December 23, 2013)

Several other perceived benefits of SEA consultation were also raised by participants as reasons for supporting its use. It was suggested, for example, that while governments may want to prohibit or restrict such consultation activities by crown corporations, any increased openness in planning by the utility can help “force the politics” out of eventual strategic planning decisions. It was also mentioned that while opening up a corporation’s strategic planning to outside interests and possible attacks may be challenging and unpleasant, this can only have the effect of making the plan and any resulting projects and activities stronger and more resilient in the long run.

A number of items related to overall context and corporate cultures were also stated to have relevance to interviewees’ acceptance or rejection of SEA consultation. It was noted by some that the electricity industry has traditionally been quite guarded and closed in its planning, and so SEA consultation would represent a major shift for some utilities. In contrast, for some large, regulated utilities (particularly those that are crown corporations), it was noted that current regulatory reviews and existing corporate processes already include significant public engagement, and the corporation is so used to external review and public scrutiny of its plans and activities that SEA consultation would not be much of a stretch or fear for them. Others felt that smaller, private companies might be more able to adopt and apply such processes if they chose to, as they are typically more nimble than large companies and crown corporations.

Being a public utility, ... we’re used to being examined inside out and upside down, having everything that we’re doing questioned. That’s not an unfamiliar process to us. Everything that we do, we do it with the thought and knowledge that this is probably going to be out for the public to have a look at. (Interviewee #1, November 22, 2013)

Several interviewees also recognized that consulting with stakeholders and the general public at the strategic planning level would likely require a certain degree of corporate

maturity and appropriate resources and skills sets, which some corporations may not currently possess. This includes both the ability to successfully engage with stakeholders, but also to respect and accept the outcomes of these activities even if they are not aligned with corporate preferences and priorities.

I think it's organizational maturity to do that. In some cases, you have to have some pretty difficult conversations with internal people, [who may not be] suited to do this work, which really ruffles feathers. .. Maybe you need someone who ... has a much softer way with the community, and that's the type of approach that you need to take as opposed to a very technical engineering approach. So there's a certain level of organizational maturity and planning that would need to go on even internally. (Interviewee #15, December 6, 2013)

The biggest challenge, I can tell you [is] for executives is to have the humility to accept the feedback... and actually think outside the box a little bit and say, okay it's not what we would do as engineers but there's something to this... The more we get turned away, the more we get our wrists slapped, the more willing executives are to accept that they have to take this feedback and in a credible way consider it and incorporate it into their planning processes, and be able to demonstrate that they have. (Interviewee #10, December 4, 2013)

A number of interviewees' past experience with seeing strategic planning and associated consultation processes work well was also a clear driving factor in their interest in SEA consultation, as was past experience or observations where things have gone wrong in the absence of same (in Ontario especially). Others also expressed interest in SEA consultation simply because it was considered to be the "right thing to do" and because the industry is naturally moving towards such processes.

In addition to the main reasons outlined earlier for rejecting SEA consultation by those who did so, a number of perceived issues and considerations were also stated by those interviewees that accepted it. This included cautions that while SEA consultation may help improve corporate image and provide other benefits to the company in its planning

and eventual PPP implementation, there are possible negative outcomes and reputational risks if things go wrong. Interviewees also noted that it is important to recognize that public and stakeholder interests and concerns are not homogenous or static, and so it will therefore be difficult to address and attempt to reconcile such variable and dynamic issues in an early and PPP wide consultation. This was said to be especially true where a corporation's strategic plan covers a large geographic region with diverse and variable issues and interests, in which case it will be difficult to address and reconcile any individual and site specific issues and concerns through a single, plan level environmental analysis (although, it was suggested, it may be possible to do so if the issue was specific to a certain area or interest).

A number of interviewees also emphasized that it would be important to be very clear on the nature and purpose of SEA consultation, in order to manage expectations and to clarify from the onset that it is intended to support not drive the planning process. In particular, some noted that stakeholders should be made aware that the corporation is seeking input and information, rather than shared decision-making or consensus.

You have to maintain the balance so that these processes, while they are supporting they're not running the process, and that would be one of my concerns that you give them too much of a yardstick. But there's a balance there somewhere. (Interviewee #3, November 25, 2013)

I think to what degree you set expectations out there with what you're willing to do, going to do or able to do, I think it's really key to set expectations appropriately with why you're out consulting with people, what you want to learn from it, and how much you're willing to incorporate or how you'll incorporate it. It's very simple to get people with very high expectations in a hurry to set you up for failure no matter what you do, even if it was a good thing. (Interviewee #20, December 9, 2013)

It was also noted that there is always a risk when opening up your planning to outside parties that the SEA may lead to information and conclusions that are contrary to

corporate priorities and preferences, but that after such a public process there will be “nowhere to hide”. Interviewees again recognized that there will often be a strong, negative self-selection bias involved, in which an open SEA consultation process would be dominated by individuals and groups that are opposed to the corporation in general or to particular development technologies and options, and who would use the process as a platform to advance their interests and to showcase rather than participate meaningfully in it. In that regard, some interviewees noted that it would be important to ensure a balanced discussion by including a good cross section of stakeholder interests and representation from all of the various sides of the issues. It was also feared by some that social media and other available technologies would increase the risk and magnitude of information spread and misuse, as well as facilitating the involvement of vocal yet far removed opponents who have no direct interest or local presence.

What if the SEA tells you something that you didn't want to hear? (Interviewee #41, December 23, 2013)

One risk would be maybe you'll get some answers you hadn't thought you were going to get. I think people from our own company might be at the table with their own particular agenda for whatever reason, and the outcomes through a diligent and robust process might be different... I think any time you involve and fully engage the public, the results may be unpredictable depending on who you have at the table. (Interviewee #34, December 18, 2013)

There's definitely risks in being more open and public about your internal affairs, especially your strategic planning. Then have hundreds of thousands, millions of people that don't really have any direct impact on your business, somehow can influence it. With social media, people can pretend that they're in your backyard, but they're not... And they can actually sometimes localize and invigorate local populations when there really was never an issue. So you open it too broad, it certainly opens you up to those kinds of risk factors. (Interviewee #33, December 18, 2013)

5.3.3.3 Consultation Timing and Participation

For those interviewees that expressed interest in SEA consultation and its potential outcomes and benefits, the interview questions also explored their views about the potential nature, timing and scope of any such engagement, including the stage of planning at which it would occur, and the eventual selection of stakeholders that would be consulted.

As noted earlier in terms of SEA use overall, there seemed to be no question that this would involve some consideration and discussion of planning options and alternatives, and in no cases did interviewees state specifically that people would or should be consulted on a single proposed PPP only. Most respondents that supported SEA consultation did note, however, that they would not likely “go out with a blank slate”, and there would have to be some initial, internal analysis and definition of viable and feasible PPP options to form the basis for any eventual discussions with stakeholders. It was noted that it would be important for the company to have enough information and analysis done on planning options to allow for a meaningful discussion, and that going out with information on identified, viable alternatives would then allow for a more fulsome discussion on the nature, implications, costs and benefits of each, including any associated issues and tradeoffs.

I couldn't see us walking into the public with a clean slate to say tell us what sort of generation options you'd like us to develop and where. I just think that kind of discussion would be much too general and it would be very difficult to get any sort of traction at the end of the day...On a project specific basis, we're certainly very supportive of that and bought into that. On a sort of macro planning basis ...certainly less so. (Interviewee #18, December 9, 2013)

I think having a little more structured process to put in front of people rather than one being a blank sheet of paper...What do I need to do to get this done, let's frame the issues, ideas, thoughts, concerns, what have you and then have a discussion in a little more of a framework. (Interviewee #20, December 9, 2013)

Several respondents apparently did, however, envision a somewhat less early and equal evaluation of alternatives through SEA consultation, as they noted that having your homework done on particular options would allow the corporation to at least have a basis for “advancing a position”. On the other hand, several representatives of private firms operating in competitive markets indicated that they would prefer to consult on broad and general planning issues and concepts only, rather than on specific PPP options. In doing so they would seek to broadly understand issues and perspectives and educate people on planning processes and realities, but they would not be willing to go out with specific development options due to issues of market competitiveness and commercial confidentiality, and for fear that doing so would limit the company’s ability to pursue other options as well.

An SEA might be thinking more in terms of rather than saying this is what we’re going to be doing...You’re staying one step back from that... So before we go and develop a proposal, tell us what your priorities are, what’s important to you, and what suggestions you have. (Interviewee #37, December 20, 2013)

Most participants that accepted SEA consultation also had views about the numbers and types of individuals and groups that should be given the opportunity to participate, and thus, on the potential all-inclusive or selective nature of any such engagement. In no cases did interviewees suggest that SEA consultations could or should be open to all parties and the general public, but rather most indicated that it should involve select stakeholders only at that early stage of planning. As indicated previously, there was a recurring concern around a perceived low level of public understanding of the electricity industry, which some participants stated would limit the value of any general and all-inclusive public consultation in strategic planning through SEA. Several interviewees therefore indicated a preference to consult with those groups that were interested in, and well informed on, the larger “plan wide” social issues that may be associated with the PPP (see next section), and who could therefore contribute effectively and meaningfully to the planning discussions. Some interviewees also stated that such consultation should be process of continuous rather than intermittent engagement by the corporation, so that relevant groups do not have to be constantly re-educated. It

was thought that this would have the effect of saving time and resources in the long run, but also help to ensure an enlightened (and potentially, supportive) public on an ongoing basis which may help with future planning and PPPs.

The people that we tend to listen to more, I would say, is the [group] that invested hours to learn and to be educated on the trade-offs. You've brought them through a continuum of learning on all the complexity of the issues. (Interviewee #49, January 10, 2014)

A good consultation process is one where you take your stakeholder group, you educate them, get their feedback, and ultimately if you're going to consult properly, once they're fully conversant and understanding the issues, then you have an informed opinion. (Interviewee #39, December 20, 2013)

I think it needs to be more of a continuous process, not just a one shot deal...Particularly in our industry, I think ... it needs to be a continuous process. Then I think it wouldn't be such a surprise or wouldn't be such a big deal to the public. It would just be normal, it would just be oh here's the utility, they're asking us for our input, they're asking us for feedback, they're telling us some stories, that's what the utility does, rather than have a big circus tent and roll out the strategic plan that's underway. I think it needs to evolve into a more continuous process. (Interviewee #34, December 18, 2013)

5.3.3.4 Focus of SEA Consultation

Interviewees that supported SEA consultation were also typically of the view that any such engagement should focus on specific and select issues only, particularly those that were most relevant to the strategic levels of corporate planning and decision-making. It was suggested that this was necessary in order to ensure that the discussion stayed focused and meaningful, and to help prevent consultation fatigue and stakeholder burnout. Specifically, participants often felt that the focus of any such SEA engagement would be on addressing overall stakeholder concerns and perspectives around

particular energy technologies and development options and their likely implications for electrical rates, especially where these were seen as key areas or uncertainty and risk that could prevent or impede the corporation's business activities if not understood and addressed earlier. The focus of SEA consultation would therefore be on "larger and plan-wide" social issues and interests, rather than on specific environmental issues that may eventually have implications for individual project implementation.

Public interest is very much focused on more of a least cost, reliable, good customer service perspective, as opposed to, I'll say, environmental. It's difficult for us to build in environmental externalities or those types of things into it ...and depending on how far it goes with regard to cost, the regulator can say no way. So that really does influence what we do. (Interviewee #25, December 11, 2013)

The other thing about environmental issues is that it's not something that typically people are willing to pay a premium for, and that is the reality of the world. (Interviewee #52, January 24, 2014)

You're not going to satisfy everybody 100 percent of the time. There's always going to be naysayers, but if you can focus on key interests and bring the argument down to one or two issues and deal with those as opposed to having 500 things thrown at you up front. (Interviewee #46, January 2, 2014)

When we assess options for the power system, we build models to estimate the impacts of various resource choices on a specific set of environmental parameters, and those are the things that we can more readily measure and estimate; greenhouse gas emissions, other emissions ...and other things. But social issues are difficult to quantify, if not impossible to quantify. They can be huge risks...but we can qualify them by working closely with stakeholders...to better identify those potential social issues. (Interviewee #41, December 23, 2013)

For other types of (more specific) environmental considerations, it was seemingly recognized that the occurrence of, and most stakeholder interest in, these issues would be somewhat far removed from the strategic planning stage and would be primarily if not exclusively project and site specific in nature.

Interviewees' stated preferences that any SEA consultations would focus on addressing plan-wide issues and social concerns also appeared to be influenced by the relatively public nature of the electricity industry in Canada, where utilities are typically required to file their strategic plans with public bodies, and where there is therefore often a degree of public exposure on these issues at the PPP level as opposed to just when individual projects are proposed and implemented. It was also apparent that for these types of larger, societal issues, participants were concerned that any associated stakeholder concerns and opposition would potentially make their way down to the project level if they were not addressed earlier. Several interviewees referenced the fact that if there is continuing debate and dissatisfaction around overall, fundamental issues such as energy options and electricity rates, these will almost always then make their way into project EA reviews and may preclude or delay the approval and implementation of projects. It was also noted that these are larger and somewhat more subjective issues and preferences that cannot necessarily be mitigated (designed away) at the individual project level, but which may have implications for project implementation, costs and schedule. It was therefore considered better and more effective to address these types of issues early and during the planning stage, where there is more time and less risk, as opposed to during the "heat" of project sanction and implementation when there are schedule constraints and large expenditures of resources and capital are being made or are imminent.

5.4 Summary of Within Sample Variability in Results

In analysing and interpreting the interview data, the primary focus has again been on identifying and exploring key findings and relationships, particularly recurring ideas and perspectives put forward by interviewees as being important and influential in their decisions about potential SEA use. These overall findings are reflected in the

presentation of the detailed research results given earlier in this chapter. Although a variety of views about various aspects of potential SEA use were given by the 54 interviewees, the observed variation in these perspectives and decisions appeared to relate to interviewees' own (and therefore somewhat subjective and context-specific) views about whether SEA might be necessary, beneficial and effective for their company and its planning processes, which the exploratory and qualitative nature of this research was intended to facilitate an investigation of.

While the study was not intended to test whether any within sample variability in results were linked to particular corporate or market characteristics, as noted in the preceding sections there was certainly some evidence that SEA decisions were influenced (either directly or indirectly) by such factors. This included, for example, a typically low level of SEA acceptance on the part of smaller corporations (primarily distribution utilities), given the perceived lack of environmental concerns amongst these companies or their ability to manage or react to these downstream, which was often considered to preclude any need for SEA. Similarly, these and other types of utilities, particularly those with restricted mandates and who are focused on a particular type of activity (such as transmission) were found to often have limited planning options and abilities, which likewise prevented or reduced their interest in SEA. Larger, investor-owned corporations operating in competitive markets were also generally found to have a decreased level of interest in SEA, due to the often geographically dispersed nature of their activities, the dynamic and unpredictable nature of their planning environments, the commercially competitive nature of their planning which would preclude public involvement or making PPP decisions in public, and concerns that voluntary SEA use may therefore in fact result in a competitive disadvantage in certain situations. Finally, several crown corporation representatives noted, for example, that these types of utilities were far more likely to accept and adopt SEA consultation given the inherently public and transparent nature of their business, which is often subject to public review and scrutiny as a matter of course, although some others noted that utilities operating in a non-competitive market would be less likely to engage external stakeholders through SEA.

5.5 Focus Group Results

In addition to the 54 interviews conducted with corporate representatives, the study and its methods also included a number of focus groups, the rationale, objective and nature of which are described previously (Section 4.3). As indicated, these sessions were planned and implemented as an “interim” stage of the data analysis processes, and included three focus groups involving representatives of Canadian electricity utilities who were not part of the original interview sample. Their purpose was to present these individuals with some initial and representative findings from the study and to seek their views on these, including whether they seemed to be accurate and reasonable, to be generally in keeping with their own views and perspectives, and to prompt discussion to determine if there were any new or different ideas or others that would require further exploration. This methodological step was intended to help further ensure the validity and reliability of the qualitative data obtained through the study, and particularly, of the associated analysis and interpretation of this information as the study progressed.

Given the nature, purpose and timing of these focus groups, their results do not represent new or separate findings from the study, as they were undertaken with the intention of helping to shape, guide and focus the analysis and interpretation of the interview data itself. Their results are therefore included, integrated and reflected in the overall results of the study, as presented previously in this chapter. In order to highlight the main outcomes of these sessions, however, and to illustrate the manner in which they helped direct and shape the data analysis and interpretation, a short overview of the focus group results is presented below.

One of the main perspectives that was noted and reiterated in the focus group sessions was that an important role and potential benefit of SEA use was that it would allow a corporation to obtain a better understanding of important environmental issues and societal concerns that do not originate from specific environmental regulations, standards or other such requirements, and which are thus somewhat vague and complex in nature, particularly at the strategic planning level. It was similarly suggested

that most corporations are anticipating a greater environmental focus and public interest in relation to their activities in the future, and SEA was seen as a means of proactively identifying and understanding these issues and expectations, including associated PPP options that would likely be problematic or unacceptable at the very early stages of planning. The focus groups also repeatedly confirmed that SEA need and interest would be much lower where there was a limited number and diversity of planning options available to the corporation, and especially, where other parties and directives influence corporate planning and business activities such as relevant government policy or legislation. Even in such cases, however, it was suggested that government directives often remain very vague on environmental issues and requirements, and so corporations often require tools such as SEA to help understand issues, expectations and to identify and evaluate planning options in that regard.

Focus group participants also emphasized the importance of environmental uncertainty and risk at the strategic planning level in influencing corporate views and perspectives about potential SEA need and use. Several participants noted that as a general trend, the industry was getting more and more uncertain and risky, where corporations now typically have to look at opportunities, risks and solutions from many different angles and often outside of their particular business and markets. They also reiterated the importance of the potential and recognized “consequences of being wrong” in strategic planning as a key driver towards whether and how a corporation might wish to use SEA to help address its environmental uncertainty and risk at the strategic level. Participants confirmed and reiterated that this included considerations around the nature and magnitude of potential environmental issues and their consequences, but also the degree to which these would be manageable or reversible at later stages of planning or implementation or require management at the PPP level. A discussion in one of the focus group sessions also reinforced the fact that it is often only possible to consider and attempt to address certain types and levels of environmental concerns at the strategic level, and so it was noted that environmental issues would typically be a more heavily weighted consideration when choosing between options “where everything else is basically equal”, and thus, where environmental issues and risks become the main differentiator. In several of the sessions it was also confirmed that SEA would be seen

as useful in helping to understand and potentially influence new or changing environmental regulations or other such forthcoming requirements that may be relevant to the company and its activities.

Focus group participants also reiterated that a key issue related to the potential voluntary use of SEA by corporations would be around the likely net benefits of SEA versus the associated costs and risks associated with its adoption and application. On the one hand, SEA was touted by some as a useful tool for improving and standardizing internal processes and for helping facilitate a more comprehensive and rigorous analysis of environmental issues at the strategic planning level and for better demonstrating this. Others were concerned, however, that SEA may be too rigorous and analytical a tool and too separate a process to fit the often vague and nebulous nature of strategic planning or to provide the necessary integration of environmental issues into overall strategic planning. It was also noted that there are a variety of tools and procedures available to and being used by corporations for analysing, documenting and considering environmental issues and stakeholder concerns in corporate planning and associated management systems, and so most firms would require more insights into how SEA would work and how it relates to other existing or potential tools and procedures. Previous, positive experiences and associated comfort with project EAs and similar processes were also said to help people be more comfortable with SEA, and it was noted that SEA may also be of more interest to corporations if it were to become recognized as a best practice in the industry.

In terms of potential SEA related consultations, focus groups participants often noted serious reservations about this and the risks of stakeholder consultation at the level of strategic planning. This was especially the case for the focus group session that involved representatives of corporations that operate in a competitive commercial environment. In such a market setting, it was noted that while consultation may help a company to manage and control issues and therefore provide some type and level of competitive advantage, most corporations would be more concerned that doing so would put a corporation at risk and at a disadvantage over its competitors who had not opened up their planning to outside interests and scrutiny.

In summary, therefore, there were no entirely new themes, issues or perspectives raised during the focus groups that were not identified during the original interviews, nor did the results of these sessions contradict the information gathered through the interviews and the associated data analysis. In each of the focus groups, participants stated that they felt that the preliminary, select results of the study that were put before them for their review seemed generally accurate and reasonable, and indeed, in the only written follow-up provided a participant stated that the “synthesized initial findings were well articulated and consistent with my experience”. The primary outcome and value of the focus group sessions were therefore as an interim measure in helping to confirm and validate the preliminary results of the data analysis, and especially, to help inform and focus the on-going interpretation by exploring the various issues and dimensions summarized above.

5.6 Summary

This study involved presenting corporate representatives (interviewees) with information on possible SEA approaches, and then investigating their views about its possible applicability as part of their strategic planning and decision-making processes, including whether, why, when and how they might choose to adopt and apply SEA as part of their corporation’s future activities. The preceding sections have presented the overall results of the research, as obtained through the previously described processes of data collection, analysis and interpretation.

The overall findings of this exploratory study indicate that corporate SEA use decisions are initially and fundamentally influenced by a number of important contextual factors that determine its perceived need and applicability, which relate to particular characteristics of the corporation’s planning and business activities and their associated environmental issues. From there, the results suggest that strategic planning situations that give rise to increasing numbers and ranges of planning options, and thus to associated levels of environmental uncertainty, risk and variability between these alternatives, contribute to a perceived need for SEA, along with associated views on whether these issues need to be addressed in an early or proactive manner or can be

managed and/or reacted to later. The results also indicate that in such cases of perceived environmental risk and uncertainty in planning and possible negative consequences for the company, firms will often seek to increase the comprehensiveness and analytical rigour of their planning process through tools such as SEA, with other considerations around the potential cost-benefit, applicability and effectiveness of such methods in addressing these risks also being influential. These and other factors also then translate in associated views and decisions about the particular stage(s) of planning to which SEA would be applied, and the particular environmental issues upon which it would focus.

In exploring interviewees' views and decisions about the potential use of SEA consultation in corporate strategic planning, a number of issues and considerations related to the potential need for, and applicability and challenges of, such initiatives were raised, including by those that rejected it and others that were interested in its use. In addition to the perceived risks associated with voluntarily releasing information and engaging with stakeholders in corporate strategic planning, the study's results also provide insights into the expected and desired outcomes and benefits of such engagement, particularly in terms of the potential learning and transformative effects of SEA. A key consideration was therefore found to be whether a productive and successful engagement process was considered likely to occur, along with other issues around consultation risks and overall unpredictability also influencing corporate views about the potential nature, timing and scope of any such engagement, including the stage of planning at which it would occur and the possible selection of stakeholders that would be consulted.

The next chapter highlights and discusses the study's main findings and outcomes and the key implications and importance of same. In doing so, it evaluates these results against the previously reviewed literature (existing theory and previous research), and describes the study's associated contribution of new knowledge. This includes the development, presentation and evaluation of a conceptual framework related to corporate decision-making around whether, why, when and how to voluntarily adopt and apply SEA. As indicated previously, a summary of the main results of the study,

including the resulting conceptual framework, was provided to all interviewees and focus group participants and is included as Appendix C.

6 DISCUSSION

This chapter presents and discusses the main findings and key outcomes of this study. It initially describes its overall findings regarding the various considerations in, and determinants of, corporate decisions about SEA use, including the manner in which these are present and influential in general and in particular contexts. In doing so, the discussion also evaluates these research results alongside relevant aspects of the previously reviewed literature on SEA (Chapter 2) and corporate environmental proactivity (Chapter 3), in order to identify and highlight the associated contributions of new knowledge that are being made through this exploratory study. This includes a particular emphasis on considering the research outcomes against current theoretical perspectives about the overall purpose, function and outcomes of SEA (as outlined in Chapter 2), to evaluate their relevance and relationship to decision-making about the voluntary adoption and use of SEA in a corporate context, and especially, the implications of this research for the further development and advancement of theory.

6.1 Key Considerations in and Determinants of Corporate Decisions About SEA Use

The purpose of this study has been to investigate and seek to understand whether, why, when and how corporations may choose to voluntarily adopt and apply SEA as part of their strategic planning and decision-making processes, including the key factors that influence such decisions. This is reflected and further defined in the specific research questions that have formed the focus of this study, which include issues related to whether or not SEA might be adopted and applied voluntarily by corporations, the primary determinants of those views and decisions and any associated contextual elements that influence these, and the various factors that then influence associated decisions about SEA application (timing, focus and approaches) (Section 1.3).

Through this study, corporate representatives were presented with information on SEA and potential approaches for its use, and were asked whether or not (and if so, how) they would choose to adopt and apply it as part of their corporation's future planning activities and the main reasons for these perspectives and decisions. As illustrated in

the preceding chapter, nearly half of those interviewed indicated that they would (definitively or conditionally) implement, support or recommend the use of SEA, with the remainder either stating that they would not do so or being unsure or vague in their responses. The study has shown that a variety of factors are raised and considered by corporations in forming their views and making decisions about possible SEA use. This included considerations related to the perceived need for and applicability of SEA in relation to a corporation's planning processes and business activities, as well as the objectives and potential outcomes of SEA use and its associated costs, benefits, risks and overall efficacy. In almost all cases, interviewees raised both positive and negative issues related to possible SEA use, including with regard to its potential application as an internal and primarily analytical process as well as in relation to any associated consultation initiatives. This, along with the relatively high number of conditional supporters of SEA and the large proportion of respondents (nearly a quarter) that would or could not state definitively whether they would adopt it, indicates that thinking and deciding about SEA was not always a clear, "black and white" evaluation. Rather, it was seen to involve the recognition, contemplation and interplay of multiple and at times uncertain and conflicting factors around whether SEA would be applicable, useful and would likely provide the required and desired positive outcomes for the corporation, particularly in light of the costs, resources, challenges and risks that might be involved.

The analysis and interpretation of the resulting interview data have therefore been undertaken with the objective of identifying key themes and recurring perspectives that were put forward by interviewees as being important and influential in their views and decisions about potential SEA use, as well as any notable areas of variation between individual respondents and in relation to particular corporate characteristics and planning contexts. The overall findings of this analysis were presented in detail in the preceding chapter, which were generally organized according to the various research questions being investigated and other associated themes that have emerged from the data.

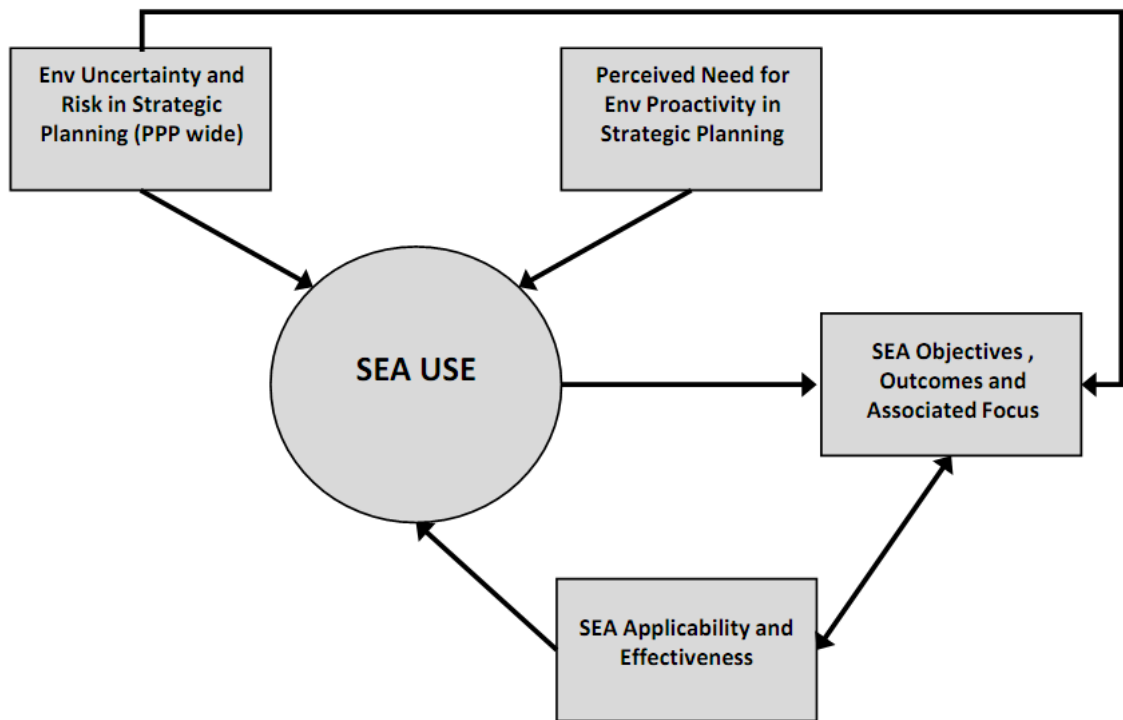
In this chapter, the study's results are further reviewed, summarized, evaluated and organized in order to present and discuss its overall findings and outcomes, which take

the form of a structured and empirically derived conceptual framework that identifies the various determinants of corporate decisions about potential SEA adoption and application. This includes defining and describing the occurrence, influence and interrelationships of these factors and the manner and order in which they are recognized, considered and influential in such decisions, both general and in specific contexts as applicable.

As discussed herein, the study has found overall perspectives and decisions about SEA use (and particularly, its acceptance) by corporate representatives to be based on and influenced by a number of key factors and fundamental considerations, the general nature and observed ordering of which are summarized below and illustrated in Figure 6.1:

- 1) *Environmental Uncertainty and Risk in Strategic Planning (PPP wide)*: The presence of perceived environmental uncertainty and risk in relation to a corporation's planning and decision-making processes and overall strategic initiatives (PPP) (Section 6.2);
- 2) *The Perceived Need for Environmental Proactivity in Strategic Planning*: A corporation's perceived need to proactively address environmental risks at the strategic level as opposed to at later stages of planning or in PPP implementation (Section 6.3);
- 3) *SEA Objectives, Outcomes and Associated Focus*: The particular rationale for, and objectives and desired outcomes of, identifying, understanding and addressing these environmental risks early in strategic planning through SEA (Section 6.4); and
- 4) *SEA Applicability and Effectiveness*: The perceived applicability and likely effectiveness of SEA in achieving these objectives and desired outcomes (Section 6.5).

Figure 6.1 Key Determinants of Corporate Decision-making about Potential SEA Use



The discussion that follows addresses, and is generally organized according to, these various considerations and stages of corporate decision-making about SEA use. Also relevant are corporations' related perspectives about what particular environmental issues can and should be addressed through SEA and the particular stage(s) of the planning processes at which it would likely be applied, which are also discussed as applicable in an integrated manner within the sections that follow. The discussion also includes consideration of the various determinants of corporate rejection of SEA use, which as illustrated in the following sections often related primarily to a perceived absence of the various conditions that would give rise to a need for SEA or which affected views about its likely effectiveness and influence. These issues and decision outcomes are also discussed in an integrated manner within the sections that follow. The identified determinants of corporate decisions about whether any such SEA processes would include public and stakeholder engagement are then also discussed in a subsequent part of this chapter (Section 6.6).

Each of the sections that follows includes a figure that outlines the identified factors and suggested relationships between them that influence that particular aspect and stage of corporate decision-making about SEA use. For overall context and continuity, each of these figures includes all of the overall components of SEA decision-making that are reflected in Figure 6.1, with those aspects and determinants that are relevant to that particular section being highlighted in grey shading. All of the figures included in this chapter form part of the overall conceptual framework about corporate SEA decision-making that forms the key outcome of this research, which is subsequently presented as a single, summary diagram in Chapter 7.

6.2 Environmental Uncertainty and Risk in Strategic Planning (PPP Wide)

An important and initial determinant of SEA-related decisions by a corporation is whether or not there are important environmental issues associated with its planning and decision-making processes and resulting strategic initiatives (PPPs) as a whole, and particularly, the degrees of uncertainty and perceived risk that are associated with these. In particular, a number of issues and factors are particularly relevant and influential in that regard, including:

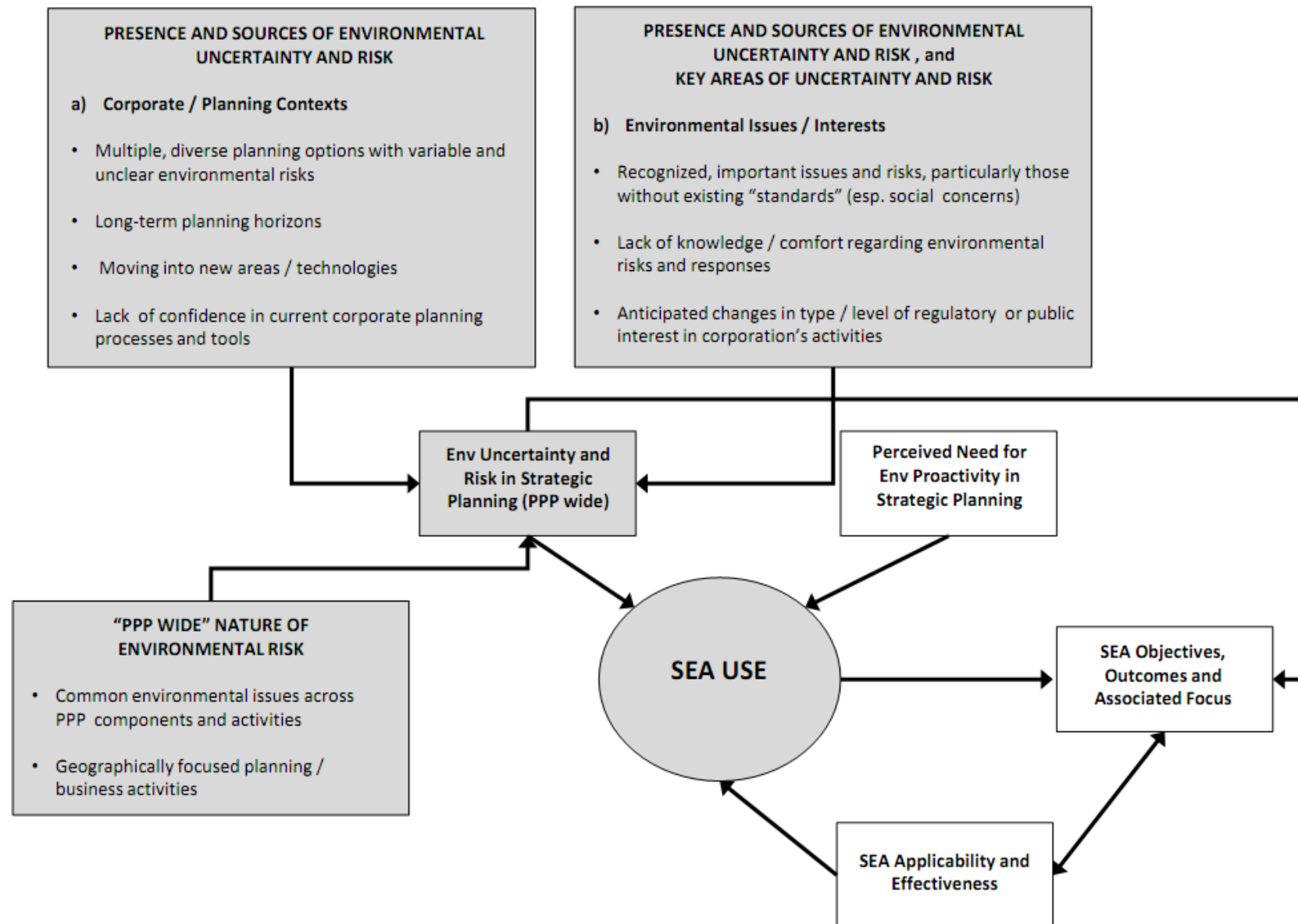
- a) *Presence and Sources of Environmental Uncertainty and Risk*: Whether or not the corporation considers there to be important environmental issues associated with its current or future activities, and particularly, the type and level of uncertainty and risk that are perceived to be associated with these in its strategic planning processes (Section 6.2.1). A number of factors were also identified as potential sources of same and determined their influence, including issues related to corporate characteristics and planning contexts, as well as the nature and degree of associated environmental issues and interests associated with the corporation and its activities (Figure 6.2); and
- b) *“PPP wide” Nature of Environmental Risk*: Namely, whether the perceived environmental risks are considered to relate to all or most of the strategic

initiative in question or to only specific portions of it (including one or more individual projects) (Section 6.2.2).

These situations of enhanced PPP-wide environmental uncertainty and risk often originate in or are enhanced by particular corporate characteristics, planning situations and contexts (Figure 6.2), as discussed within the sections that follow.

Areas of perceived environmental uncertainty and risk are also then influential in associated corporate perspectives and decisions about the particular types of environmental issues that should be considered and addressed at the strategic level through SEA, and thus, the associated objectives and outcomes of its use (Section 6.2.3 and Figure 6.2).

Figure 6.2 PPP-Wide Environmental Uncertainty and Risk and its Origins and Influence in SEA Decisions



6.2.1 Presence and Sources of Environmental Uncertainty and Risk

In cases where corporate representatives do not consider that their strategic planning processes give rise to projects or activities that will likely have important or influential environmental issues and interests associated with them, there is typically little or no perceived need for SEA or interest in its use. This was the most commonly cited reason for SEA rejection amongst those interviewees that did so, a finding that was not surprising and which is in keeping with the literature on corporate environmental behaviours in general. Past research has shown that environmental proactivity and the voluntary adoption of environmental protection measures by a company is often influenced by the type and intensity of environmental issues or risks that it faces (Ghobadian et al 1995; Banerjee 2001; Lopez-Gamero et al 2009; Tatoglu et al 2014) and associated public and stakeholder concern about these or the firm's activities in general (Bondy et al 2004; Aragon-Correa and Rubio-Lopez 2007), including the anticipated occurrence and importance of any such issues in the future (Henriques and Sadosky 1996). The findings of this study lend general support to these perspectives, and further illustrate their relevance and influence in a strategic planning context. This includes confirming that while a lack of perceived environmental issues and interests often results in SEA being rejected, its acceptance is also at times linked to an anticipated increase in environmental issues, requirements and public interest in relation to a corporation's activities in the future, particularly where there is uncertainty and perceived risk around these, as discussed below.

As described in Chapter 3, previous discussions and investigations of environmental proactivity by corporations have focused on the more downstream and operational stages of their business activities, and have looked primarily at decisions to implement specific measures to address (prevent, reduce or react to) certain environmental problems. Unlike these situations, where the presence, nature, magnitude and potential implications of an environmental issue and the necessity, cost and likely effectiveness of any particular mitigative actions are more clearly evaluated and understood, it was clearly recognized by participants in this study that the strategic planning stage is inherently characterized by a degree of uncertainty regarding potential environmental

issues, their possible implications, and the necessity of and approaches for managing these early in planning. These perceptions of associated uncertainty and risk therefore included aspects of the *state* (current condition), *effect* (impact of issues or events) and *response* (management options and their outcomes) uncertainty, as defined by Milliken (1987) and discussed earlier in Section 3.3. In the case of corporate decisions about potential SEA use, however, the existence and influence of these types of uncertainty relate less to the potential implications of externally derived developments and factors for the corporation and its potential response to these, but rather relate to uncertainty about the manner in which its own planning decisions and actions might trigger issues and reactions in its external environment, and the potential need to use a tool such as SEA to better understand these issues and risks (state and effect uncertainty) and the manner in which these could be proactively managed (response uncertain) in its overall planning and decision-making. The nature and degree of such uncertainty and associated perceptions are a primary consideration in decisions and perspectives about the potential need for and benefits of SEA use by corporations.

The relevance and importance of perceived environmental uncertainty and risk in strategic planning for corporate decisions about SEA use was apparent and found to be influential in a number of ways. As noted above, for example, corporations that are involved in relatively small-scale, routine and environmentally benign activities, and therefore have an overall confidence that there are not likely to be important or unexpected environmental issues associated with their activities, often see little or no need for or benefit of adopting SEA as part of their strategic planning. In such cases, corporate representatives interviewed as part of this study were often reluctant to adopt SEA or to otherwise change their planning processes and outcomes on the basis of environmental matters, and in such instances the potential costs and time involved in SEA use were found to be most influential and often enough to tip the scales towards maintaining the status quo as opposed to potentially seeking improved or optimal solutions through SEA use. Even in cases where environmental issues are present or anticipated and are recognized as being important considerations in corporate strategic planning, the perceived need to assess and potentially manage these through SEA is reduced or non-existent where there is little or no uncertainty about these. In particular,

the study's results show that where corporations feel that they have sound environmental and stakeholder management systems in place and a resulting good understanding of and comfort regarding such issues and their future occurrence and management, the perceived need for SEA is far lower. In contrast, and as discussed later in Section 6.3, SEA acceptance is increased where existing corporate systems and tools are considered to be inadequate in that regard, and where there is an associated desire to enhance the comprehensiveness and rigour of corporate planning processes in dealing with environmental risk.

It is therefore often not the known presence, scale or likely implications of specific existing or upcoming environmental problems that drives corporations towards voluntary environmental initiatives and proactivity at the strategic planning level. Rather, it is the perceived degree of uncertainty, risk and resulting discomfort around these that tends to motivate a corporation to seek to better identify, understand and potentially address these risks as part of its early planning through the use of tools such as SEA. This is further reflected in varying perspectives around whether SEA would be used as a tool for simply understanding as opposed to necessarily managing certain environmental issues and risks in strategic planning, as discussed below in Section 6.4.2.

Situations of elevated uncertainty and risk around environmental matters that lead to SEA interest and acceptance often originate in or are enhanced by certain corporate characteristics and planning contexts and with regard to particular types and levels of environmental issues and interests. In particular, SEA acceptance often increases in cases where a corporation has a wide and somewhat diverse variety of future planning alternatives available to it, which may have important, variable but as yet unclear environmental issues and interests associated with them. In this study, these circumstances were found to occur in a number of situations, such as where technical and economic factors result in a range of options and opportunities being available to the corporation, and where associated industry structures, mandates, government directives or regulatory constraints do not limit the organization's planning options and abilities.

As described in Chapter 2, the SEA literature has referenced a lack of available PPP options as being one reason why SEA may be inapplicable or ineffective, and especially, why the identification and consideration of alternatives is often limited or non-existent in SEA. This includes situations where an organization's planning options and abilities are restricted due to earlier and influential decisions by other authorities and processes (Geißler 2013). These issues have also been generally referenced in the case of possible corporate SEA use (Jay 2007), where they may result from industry fragmentation and an associated lack of planning options, abilities and centralized planning responsibilities (Jay and Marshall 2005). These factors were again found to be recognized, considered and quite influential in corporate decisions about SEA use in this study. In this case, however, the availability or lack of strategic planning options is seen to be less influential in terms of its perceived effect on the applicability, scope or effectiveness of the SEA process, but rather as a result of the degrees of uncertainty and variability between options that are created in such situations, which in turn determine whether or not SEA is considered necessary. This is a recognized and very influential factor in decisions about voluntary SEA use that has not been investigated or demonstrated through previous research.

The influence of planning uncertainty and variability on SEA decisions is also reflected in the fact that it is most often of interest to corporations in relation to long-term planning situations, both because of the greater number and diversity of options that are typically available at those temporal scales (as discussed above), but also because these alternatives and their potential environmental issues and risks would likely be less clear over such longer planning horizons. Also, although SEA was at times rejected in relation to a company's standard planning processes where planning options and issues were thought to be clear and not environmentally problematic or contentious, there was sometimes interest in its use in relation to upcoming overall policy and planning options which had the potential for important but undefined environmental issues and interests and for which the company had little or no previous experience. Situations of environmental uncertainty, variability and resulting SEA interest may also be present where corporations expect to be moving into new areas or towards different types of developments and technologies for which they have little or no previous experience,

and where they are expecting increased regulatory or public interest and pressure in the future. These situations can create enhanced uncertainty and potential risk both in terms of the possible environmental consequences of any particular PPP option as well as about how the available alternatives compare to each other in that regard, which often gave rise to SEA acceptance by interviewees. In this way, contextual factors related to corporate characteristics, jurisdictions and planning situations were seen to account for a considerable portion of the variation in SEA interest and acceptance amongst interviewees within the sample. SEA was often rejected by, for example, smaller corporations with focused mandates and restricted planning latitudes and those who were involved in relatively routine and environmentally benign activities, due to the resulting lack of perceived environmental issues and risk associated with the corporation's planning and PPP implementation activities.

6.2.2 “PPP-Wide” Nature of Environmental Risk

Another initial and fundamental determinant of SEA decisions by a corporation relates to whether perceived environmental risks are considered to pertain to all or most of the corporation's strategic planning initiatives (PPPs) or to only specific portions of it (including individual projects). In this study, SEA was typically rejected in situations where the company's activities are relatively diverse and geographically dispersed, and are therefore not relevant to a single regulatory jurisdiction, receiving environment or interested public. In this way, SEA was typically more relevant to and accepted by larger, vertically integrated utilities operating solely or primarily within an individual jurisdiction, and of less interest to some of the larger, investor-owned corporations operating in multiple markets and regions. Although the SEA literature has referenced its potential applicability to larger, international institutions with diverse activities in jurisdictions around the globe (Annandale et al 2001; Banhalmi-Zakar and Larsen 2014), this study has found that a lack of a perceived environmental issues or interests related to a company and its activities at a national or international scale reduces the perceived need for SEA by corporations, who often then see the individual project level as the most appropriate stage at which to identify and address any environmental issues and requirements.

The very limited consideration of corporate SEA use in the literature to date has also recognized the relevance of the geographic distribution of a company's activities to the potential applicability and effectiveness of SEA (Jay and Marshall 2005), where it has been suggested that the often dispersed nature of some corporations' activities can preclude the long-term, comprehensive and structured strategic planning processes and outcomes that would facilitate SEA use (Jay 2007). All of the corporations that were represented in the interview sample for this study reported comprehensive, structured and hierarchal strategic plans that covered their overall (and even diverse and dispersed) activities, and which could therefore potentially be subject to SEA review. Indeed, and as described in Section 4.3, this was a key consideration in study design and sample selection, including the focus on Canadian electricity utilities. It was therefore not an associated lack of a structured and comprehensive strategic planning process that resulted in a perceived lack of SEA applicability in these cases, but rather, corporate perceptions about the absence of overall environmental issues and interests related to the PPP as a whole as a result of this geographically dispersed nature that would in turn reduce or eliminate the need for SEA.

In summary, the nature and distribution of a corporation's activities are initial and fundamental factors in its decisions about possible SEA use, and these issues are both recognized and very influential in corporate perspectives about its necessity and applicability. The presence or absence of PPP wide environmental issues and interests are therefore key and initial drivers in such decisions, and in fact comprise overall prerequisites and determinants of whether or not SEA use decisions even go any further. As discussed in a later section, the PPP-wide nature of a particular environmental issue or risk is also influential in corporate decisions about whether and how it is to be assessed and potentially managed at a particular stage of strategic planning or in eventual PPP implementation.

6.2.3 Key Areas of Environmental Uncertainty and Risk

The important influence of perceived uncertainty and risk in corporate decisions regarding SEA need and use is also reflected in views about the particular types of

environmental issues that should be considered and addressed at the strategic level. As reflected in the literature and discussed further in the next section, technical and economic requirements and other planning realities often mean that environmental issues receive relatively limited consideration by corporations at the strategic planning level (Banerjee 2001), where the main focus is often on factors that can have overall implications for PPP cost and feasibility. For environmental matters, this often means a primary or exclusive focus on achieving compliance with relevant legislation, regulations or other directives, such as those related to renewable energy targets, air or water emissions or others. Strategic planning therefore often involves a consideration and comparison of the costs and other implications associated with achieving and maintaining regulatory compliance for different planning alternatives. In addition to an overall economic rationale for this focus on environmental regulation in strategic planning, the results of this study also suggest that contextual factors may also contribute to this focus, such as where corporate objectives and policies place the sole or primary emphasis on achieving and maintaining compliance.

The literature on corporate environmental governance and proactivity in general indicates that corporations may adopt and implement “beyond compliance” environmental measures to help adhere to existing or anticipated environmental regulations in a more innovative, efficient and cost effective manner (Khanna 2001; Anton et al 2004; Khanna and Speir 2013), and it has been suggested that SEA itself can be used to help an organization achieve and demonstrate compliance with applicable environmental regulations, standards and commitments by allowing these requirements to be incorporated at the earliest stage of planning (Noble 2004b; Jay 2007). These potential objectives and outcomes were not, however, found to be key considerations or drivers of corporate interest in SEA in this study. Notwithstanding overall perspectives by some interviewees that strategic planning does and should focus primarily or exclusively on matters of environmental compliance, the relatively high degree of clarity on applicable regulatory requirements is influential in corporations’ views about SEA need and use and its desired focus. In particular, issues and obligations around environmental compliance are typically derived from and linked to formalized, documented and therefore known requirements that the corporation must adhere to

in its planning and eventual business activities. There is therefore typically little or no uncertainty associated with these, and many corporations reported having existing models and other analytical tools for quantifying and considering these requirements and their technical and cost implications in their strategic planning and project design processes. In cases where corporation's see the sole or primary focus of environmental management at the strategic planning stage being on ensuring regulatory compliance, the perceived need for and resulting acceptance of SEA is therefore far less. In some such cases, SEA may also in fact be rejected out of concern that its use might result in perceptions and expectations amongst regulators or stakeholders that the corporation is able and willing to go beyond compliance in its business activities.

The only apparent exception and recognized potential benefit of SEA in that regard was found to be in cases where SEA is viewed as a means of helping to better integrate environmental regulatory considerations into the corporation's strategic planning processes, and in cases where it is thought that additional (and at times non-quantitative) analysis would be helpful in interpreting and utilizing that information. There is also often interest in SEA where there is uncertainty about existing or future environmental regulation. This includes situations where a corporation perceives that there may be new or changing requirements forthcoming, in which case there may be interest in SEA as a means of helping to identify, understand and address these. This is also somewhat in keeping with the relevant literature on corporate environmental proactivity, which states that corporations may proactively adopt voluntary environmental measures in order to attempt to pre-empt or influence new or revised regulatory requirements (Ghobadian et al 1995; Hutchinson 1996; Lyon and Maxwell 1999, 2004; Khanna et al 2009; Khanna and Speir 2013). In this case, however, SEA is viewed as a means of obtaining an early and strategic opportunity for a corporation to attempt to influence regulatory change and therefore manage its effects on the business through lobbying efforts or other such initiatives, as opposed to finding ways to proactively address these requirements in planning its activities so as to reduce the perceived need for greater regulation by government.

In summary, in situations where regulatory compliance is viewed as the sole or primary focus of environmental analysis and management in corporate strategic planning, the acceptance or rejection of SEA is influenced by whether there is considered to be sufficient information and clarity around these (current or future) requirements and the existing and adequate analytical tools to address these by the corporation. This finding further highlights the importance of perceived environmental uncertainty in corporate decisions and perspectives around voluntary SEA use, which influences both the perceived need for SEA as well as the associated objectives and focus of its potential application (see Figure 6.2). In terms of the latter, this includes the associated and selective focus on managing environmental issues and risks that have important and material economic implications for the overall business at that level, as discussed in a later section.

At the other end of the spectrum, for those corporations that recognize a need for SEA and have an interest in its adoption and use, social concerns are often considered to be the primary driver for and focus of any such SEA application in corporate strategic planning. This is in contrast to the typical focus of SEA practice, as reported in the literature. Indeed, and notwithstanding overall questions and on-going debates around whether SEA should focus solely on the protection of the natural environment or should simultaneously consider and attempt to integrate and address social, economic and environmental considerations (Kornov and Thissen 2000; Morrison-Saunders and Fisher 2006; Wallington et al, 2007; Nilsson 2009; Bina et al 2011; Tetlow and Hanusch 2012; Lamorgese and Geneletti 2013), recent reviews have found that there is typically a strong degree of emphasis on the biophysical environment in SEA practice, albeit with an apparent desire amongst some planners to increase SEA's emphasis on technical and economic considerations for political or commercial reasons (Lobos and Partidario 2014). With regard to the latter issue, although a potential desire for SEA to focus on a PPP's potential socioeconomic benefits (as opposed to highlighting its possible negative biophysical effects) may be thought to be even more so the case in a business setting, the results of this study suggest otherwise. This reflects another important difference and interesting dimension of corporate SEA use as compared to its more traditional public sector application under statutory SEA review and approval processes. In

particular, this study indicates that the key objective and focus of any voluntary use of SEA by a corporation would be to inform and influence that organization's strategic plan by identifying and addressing social uncertainty and risk, as opposed to increasing emphasis on the potential positive outcomes and societal benefits of a PPP in order to maximize the likelihood of its eventual approval under a regulatory review process, or even necessarily to seek overall public support of its PPP on the basis of its positive outcomes and benefits.

In this study, participants consistently indicated that corporations often perceive social issues and interests as being amongst the greatest sources of uncertainty and risk for their business activities. Indeed, it was widely recognized that certain, socially derived concerns were likely to be the main area of focus for stakeholders in opposing or supporting the company and its activities. This was said to be particularly so at the PPP stage, where the focus in the electricity industry is typically around overall development types and technology alternatives and their implications for costs to consumers (electricity rates), where environmental regulatory compliance is assumed, and where people are generally unwilling to pay a premium for environmental protection at the PPP (especially, provincial) level. Most corporate representatives that accepted SEA use therefore saw it as having a key focus on understanding and seeking to address negative social issues and concerns, which are recognized as being important but at times unclear due to their typically subjective, variable and often dynamic nature, and which (unlike environmental compliance matters) do not have specific standards or rules associated with them to provide clarity and certainty, and upon which planning decisions can be based.

These key areas of perceived uncertainty and risk therefore influence both the perceived need for and acceptance of SEA use by corporations, and in turn, help determine the associated objectives, desired outcomes and focus of any such SEA application (Figure 6.2). In particular, SEA is often viewed as means of addressing the perceived uncertainty and risk that is often associated with social issues, both in terms of providing a better understanding of associated societal concerns and expectations (thereby addressing state uncertainty), and the likely social acceptability of (and thus

likely public reactions to) different planning options and outcomes (effect uncertainty) and therefore the manner and degree to which these could be proactively managed through associated PPP selection and implementation (response uncertainty). As noted in other contexts related to corporate social responsibility initiatives and associated stakeholder engagements in general, a key objective and focus of SEA use by a corporation would therefore be to seek to make the social environment more understandable and potentially controllable (Backer 2007) and to reduce the perception of risk and associated anxiety within the organization about social issues and pressures (Solomon 2005), as discussed further in the next section.

6.3 Perceived Need for Environmental Proactivity in Strategic Planning

In cases where there is recognized environmental uncertainty and risk associated with a corporation's strategic planning and eventual business activities, corporate decisions about potential SEA use are then based largely on whether there is a perceived need to proactively address these at the strategic level as opposed to later in planning or implementation.

The literature on corporate environmental governance and proactivity indicates that while higher levels of uncertainty may in some cases increase the perceived requirement for additional and innovative environmental approaches and procedures, in other cases this can result in the corporation adopting a "wait and see" attitude (Aragon-Correa and Sharma 2003; Vecchiato 2012; Pondeville et al 2013), especially where the need for and likely benefits of a voluntary environmental measure are unclear and the cost, time and resources required to implement it may therefore not be justified in light of the risk. This may be especially relevant to corporate strategic planning and associated decisions about voluntary SEA use, given that this early stage is quite far removed in process and time from the eventual projects and activities that result in environmental issues, and thus, there is likely to be greater uncertainty about the need for and likely outcomes of SEA application. At that early stage, there would also be some time until such issues and any negative consequences for the corporation would occur, and there may therefore may be opportunities to address environmental

problems later if and as they may arise. A key focus of this study has therefore been to investigate what specifically would motivate a corporation to take such a proactive approach to understanding and potentially addressing recognized environmental uncertainty and risk early in its strategic planning, as opposed to waiting until later when there would be more clarity and certainty on these issues, their likely implications and consequences, and the need for and likely effectiveness of specific environmental management approaches.

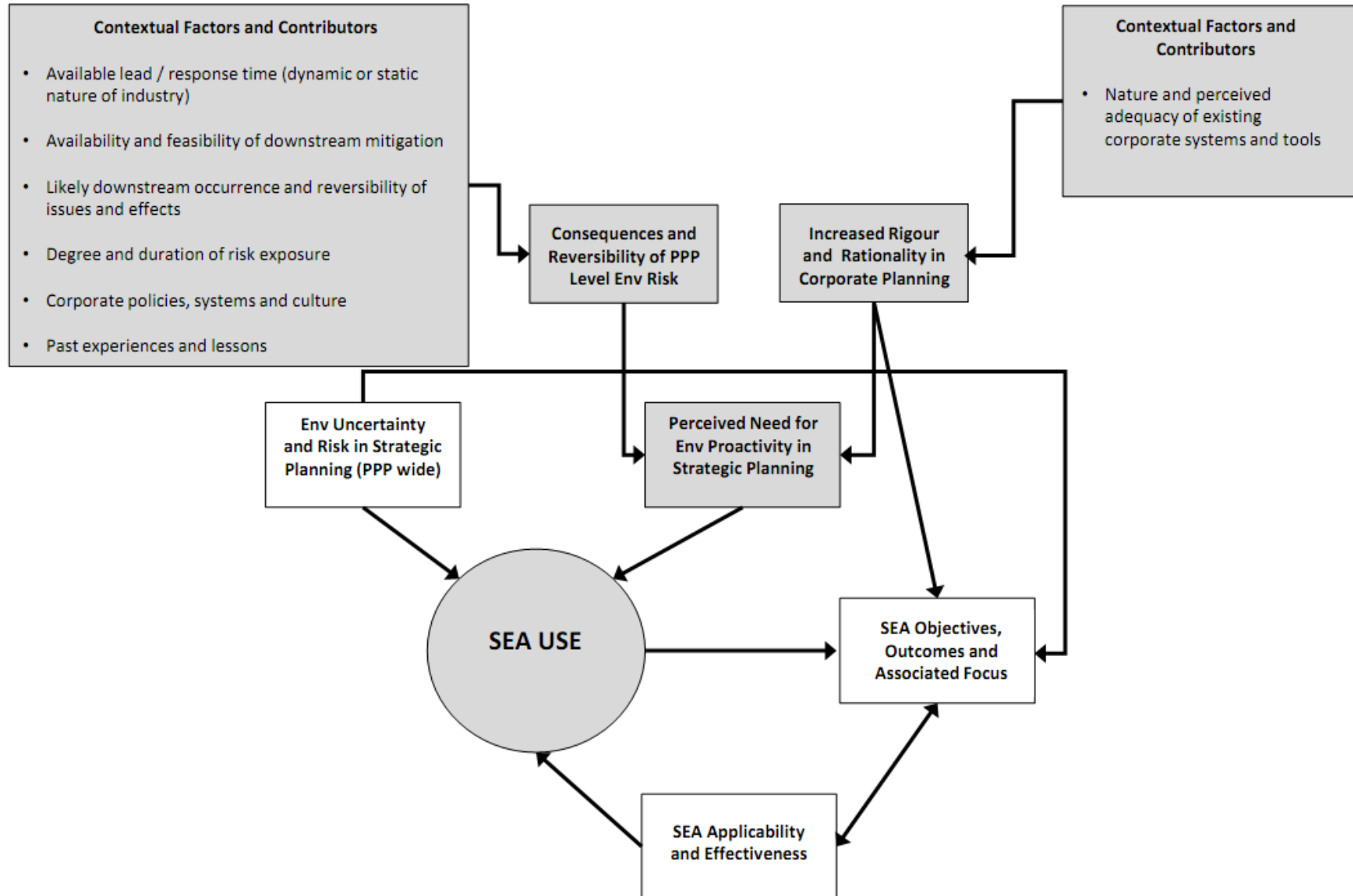
These perspectives and decisions are based on the following considerations (Figure 6.3):

- a) *Consequences and Reversibility of PPP Level Environmental Risk*: The potential implications of carrying important yet unanticipated or unresolved environmental issues and risk into PPP decisions and their implementation, including whether and how these can be effectively managed (avoided or reduced) or even reversed at the more downstream stages of planning or implementation. In some cases these were again found to be derived from and influenced by particular contextual factors and other contributors (Section 6.3.1, Figure 6.3); and a

- b) *Desire for Increased Rigour and Rationality in Corporate Planning*: An apparent tendency by some corporations to attempt to address environmental uncertainty and risk at the strategic planning level (and their associated discomfort with same) by seeking to increase the levels or rigour and documentation associated with their existing, internal processes in identifying and understanding environmental issues (Section 6.3.2, Figure 6.3).

Each of the above referenced issues is discussed in an individual subsection below.

Figure 6.3 Perceived Need for Environmental Proactivity in Corporate Strategic Planning and its Origins and Influence in SEA Decisions



6.3.1 Consequences and Reversibility of PPP Level Environmental Risk

An important and influential consideration that drives corporate interest in proactively addressing environmental uncertainty and risk through SEA is an overall recognition that PPP decisions represent significant and fundamental decisions that direct the company's activities, which are often difficult to reverse and backtrack from once they are selected and being implemented. It was widely recognized amongst participants in this study that any significant, PPP-wide environmental issues could therefore have important negative consequences for the company as a whole. This is certainly well in keeping with the theoretical rationale for SEA as reflected in the literature since its inception (e.g., Wood and Dejeddour 1992; Therivel et al 1992), in which its overall purpose is to assess and manage environmental issues early in strategic planning, before fundamental and often irrevocable decisions are made and implemented. At that stage of strategic planning, and particularly where there are multiple, diverse options available (as discussed previously), it was noted that a corporation is often required to evaluate and select from between alternative courses of action for which environmental issues and risks are not clear and are often variable, and for which is therefore often no single and obvious best option. In this study, respondents that accepted SEA were clearly mindful of the stakes involved in corporate PPP decisions, and the implications and possible negative consequences of going down the wrong path and encountering important and unexpected environmental issues which may have material, negative effects upon the corporation and its activities. In cases where SEA was accepted, there was therefore a clear consideration of this potentially significant and PPP wide risk, and the overall "consequences of being wrong", which is a source of considerable apprehension and discomfort that can give rise to SEA acceptance.

Even in cases where there are recognized environmental issues and acknowledged uncertainty about these, corporate characteristics, planning situations and other contextual factors can also temper associated views about the need for SEA. This includes situations where a corporation feels that in their industry and jurisdiction things tend to happen or change relatively slowly, such that any unforeseen issues would become evident well in advance, giving adequate time to address them at the

later stages of planning and implementation. Corporate perspectives about whether and to what degree any such environmental issues can likely be reacted to and managed, or even reversed, at later stages of planning or implementation are therefore influential in decisions about SEA acceptance or rejection, including the possibility of addressing these issues later through project design or even subsequent modifications that would not likely have material negative effects on the business. These situations and associated perspectives were again found to be very much corporation and context specific, including whether environmental issues would be manageable or reversible later for a particular type of business and its activities, as well as in certain market settings which determine the nature and duration of the company's attachments to particular assets, and thus, its exposure to their associated environmental issues and risk.

The literature on corporate environmental proactivity also suggests that prior experiences and lessons regarding environmental issues and their management can also influence corporate behaviours in that regard (Aguilera-Caracuel et al 2012; Singh et al 2014), and a number of these issues were likewise found to be an important influence in corporate decisions about SEA use. In some cases, SEA rejection may occur at least in part due to previous, negative experiences with the use of such tools and associated concerns about their effectiveness (Section 6.5), or more generally with the observed lack of influence or even negative outcomes of having undertaken early analysis and consideration of environmental issues in strategic planning. In other cases, however, past experiences and observed positive outcomes from environmental planning and EA processes, or from having seen the negative outcomes of not identifying and considering environmental issues early in planning in other situations and companies, may reinforce the need for and benefits of having an earlier and more comprehensive approach through SEA. Other influential factors in SEA use decisions include views about the compatibility of such a proactive planning and analytical approach with the corporation's overall systems and culture (Section 6.5.1), and in some cases SEA may be seen as a way to help a corporation implement statutory or perceived requirements for greater environmental analysis or public and stakeholder engagement or associated corporate policies and objective on these matters. Conversely, SEA rejection can also

occur where corporations do not see their previous and current planning processes and outputs as being deficient or environmentally problematic, such that an investment in SEA and the addition of additional review and analysis is not considered to be required or justified.

6.3.2 Increased Rigour and Rationality in Corporate Planning

Where corporations choose to adopt and apply SEA to address uncertainty and risk about future environmental issues at the strategic level, this is often linked to a perceived requirement to enhance and improve internal corporate procedures. Specifically, SEA is often viewed as a means of providing better environmental analysis and associated rigour and documentation, particularly where existing corporate processes are considered inadequate in that regard.

It has been suggested that SEA may help an organization to bring additional structure and efficiency to its planning processes (Acharibasam and Noble 2014), and past writings about corporate SEA use have likewise suggested that it can bring enhanced organization, rigour, discipline, documentation and defensibility to these processes, a trend which corporate governance structures in many industries are generally moving towards (Marshall and Fisher 2005). In this study it was evident that in cases where SEA was accepted, there was a perceived need and general desire for additional rigour, consistency and documentation in the identification and consideration of environmental issues and risks in corporate strategic planning, due to the perceived inadequacy of current approaches and systems. This includes a degree of discomfort with the general “environmental issues scan” undertaken as part of strategic planning by some companies, or in depending on general predictions and opinions from one or more personnel with regard to identifying and managing environmental issues and risk. This was therefore found to be a key driver of SEA acceptance, which may be seen as a way for the corporation to increase its internal capabilities to better identify, understand, communicate, discuss, document, consider and integrate environmental issues, requirements and associated tradeoffs in its internal processes.

The SEA literature has also repeatedly highlighted the tendency of EA processes, methods and outputs to reflect and support a rational approach to planning and decision-making (Kornov and Thissen 2000; Nilsson and Dalkmann 2001; Fischer 2003; Connelly and Richardson 2005; Wallington et al 2007; Elling 2009; Weston 2010; Jiliberto 2011; Tetlow and Hanusch 2012), with an associated emphasis on the generation and use of technical information and the presumption that this will have a positive influence on decisions and outcomes (Bina 2008; Tetlow and Hanusch 2012). A particularly important and interesting finding from this study is that in cases where there are recognized environmental issues and risks and a perceived need to address any associated uncertainty in planning an immediate and somewhat natural reaction for a corporation is to seek to increase the comprehensiveness and analytical rigour of the organization's planning process, and in doing so, the volume, quality and utility of the associated information that informs such decisions and thus the perceived rationality of same. In particular, the use of an analytical tool such as SEA is seen as a way to at least partially offset the internal discomfort associated with such uncertainty through stronger and more rigorous analytical processes, and in doing so, to make corporate planners and decision-makers more comfortable in such environments and confident that any important issues and risks have been identified and understood and that appropriate due diligence has therefore been carried out.

Beyond a purely technocratic approach to seeking to enhance the rationality of corporate strategic planning decisions by better understanding and addressing environmental issues through SEA, the findings of this study also suggest that corporate representatives typically recognize the inherently bounded nature of same. In particular, those that accepted SEA were often keenly aware that even with such a process, there would always be a degree of uncertainty and vagueness regarding environmental (and especially, social) issues and risks, particularly at the strategic planning level, and that corporate decisions must therefore often be made based on an incomplete knowledge and must consider non-technical, ill-defined and often subjective factors and criteria. Where these environmental and social issues are recognized as important and requiring consideration at the strategic level, SEA is therefore seen as a means of making such decisions look and feel more rational by

improving the internal (analytical and deliberative) processes through which they are achieved, and the associated achievement of an enhanced “procedural rationality”, as has been referenced in other contexts (Simon 1996, cited in Jiliberto 2002).

These issues also relate to considerations around the rationale for, and objectives and desired outcomes of, SEA adoption and use by a corporation (as discussed in the next section), and specifically, the particular reasons why a corporation might want to increase the rigour and perceived rationality of its planning and decision-making processes with respect to environmental matters. Weston (2010), for example, notes that the achievement of legitimacy in planning and decision-making may be sought and facilitated by the use of rigorous and systematic analytical methods in EA processes, and the demonstration of corporate environmental commitment leading to enhanced image and reputation has been suggested as a possible objective and outcome of corporate SEA use (Noble 2004b; Jay and Marshall 2005; Jay 2007; Marshall and Fischer 2005, 2006). This study did find that in a few cases, corporate representatives felt that a potential benefit of SEA use would be in demonstrating additional planning rigour and sophistication to regulatory agencies, which might help inspire further confidence that the corporation was taking a proactive and systematic approach to managing environmental issues. Although it was suggested that SEA adoption and use could therefore have the effect of increasing regulator and public confidence in the corporation and its decisions and actions, for the most part the achievement of additional analytical rigour in planning appeared to be far more about increasing internal confidence and comfort about planning processes and outcomes, as opposed to convincing or impressing external parties in that regard.

In a few other cases, respondents that accepted SEA in order to increase the analytical rigour and documentation associated with their corporate strategic planning processes noted that doing so is generally considered to be a positive and necessary thing that they appeared to naturally strive for. Some also felt that the industry overall was generally moving towards such approaches, and so while SEA itself may not have been considered an institutional norm which a company may feel pressured to adopt and implement due to societal pressures and the possible negative repercussions of not

doing so (Paulraj 2009; Liu et al 2010; Tatoglu et al 2014), this did suggest a degree of mimetic or normative isomorphism in which companies may tend to lean towards environmental practices that are being used successfully by others or which are viewed as becoming standard (Lannelongue et al 2014; Singh et al 2015).

6.4 SEA Objectives, Outcomes and Associated Focus

In situations where there is recognized environmental uncertainty and risk associated with a corporation's strategic planning and eventual business activities and a perceived need and desire to better identify, understand and address these through SEA acceptance and use, the study's findings also indicate that there may be a number of rationales and desired outcomes for a corporation attempting to do so at the strategic level, and thus, a number of associated objectives and areas of focus for SEA use in that context.

The SEA literature has continuously stated that the overall purpose and primary benefit of SEA is in identifying the potential environmental consequences of proposed and alternative strategic initiatives, in order to attempt to proactively manage these issues through appropriate planning, and in doing so, to prevent or reduce their occurrence at later stages of planning and implementation (Lee and Walsh 1992; Wood and Dejeddour 1992; Therivel and Partidario 1996; Noble 2000; Noble and Storey 2001). In keeping with that rationale, and as described in the preceding sections, a key driver for SEA interest and acceptance by corporate representatives is a perceived need to assess and evaluate potential environmental issues and risks in an earlier and more comprehensive manner. At the same time, however, and likely due to the business context for this research, interviewees typically also recognized that companies would be somewhat constrained in their ability to consider and manage environmental issues in their overall strategic planning processes. In particular, it was acknowledged that environmental concerns would often have a relatively low weighting and level of consideration in the selection and implementation of a particular PPP, given that technical and economic factors (including those associated with achieving environmental regulatory compliance) and other such priorities would almost always "trump" any other such factors at that level

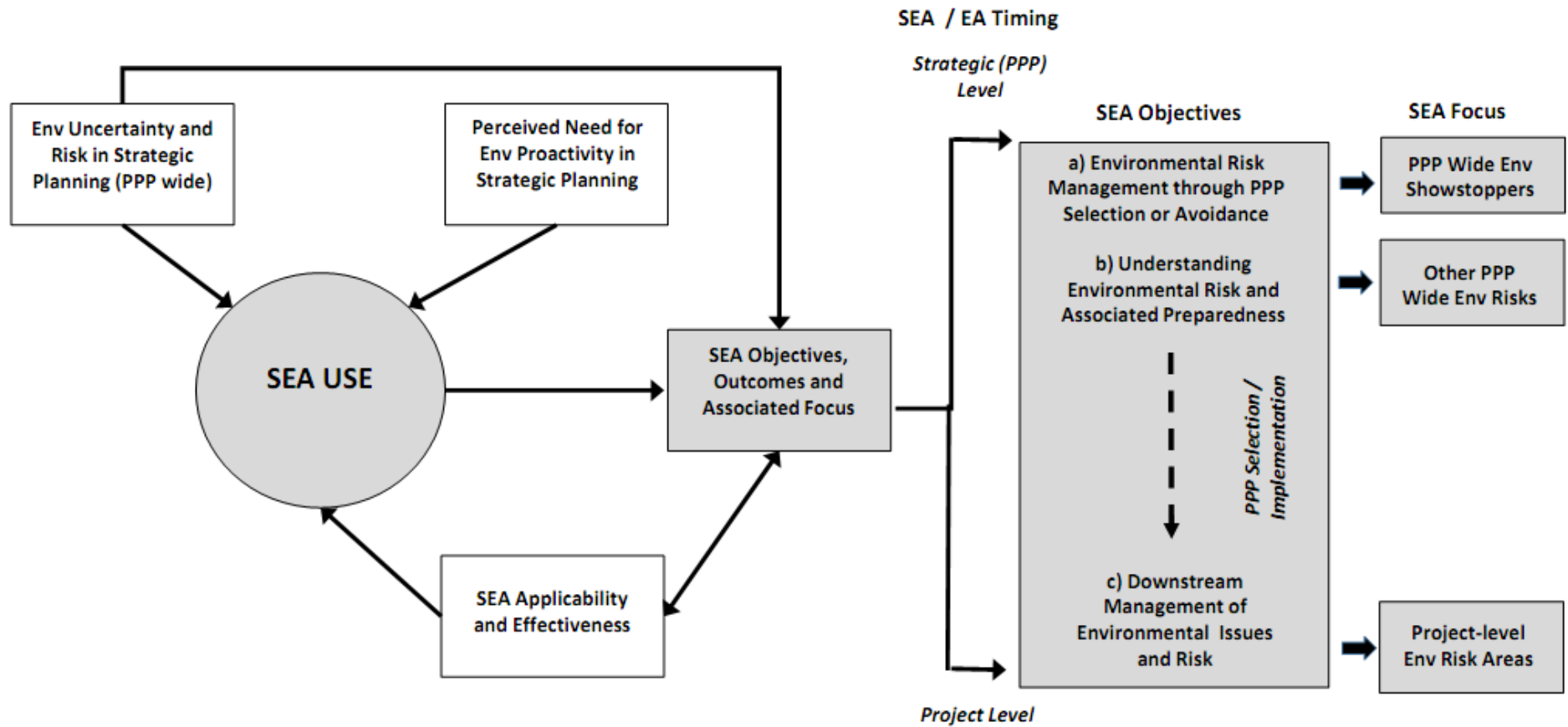
of planning. These would therefore be the main factors that would affect and differentiate the overall feasibility, costs and attractiveness of various PPP options, and therefore influence planning decisions. In some cases, this results in SEA being rejected outright as an unnecessary and likely non-influential waste of time and resources within the organization, as do concerns about the perceived stand alone nature of SEA which may be considered to limit its applicability and utility given an inability to consider environmental issues separately from or to a greater degree than these other factors. Those that accepted SEA, however, also often did so with related views about its resulting rationale, focus and desired outcomes and benefits.

As discussed in each of the individual sub-sections that follow, these perspectives translate into a number of different potential objectives, timings and planned areas of focus for SEA application, including (Figure 6.4):

- a) *Environmental Risk Management through PPP Selection or Avoidance*: The planned management (avoidance or reduction) of certain types and levels of environmental risks in strategic planning (PPP selection) through SEA use. This also includes associated considerations related to the potential and desired business benefits and other outcomes that may be associated with addressing environmental risk at the strategic level through SEA (Section 6.4.1);
- b) *Understanding Environmental Risk and Associated Preparedness*: In some cases, an emphasis on using SEA as a means of providing a better understanding and increased comfort around environmental issues and risk as the company makes its strategic planning decisions and proceeds into their eventual implementation, as opposed to a specific desire to purposively manage these at the strategic level through PPP selection (Section 6.4.2); and

- c) *Downstream Management of Environmental Issues and Risk*: Associated decisions about the particular stage(s) of the planning process at which SEA would be applied, and particularly, at what level of planning (PPP or pre-project) certain types and levels environmental issues and risks would be addressed (Section 6.4.3).

Figure 6.4 SEA Objectives, Outcomes and the Associated Focus of its Application in a Corporate Context



6.4.1 Environmental Risk Management through PPP Selection or Avoidance

As noted above, one of the potential objectives and desired outcomes of SEA use by a corporation relates to the planned management (avoidance or reduction) of specific environmental risks in strategic planning through PPP selection or avoidance, as well as the potential and desired business benefits of doing so.

6.4.1.1 Key Environmental Risks and Associated Areas of SEA Focus

Corporate representatives often have very specific views about the particular types and levels of environmental risk that should be addressed in strategic planning through SEA. Indeed, it was often stated by interviewees that any corporate use of such a process would have to allow considerable flexibility to identify and focus on a select number of important environmental considerations at that level, with the ability to screen out those that are less relevant to that stage of planning. For corporations that accept SEA, the primary or sole focus is therefore primarily on identifying and addressing those issues and risks that would likely have overall, adverse implications for the viability and cost of a PPP and its implementation.

As a result, other than achieving and maintaining environmental regulatory compliance (for which SEA is often not seen as necessary or beneficial for the reasons described earlier), a primary focus of planning and associated SEA use would be on identifying and steering PPP selection away from any key areas of environmental risk, particularly any likely “showstoppers” that if unanticipated and unresolved would have significant adverse implications for the corporation. These include, for example, any important and overall (PPP wide and cumulative) environmental issues such as developments within or near protected or other environmentally important locations, likely effects upon species at risk and their habitats, large scale alterations of wetlands or other sensitive areas, and other issues that may trigger significant, eventual governmental or stakeholder interest. These involve issues that could have implications for overall PPP feasibility and costs, such as any which may affect the likelihood of receiving the necessary environmental approvals or investor funding for PPP implementation.

A related and notable finding relates to an apparent desire of corporate representatives to apply SEA at a fairly early stage of their strategic planning, through the identification and evaluation of alternative PPPs and the consideration of environmental issues in the eventual selection and implementation of a preferred strategic initiative. This is in stark contrast to the observations and criticisms reported in much of the SEA literature, where the identification and consideration of alternatives is often limited or non-existent in SEA practice (Kis Madrid et al 2011; McCluskey and Joao 2011; Du et al 2012; Fidler and Noble 2012; Geißler 2013; Malvestio and Montano 2013; White and Noble 2013b; Bidstrup and Hansen 2014; De Montis 2014; Lobos and Partidario 2014; Mota et al 2014; Silva et al 2014), and where SEA is therefore often applied as a relatively late stage assessment of a single proposed PPP. As discussed earlier, the voluntary use of SEA by a corporation appears to be a situation where it is viewed and used more as a useful and legitimate planning tool, as opposed to situations where SEA is being undertaken pursuant to a statutory requirement to do so, and where eventual PPP approval is being sought. In that way, corporate SEA use is aimed at the early identification and evaluation of broad PPP options in order to seek to reduce or avoid environmental issues and risk, and in doing so, to avoid or minimize these and any associated negative consequences for the corporation during eventual PPP implementation.

That being the case, however, the relatively low weighting of many types of environmental issues in corporate strategic planning and a resulting inability to consider and address any but the most significant of these at that stage also results in SEA typically not being viewed and used as a process for contributing to the early and fundamental stages of PPP formulation. In this study there was, for example, no reference made by interviewees to the use of SEA in helping to define overall planning objectives, goals and principles, as has been alluded to in some of the more theoretical SEA literature (Kornov 1997; Brown and Therivel 2000; Noble 2000; Nilsson and Dalkmann 2001; Nitz and Brown 2001; Chaker et al 2006; Bina 2007; Tetlow and Hanush 2012). Therefore, even where accepted, SEA use by corporations appears to be based primarily upon an instrumental rationality (Fischer 2003), where SEA is applied in evaluating PPP options based on previously and externally defined objectives rather than it contributing to these (Jackson and Illsley 2007).

There was also little or no evidence that SEA is considered to be an exercise that would contribute to and inform the development and refinement of particular PPP options on the basis of environmental considerations (Noble 2000; Joao 2005a, 2005b; Therivel 2010; Gonzalez et al 2015). Rather, it was again seen primarily as means of looking at the range of identified technically and economically feasible PPP alternatives and to help address associated environmental uncertainty and risk by identifying and thus completely avoiding those options that had significant, pervasive and potentially showstopping environmental problems. In that way, SEA would help in proactively steering a corporation's plans and activities away from such pathways to prevent their occurrence and negative consequences. The results of this study also indicate that corporations may likewise wish to increase the level of environmental analysis at the strategic level in order to more fully investigate whether particular PPP options are indeed environmentally problematic, as opposed to prematurely dismissing technically and economically attractive options simply on the basis of potential issues and fears that are identified internally without proper evidence and analysis. In each instance, SEA is largely considered as an extension and enhancement of the high level and often general "environmental scan" that is often undertaken by corporations, but with additional analytical rigour and documentation being completed as part of that exercise, as discussed in Section 6.3.2. Over and above an early identification and overall avoidance of any PPP options with significant environmental problems and associated fatal flaws, corporations therefore typically do not view SEA as a tool for the identification and management of all types and levels of environmental considerations in strategic planning, or for contributing to the design and refinement of particular PPP options on the basis of these and as part of such an exercise.

This is further reinforced by the fact that with the exception of an overall avoidance of environmentally problematic PPP options and their negative consequences, there was very limited reference to the early management of particular environmental issues that may eventually become evident at the project level, and thus to the associated downstream benefits of SEA. Although the potential "trickling down" of environmental sustainability from an improved PPP down through subsequent decisions and actions has long been noted as the primary rationale for and objective of SEA (Therivel and

Partidario 1996), there is again little evidence that corporations view this as a potential occurrence or benefit of SEA use, or at least, that this is at all influential in their decisions about it. Rather, interviewees in this study often saw the various stages of their planning processes, and the management of environmental issues within them, as somewhat separate and distinct exercises, based on an overall avoidance of significant environmental issues in PPP selection at the strategic level and a subsequent and separate mitigation of particular environmental concerns at the implementation (project) stage. The only apparent exception to this is with regard to certain types and levels of social concerns that would be evident and important at the PPP level and are considered likely to make their way down to and negatively affect project implementation. In some cases this can lead corporations to opt to attempt to proactively manage these at the PPP level through SEA consultation and its associated stakeholder learning and transformative outcomes (Section 6.6.2).

Similarly, corporate representatives did not appear to consider that the earlier management of particular environmental issues through SEA would or could result in the avoidance (Wood and Dejedour 1992) or streamlining and focusing (Lee and Walsh 1992; Wood and Dejedour 1992; Ortolano and Shepherd 1995; Fischer 1999; Stinchcombe and Gibson 2001; Nooteboom 2000; Dalal-Clayton and Sadler 2005) of subsequent EA requirements, particularly at the project level. Although this has also been noted as a potential outcome of and benefit from corporate SEA as well (Noble 2004b; Jay and Marshall 2005; Jay 2007; Stoeglehner et al 2010), there was little indication that interviewees viewed this as a key advantage of SEA, nor that it was influential in their acceptance of it. This lends further support to the conclusion that corporations do not see the management of certain environmental issues at the PPP level as trickling down to, and necessarily making things easier at, the project level, and particularly not to the extent that subsequent regulatory reviews would be avoided or lessened.

6.4.1.2 The Perceived Business Benefits of SEA Adoption and Use

It has been suggested that in a business context, a decision to adopt and apply SEA is unlikely to be based purely on a corporation's environmental principles and goals, but rather will need to be based on wider business interests and objectives, including a recognition and understanding of the possible business benefits of SEA use (Jay 2007). These ideas are also supported in the literature on corporate environmental governance, including existing theory and previous research which indicates that decisions about the proactive and voluntary application of environmental measures is typically linked to there being a perceived (whether direct and immediate, or indirect and longer term) benefit in managing environmental issues and stakeholder concerns (see Section 3.2).

In this study, participants continually made reference to considering the potential "value add" of SEA use in helping the company to meet its objectives, and particularly the likelihood that it would save the company time and money in the long run. Where SEA is accepted by a corporation, this typically includes an associated recognition that the early identification and proactive avoidance of significant and potentially irreversible environmental problems would potentially save the corporation time and money in the long run, particularly during eventual PPP implementation. Conversely, SEA may also be rejected where there are concerns that its use could unnecessarily slow down or otherwise constrain the company's activities, and therefore could therefore even have a negative financial effect on the corporation.

While there is therefore often a clear business imperative associated with corporate decisions to accept SEA, the results of the study indicate that (similar to the preceding discussion) this typically has far more to do with avoiding environmental issues and their adverse economic consequences for the company than obtaining an overall positive economic effect. The particular industry sector upon which this study has focussed may have contributed somewhat to this finding, in that many of the corporations represented in the sample operate in essentially non-competitive markets with full or partial monopolies. As discussed in Section 7.3, however, these various crown and

private sector regulated utilities are still motivated by their legislated mandates and associated responsibilities to their shareholders and regulators to minimize their development and operating costs and optimize their revenues, and so any recognized potential for positive business effects of SEA use may therefore be relevant and influential in these circumstances. In only one case, however, did an interviewee mention that early intelligence on environmental risks and their mitigation may provide a competitive advantage by allowing the company to manage these better than one's competitors. For the most part, SEA use was instead seen as being far more about understanding and preventing negative outcomes, as opposed to creating opportunities, advantages or net positive economic effects for the corporation. Although this may again have been due to relatively low number of representatives of firms that operate in a competitive market in the study, even amongst those types of companies the potential achievement of competitive advantage was a minor consideration, and the main focus was on concerns that the risks associated with SEA use may actually provide a competitive disadvantage. Therefore, where this issue was raised and considered, it primarily resulted in SEA being rejected as opposed to it being accepted for that reason.

The voluntary analysis, consideration and potential management of environmental issues and risk at the strategic level through SEA is therefore driven far more by a desire to prevent (through avoidance) significant negative economic consequences through PPP selection, as opposed to seeking economic benefits or advantages. This is again due to the relatively low weighting of environmental considerations (whether negative or positive) and their management at the strategic planning level, with the exception of preventing those that may have significant adverse consequences for the business overall.

6.4.2 Understanding Environmental Risk and Associated Preparedness

Although corporations that accept SEA may see it as means of identifying and better understanding key issues at the strategic planning stage, the objective and intent of this analysis is not always to necessarily attempt to proactively manage all or even any such

issues in PPP selection. In addition to the important and larger scale environmental and social issues described earlier as a key focus of SEA application, it was also found that corporate SEA use may also include consideration of other types and levels of issues. These are often recognized as important considerations for the corporation and its activities, which may not necessarily be large scale showstoppers that would affect overall PPP viability and costs, but may create risk and potentially have associated direct or indirect costs or other implications during eventual PPP implementation. In some such cases, SEA is recognized and accepted as a means of identifying and providing a better understanding of such issues for the corporation at the strategic planning level, especially given the lack of applicable regulation or defined standards and the resulting lack of clarity and certainty around these matters (Section 6.2), although there is again often a limited ability to manage these at the strategic level through PPP selection. In such cases, SEA may be viewed and used by a corporation as a means of providing analysis and information to address the previously described uncertainty and associated discomfort about such environmental issues at the strategic planning stage, rather than to directly and purposively try to prevent or otherwise mitigate these issues at the early stage of planning through PPP selection.

There is therefore an element of a “fear of the unknown” that can drive corporations towards adopting and applying a tool such as SEA, due to an inherent desire to identify and better understand environmental issues and risks during the development and selection of the company’s strategic plan, in order to alleviate the previously described situations of uncertainty, anxiety and internal discomfort about these. As described in Chapter 5, interviewees and focus group participants in this study noted a general trend that their industry was getting more and more uncertain and risky, where corporations now typically have to look at opportunities, risks and solutions from all sides and from many different sources. Many of the interviewees were therefore apparently coming into SEA discussions and decisions with an existing level of uncertainty, risk apprehension and an on-going search for ways and tools in which to get more informed and comfortable about their environmental risk. The previously described recognition of the large-scale and often irrevocable and irreversible nature of PPP decisions and any negative outcomes may lead some corporations to accept SEA as a relatively low cost

precautionary approach to identifying risk, and especially, for making decision-makers feel better about it and more comfortable with their decisions through additional analysis, information and rigour and thus, by making these more rational (as discussed previously in Section 6.3.2). It was also apparent that corporate representatives' past experiences and observations, including having seen things go wrong in other places and companies as a result of unanticipated and unresolved environmental issues and social concerns, may result in them having a natural inclination to want to better understand issues and become more comfortable with these risks at the PPP level, even if not entirely able or willing to address them at that time and stage of planning.

A key recognized benefit of SEA for some corporations is therefore also being able to move forward with decisions and their implementation with more information and knowledge about what issues and requirements the corporation might be facing as it progressed, which would be more "familiar territory" by the time of PPP and project implementation. These early insights are seen as a way in which the company can give itself more time to plan and arrange its eventual responses to these issues, thereby making it better prepared to understand and manage these as PPP implementation progresses. In such cases, SEA may also be viewed by a corporation as a means of providing information and intelligence to help it make early and more informed decisions about whether and when to seek to manage its identified environmental risk. This includes considering and deciding whether to attempt to mitigate these issues at the strategic planning stage, or whether and how far down in its planning, design and implementation stages to push these issues and their management, as discussed in the next section.

This finding is generally in keeping with the potential objective and outcome of SEA noted by Sheate et al (2003), who suggest that in addition to its potential direct effects on PPP decisions (Section 2.3.1), SEA can also provide general information to decision-makers about the presence and nature of, and the degree of uncertainty about, environmental issues and risks, as well as the level of consistency or variation in issues and perspectives on the PPP and its associated environmental concerns, and the overall sensitivity of the receiving environment. This is an important and valid yet very rarely

discussed and investigated SEA outcome and objective that was found to be applicable in a corporate setting, and particularly relevant to associated corporate decisions about the voluntary use of SEA in this context.

6.4.3 Downstream Management of Environmental Issues and Risk

Corporate strategic planning and decision-making represents an interesting and somewhat unique context for SEA use and for evaluating and contributing to theory. In contrast to other organizations and planning situations in which SEA has been or may be applied, a corporation is often involved in and responsible for a full continuum of development planning and decision-making that pertain to its activities, from corporate policies and objectives to strategic plans to the eventual selection, design and implementation of the individual projects and activities that result from these earlier strategic decisions. This is somewhat different from other contexts for SEA use, where an earlier PPP (such as a regional development plan) is often developed and/or approved by a public authority, which then sets the stage for the identification, proposal and eventual implementation of individual development projects and activities by proponents. As a result, a corporation may therefore have interest or involvement in, and a degree of responsibility for, identifying and addressing any environmental issues associated with its PPP, as these may create issues or risks for the corporation at the eventual implementation stage(s). At the same time, however, a company also has considerable discretion in deciding whether, when and how to assess and attempt to manage environmental issues at particular stages of its strategic planning and eventual PPP implementation, whether through SEA or otherwise.

Stoeglehner (2010) identifies several types and levels of alternatives that are relevant to EA, and which reflect the different stages of strategic and downstream planning at which they may be considered. These range from overall visions and objectives for a strategic initiative, to PPP options and associated technological choices, to locational alternatives for the eventual activities that are directed by the PPP, to design options for individual projects. For the reasons outlined above, these various stages and types of available alternatives, and their tiered presence in a linked and coordinated planning

context, is often particularly relevant in a corporate setting. There has, however, been no discussion or previous investigation of what factors influence an organization's decisions around where and when to apply SEA / EA approaches in such a context and the particular issues to address at each level, especially where the use of such tools is voluntary in nature.

In this study, it was apparent from the initial (background) interview questions that all of the represented corporations engaged in fairly structured and tiered strategic planning processes (e.g., high level 20 year plans, five year strategic plans, annual capital and operating plans, capital works programs, and multiple stage of project planning including options reviews and sanction and design decisions), and so there was a resulting ability to use SEA, as well as to be selective in terms of deciding at what level(s) of planning it would be applied and which environmental issues might be considered or managed at what stage. As discussed previously, SEA may be viewed and used as a means of making more informed decisions about issues that are to be addressed at later stages of planning or during PPP implementation, and particularly, for being better prepared to do so. In addition, where corporations accept SEA, their decisions about the particular planning stages at which they will apply it and/or when to manage particular environmental concerns is often driven by the specific nature of their industry and characteristics of their business. In some cases, contextual factors result in a corporation having limited strategic planning options or abilities, such that its planning is limited to evaluating project options and design decisions as opposed to being able to consider overall strategic directions for the company and its activities (Section 6.2). In other situations, environmental issues are recognized (or would be through SEA) but are not considered to be relevant to the overall PPP or able to be considered and addressed there due to other planning priorities (as discussed above) or a lack of clarity on these at the strategic level. In some such cases, corporations appear to be willing to defer such issues until the project stage, and thus address or even react to particular issues at the project EA level. The results of this study have also found, however, that in other cases corporations are interested in the application of SEA-like tools and analysis, but at a stage after PPP development and implementation but prior to an individual project being selected, defined, and put forward for EA review and permitting.

The rationales for and anticipated outcomes of such a “post PPP / SEA but pre Project EA” planning by corporations are very much in keeping with those identified and discussed for SEA in general. These include gaining an early understanding of key environmental issues and interests associated with a proposed development (through associated analysis and/or consultation) in order to seek to proactively address these in the early design stage, and prior to a project being identified, sanctioned and put forward for approval. This approach was found to be applicable and of interest to corporations where environmental issues and public interests were likely at the project level, where there were project options or design alternatives available that could be explored but would not have overall implications for technical feasibility or overall costs, and where there was a recognized potential that proactively addressing these would likely save time and costs in the long run during eventual project implementation.

Any associated stakeholder engagement (see Section 6.6) was also seen as potentially being more effective at that stage, as there would be something specific and concrete to discuss, thereby providing an opportunity to seek information and clarity on public concerns while at the same time informing and educating people about specific project rationales and requirements, as well as for gradually “easing” people into projects through information and dialogue (from the general to the more specific), before details are finalized and the project is formally proposed and announced. There is also evidence that some corporations see this later stage approach to consultation as being not only more effective and beneficial, but also allowing the company to increase its overall stakeholder engagement activities and bolster its image, while at the same time not inviting third party involvement in its overall strategic planning processes and decisions.

In summary, therefore, where corporations see environmental uncertainty and risk as being primarily related to issues that are necessarily relevant to or manageable at the PPP decision level (for technical or economic reasons or otherwise), there is a tendency to defer these to lower stages of planning and implementation. However, uncertainty about these, concerns about their possible implications for project costs and schedule if unresolved, and a perceived ability to address them proactively (prior to formal project decisions and EA reviews) through feasible design decisions, can lead a

corporation to voluntarily decide to apply SEA like approaches to that later stage of planning, but at a pre-project stage.

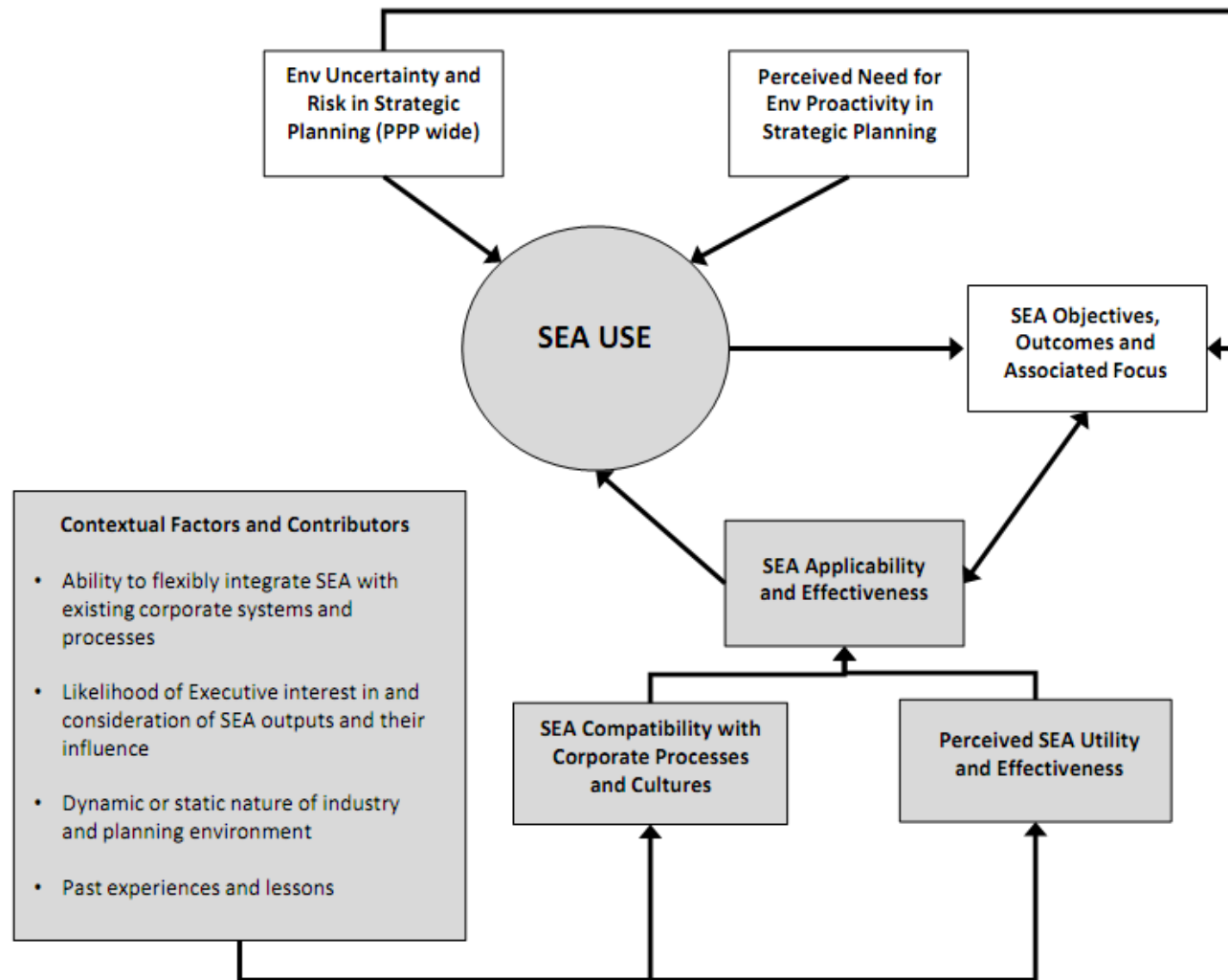
6.5 SEA Applicability and Effectiveness

In cases where there is perceived environmental uncertainty and risk and a recognized need and desire to attempt to understand and potentially manage these in corporate strategic planning (for whatever rationale and purpose), corporate decisions and perspectives around potential SEA use then move to considerations about the overall applicability and likely effectiveness of its application in that regard. This includes the following (Figure 6.5):

- a) *SEA Compatibility with Corporate Processes and Cultures*: SEA's overall applicability and compatibility with the corporation's planning processes, systems and overall cultures (Section 6.5.1); and
- b) *Perceived SEA Utility and Effectiveness*: The perceived ability of SEA to achieve the specific objectives and desired outcomes of its adoption and application by a corporation (Section 6.5.2).

In some cases these were again found to be derived from and influenced by particular corporate characteristics and other contextual factors (Figure 6.5).

Figure 6.5 Perceptions of SEA Applicability and Effectiveness and their Origins and Influence in SEA Decisions



6.5.1 SEA Compatibility with Corporate Processes and Cultures

In terms of overall SEA applicability, all of the corporations represented in the sample reported having existing, structured and comprehensive strategic planning processes, with specific PPP outputs that could be subject to SEA as required and desired. Many of the procedural impediments to SEA use resulting from the at times fragmented or ad hoc nature of strategic planning that are referenced in the literature (Jay 2007; Bina 2007; Wallington et al 2007; Wallgren et al 2011; Lobos and Partidario 2014) were therefore not found to be relevant or influential here. There was little or no evidence of SEA rejection because of a perceived lack of applicability to the nature and structure of a corporation's planning processes overall, which as indicated previously was considered and addressed in overall study design and sample selection.

The only related, negative issues and considerations that were seen to be influential in that regard and to contribute to a rejection of SEA pertained to concerns about the perceived separate, inflexible and "stand alone" nature of the process. This can lead to concerns about a possible requirement to create an entirely new process to accommodate SEA, as opposed to it being part of and adapted into existing systems (as noted by Jay and Marshall 2005; Marshall and Fischer 2005; Wallgren et al 2011; Roura and Hemmings 2011; McGimpsey and Morgan 2013), as well as SEA being considered to be a somewhat rigid and inflexible process that would have difficulty fitting into current corporate systems (Nilsson and Dalkmann 2001; Retief 2007a; Jay 2010; Roura and Hemmings 2011). This can lead to associated concerns about SEA's applicability and utility, including corporate perspectives that environmental considerations cannot be considered separately from, or be perceived to be more important than, other planning considerations. Also relevant are corporate concerns about the potential for SEA analysis to artificially inflate environmental concerns within the organization, and therefore inappropriately and unnecessarily restrict the company's activities and have resulting negative effects. These findings further reflect corporate perspectives about the relative importance and weighting of environmental issues in corporate planning, and the perceived need to ensure that these have an appropriate level of consideration in and influence on decision-making. Other related concerns that may result in SEA

rejection include views that any SEA outputs are not likely to be read or considered by decision-makers, leading to conclusions that an investment in SEA use might not be worth it given its likely limited influence on corporate decision-making at the strategic level. On the other hand, a perceived compatibility of SEA with overall organizational processes, cultures and values (Marshall and Fischer 2005) is also an influential, positive driver towards corporate acceptance of SEA use.

Although it has been suggested that corporations may have concerns about the possible negative effects of SEA use on corporate image due to the identification and documentation of environmental issues and problems (Jay 2007), there was also no evidence of this in this study, or especially, that it is in any way a concern that leads to SEA rejection. Rather, there appeared to be an overall environmental awareness within the represented corporations, where it was recognized and acknowledged that there are often environmental concerns and considerations associated with projects and activities in the electricity sector, and that given the overall nature and visibility of the industry these were essentially no secret. There was therefore no indication of concerns that SEA would have the effect of exposing these issues, or of subjecting the corporation to greater risks through potential liabilities or negative effects on its public reputation. In deciding whether and how to engage with stakeholders as part of any such SEA exercise (Section 6.6), corporate concerns appear to be less about exposing new and previously unknown environmental issues and generating public concerns and opposition as a result, but rather, that SEA use might create expectations of environmental objectives and planning abilities that the corporation would not be able to achieve and would therefore have to manage. These includes possibly signalling to regulators or others that the company may be able to adopt and implement beyond compliance environmental protection measures, or PPP options that may not be feasible or preferred. There are also perceived risks associated with providing opponents with more information and time to mount an attack on the corporation's activities as well as the potential for greater misunderstanding and other issues given the relatively early and often vague nature of strategic planning (see Section 6.6), as opposed to concerns about creating or highlighting particular environmental problems.

The potential costs, time and resources that may be required to undertake SEA have also been suggested as important considerations in decisions about its use, particularly in a voluntary capacity (Stinchcombe and Gibson 2001; McGimpsey and Morgan 2013) including in a corporate context (Marshall and Fischer 2005; Jay 2007). Although time and money and associated cost-benefit considerations regarding SEA use were repeatedly raised by corporate representatives in this study, there was no indication that any firm would not have the financial means or access to the technical competencies to implement an SEA approach if it chose to do so, nor that this was an important driver in decisions about whether and how to adopt and apply it. The most common consideration in that regard was that in cases where the need for and potential benefits of SEA were considered to be low due to a perceived lack of environmental issues and risks by a corporation, the possible costs and resources associated with SEA adoption may not be considered to be worth the investment in it. Also influential are concerns about the likely resilience and shelf life of SEA analysis and information (in keeping with Jay 2007 and Wallgren et al 2011) and thus the likely time and costs involved with having to repeatedly and regularly re-do or update SEAs to address new issues and situations in an often dynamic planning environment.

Other contextual factors and corporate characteristics have also been referenced in the literature as influencing corporate environmental strategy, including the proactive and voluntary implementation of environmental measures, including firm size, industrial sector, technical and financial capacity and others (see Section 3.3). Although this research did not attempt to specifically identify and test for relationships between these factors and SEA decisions, and even to a degree attempted to control for their influence through, for example, its focus on firms with a single industry, most of these factors were not directly influential in corporate SEA decisions. Compared to other, more downstream environmental measures and operational mitigations, the relative costs, technical capabilities and other resources required to implement SEA would be relatively minimal, and as discussed above no firms rejected SEA because of a lack of technical or financial ability to do so. The most apparent contextual influences on corporate SEA decisions include those identified and described elsewhere in this chapter, including cases where the specific nature of the corporation and its business

activities affected the recognized presence and degree of environmental issues, uncertainty and risks, the availability of planning options and their variability, the likely magnitude and duration of any environmental risk exposure, and the potential consequences and reversibility of these during PPP implementation.

6.5.2 Perceived SEA Utility and Effectiveness

Perhaps most fundamentally, in cases where there is an awareness and recognition of potentially important environmental issues and risk within a corporation and desire to better understand and potentially address these in strategic planning, decisions on SEA use are also very much influenced by perceptions about its likely ability to achieve these objectives and desired outcomes. In particular, SEA is typically rejected in situations where it is considered to provide limited utility in understanding and addressing environmental issues, risks and requirements due to their inherently unpredictable and dynamic nature at that stage of planning. This was found to be primarily the case for representatives of larger, investor-owned corporations operating in multiple, competitive markets, which were observed to generally have a lower level of interest in SEA due to stated concerns about the dynamic and often unpredictable nature of their planning environments.

This is a new and important finding that has not been demonstrated or discussed in the SEA literature to date, particularly with regard to its important influence on decisions about SEA use. In particular, the SEA literature appears to reflect or imply a fundamental and somewhat unquestioned belief in the utility and effectiveness of SEA, especially in terms of its substantive rationale of providing useful and sound information for use in planning and decision-making. The main areas of on-going discourse therefore pertain to whether the predominantly technical-rational focus of SEA should be replaced or supplemented with a more consultative approach and deliberative rationale (Bina et al 2011), as well as the timing of SEA application and the eventual use of its outputs in informing and influencing strategic and downstream planning decisions (see Section 2.2). The findings of this study suggest strongly that the utility of SEA and especially its associated predictive ability are often far from assumed amongst those that may

perceive a need for it and have an interest in its voluntary use, and that these perspectives and concerns are in turn quite influential in decisions about whether and how it might be adopted and applied. Respondents' views and decisions in that regard were again found to be particularly influenced by their past experiences with such tools and processes.

6.6 SEA Consultation

In addition to exploring corporation's decision-making about the possible adoption and use of SEA overall (particularly, as an internal and primarily analytical process), this study also investigated whether or not they might choose to conduct public and stakeholder consultation activities as part of any such SEA exercise. As described in Chapter 5, a majority of interviewees did not support SEA consultation or were unable or unwilling to state specifically and definitively that they would do so. Notwithstanding a general recognition of the rationale for and potential positive outcomes of such engagement, this is clearly the aspect of potential SEA use that is considered to be the most challenging and risky for corporations, as it would involve opening up their strategic planning to a degree of outside interests, input and scrutiny. Weighing the potential necessity and benefits of SEA consultation against its likely challenges and possible negative outcomes was a key part of most interviewees' decisions and perspectives on this matter, and the apparent unpredictability and risk associated with these factors again led many respondents to either reject or to be unsure about its use.

The subsections that follow discuss and evaluate the study's findings with respect to the main considerations in and determinants of corporate decisions about SEA consultation (Figure 6.6). These include issues related to:

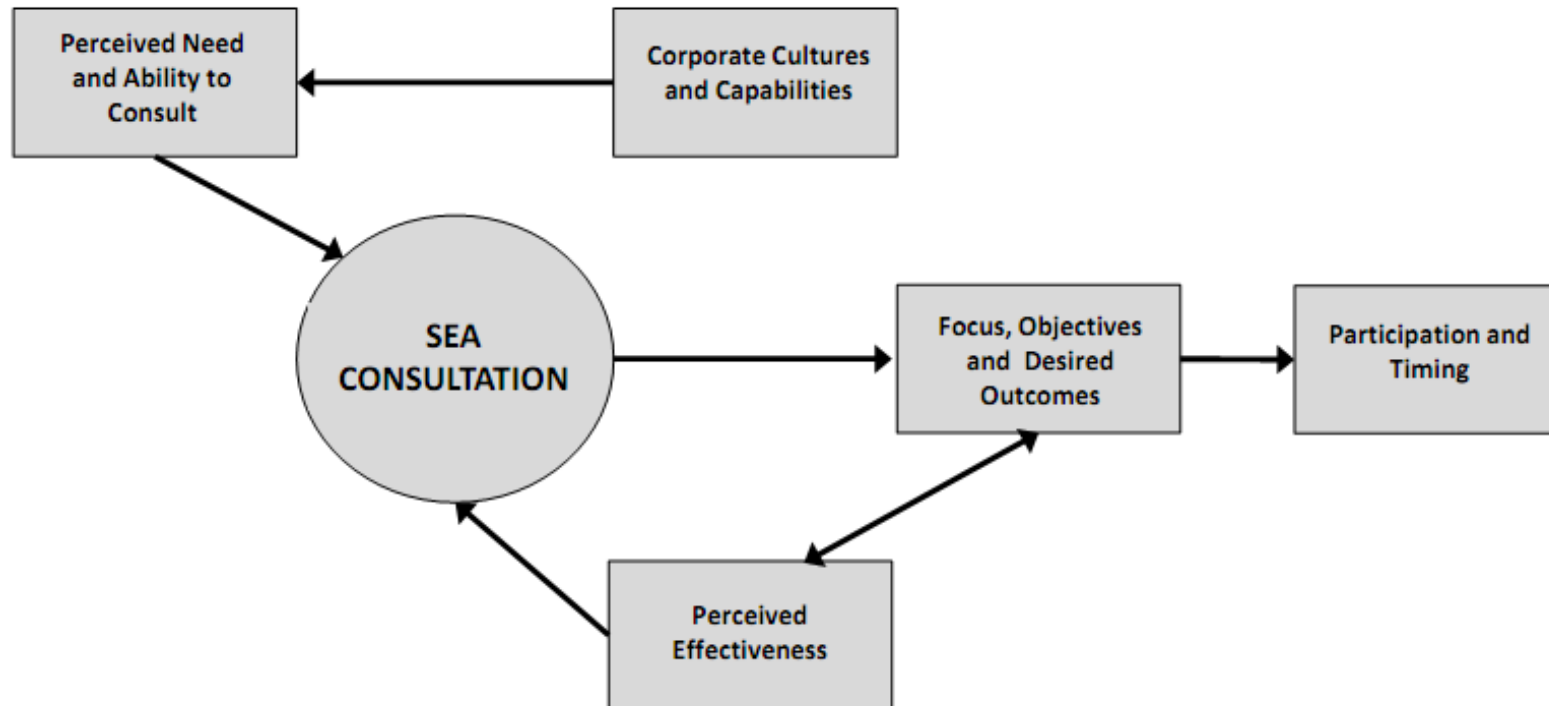
- a) *Perceived Need and Ability to Consult*: A corporation's views about whether they would have an ability to consult with stakeholders as part of their strategic business planning, as well as whether there is a perceived need to do so and the various challenges and risks associated with this (Section 6.6.1). Corporate

characteristics, culture, capabilities and other such factors are again particularly influential here;

- b) *Focus, Objectives and Desired Outcomes of SEA Consultation and the Perceived Effectiveness of SEA Consultation:* The objectives and desired outcomes of such engagement (Section 6.6.2), and its perceived likely effectiveness in that regard (Section 6.6.3); and

- c) *Participation in and Timing of SEA Consultation:* Where SEA consultation was accepted, perspectives and decisions about the particular groups that would be invited to participate in any such SEA consultations and the timing (stage of planning / PPP development) at which this would be carried out (Section 6.6.4).

Figure 6.6 Key Determinants of Corporate Decision-making about Potential SEA Consultation



6.6.1 Perceived Need and Ability to Consult

An overall inability to conduct public and stakeholder consultation in corporate strategic planning due to associated confidentiality concerns was one of the more frequently stated reasons for outright rejections of it. This issue has been referenced in the SEA literature in general (Partidario 1996; Therivel and Partidario 1996; Therivel and Brown 1999; Gauthier et al 2011) including for corporate SEA in particular (Jay 2007). As was the case for decisions about SEA use overall (Section 6.2), SEA consultation is also rejected where there are not considered to be any important environmental issues or societal concerns in relation to a company's activities, or where it does not perceive a need for additional insights on these through SEA or for increased public understanding of or support for the corporation and its activities. Corporate cultures and experiences are also particularly relevant in this regard. Whereas some interviewees noted that as regulated public utilities and crown corporations they were used to requirements for openness and transparency in their planning, development and operational activities, and to having these aspects of their business reviewed and scrutinized, others noted that utilities with market monopolies would be less likely to perceive a need to engage stakeholders in their strategic planning.

A number of important concerns about the challenges and potential risks associated with SEA consultation in a corporate context were also identified which in some instances lead or contribute to its rejection. These include a number of factors that have been referenced previously in the SEA literature, and which have been confirmed through this study as being recognized and influential in organizational decisions about whether and how such consultations are to be conducted in a corporate context. There may be, for example, concerns that PPPs and their potential environmental issues may be too general, intangible and distant to generate issues, interest or involvement (Nilsson and Dalkmann 2001; Kornov and Christensen 2007; Elling 2009; Fidler and Noble 2012; Van Doren et al 2013). The general literature on corporate environmental information disclosure also suggests that corporations may fear that voluntary environmental initiatives and associated information disclosure could lead to increased visibility and exposure, greater stakeholder concerns and risk of opposition (Liu et al

2010; Langpap 2015), which was found to be relevant in a corporate SEA context as well. Similar to concerns noted by Gouldson et al (2007) in their interviews with corporate representatives regarding stakeholder engagement regarding operational-level environmental risks, there were also identified concerns about: the potential time and costs required to undertake such consultations; the likelihood that only the most negative and vocal stakeholders would choose to participate and that their views and expectations would be unreasonable and not representative of society as a whole; the potential for issues to be raised that were not relevant to the company's actions and responsibilities; the difficulty of conveying complex technical information and the associated potential for information and issues to be misunderstood or misrepresented; and the potential for matters of disagreement and conflict to actually be increased through such processes or later if negative effects actually did occur following such engagement and the resulting establishment of trust.

In addition, a number of new issues and perceived risks regarding stakeholder consultation activities were identified through this study and were found to be influential in such decisions, which are likely relevant to such engagement at the strategic planning level in particular. These included the potential for early consultation to result in higher degrees of misunderstanding, inflated concerns and increased opposition than might otherwise be the case due to the relative vagueness of discussions and decisions at the PPP stage, as well as for early engagement through SEA to provide more time and information for opponents to prepare and mount an attack on the corporation's eventual activities. SEA consultation was also rejected where PPP wide issues were considered to be so variable between groups, locations and over time that these could not likely be understood or managed at that level through SEA. There were also recurring concerns about the potential for such consultation to slow down the corporation's planning and overall business activities, and especially, for limiting or otherwise affecting a corporation's overall strategic options and planning abilities. This included concerns about creating early and unrealistic expectations and entrenched positions amongst stakeholders on strategic planning options and on the degree to which their input can and should influence eventual decisions, and the resulting need to clarify these matters at the onset of any consultations. Also, while on the one hand

there were perceived benefits of increasing the openness and transparency of the planning process to help reduce political or other influences, there were also concerns that SEA findings and outcomes might not be aligned with corporate or government strategic objectives and policies, which would then be difficult to ignore at the decision-making and implementation stages due to such an open planning process.

Therefore, even where SEA consultation may be possible and of interest to a corporation, the challenges, risks and overall unpredictable nature of such stakeholder involvement and thus the degree to which it may address or increase opposition and enable or restrict the company's activities are key drivers in corporate decisions about it and its use at the strategic planning stage. Whereas a recognition and consideration of these potential challenges and risks very often results in SEA consultation being rejected by corporations, in other cases perspectives about the possible need, benefits and likely effectiveness of such early engagement and the corporation's ability to do so may serve to override these concerns and lead some to accept it, as discussed in the next section.

6.6.2 Focus, Objectives and Desired Outcomes of SEA Consultation

As discussed in Section 6.4, the study has found that social issues and interests are typically seen as a primary focus of any SEA use by corporations, given that these are often a key source of perceived risk for corporations that leads to its acceptance. The purpose and objectives of SEA consultation for corporations that accept it may range from an overall desire to better understand these matters through an associated gathering of intelligence on social concerns and expectations, to gauging the likely social acceptability of various PPP options (particularly where there is a lack of relevant standards, and where the corporation's current processes are considered inadequate in that regard), to using this information to more directly and purposefully manage social issues and concerns in the planning process. These objectives and approaches have been generally alluded to in the SEA literature (Noble 2004b; Marshall and Fischer 2005; Banhalmi-Zakar and Larsen 2014), although there has been comparatively little

consideration of what factors influence whether this takes the form of a general issues scoping exercise or a more directed issues and stakeholder management approach.

Notwithstanding these various potential objectives for and outcomes of SEA consultation, corporations that accept it will typically do so with a view to managing, rather than merely understanding or avoiding, such issues in their strategic planning. Indeed, the potential and recognized risks and negative outcomes associated with voluntarily opening up one's strategic planning to public input and scrutiny means that in choosing to do so, a corporation will have to perceive a greater need for, and anticipate greater returns from, SEA consultation than simply the gathering of intelligence. The study's findings therefore indicate that where there are important public interests and preferences that are not necessarily aligned with corporate objectives and planning requirements and realities, and where SEA consultation is considered possible and beneficial, it may be accepted as a means of more actively and proactively managing public concerns and expectations, in order to attempt to address and reconcile these with the corporation's objectives rather than just avoid or understand PPP options that may be unpopular.

The potential learning and transformative effects of SEA consultation (Stinchcombe and Gibson 2001; Jay and Marshall 2005; Marshall and Fischer 2006; Jay 2007; Wallington et al 2007; Tetlow and Hanusch 2012) were therefore clearly and repeatedly identified as a primary reason for, and desired outcomes and benefit of, its use amongst those corporate representatives that accepted it. The study therefore confirms that in addition to being a theoretical objective and at times observed outcome of SEA, deliberative approaches to SEA and their possible learning effects are recognized by and of interest to many potential SEA users, and are very influential in organizational decisions about whether and how such consultation will occur in a voluntary capacity. For most corporate representatives that stated that they would accept or support the use of SEA consultation, the objective of doing so was clearly to attempt to educate consultees and transform their views, in order to increase the degree to which the corporation's PPP and eventual activities were perceived to be appropriate and acceptable. Generating and maintaining legitimacy is considered to be one of the most

important objectives and outcomes of EA consultation (Lawrence 2003; Petts 2003), including in SEA (Elling 2009; Jiliberto 2011), and the management of social issues and risks through an SEA related learning and transformative process was seen as a primary goal for those corporations that accepted it. In particular, it was hoped that this increased understanding would lead to enhanced public support (or at least, non-opposition) for the PPP and/or its eventual implementation, and in some case that this support could be leveraged to help convince other parties whose approval of the PPP is directly required such as relevant regulatory bodies.

The legitimacy theory literature and associated research (Chapter 3) also indicate that organizations may adopt a number of possible strategies in seeking to increase the perceived legitimacy of their activities. These range from planning or altering their activities to ensure adherence to societal expectations, attempting to alter society's definitions of legitimacy to better conform to its objectives or practices, to attempting to become identified with symbols or institutions that are perceived to be legitimate (Dowling and Pfeffer 1975). This study found very little evidence of the former approach, in that in only a very few instances did corporate representatives indicate that an objective of SEA consultation would be to learn from consultees and to alter their plans to address these findings. In a limited number of cases this involved possibly consulting with local residents about any potential but currently unknown environmental problems that could eventually pose risks (and possible embarrassment) to the company, and to a more limited degree, a view that stakeholders could help in identifying new options or in solving planning problems. Any such SEA related learning on the part of the proponent was again seen to be primarily about obtaining additional clarity on the nature of associated public interests, concerns and expectations (thus addressing state uncertainty), and the likely social acceptability of (and thus likely public reactions to) different planning options and outcomes (effect uncertainty). In such cases, this also appeared to be focused primarily on possible single loop learning rather than double loop (shifts in understanding, objectives or values) learning outcomes (Jha-Thakur et al 2009; Stoeglehner 2010). This was also not unexpected, in that it is considered unlikely that there would be a perceived need to alter one's overall objectives and values in considering whether and how to consult, but rather, any such

self-awareness and change would presumably occur during a consultation process itself. For the most part, however, it was clear that the main objective of any SEA related consultation by a corporation would be to seek to manage public concerns and expectations through associated learning and value transformations on part of these stakeholders.

Of particular interest in this study is again the question of why a corporation would choose to try to obtain increased legitimacy through engagement at the early and relatively sensitive stages of its strategic planning process, as opposed to at later stages of planning or PPP implementation, or even to react to public concerns later if they do indeed occur and become problematic for the corporation's activities. As per previous discussions for SEA use in general (Section 6.1) this was again found to relate to a general recognition of the overall and fundamental nature of strategic decisions and the likely adverse consequences of going down the wrong path and encountering public issues that cannot be reacted to or reversed at later stages without significant negative implications for the corporation. It was also clear that corporate representatives in this study were mindful that a Canadian electricity utility's PPP itself also often has a degree of public and regulatory exposure, and so in many cases managing stakeholder concerns at the strategic level was as much about addressing potential risks at the PPP stage as opposed to concerns about these eventually materializing further downstream. Interviewees were also aware, however, that PPP-wide public concerns about alternatives and power rates were likely to make their way down to the project implementation stage if not addressed earlier, both in general and because of the requirement to consider and evaluate project need and purpose and to identify and consider alternatives as part of project-level EA processes in Canada. Corporate acceptance of SEA consultation is therefore based on the presence and recognition of important and PPP-wide social concerns, a perceived likelihood that if unresolved these will have significant negative implications for the corporation at the PPP and/or project level, a recognition that there will be limited ability to address these later without negative consequences, and an associated desire to manage these risks through consultation and associated stakeholder learning.

As opposed to any such stakeholder learning and understanding being of a single type and form, corporations may view this as potentially taking a number of levels, which reflect the type and level of public understanding and acceptance that is perceived to be required and possible to achieve in a given situation. In some instances, corporate representatives may see early consultation through SEA as a means of getting stakeholders gradually aware of and comfortable with the corporation's plans and activities, thereby "easing them into" PPP decisions and their implementation and the eventual development projects. This was noted to be about building relationships and trust with key stakeholders, thereby creating a planning environment where people feel involved, informed and respected, and the eventual implementation of the PPP at the project level would be less likely to be a surprise and to generate concern and controversy. At the other end of this spectrum, SEA consultation was also seen as an overall process of educating stakeholders in order to achieve an increased understanding of the corporation's planning processes and requirements, and hopefully, enhanced support for these through learning and a transformation of stakeholder views at the PPP level.

A related and similarly interesting finding from this study relates to an apparent difference in perceived legitimacy requirements and approaches at different stages of the planning process. Whereas, as discussed above, a key objective of SEA consultation at the earlier stages of planning is around obtaining greater understanding of and legitimacy for the corporation's PPP decisions through stakeholder learning and associated value transformations, this was observed to change somewhat at the lower stages of planning. As described in Section 6.4.3, in some cases corporations saw SEA approaches (including consultation) being applied at lower (post PPP, pre-project) levels of planning, including in the identification and evaluation of project options to meet specific requirements and objectives or in the conceptual design of an individual project. Where SEA was to be potentially applied at these later stages, public and stakeholder consultation was found to be more readily accepted by corporations, as many of the risks associated with consulting at the very early and sensitive stages of a corporation's strategic planning would presumably be reduced or eliminated. It was also noted, however, that at those later stages of planning (such as in the evaluation of alternative

project options or project siting or routing alternatives), any public interests and mitigation approaches were considered to likely be more clearly defined, and it would likely be more technically and economically feasible to attempt to address these in planning and design (as opposed to PPP) decisions.

6.6.3 Perceived Effectiveness of SEA Consultation

Other findings from this study also further reinforce the importance and influence of these potential learning and transformative outcomes of SEA consultation as a key driver for its acceptance by corporations. In particular, corporate acceptance of it is very much influenced by whether or not a successful, but also productive and meaningful, engagement process is expected, including the anticipated involvement of reasonable and open-minded consultees who have an interest in learning and the capacity to do so. The SEA literature indicates that open-mindedness, reasoned dialogue and a search for common ground are key elements of and prerequisites for a successful, deliberative approach to SEA (Sheate and Partidario 2010; Illsley et al 2014), and it has been suggested that a lack of these characteristics in practice may prevent such outcomes from occurring (Weston 2010; Jiliberto 2011; Scott 2011). Past research has not, however, investigated whether and how these factors are recognized, considered and influential in associated organizational decisions about SEA consultation, particularly where SEA related learning is seen as a core objective of such a process. This study has shown that this is indeed a very influential factor and consideration in decisions about the use of SEA consultation, including whether it occurs in a voluntary capacity, and presumably therefore, whether in other compulsory contexts it is planned and implemented in a minimalistic way just to satisfy legal requirements. Again, respondents' views and statements in that regard were found to be strongly influenced by their individual perceptions, experiences and other somewhat subjective factors, including their knowledge of and current relationships with relevant stakeholders and the recognized presence and availability of the required resources and capabilities within the firm to effectively and meaningfully engage with stakeholders.

SEA consultation may also be linked to either a procedural or a deliberative rationale, and can therefore have the objective of increasing the perceived legitimacy of the resulting decisions and actions and/or of the planning process itself (Salomons and Hoberg 2014). The use of SEA or other consultative and communicative processes may therefore be seen as a means of demonstrating comprehensiveness and transparency in an organization's planning processes, and thus increasing the perceived legitimacy of its outcomes. While in some cases the overall reputational benefits of SEA consultation were noted as possible outcomes and benefits of its use by a corporation, for the most part the other, larger objectives of consulting and the potential risks of doing so meant that this becomes a secondary consideration as opposed to a key driver. Indeed, it was suggested by some interviewees that there are other means by which a company could attempt to enhance its reputation for openness and transparency that would carry less risk than PPP level consultation through SEA. There was therefore less evidence that corporations see SEA consultation as means of obtaining increased "procedural legitimacy" in and of itself, or in indirectly obtaining increased legitimacy for its associated PPP decisions simply because its planning processes were deemed to be so. If anything, any such process-related legitimacy resulting from SEA related stakeholder engagements appears to be viewed as a means of providing further internal comfort that the resulting (and likely, imperfect) planning decisions were the outcome of appropriate reflection and deliberation and thus exhibited an appropriate procedural rationality (Simon 1996, cited in Jiliberto 2002), as opposed to seeking external support and understanding for PPP decisions.

In a few cases, it was suggested that even without achieving public understanding and support it may still be worthwhile and beneficial to consult through SEA. In such situations it was noted that this could only have the effect of making the PPP more resilient in the long run, and one interviewee noted that the company would at least learn something by observing the ensuing debate and would therefore be better prepared to face these issues during PPP implementation. One interviewee also indicated that while it would not be likely that stakeholder issues could be addressed and their support obtained, it would also be useful to be able to refer back to these consultation activities in the face of unpopular and opposed PPP decisions and

demonstrate that all interested parties were given an opportunity to participate in the planning process. Where this was stated, it involved circumstances where the organization involved has relatively limited exposure at the implementation stage, and where it was considered beneficial to demonstrate a thorough and open process to another party with public responsibilities and whose PPP support is required, such as a government regulatory agency. Therefore, where the above described learning and transformative outcomes were considered unlikely to occur, SEA consultation was typically rejected, particularly in light of the important risks involved in doing so.

6.6.4 Participation in and Timing of SEA Consultation

Although the theoretical SEA literature has suggested that full and open opportunities to participate in SEA consultations are required in order for it to be inclusive of all viewpoints and perspectives (Petts 2003; Dietz and Stern 2008; Salomons and Hoberg 2014) and to truly democratize planning (Bonifazi et al 2011; Glucker et al 2013), recent reviews have found that in practice all stakeholders and their interests are not afforded equal involvement in such consultation initiatives (Bonifazi et al 2011; Partidario and Sheate 2013; Illsley et al 2014). There has, however, been very little previous research on stakeholder selection in SEA consultation, particularly the key motivations and drivers behind who is invited to participate and the manner in which they are involved. As discussed in Chapter 3, stakeholder theory suggests that organizations will often attempt to engage stakeholders and to address their concerns in order to seek to obtain support from relevant groups (Hart 1995; Sharma and Vredenburg 1998; Delgado-Ceballos et al 2012). It has also been suggested that stakeholder selection by an organization will be based on the perceived importance and power of a particular group and the corporation's passive or active approach to managing these interests (Ullmann 1985, cited in Eljido-Ten 2007), as well as the perceived legitimacy of the stakeholder group and the urgency in addressing their concerns (Mitchell et al 1997; Buysse and Verbeke 2003). This research has explored and attempted to determine the factors that affect corporate perceptions and determinations of stakeholder salience and associated decisions about their early engagement at the strategic planning level.

Where corporations accept SEA consultation, they typically do so with very specific views that any such engagement should and would involve select stakeholders only, as opposed to being open to all. In voluntary and corporate context, however, stakeholder selection for SEA consultation was seen to be less about the perceived importance or power of a particular group or the legitimacy of its views, but rather, the legitimacy and appropriateness of its methods and its potential to participate productively and meaningfully in such a consultation process. Although stakeholder selection would clearly include individuals and groups that had interests related to the PPP in question, corporate views on stakeholder salience and selection involve balancing this against considering what particular groups and interests were most likely to participate meaningfully through open minded discussion and potential learning, or at very least, those that would likely not create negative issues and outcomes as a result of any such early (PPP level) consultation.

This is somewhat in keeping with the perspectives put forward by Gouldson and Bebbington (2007), who note that the issues and inherent risks associated with stakeholder engagement may result in a corporation providing greater opportunities for the more pragmatic stakeholders to participate, in order to help legitimize rather than influence their activities, while at the same time limiting or preventing the role of the more radical individuals and groups. They go on to note that corporations (and consultees) are likely to engage in such processes as a way of furthering their own interests and in order to learn more about issues and how they may be addressed, and thus approach such processes in a somewhat tentative and experimental way. The results of this research show evidence of this at the strategic planning level, in that corporations that accepted SEA consultation were again of the view that they would seek to involve reasonable and ‘transformable’ stakeholders only. In this case, however, there was no indication that this would include inviting and involving only those that would be likely or largely supportive of the company and who would therefore be likely to help legitimize its planning processes and activities. Rather, in cases where participants provided views and decisions on this matter, this would involve groups that were known to have associated interests and concerns but who would likely have a

capacity for learning and for obtaining an enhanced understanding of the corporations and its activities.

There is also an apparent recognition that at the strategic planning stage, given the large number and diversity of interests, issues, perspectives involved it is unlikely that overall public support (and thus, legitimacy) would be achieved at the PPP level. SEA consultation and associated stakeholder selection therefore appear to be influenced by a desire to involve key stakeholders as appropriate and to manage key issues through learning where possible, but also to seek to obtain a core basis of public support for the PPP at that early stage while at the same time optimizing the chances of this occurring while also minimizing the risks, negative outcomes and overall unpleasantness of doing so. While the risks of moving forward with PPP implementation with important and unresolved social issues are recognized, and indeed were a driver towards SEA consultation to try and proactively manage these where possible, it also appears that at this early stage the perceived “buffer” between planning issues and discourse at the PPP level and their eventual effects on project implementation results in companies being even more selective in terms of what stakeholders and interests they will engage with early, as opposed to simply taking these on at later stages of planning or during implementation.

In terms of when to consult, the literature has also noted the tendency of SEA consultations to be at low end of the spectrum and to rarely provide real opportunities for collaborative and deliberative planning (Noble 2009; Bonifazi et al 2011; Gao et al 2013). In practice these have been shown to primarily involve a relatively late stage, short and somewhat superficial consultation on a proposed PPP rather than involving stakeholders in PPP development. This includes little or no stakeholder involvement in the identification and evaluation of alternatives (Kis Madrid et al 2011; Partidario and Sheate 2013; White and Noble 2013b; Illsley et al 2014; Mota et al 2014; Slunge and Tran 2014; Walker et al 2014; Rega and Baldizzone 2015), which has been said to reflect an attempt for planners to maintain control (Beckwith 2012; Rega and Baldizzone 2015). In this study for the (albeit minority of) corporate representatives that said they would accept and adopt SEA consultation, there seemed to be no question that any SEA

consultations would involve some consideration and discussion of planning options and alternatives, and in no cases did interviewees state that stakeholders should be consulted on a single, preferred and proposed PPP. There were, in fact, recognized risks associated with consulting on a single PPP, both in terms of reduced credibility and possibly increased opposition, as well as in terms of it limiting the corporation's planning options and abilities in the future. Most respondents that supported SEA consultation did indicate that they would not likely "go out with a blank slate", as there would have to be some initial, internal analysis and definition of viable options to form the basis for any stakeholder discussions, which was intended to help maintain focus and to avoid the previously mentioned risks associated with having consultees perceive that all PPP options are possible. At the same time, however, although SEA consultations may have the objective of identifying key issues and seeking public learning and support in relation to those that may not currently be socially acceptable or preferred, corporations are keen to maximize and maintain their PPP options prior to, during and following any such consultations.

This again reflects important differences between voluntary SEA use and that which takes place pursuant to applicable statutory requirements, where in the latter case PPP approval is typically the objective and planners may therefore seek to maintain planning control by presenting few or no PPP alternatives. Instead, this research indicates that corporations that choose to voluntarily apply SEA and its associated consultative elements will do so in order to seek to better understand and manage public concerns and expectations, but in this case, decision-making authority and power remain with the company. In such cases, even after SEA consultations a corporation may still wish to implement a technically and economically preferred but socially unpopular option, and therefore, decide to assume and attempt to address the risks of doing so at later stages of planning or implementation. The results therefore indicate that in order to preserve these options, and thus to prevent the possible technical or economic implications of their foreclosure, the corporation will therefore seek to maintain its planning latitude throughout and following the SEA process. This involves attempting to manage public concerns where possible through SEA, but at the same time ensuring that any such consultations do not have negative implications for the company by removing or limiting

its planning options, or in increasing public concerns or opposition over that which would otherwise have occurred without it. This led some respondents to even suggest that preferably any such SEA consultations would not even identify particular options, but rather, would discuss overall issues and principles to feed into corporate planning at the early stages. Others similarly noted that even with SEA consultation, the corporation would not be willing to commit to a set of options or to an eventual PPP decision in a public forum.

The SEA literature has also suggested that public and stakeholder participation may be required at multiple stages of the SEA process rather than a one-time consultation event, particularly if learning and transformative effects are to occur (Axelsson et al 2012; Illsley et al 2014). It was also somewhat common for those that accepted SEA consultation to propose it as an overall and continuous process of on-going public engagement on key issues and plans, both as a means of facilitating the above described learning outcomes, but in particular, in order to create a continuous environment of certainty, stability and support for the company and its activities in order to reduce uncertainty and risk for the corporation over the long term.

6.7 Summary and Implications of the Research for SEA Theory

This study has undertaken to create and contribute new knowledge about SEA in a number of individual but interrelated ways. Initially and primarily, this has involved an investigation of corporate decision-making about the potential voluntary adoption and application of SEA, a subject that has seen very limited discussion or analysis to date and which has not been subject to previous study through empirical research. The key findings and outcomes of that exploratory investigation, and thus the new knowledge that has been produced through it, were discussed in the preceding sections of this chapter. This includes providing new insights into and understanding about whether, why, when and how corporations may choose to voluntarily adopt and apply SEA, including the main considerations in and determinants of such decisions and the occurrence, influence and interrelationships of these factors in particular situations and contexts.

Another, related objective of the research has been to evaluate these findings against current SEA theory, as reflected in the recent literature (Chapter 2), in order to determine its relevance and relationship to the voluntary adoption and use of SEA in a corporate context. In this way, the research is intended to contribute to the on-going discourse on SEA objectives, approaches and outcomes, and thus, to the further development and advancement of SEA theory.

The SEA literature indicates that over the past decade there have been significant developments in the conceptualization and theoretical basis of SEA, with recent, detailed and useful reviews being provided by several authors (e.g., Bina et al 2011; Pope et al 2013; Lobos and Partidario 2014). An overview of these existing and evolving theoretical perspectives on SEA and their relationship to current SEA practice was provided in Chapter 2. This literature includes a widespread acknowledgement that most of the early discussions of SEA and much of its practice to date have reflected an “assessment” focus and approach, where SEA has been viewed primarily as an analytical exercise (Montanez-Cartaxo 2014) aimed at providing technical information into particular stages of existing planning exercises as part of a rational decision-making process (Nilsson and Dalkmann 2001; Morgan 2012; Tetlow and Hanusch 2012). As a result, there has thus far been an overall focus on a substantive rationale for SEA, including its information outputs and their direct influence on the final PPP decision (Jiliberto 2011).

Recent years have seen a theoretical shift away from these primarily analytical approaches and the technical-rational planning tradition, where SEA is increasingly being viewed as a more integral and integrated aspect of strategic planning itself (Nilsson and Dalkmann 2001; Bina 2007). In that way, SEA is intended to contribute to the early formulation and shaping of strategic initiatives (Noble 2000; Bina 2007; Stoeglehner 2010; Tetlow and Hanush 2012), such as in the identification and evaluation of PPP alternatives (Bidstrup and Hansen 2014; Geneletti 2014). There are also clear shifts away from purely or primarily technical-rational approaches and outcomes to more post-modern and constructivist planning traditions (Lobos and Partidario 2014), where SEA processes are seen as forums for the identification, analysis and

consideration for various viewpoints and types of knowledge (Connelly and Richardson 2005; Beckwith 2012; Morgan 2012; Partidario and Sheate 2013). Based on planning theory and social learning theory (Kornov and Thissen 2000; Lawrence 2000; Nitz and Brown 2001; Richardson 2005), SEA is increasingly being described in the theoretical literature as a process of communication, learning and negotiation amongst its participants (Jackson and Illsley 2007; Jha-Thakur et al 2009; Stoeglehner 2010; Illsley et al 2014), and there is thus an increasing emphasis on a collaborative-deliberative rationale for SEA (Jiliberto 2011) and its potential transformative effects on the participants, planning processes and institutions involved (Wallington et al 2007; Bina et al 2011; Lobos and Partidario 2014).

This research has provided an opportunity to investigate, observe and evaluate SEA in a new context and from a somewhat unique perspective, namely decision-making about its potential use in a voluntary capacity in general, and in a corporate setting in particular. Notwithstanding the exploratory and inductive nature of this research overall, it also allows for a subsequent evaluation of the results of this exploratory study against these prevalent and influential aspects of current SEA theory, to determine whether and to what degree these theoretical and somewhat normative perspectives are relevant to, and “hold up” in, this new context. With clear recognition and due consideration of the inherently different nature of corporate decisions about voluntary SEA use as compared to the more traditional (statutory and public sector) focus of most SEA experience to date (which has formed the basis for current theory), it is considered useful and informative to evaluate these existing theoretical perspectives by looking at them in this new context, and in doing so, to contribute to the further advancement of same.

6.7.1 SEA’s Substantive and Procedural Rationales

The literature has repeatedly highlighted the tendency of EA processes, methods and outputs to reflect a rational approach to planning and decision-making (Kornov and Thissen 2000; Nilsson and Dalkmann 2001; Fischer 2003; Connelly and Richardson 2005; Wallington et al 2007; Elling 2009; Weston 2010; Jiliberto 2011; Tetlow and Hanusch

2012), with an associated emphasis on the development, transfer and use of technical information based on the assumption that this will have a positive influence on decision-making (Bina 2008; Tetlow and Hanusch 2012). Along with continued observations that rational models rarely correspond to the manner in which planning and decision-making processes work and the associated manner in which they are informed and influenced by EA and other such appraisal techniques (Owens et al 2004), it has been further noted that technocratic and rationalist approaches become even less relevant at the strategic level as a result of the higher number and diversity of available planning options and decision outcomes and the greater levels of ambiguity and uncertainty at these early planning stages (Sheate 2011; Lobos and Partidario 2014).

The findings of this study suggest that in a voluntary, corporate context there is a fundamental and seemingly natural tendency towards assuming a technical-rational approach to and rationale for SEA, which is viewed as a means to more proactively and comprehensively address environmental uncertainty and risk through the introduction of additional analytical rigour and documentation into corporate strategic planning processes. Through the interviews it was evident that corporations recognize the importance, but also inherently complex and uncertain nature, of environmental issues and social concerns, particularly as compared to the technical and economic issues that are often seen as being more conducive to analysis, understanding and management within corporate planning processes. The results of the study suggest that this recognition of, but inherent discomfort with, such issues often leads corporations to attempt to make their strategic planning processes more structured and rigorous with regard to environmental issues, and thus, to strive to make their procedures and decision outcomes look and feel more rational (whether purely or procedurally so) through the use of analytical tools such as SEA. The adoption of a technical-rational approach to SEA use in a corporate context is also further enabled by a number of key characteristics of corporate strategic planning that can help facilitate such an approach. These include the presence of a single and central decision-maker and a clearly defined and structured planning process with defined PPP decision points, where an EA / SEA process is intended to provide environmental information as one input to inform associated decision-making (Lobos and Partidario 2014). This is in contrast to the often

more complex, dynamic, interactive, incremental and erratic nature of some (public sector) planning processes, which have been said to be fundamentally non-rational, and therefore create challenges for SEA application and outcomes (Bina 2007; Wallington et al 2007; Weston 2010; Wallgren et al 2011).

Through its analysis of SEA decisions and their determinants in a voluntary, corporate context, this study has also shed new light on the potential rationales for and desired outcomes of such an approach to SEA. In particular, it indicates that in some situations a key objective of seeking to increase the analytical and procedural rigour of, and the associated informational inputs to, such a strategic planning processes pertains less to the desired influence on the PPP itself and an inherent belief that this will result in a better decision. Rather, the use of SEA in a corporate context has been found to at times be as much about addressing uncertainty and risk and alleviating the internal discomfort about these through the mere presence of better analysis, information, discussions and documentation, especially where existing corporate processes are considered insufficient in that regard. The SEA literature reflects an assumption that the traditional and continued use of SEA as an assessment tool based on rational approaches and objectives is due, for example, to a general lack of awareness about other SEA approaches and potential outcomes (White and Noble 2013b; Slunge and Tran 2014). Current theoretical perspectives about SEA have therefore not considered or reflected the fact that a key driver for this focus may be a desire for enhanced clarity and internal comfort that these approaches and processes bring to decision-makers, particularly in situations of uncertainty and risk which are often even further accentuated at the early stages of strategic planning. In this way, improved processes, better understanding and a resulting comfort - and not necessarily changed or improved PPP level decisions - may be the ultimate objective and end goal of SEA use in some situations.

The study has also found that even in situations where there is perceived environmental uncertainty and risk associated with an organization's activities and planning, and a recognized need and desire for additional analysis and information to help address these (either through planning decisions or otherwise, as discussed above), the effectiveness of SEA in that regard is not necessarily assumed. Indeed, the study found

that SEA was often rejected where additional clarity and certainty on important environmental issues was desired, but where SEA was considered to provide limited predictive ability and utility in that regard. This is somewhat different from the content and tone of much of the SEA literature, in which its value and effectiveness are assumed or implied, and where its limited or restricted use in practice has again been linked to other factors such as an overall lack of awareness and understanding amongst about it. While concerns about SEA utility have been shown in this study to have implications for decisions about its use in a voluntary and corporate context, it may also be relevant and influential in how it is viewed and used in a more compulsory context, such as in a minimalistic way to fulfil legal requirements only rather than to its full potential due in part to its perceived ineffectiveness.

6.7.2 SEA Timing and its Influence on Strategic and Downstream Decisions

As summarized above and described in some detail in Section 2.2.3, the SEA literature has also repeatedly shown that despite a widely acknowledged need for a more “strategic” view of and approach to SEA through its early and integrated application at key stages of PPP formulation, in practice it remains characterized by a relatively late stage entry into planning and its somewhat reactive application to a selected and proposed PPP with limited consideration of alternatives. The findings of this study indicate that in a voluntary, corporate context, there is may be more of an inclination and intent to use SEA in a more strategic manner, and particularly, in analysing and evaluating (and maintaining) a broad range of alternatives both as part of an internal and analytical process as well as in any associated consultations. This suggests that strategic planning realities and requirements (including technical, economic and environmental risk considerations), the presence of a tiered planning system that includes responsibilities and risk at both the strategic and downstream (implementation) stages, and the lack of a formalized SEA process culminating in a requirement for PPP approval provide added incentives for SEA users to view and attempt to use it in an early and integrated manner as part of their planning process, in addressing uncertainty and risk while at the same time trying to maximize and maintain their planning options and abilities. The study therefore contributes to these on-going

debates about the perceived requirement for a firm statutory basis and methodological prescription for SEA versus the need for flexibility (Section 2.3), by indicating that in some situations and respects a voluntary and flexible use of SEA may indeed provide greater incentives for SEA to be used to its full potential as an early and integrated part of strategic planning.

Notwithstanding the above described findings that SEA use in a voluntary, corporate context may provide situations for it to be applied in a relatively earlier and deeper manner through the evaluation of PPP alternatives, the study also indicates little interest in using SEA as a means of developing, reviewing and refining particular PPP options on the basis of identified environmental concerns. Rather, the results indicate that its acceptance and potential use in this context is driven primarily by a desire to identify and avoid PPP options with important issues that would likely affect their overall costs and feasibility, and thus, those with possible fatal flaws that would negatively and significantly affect their eventual implementation and thus the corporation. To borrow terminology from project-level EA legislation and practice, the proposed use and focus of SEA was therefore found to be focused far more on evaluating “alternatives to” rather than “alternatives within” a particular PPP option, and would therefore involve contributing to decisions about whether to include or drop a particular PPP alternative based on environmental risk. Although this issue may have been particularly relevant and highlighted in the business context that characterizes this study, it is by no means specific to decisions about whether and how SEA might be used in a voluntary, corporate capacity. In addition to there having been little if any evidence of SEA having been used in this manner in practice to date, this matter is likewise not one that has been widely recognized or discussed in the SEA literature or considered in the development or evaluation of SEA theory, despite repeated calls for an increased acceptance and use as of SEA as a planning rather than as assessment tool. This may in fact represent a deeper and more influential planning approach and focus for SEA as compared to the current emphasis on the evaluation of alternative PPPs, and this study therefore contributes to this discourse by highlighting this as an important matter for future consideration and investigation in the evaluation of SEA practice and the development of theory.

Other aspects of SEA's perceived need, rationale and objectives relate to its role in proactively identifying and addressing particular environmental issues at the earliest stages of planning processes, in order to avoid or reduce the occurrence of negative effects during PPP implementation, and thus, to help sustainability and environmental acceptability to "trickle down" to lower tiers of the planning process and eventual project implementation (Therivel and Partidario 1996). Although there are important and enduring questions about whether and how these tiering and trickle down effects actually do occur (Noble 2009; Arts et al 2011; Gunn and Noble 2011; Fidler and Noble 2012; Thompson et al 2013), these concepts have formed the very basis of SEA's rationale and objectives since its inception. Given the structured, tiered and comprehensive planning processes that were reported by each of the corporations represented in the research sample, this study provided an excellent context in which to further investigate these tiering and trickle down concepts in SEA, not in terms of whether and how these actually do occur in practice, but rather, the degree to which these objectives and outcomes are recognized and influential in decisions about whether, why and how SEA may be used.

The study has found that with the exception of identifying and potentially avoiding PPP options with important and show stopping environmental issues, and in possibly managing key social concerns through associated stakeholder engagement and learning outcomes, there is little apparent interest amongst corporations in using SEA as a means of managing most other types of environmental issues at the strategic level in order to prevent them from occurring and creating difficulties at the eventual implementation (project) stage. Indeed, there were clear differences in the types and levels of environmental issues that respondents felt should and could be managed at the PPP level versus those that may occur and be important and potentially problematic at the project level, even when the latter were considered to be relevant to all or most of the PPP as a whole.

In evaluating and theorizing about its approaches and outcomes, the SEA literature appears to reflect an implied commonality and uniformity of environmental issues at the strategic and downstream planning stages, with SEA's fundamental role being to

manage a particular environmental issue earlier to prevent its associated negative effects from occurring later. The results of this study indicate that environmental issues and/or their perceived importance and relevance in planning vary considerably at different stages of these processes, and that in highly tiered planning environments (especially where SEA is applied voluntarily and flexibly), there is often a high degree of selectivity in terms of what environmental issues are to be addressed at what stage. The underlying objective of SEA may therefore not be to proactively manage certain issues to keep them from trickling down to later stages, or to seek a resulting avoidance or streamlining of subsequent EA reviews or other regulatory requirements at the project level. Rather, SEA may be applied in order to address different types and levels of environmental issues at different stages of planning, based on their nature and the degrees of risk involved and their likelihood to materialize at the project level, and a deliberate consideration of when and how these are best considered and managed. This may include a general objective of using SEA to help inform these decisions, and to obtain increased clarity and comfort at the PPP level regarding issues that will be addressed at later stages of planning or during PPP implementation.

Related to this, there have been commentaries and criticisms in the SEA literature regarding an apparent lack of SEA effectiveness, particularly in terms of its observed influence on PPP decisions (Section 2.3.1). This includes the identification of various factors that contribute to this perceived lack of SEA influence, including a recognition that the often complex nature of strategic planning and other factors can make it difficult to establish a clear link between SEA outcomes and PPP decisions (Ortolano and Shepherd 1995; Hilden et al 2004; Bina 2007; Cherp et al 2008; Van Buuren and Nooteboom 2009), including varying or ill-defined views about SEA's purpose, methods and outcomes (Cashmore et al 2010; Tetlow and Hanusch 2012; White and Noble 2013b; Zhang et al 2013). This study contributes to this discourse by further suggesting that in some contexts and situations, the objective and planned outcome of SEA may again not necessarily be changes to the PPP itself or even other the direct and indirect outcomes that have been referenced in the SEA literature. Rather, and again, its key purpose in a particular situation may be to provide insights and intelligence in key environmental issues and increased internal understanding and comfort on these in

making planning decisions, as well as in making decisions that these are better addressed later and for providing enhanced preparedness for doing so.

This study and its corporate planning context also provide insights into the potential application of SEA to lower (post PPP but pre project EA) levels of planning, and especially, the various factors and considerations that influence decisions about whether and why to do so as opposed to applying SEA at the PPP level or addressing all such issues later at the individual project EA stage. Although there has been a general recognition of the potential for SEA to be applied to these lower level planning decisions (Stoeglehner 2010), this is an area that has received very little discussion or investigation to date, including the development of a sound theoretical basis for when, why and how it occurs. The findings of this study therefore contribute to this aspect of SEA theory by shedding further light on these questions, including its general finding that as SEA application moves down to lower stages of the planning process, its purpose and focus likewise move progressively towards increased interest in a more integrated and deliberative planning approach. In particular, as environmental issues and interests become better defined and localized at lower planning tiers, and where alternative planning options become increasingly feasible and their effectiveness as mitigation is clearer, the results of this study indicate that there may be an increased willingness and ability to address environmental issues and societal concerns through planning and design changes as compared to at the PPP level.

6.7.3 SEA's Deliberative Rationale: Consultation and the Transformative Strategy

This study has also found that while SEA related consultation is often rejected by corporate representatives due to issues and concerns about the possible ability or need to engage with stakeholders in strategic planning or as a result of the perceived challenges, costs and risks that may be associated with doing so, it may at times be accepted where there is a perceived need and ability to engage with key stakeholders to proactively manage social concerns and expectations in corporate planning and decision-making. In addition to the above described analytical approach to SEA which would seek to identify and potentially avoid environmentally problematic PPP options,

stakeholder consultation was the other means through which some corporate representatives saw important issues being actively and proactively managed in the strategic planning process, as opposed to the mere gathering of intelligence on these matters for comfort or consideration later.

In almost all cases where SEA consultation was accepted, the rationale and objective of this approach was to seek increased stakeholder understanding and acceptance of the organization's activities and planning outcomes through associated dialogue and learning. Therefore, and notwithstanding views and reports that suggest that these theoretical approaches to and outcomes of SEA are also considerably further advanced than its practice (Axelsson et al 2012), the study has demonstrated that the possible learning and transformative effects of SEA consultation are well recognized by and of key interest to potential users of it, and especially, are very important and influential factors in decisions about whether, why and how to apply it. This was based on a clear recognition amongst corporate representatives of public concerns and expectations as key areas of focus and risk in strategic planning and decision-making, the likelihood that certain social issues would create problems for the corporation at the PPP and/or downstream levels of planning and implementation, and the need for and possible benefits of taking measures to better understand societal concerns and expectations including more actively manage these through processes of early stakeholder consultation and learning.

The study further shows that even where there is an ability and willingness to engage in such consultations and to seek to achieve these learning outcomes, a perceived lack of a productive consultative environment and receptive and open-minded stakeholders is a key determinant in decisions about whether and how to undertake SEA consultation, rather than merely influencing the eventual quality and likely effectiveness of such an exercise. Stakeholder selection and the nature and timing of the consultation process was found to be similarly influenced by the potential for meaningful input and open-minded and productive participants, as well as to seek to obtain a core basis of public support for the PPP while at the same time optimizing the chances of this occurring and minimizing the risks and negative outcomes of doing so. In addition, it was evident that

at this early stage the perceived “buffer” between issues at the PPP level and their eventual effects on project implementation results in companies being even more selective in terms of what stakeholders and interests they will engage with early, as opposed to taking these on at later stages. Also, and again contrary to much of the reported experience in SEA practice to date, corporations that accepted SEA consultation typically see stakeholders being engaged early and in relation to multiple, alternative (rather than single, proposed) PPPs, both as an input to planning but to also maximize and maintain planning flexibility prior to, during and following any such consultations. This is a new finding and somewhat unique aspect of SEA use in a voluntary, corporate context that has not been demonstrated or investigated through research to date.

Finally, the results of the study also contribute to SEA theory by illustrating that there are a range of potential and perceived types and levels of such stakeholder learning that may occur and which are of interest to SEA users, particularly in a corporate setting. Although in the case of corporate SEA this was found to be primarily about educating stakeholders and transforming their views as opposed to more reciprocal learning, these outcomes include, for example, a gradual process of stakeholder awareness and an “easing in” to PPP decisions and actions, to a more complete learning process that seeks to change mindsets, values and possibly achieve overall PPP support.

7 CONCLUSION

This chapter presents the conclusion of this thesis, including a short reiteration of the study topic and the research rationale and approach, as well as a brief overview of some of its main findings and outcomes which are presented in the context of the research objectives that the study was intended to address. It also includes a discussion of the study's limitations and a number of associated recommendations for further research.

7.1 Reiteration of Research Topic, Rationale and Approach

SEA is a systematic process for assessing and evaluating the potential environmental effects of proposed strategic initiatives (PPPs) and their alternatives, in order to identify and consider such environmental issues in associated decision-making (Therivel et al 1992; Noble 2000). SEA is currently a key aspect of EA theory and practice, with SEA systems in place in jurisdictions throughout the world which are being applied to a variety of planning processes and associated PPPs (Dalal-Clayton and Sadler 2005; Tetlow and Hanush 2012; Joao and McLauchlan 2014; Fischer and Noble 2015). SEA has also become a major area of focus in the EA literature (Fischer and Onyango 2012; Caschili et al 2014), with considerable growth and evolution in its theoretical basis in recent years (Bina et al 2011; Pope et al 2013; Lobos and Partidario 2014). This includes current views on, and continuing debates around, its need, purpose and rationale, its role and timing in strategic planning and decision-making, its key components and associated analytical and consultative methods, and the potential and expected outcomes of SEA use (Chapter 2).

Although SEA practice and research to date has focused almost exclusively on its statutory application by governments and other responsible authorities to public-sector planning initiatives, it has also been suggested that SEA would likely also be applicable, beneficial and possibly of interest to corporations as part of their own strategic planning activities (Jay and Marshall 2005; Marshall and Fischer 2005, 2006; Jay 2007, 2010). There has, however, thus far been very limited evidence of SEA use in a business context, and notwithstanding some initial and general discussion of this subject in the

literature, there has been no empirical analysis of corporate perspectives and decisions about the possible voluntary adoption and application of SEA approaches. Important questions therefore remain about the various factors that might motivate or deter corporations from deciding to use a tool such as SEA, including the perceived need, benefits, challenges and risks of doing so, and the existence, influence and possible interrelationships of these various considerations and determinants in particular contexts and situations. Voluntarily adopting SEA would also involve associated corporate decisions around the timing or stage of planning at which it is applied, the particular environmental issues upon which it would focus, and the approach and methods to be used for its application, none of which have been subject to substantive discussion or any degree of empirical investigation to date. There have therefore been calls for further research into whether and why SEA may be voluntarily adopted and implemented in general (Yang 2012; McGimpsey and Morgan 2013) and the various determinants of such decisions and actions (Victor and Agamuthu 2013), including research into why and how SEA may be applied to corporate strategic planning (Marshall and Fischer 2005; Mota et al 2014).

This study has therefore been designed and carried out in order to explore and seek to understand corporate decision-making about the potential voluntary adoption and application of SEA. This includes investigating the various factors that would motivate or deter a corporation from taking such a proactive approach in understanding and potentially addressing environmental issues so early in its planning process, as well as the manner in which these and other issues might then influence associated views and decisions about the nature and timing of any such SEA application. The research has provided an opportunity to generate new knowledge through a conceptual understanding of this previously uninvestigated subject, and in doing so, contribute to relevant theory about SEA and about corporate environmental proactivity in general. This subject also provides an interesting and somewhat unique context in which to investigate and evaluate some of the longstanding and more recent and evolving theoretical perspectives on SEA's purpose, approaches and outcomes in order to contribute to the further advancement of such theory.

In investigating this topic and addressing the research purpose, objectives and questions established previously (Chapter 1), the study has adopted a qualitative and inductive approach. This is again due to the lack of previous research and analysis on this particular subject, as well as the overall inapplicability and inadequacy of other existing knowledge, theory and past research to understanding and explaining corporate decision-making about SEA. The research methods involved a series of semi-structured interviews and subsequent focus group sessions with representatives of electricity utilities in Canada who are responsible for or involved in strategic planning activities, in order to identify, document, analyse and understand their views and decision-making about the possible voluntarily adoption and application of SEA.

7.2 Addressing the Research Purpose and Objectives

The overall purpose of this study has again been to develop and provide new knowledge about whether, why, when and how corporations may choose to voluntarily adopt and apply SEA, including the main considerations in and determinants of these decisions. In doing so, the research has been shaped and guided by a number of specific objectives, which are repeated below along with a brief overview of how these have been achieved through the study and its outcomes as reported herein.

Objective #1: *To identify, review and assess the existing and available literature on SEA and corporate environmental governance and proactivity, including past research and previous applicable theory, to evaluate their applicability to the research topic and questions that are the focus of this study, identify the particular gaps or issues in theory and knowledge that the study is intended to address, and to provide a guide and framework for the analysis.*

Chapter 2 (Strategic Environmental Assessment) provided a summary and analysis of existing and available literature related to the theory and practice of SEA, including an overview of its origins, purpose and rationale, approaches and methods, and potential outcomes. This included a particular focus on current and evolving theoretical

perspectives on SEA objectives and approaches, its timing and role in strategic planning, its analytical and consultative components and methods, its potential and desired outcomes, and the relationship of these to its current practice. The literature review also included an analysis of previous discussions in the literature about the observed and potential use of SEA in a voluntary capacity and by corporations. As illustrated therein and described elsewhere in this thesis, the SEA literature to date has focused very little attention on the voluntary use of SEA in general, and its adoption and application in a corporate context in particular, and these issues have thus far been relatively un-theorized and under-investigated, including having contributed very little to the advancement of SEA theory and practice to date. In particular, there has been no analysis of corporate decision-making about the possible voluntary adoption and application of SEA, with important issues and questions therefore remaining about the various determinants of associated decisions and actions about whether, why, when and how SEA might be adopted and applied in that context.

Chapter 3 (Corporate Environmental Governance and Proactivity) provides a review and analysis of the relevant literature related to the proactive and at times voluntary implementation of environmental protection initiatives by corporations. It has shown that although there is a large and growing body of theory and research related to understanding why corporations may decide to adopt proactive environmental strategies to address current or anticipated environmental issues, this has focused primarily on more “downstream” environmental systems and specific mitigation measures that are intended to address particular environmental problems. This review and analysis of the relevant literature has also demonstrated that there are important differences in the nature and timing of SEA as compared to these other types of environmental initiatives, which indicates very different and multi-dimensional decision-making related to its potential use, and therefore, which limits the applicability and utility of existing theory and previous research to the topic of the current study.

This current lack of understanding and previous research on corporate decision-making about SEA use, and the associated opportunity to develop new knowledge on this subject, therefore formed the underlying rationale for and basis of this study, as well as

for the exploratory approach and qualitative methods that it has adopted and used. Each of the two literature review chapters has, however, provided an overall analytical framework for the research, guiding the associated data collection and analysis and the eventual interpretation and presentation of the study's results, particularly the eventual evaluation of its findings against existing theory as outlined in Objective #4 below.

Objective #2: *Through interviews with corporate representatives, to gather and analyse empirical information on their perspectives and decisions about the potential adoption and application of SEA approaches in their corporations' strategic planning processes, including the main considerations in and determinants of these views and associated decisions.*

and

Objective #3: *To develop and present a new conceptual understanding of corporate decision-making about SEA use based on the findings of this exploratory study. This will take the form of a structured and empirically derived conceptual framework that describes the occurrence, influence and interrelationships of the various factors that influence corporate SEA use decisions, including the manner and order in which they are recognized and considered in such decisions.*

The study has shown that a variety of factors are considered by corporations in forming their views and making decisions about possible SEA use. This includes issues related to the perceived need for and applicability of SEA in relation to its planning processes and business activities, as well as the objectives and potential outcomes of SEA use and its associated costs, benefits, risks and overall efficacy. In particular, overall perspectives and decisions about SEA use by corporations are based on and influenced by a number of key factors and fundamental considerations, the general nature and observed ordering of which are as follows:

- 1) The presence of perceived, PPP-wide environmental uncertainty and risk in relation to a corporation's planning and decision-making processes and overall strategic initiatives;
- 2) The perceived need to proactively address environmental risks at the strategic level as opposed to at later stages of planning or in PPP implementation. These factors are determined by the perceived downstream consequences and potential reversibility of PPP wide environmental risk, and the associated need for alleviating associated uncertainty and discomfort on these matters through additional rigour and rationality;
- 3) The particular rationale for, and the objectives and desired outcomes of, identifying, understanding and addressing these environmental risks early in strategic planning through SEA, which may include managing key issues in PPP selection and the associated business benefits of doing so, or just getting an improved understanding of these and preparedness for addressing them later; and
- 4) The perceived applicability of SEA to corporate processes and cultures and its likely effectiveness in achieving these objectives and outcomes.

SEA consultation decisions are likewise based on a variety of issues and considerations, including views about the potential need and ability to engage with stakeholders as part of strategic business planning, the various challenges and risks that may be associated with doing so, and the objectives and desired outcomes of such engagement and its likely effectiveness in that regard. These and other factors are then influential in associated perspectives and decisions about the particular groups that would be invited to participate in any such SEA consultations and the timing (stage of planning / PPP development) at which this would be carried out.

A number of contextual factors are also influential in corporate decisions about SEA acceptance or rejection, with various internal and external characteristics determining

whether SEA is or is not considered to be necessary, possible, applicable and likely effective, as well as influencing the potential and perceived benefits, costs, risks and challenges of SEA use. These include, for example, the nature, scope and geographic distribution of corporation's planning and business activities, which determine whether there are perceived PPP-wide environmental issues and interests that would necessitate an SEA approach, the nature and duration of associated risk exposure, and the perceived ability to react to or reverse issues at subsequent stages of planning or during PPP implementation. Certain corporate and planning characteristics and contexts also give rise to or enhance the situations of environmental uncertainty and risk that led to corporate SEA acceptance. These include situations where corporate and industry characteristics result in a broad and diverse range of planning options being available, as well where planning involves relatively long-term horizons, moving into new areas or technologies, and other such circumstances, as well as where the perceived dynamic or relatively static nature of the industry setting is considered to provide available response times to foresee and address environmental issues later. Internal factors that are influential in corporate SEA decisions include those related to corporate policies, cultures and systems, including the ability to flexibly integrate SEA with existing corporate processes, perceptions regarding SEA utility and its influence on corporate decisions, and past experiences and lessons in that regard.

As summarized in an earlier section, SEA use in a corporate setting (and the associated objectives of and motivations for doing so), tend to lead to it being viewed as a means of identifying and evaluating a range of strategic planning options. This includes evaluating PPP alternatives as part of any internal and analytical SEA use as well as where associated stakeholder consultations are planned, with the objectives being to identify and steer PPP decisions away from significant environmental problems as well as maximizing and maintaining planning flexibility during and following SEA application. The study has also demonstrated a clear preference amongst corporations that SEA be focused on addressing certain types and levels of environmental issues at the strategic level versus at subsequent stages of planning or PPP implementation, as well as that even in highly tiered corporate planning systems there is a perceived separation between planning tiers and thus relatively little interest in the potential trickle down or

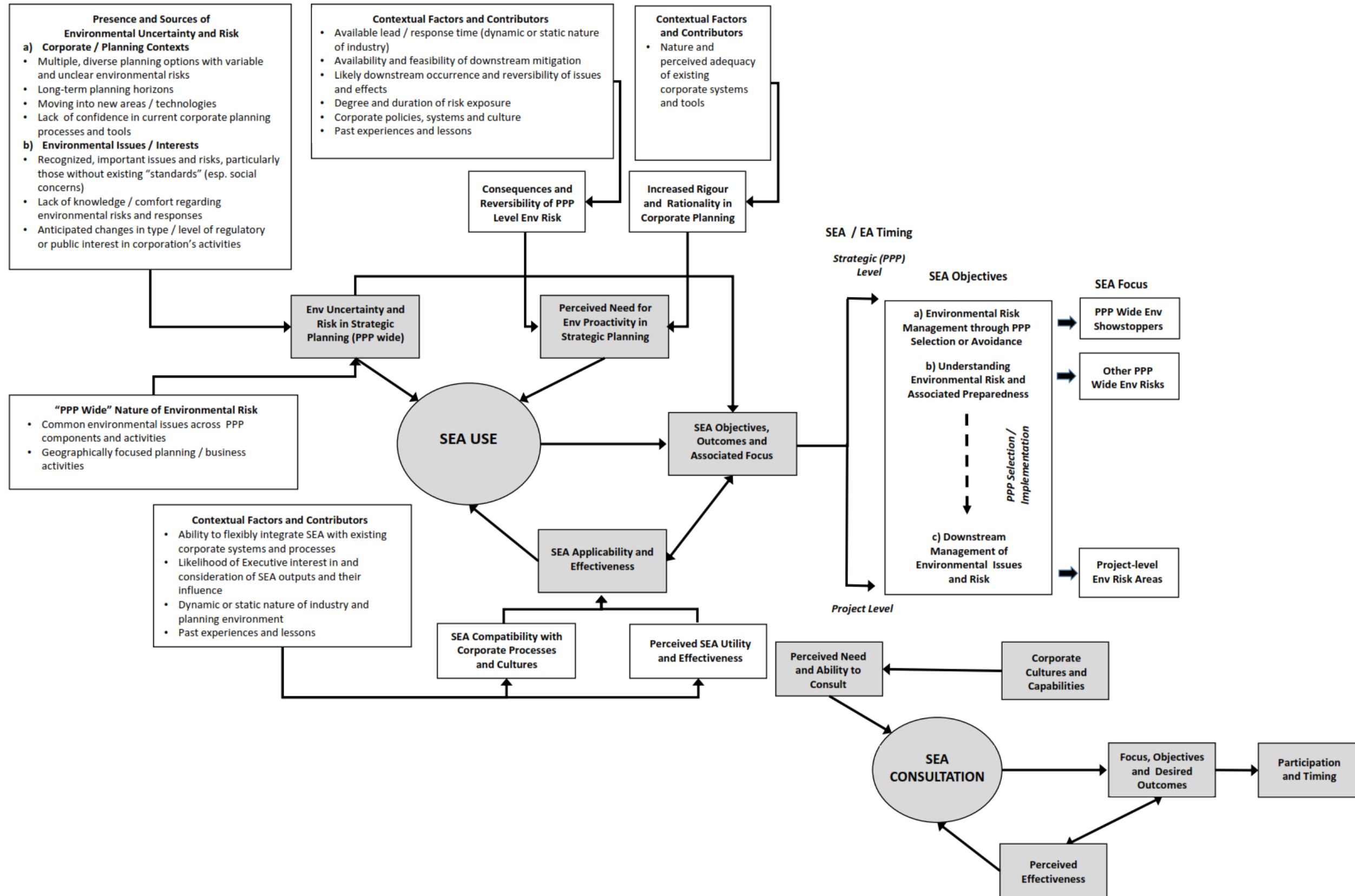
EA streamlining effects of SEA use to later stages, as described previously. Finally, where corporations see environmental uncertainty and risk as being primarily related to issues that are not necessarily relevant to or manageable at the PPP decision level (for technical or economic reasons or otherwise), there is often a tendency to defer these to lower stages of planning and implementation. However, uncertainty about these, concerns about their possible implications for project costs and schedule if unresolved, and a perceived ability to address them proactively (prior to formal project decisions and EA reviews) through feasible design decisions, can lead a corporation to voluntarily decide to apply SEA like approaches to that later stage of planning, but at a pre-project EA stage.

In terms of the potential use of SEA related consultation in corporate strategic planning, a number of issues and considerations related to the potential need for, and applicability and challenges of, such initiatives were identified through the study. This included several that have been raised elsewhere in the literature, but also others that are somewhat more specific to the early stages of corporate strategic planning. In addition to identifying the perceived risks and challenges associated with voluntarily releasing information and engaging with stakeholders in corporate strategic planning, the study also provides insights into the expected and desired outcomes and benefits of such engagement, particularly in terms of the potential learning and transformative effects of SEA. Associated decisions about SEA consultation and the nature and timing of same are driven largely by related contextual factors, particularly those which influenced whether a productive and successful engagement and learning process was considered likely to occur.

The study has therefore provided a new conceptual understanding of the key determinants of corporate views and decisions about potential SEA use, including the primary considerations in corporate decisions about SEA acceptance or rejection, as well as particular contextual factors and characteristics that have been observed to result in or enhance these perspectives. These findings were subsequently used in the development and presentation of a conceptual framework that identifies the occurrence, influence and interrelationships of these factors and the manner and order

in which they are recognized, considered and influential in such decisions (see Figure 7.1, which includes and integrates each of the individual summary Figures from Chapter 6 into a single conceptual framework based on the study's results).

Figure 7.1 Summary of Key Determinants of Corporate Decision-making about Potential SEA Use



Objective #4: *To evaluate the study's findings against current theoretical perspectives about the overall purpose, function and outcomes of SEA and corporate environmental proclivity in general, to re-evaluate their relevance and relationship to decision-making about the voluntary adoption and use of SEA in a corporate context, and especially, the implications of the results of this research for the further development and advancement of theory.*

Notwithstanding the largely exploratory and inductive nature of this study, the research has also provided an opportunity to investigate, observe and evaluate SEA in a new context and from a somewhat unique perspective, namely decision-making about its potential use in a voluntary capacity by a corporation. This is in keeping with previous calls for further research into SEA use in new and previously under-researched contexts, in order to contribute further to the development and refinement of theory (Cherp et al 2007). The study contributes to the on-going development and refinement of SEA theory through the contribution of new knowledge about this previously uninvestigated topic, as well as through a subsequent evaluation of its results against current and relevant aspects of SEA theory by looking at them in a new way and in a different context.

The results of this analysis and evaluation of the study results against current SEA theory and its associated contributions to same are outlined in Section 6.7. This includes, for example, its demonstration of a somewhat “natural leaning” of corporate SEA use towards the techno-rational tradition, and an associated desire to make internal planning processes and decisions more structured and rigorous. In particular, while it has been noted in the literature that the inherent uncertainty and complexity associated with PPP options and environmental issues at the strategic level reduces the applicability of technical-rational approaches in SEA, corporations that accept SEA often do so to reduce their associated uncertainty and discomfort around such issues, and thus to make their associated decisions look and feel more rational. In addition, despite the promotional tone and assumption of SEA effectiveness that is apparent in much of the literature, concerns about the potential effectiveness of SEA in addressing

environmental uncertainty are also present and influential in associated corporate decisions.

The study further contributes to SEA theory and the on-going discourse about its outcomes and effectiveness by showing that in some situations its objective may not necessarily be changes to the PPP itself, but rather the provision of intelligence, associated comfort and preparedness regarding key environmental issues and their downstream management. It likewise shows that in a corporate context, and unlike the situation reported in much SEA practice to date, there is a typical inclination to use SEA in a more “strategic” manner through the analysis of a broad range of PPP alternatives, but also that even in highly tiered corporate planning systems there is a perceived separation between planning tiers and thus relatively little interest in the potential trickle down or EA streamlining effects of SEA use to later stages. This study has also provided new insights into the potential application of SEA to lower (post PPP but pre project EA) levels of planning, and especially, the various factors and considerations that influence decisions about whether and why to do so. Finally, and despite views and reports that suggest that some of the more theoretical approaches to and outcomes of SEA are also considerably further advanced than its practice, the study has also demonstrated that the possible learning and transformative effects of SEA consultation are well recognized by and of key interest to potential users of it, and especially, that these outcomes and their likely occurrence are very important and influential factors in decisions about whether, why, when and how to apply it in a corporate context.

In addition to its above described theoretical contributions, the study and its outcomes also have implications and benefits for SEA practice, particularly its potential adoption and application in a voluntary capacity and corporate context. By providing an understanding of the key motivations, possible deterrents and other factors that influence whether, why and how corporations might choose to use SEA as part of their strategic planning processes, the results of this study can help in the associated communication of information on SEA and its potential application, approaches, outcomes and benefits to corporations. This need was reflected in the comments provided by several interviewees, including one who stated that: “I think there’s some

potential there, but there needs to be some publication, some guidance on how it might actually work at a corporation.” The findings of the study may therefore be used in the development of SEA related guidance for corporations that is informed by and which addresses their associated views, concerns and expectations about SEA and its need, application, approaches, functioning and outcomes. In addition, and perhaps most fundamentally, the study has helped introduce SEA to a large group of corporate representatives who might not otherwise be familiar with it and knowledgeable about its potential application and benefits, and it is expected that this will increase as the research and its outcomes become more widely disseminated. This may result in corporate representatives having both an increased awareness of, and possible interest in, the application of SEA techniques in their strategic planning and decision-making processes, or at very least, in further “SEA-like thinking” through the more systematic consideration of environmental issues in the early planning stages of their business activities.

7.3 Study Limitations

As is the case for any research initiative, this study has a number of limitations which must be recognized and acknowledged. These relate primarily to considerations around the nature and extent of the interview sample, which could have implications for the overall applicability of the study’s findings to other types of corporations and planning and market contexts.

Firstly, the study has focused on corporations that are involved in the Canadian electricity sector, as described and for the reasons outlined in Section 4.2. This focus on electricity utilities was again determined to be appropriate and beneficial in light of the research objectives and questions, in order to explore potential SEA use by corporations whose strategic planning processes and business activities were such that SEA use would be at least potentially applicable to them, and for which issues of commercial confidentiality and other factors would not automatically preclude most if not all from considering SEA use in general, and any associated stakeholder engagement in particular. The focus on this particular sector also, however, allowed for a variety of

types of corporations, market types and planning environments to be included in the analysis, in order to investigate the potential influences of these (and other) factors on SEA decisions, while also optimizing comparability within the data set by focusing on companies in the same industry. Moreover, it has been suggested that the electricity industry could be an ideal candidate for SEA (Jay 2007), and as much of the discussion of corporate SEA use to date has been focused on this sector (Section 2.5), this was also considered beneficial in allowing for a comparison of the study results against the corporate SEA literature.

It is recognized, however, that this focus on Canadian electricity utilities means that the sample represents only a very small fraction of corporate types and associated business activities and market settings. As illustrated in Section 4.2, for example, despite the inclusion of all types of utilities in the sample it was dominated by corporations (whether crown or investor owned) that operate with full or partial monopolies. Although it can be argued that all of the utilities potentially have economic motivations or associated impediments related to proactively addressing environmental issues, it may also be suggested that this focus removed some of the business factors and market forces that could be relevant to corporate decisions about their environmental strategies and actions, including potential SEA use. The fact that most of the represented corporations operate in non-competitive marketplaces and given that many operate at some distance from the eventual consumers of their products meant that their consideration of the potential need for and benefits of SEA use was focused largely on the possible implications of unresolved issues on, for example, the eventual costs and schedule associated with project developments. Other types of corporations and market contexts may therefore provide further insights into whether and how SEA decisions are also influenced more directly by considerations related to corporate reputation and its associated implications for sales, market shares and revenues.

Related to the above, the electricity utilities that are represented in the sample, and whose SEA views and decisions are therefore reflected in the study's results, include situations where the corporation's strategic planning outputs (PPPs) themselves often have a degree of public and regulatory exposure. As illustrated in the discussion of the

research results, this was found to be influential in corporate decisions about SEA use, and particularly, in determining whether social issues and concerns were regarded as important areas of risk, the perceived need to address these proactively at the strategic planning stage, and in associated decisions to engage stakeholders and seek to transform their views through SEA. Similar to, and potentially as a result of, this most corporations reported that socioeconomic issues and concerns were considered to be amongst their main areas of uncertainty and risk that would lead to SEA acceptance, as opposed to environmental (biophysical) issues and risks. It is therefore not known whether and to what degree overall SEA decisions and the determinants of these might differ in situations where the first and only exposure of a corporation's activities comes during individual project implementation, and/or where purely environmental issues were considered to be the key areas of uncertainty and risk at the PPP level.

As also discussed in Section 4.3.5, the interview process typically involved spending considerable time explaining the concept of SEA in general, as well as discussing how it might be applied and function, both as necessary background to the discussion as well as to ensure that all participants had sufficient (and consistent) information in that regard. In most cases, the interview process therefore involved the participant identifying and evaluating the possible pros and cons of SEA use as the discussion progressed, which again involved a degree of learning, reflection and reflexivity amongst the participants. While this is considered to be a positive characteristic of the research methods overall, in that it allowed the researcher to truly get inside such decision-making in essentially real time, it is not known whether or how this lack of previous SEA knowledge was influential in the results, and especially, in creating variability in responses between interviewees. Moreover, it is not known whether or how associated perspectives and decisions about SEA might change or evolve with additional information and knowledge about SEA and further experience with it.

Although beyond the objectives and scope of the present study, each of these items represent further questions and issues that have arisen out of the conduct of this study, and which may be the subject of future research as discussed further in the next section.

7.4 Recommendations for Further Research

This study has entailed an initial, exploratory investigation of corporate decision-making about the potential adoption and application of SEA. As its key outcomes, the study has provided a new conceptual understanding of corporate perspectives and decisions about whether, why, when and how to use SEA, as well as making associated contributions to the advancement of theoretical perspectives on SEA and corporate environmental proactivity, as summarized above. In doing so, it has also inevitably identified and highlighted a number of associated issues and questions which may form the basis for further research on this subject. This includes future research aimed at confirming the results of this exploratory study, as well as other related themes that have either been identified through this study but which are outside of its scope, or particular items for which this research was unable to provide specific answers.

In terms of the former, a qualitative, exploratory study and any resulting conceptual framework that is developed through it may be put forward as one or more theoretical propositions that can form the basis for, and be tested through, further quantitative investigation (Section 4.1). In the case of this study, this could include further analysis and testing of some or all of the resulting theoretical propositions about the primary determinants of corporate decisions about SEA and the various identified situations and contextual factors that influence these (see Chapter 6, and particularly Figures 6.1 to 6.6).

In addition, a number of other topics and themes have also been highlighted through this study which would benefit from future research. As noted in the preceding section, this may involve, for example, similar studies into corporate SEA decision-making in other industrial sectors and planning contexts, including more commercially competitive markets where the corporation and its products occur at a position in the value chain that is closer to individual consumers, as well as where strategic planning outputs (PPPs) have little or no public or regulatory exposure and where purely environmental issues may be seen as key areas of risk for the corporation at the strategic level. It would again also be interesting and informative to determine whether

corporate representatives' perceptions and decisions might evolve with additional information and experience with SEA and its use.

Also, in one area of apparent inconsistency between respondents and their views, it was noted by some that crown corporations would be more likely to undertake SEA consultation given the inherently public and transparent nature of their business, whereas others suggested that crown corporations and other utilities operating in a non-competitive market would be less likely to perceive a need for additional public support and thus to engage external stakeholders through SEA. The reasons for these differing views were not made apparent during the study, and this issue would therefore benefit from further investigation, particularly in relation to potential engagement at the strategic level through SEA as opposed to through other forums or at other stages of a corporation's operations. It would also be useful and informative to carry out additional research to investigate whether there are any particular issues or situations that would result in a corporation seeking to manage other, potentially "non show stopping" environmental issues at the strategic planning stage through SEA (as opposed to just attempting to understand these better at that level), or where corporations may seek to achieve an associated "trickle down" of environmental protection and associated benefits and/or EA streamlining effects at subsequent stages of planning and implementation.

Although the specific methods of data collection and analysis that were used in this study were selected for the reasons described previously (particularly, to provide a truly "exploratory" approach to the research, and to allow for respondents' perspectives and views to be considered entirely and in their overall context, see Chapter 4), any further research in this area should also clearly adopt and use methods that are appropriate to its particular focus and objectives. Any future use of qualitative research methods in this field, such as interviews or other techniques that result in the production of written transcripts or other textual material might also explore the use of other relevant analytical techniques, such as textual analysis (Fairclough 2003) to systematically analyse and interpret such data. This may involve, for example, the quantification and analysis of the frequency with which particular words, phrases or ideas are used by

respondents and their underlying patterns, or other associated methods to evaluate the specific wording and terminologies used by respondents and to further interpret their specific meanings (McKee 2003).

Finally, the study has focused on interviewing individual corporate representatives and seeking their views and decision about SEA use, as it was considered important to first understand the manner in which relevant and influential individuals within a corporation would perceive SEA and its potential use and outcomes. It is recognized, however, that any eventual corporate decisions about SEA would not be made unilaterally by any one such person. Rather, these would involve larger organizational decision-making processes, which would in turn be influenced by relevant corporate characteristics and dynamics that would collectively determine whether and how the views and interests of an individual are eventually turned into corporate decisions and actions. Organizational (rather than individual) decision-making about the voluntary adoption and application of SEA is therefore an important and relevant consideration, and a topic for which future research would be quite useful and informative.

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APPENDIX A: INTERVIEW MATERIALS

1) INVITATION TO PARTICIPATE (INITIAL CONTACT EMAIL)**Strategic Environmental Assessment (SEA) Study: Invitation to Participate**

Dear [-- name --]

My name is Steve Bonnell, and I am a PhD Candidate with the School of the Environment, University of Dundee (Scotland UK), based in St. John's, Newfoundland & Labrador.

My research focuses on the strategic planning processes of Canadian electrical utilities. Specifically, I am investigating the potential adoption and application of Strategic Environmental Assessment (SEA) approaches as part of corporate business planning and decision-making activities.

To do so, I will be conducting a series of interviews with key representatives of various Canadian electrical utilities, who are involved in strategic planning regarding future energy developments and other initiatives (e.g., multi-year energy supply / demand plans, development programs, etc). Through these discussions, I will be investigating participants' views about SEA and its potential applicability to their own strategic planning processes.

Given your involvement in, and experience with, strategic planning at a Canadian electrical utility, I am writing to request your participation in this study.

If you agree to do so, I will forward you a number of short questions and other items that I will ask you to review and consider. I will then arrange a short interview to discuss and explore these questions further with you.

Participation in the study is voluntary, and you can be assured that the identity of all participants and their individual responses will, at all times, be kept completely confidential. Please also note that there are no right or wrong answers or perspectives

associated with this subject. Rather, my intent is simply to try to better understand people's views and perspectives (motivations / deterrents) regarding whether or not (and if so, how) they might choose to adopt or support such an SEA approach.

Your cooperation and participation in this study would be very much valued and appreciated, and I look forward to your response. In addition, if you are aware of other persons who are involved in such strategic planning at your (or another) electrical utility, I would appreciate any such suggestions as well.

If you have any questions or comments concerning the study, please feel free to contact me and/or my PhD supervisor at any time, through the contact information provided below.

Thank you in advance for your reply and for your participation, and I look forward to hearing from you soon.

Sincerely Yours;

Steve Bonnell

St. John's, Newfoundland and Labrador, Canada

Tel. (709) 722 5419, Email: *s.j.bonnell@dundee.ac.uk*

Tony Jackson

School of the Environment, University of Dundee Scotland UK

Tel. +44 (0)1382 385239 Email: *a.a.jackson@dundee.ac.uk*

2) INVITATION TO PARTICIPATE (FOLLOW-UP / REMINDER EMAIL)

Hello -

Just a quick note to follow-up, and to confirm that you have received my previous email (below), requesting your participation in my PhD research study regarding the potential applicability of Strategic Environmental Assessment (SEA) to strategic business planning by Canadian electrical utilities.

Your assistance would be very much appreciated, and would certainly help to ensure the success of this study.

I am hoping to interview several representatives of each Canadian electrical utility regarding their overall business planning processes and the possible applicability of SEA. This would involve a very short (30 mins or so), confidential telephone interview, which we can complete at any time that is convenient for you.

Thank you again for your consideration of this request, and in advance for your reply.

All the best;

Steve

3) CONFIRMATION OF PARTICIPATION AND INTERVIEW SCHEDULING

Hello again -

Thank you very much for your previous reply, and for agreeing to participate in my study regarding the potential applicability and use of Strategic Environmental Assessment (SEA) in corporate planning.

As indicated previously, this research will involve interviews with yourself and other representatives of electrical utilities across Canada (and possibly elsewhere) who are involved in strategic planning regarding future energy developments and/or other business activities.

During our interview, I will be asking you a few initial questions around the general nature of your company's activities and associated planning processes, for background and context. This will be followed by some questions that explore your views about the potential applicability of SEA as part of these planning processes, and especially, that investigate the main reasons why you might (or would not) support the potential use of SEA approaches.

Participation in this study is voluntary, and you can be assured complete confidentiality and anonymity. You may also choose to not answer any question, for any reason, and can even decide to withdraw yourself and your responses at any time.

Please find below (and attached) a list of potential dates and times for conducting the interview. I would appreciate it if you could identify a preferred date and time (and several alternatives, if possible) and let me know what would work best for you. If you are based in St. John's NL, please advise if you would prefer to meet in person, at your office. For all others, please let me know the best telephone number to reach you at on that day.

Just prior to our discussion I will send you the interview script, including the list of questions, which we can then use as a guide during our discussion. I would also find it very helpful to audio-record our interview, but only if you agree to this at that time.

If you agree to participate in the study as described herein, please also review and complete the attached "Informed Consent Form" which is required as part of the University of Dundee's research policies and protocols, and return it to me either during or prior to our interview.

Thank you again for your participation. I really do appreciate this, and look forward to hearing from, and speaking with, you soon.

All the best;

Steve

Tel. (709) 693-2316

Email: *s.j.bonnell@dundee.ac.uk*

4) INFORMED CONSENT FORM

Research Title: *Decision-Making About Strategic Environmental Assessment:
An Investigation of Potential SEA Adoption and Application in
Corporate Strategic Planning*

Researcher: *Steve Bonnell
PhD Candidate
School of the Environment, University of Dundee*

Research Overview

The objective of this research is to explore the potential adoption and application of Strategic Environmental Assessment (SEA) approaches as part of corporate business planning and decision-making.

To do so, I will be conducting a series of interviews with representatives of various electrical utilities in Canada (and possibly, elsewhere), who are involved in strategic planning regarding future energy developments and/or other business activities by that corporation.

Through these discussions, I will be investigating participants' views about SEA and its potential applicability to their own strategic planning processes.

Specifically, the objective is to better understand people's views and perspectives (motivations / deterrents) regarding whether or not (and if so, how) they could potentially adopt or support such an SEA approach.

Participation in the study is voluntary, and the identity of all participants and their individual responses will, at all times, be kept completely confidential.

By signing below you agree that you have read and understood the Participant Information provided above and in the attached cover letter / email, and that you agree to take part in this research study in accordance with same.

Name (Printed) and Signature

Date

5) FINAL INTERVIEW SCRIPT / LIST OF QUESTIONS

Decision-Making About Strategic Environmental Assessment (SEA):

An Investigation of Potential SEA Adoption and Application in Corporate Strategic Planning

PhD Research - School of the Environment, University of Dundee

Steve Bonnell

Tel. (709) 693-2316, Email: s.j.bonnell@dundee.ac.uk

INTRODUCTION AND BACKGROUND

- Thank you again for your participation in this study.
- Perhaps I can provide a quick overview and refresher on the nature and purpose of my research in general, and our discussion today in particular.
- During our interview, I will be asking you a few initial questions around the general nature of your company's activities and its planning processes, for background and context.
- This will be followed by some questions that explore your views about the possible applicability of SEA as part of such planning, and which will investigate the main reasons why you might (or would not) support the use of SEA approaches.
- There are absolutely no right or wrong answers or viewpoints here, and my intent is only to try and understand your views, motivations / deterrents and overall decisions about whether or not (and if so, how) to potentially use SEA. Therefore, please answer all questions completely and truthfully, and again, you can be assured complete confidentiality and anonymity.

- The focus of the interview will be on obtaining your own views about SEA and its potential use, and so I am not requesting any disclosure of commercially sensitive or confidential information about your company and its activities. Moreover, the information gathered through these interviews will not be used for any purpose other than my PhD.
- You may also decide to not answer any question, for any reason, and can choose to withdraw yourself and your responses from the study at any time.
- Please don't feel constrained by or limited to the questions themselves, and feel free to provide any additional information or input that you feel may be relevant.
- With your permission, I would like to make an audio recording of our discussion today. This will be used for transcription only, be kept in a secure (locked) location, and will be erased as soon as transcription is complete (in approximately 1-2 weeks). I will not reference your full name in the transcript, nor will you or your affiliation be identified in my research results. May I have your permission to record this interview?
- The interview will take about 30-40 minutes, but we can take as much or as little time as you have available and require.
- Do you have any questions or comments before we begin?

Question 1: Can you first tell me a bit about your corporation's business activities in general, as well as the strategic planning processes that pertain to your work? What is your position / role in the organization?

Question 2: Can you also describe whether and how potential environmental (incl. social) issues are currently identified and considered in that strategic planning process?

Is there any consultation with stakeholders and/or the public that occurs as part of this strategic planning?

Question 3: Have there been any important environmental issues and/or public interest associated with your corporation's business activities to date, specifically your previous strategic plans?

Do you expect environmental issues and/or public interest in relation to your corporation's future strategic plans and associated activities?

Question 4: Now let's think about future planning and decision-making within your organization, such as, for example, the development of the next strategic plan.

- What if your corporation could adopt a more analytical approach to considering environmental issues in developing and finalizing its strategic plans?
- This would involve an environmental assessment exercise aimed at identifying and considering potential environmental issues in, for example:
 - a) Defining the overall strategic planning objectives,
 - b) Identifying possible alternative plans and programs, and/or
 - c) Systematically assessing the environmental effects that may be associated with each planning option, as input into the eventual strategic decisions.
- An SEA Report would then be prepared that documents that process and summarizes its findings.
- These SEA results would be integrated into the "decision package" provided to Senior Executives in your organization for their consideration in strategic planning and decision-making.

Can you first comment on whether and how your current planning process includes any of the above elements - How similar or different is the above described SEA approach from the way strategic planning occurs now?

Question 5: Would you choose, support and/or recommend (say, to your CEO) the use of such an SEA approach as part of your organization's strategic planning process - **Yes or no?**

Why? What would be the main factor(s) that would influence your decision (starting with the most important)?

Question 6a: If you answered that you WOULD NOT support or recommend the SEA approach outlined above:

- Are there any situations and/or possible SEA outcomes that would cause you to answer yes?
- If anything internal or external to your organization that contributed to your "no" response could be changed or removed tomorrow, is there anything that would make you decide to support the use of SEA?

OR,

Question 6b: If you answered that you WOULD support or recommend the SEA approach outlined above:

- Can you tell me a bit more about why you think SEA would be necessary and/or beneficial?
- What would you hope to achieve through SEA use?
- What, specifically, would make you want to identify, consider and try to address

environmental issues early in planning (through SEA), as opposed to dealing with them later (say, at the project stage)?

- What benefit would you see in increasing the type and level of environmental analysis in your planning, as compared to what is done now?
- Are there any specific factors or situations (internal and/or external to your company and its activities) that contributed to your decision to support this SEA approach?

Question 7: The SEA approach that we have discussed so far has focussed on internal environmental analysis and reporting. What about engaging with stakeholders and/or the interested public as part of this process?

This could include, for example, one or more of the following types of consultation as part of the SEA process:

- a) Having a Draft SEA Report (with planning objectives, options and analysis) released for public review and input prior to the finalization of the strategic plan;
- b) One or more meetings with interested stakeholder groups during the SEA / planning processes;
- c) One or more public open house meetings during the SEA / planning processes; and/or
- d) On-going engagement with key stakeholders throughout the SEA / planning process (through workshops, etc) to exchange information and help facilitate possible learning and increased alignment of perspectives and values between all parties.

Does your current strategic planning process include any of the above?

Would you support and/or recommend (to your CEO) an increase in the type / level of consultation in your strategic planning process, such as through one or more of the above mechanisms?

If so: Can you tell me a bit more about why you think increased consultation would be necessary and/or beneficial? What would you hope to achieve through it?

Are there any specific factors or situations (again, internal and/or external to your company and its activities) that contributed to your decision here?

Question 8: Finally, even if you answered that you WOULD support or recommend the use of SEA, are there any possible negative issues or outcomes that you also thought about when making your decision?

- That concludes all of the specific questions that comprise this interview. Do you have anything else that you would like to add, including any questions or comments for me?
- Thank you very much for your interest and time, and for your perspectives on this topic. Please do feel free to contact me should you wish to discuss any aspect of this further.

APPENDIX B: FOCUS GROUP MATERIALS

1) RESEARCH SYNOPSIS SENT TO ORGANIZATION REPRESENTATIVES FOR FORWARDING TO FOCUS GROUP PARTICIPANTS

Strategic Environmental Assessment (SEA) is a systematic process for identifying and evaluating the potential environmental effects of proposed strategic initiatives - including policies, plans and programmes (PPPs) and their alternatives - in order to consider and attempt to address such issues early in planning and decision-making. SEA is currently a key aspect of environmental assessment (EA) theory and practice, and it is being applied to an ever increasing number and variety of strategic initiatives and planning processes worldwide.

Almost all of the discussion around and experience with SEA to date has been with regard to its application by governments and other responsible authorities to "public-sector" PPPs, and there has been very limited evidence (or investigation) of its voluntary use by corporations as part of their strategic planning and decision-making processes. Important questions therefore remain around whether, why and how an SEA approach may be voluntarily adopted and applied by corporations, including the specific motivations and other factors which will influence decisions on whether or not to use SEA, and if so, the particular characteristics of that use.

The study is therefore addressing the following research questions:

- 1) Would corporations decide to voluntarily adopt and implement an SEA approach as part of their strategic planning and decision-making processes?
- 2) What are the main considerations in, and determinants (motivations / deterrents) of, corporate decisions around whether or not to voluntarily adopt SEA, and how and to what degree do these factors influence such decisions?
- 3) Are the various determinants of corporate decisions around SEA use derived from or influenced by particular contextual elements (including internal and/or external factors)?

- 4) If a corporation were to decide to voluntarily adopt SEA, what factors then influence its decisions about the SEA approach to be applied, particularly in terms of the timing of its application and the type, level and timing of any associated public and stakeholder engagement?

This research has been carried out through a series of interviews with representatives of electrical utilities in Canada who are responsible for or involved in strategic planning activities, in order to seek to understand their decision-making about whether, and if so why and how, to voluntarily adopt and apply SEA.

This involved detailed interviews with 54 representatives of Canadian electrical utilities in late 2013 and early 2014. I am currently finalizing a summary of the key findings of these interviews, which I think that your members and others working in this sector will find very interesting.

In order to share - but also, to further confirm and validate - the study's main results, I am hoping to present a brief summary of the research to a group(s) of appropriate utility representatives, and discuss what they think of these results in an open forum (sort of a "focus group" type format - do you agree, disagree, any gaps?, etc).

I am therefore hoping that it would be possible to conduct this as part of an upcoming, relevant *[ORGANIZATION NAME]* session, such as a conference, workshop, working group meeting or some other such forum over the next several weeks, during which it may be possible for me to present a very brief summary of my research findings and seek this input.

Decision-making *About* Strategic Environmental Assessment

An Investigation of Potential SEA Use in Corporate Strategic Planning

*Overview of Some Preliminary PhD Research Findings,
For Discussion*

Steve Bonnell

PhD Candidate
School of the Environment, University of Dundee, Scotland UK
Based in St. John's, NL, Canada
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FINAL, July 2015

Introduction and Background

- Strategic Environmental Assessment (SEA) involves the application of Environmental Assessment principles to strategic planning decisions (policies, plans and programs, or PPPs), rather than solely to eventual / individual projects
- Almost all of the experience with SEA to date has been for "public sector" PPPs by government agencies
- It has been suggested that SEA may also be applicable (and of interest) to corporations as part of their strategic planning processes
- Important questions remain around whether, why, when and how corporations may voluntarily adopt and apply SEA



Summary of Research Questions

- 1) Would corporations decide to voluntarily adopt and implement an SEA approach (analytical and/or consultative elements)?
- 2) What are the main considerations in corporate decisions around whether or not to adopt SEA?
- 3) Are these factors derived from or influenced by particular contextual elements (internal and external)?
- 4) If SEA is adopted, what factors influence decisions about its timing and the approach to be used?

Research Approach and Methods

- Telephone interviews with strategic planning personnel within Canadian Electricity Utilities (2013-2014, managers and above)
- 54 participants from 25 corporations. Variety of utility types, jurisdictions and planning / development contexts represented in the sample
- Semi-structured interviews, including questions about:
 - 1) Background about corporation and its strategic planning processes, and current or anticipated environmental / public issues and interests
 - 2) Presentation of potential SEA approaches and inquiry as to whether or not the respondent would support or recommend use
 - 3) Probing of key factors that influenced the decision around whether or not to adopt SEA (motivations, deterrents, possible outcomes)

Some Overall Results *(Preliminary)*

- 44% of respondents stated that they would (definitively or conditionally) support the introduction of "analytical SEA" in their corporate planning
- 28% stated that they would (definitively or conditionally) support the use of "consultative SEA" in their corporate planning
- Others rejected SEA or unsure / vague in responses about one or both
- Variety of reasons given for **SEA acceptance**, pertaining to (examples):
 - Proactive identification / management of environmental issues / risks and regulatory requirements (with associated business benefits)
 - Introducing and demonstrating greater / more rigorous consideration of environmental issues in planning
 - Improving internal decision-making processes, information and understanding. Greater defensibility and protection of decision-makers
 - Stakeholder learning, trust and possible support

Some Overall Results *(Preliminary)*

- Variety of reasons given for **SEA rejection**, pertaining to (examples):
 - Corporate planning already includes (enough) env analysis and consultation
 - Limited environmental issues or public interest / understanding
 - Limited ability to address env issues at the strategic level through planning
 - Dispersed nature of business activities and interests
 - Competitive and confidential nature of business and corporate planning
- Primary / general reason given for SEA acceptance:
 - ✓ *Proactive identification, analysis and/or management of environmental issues and associated risks early in strategic planning and decision-making*

Some Initial Propositions – *For Discussion ...*

- 1) Interest in SEA increases according to the number and variety of planning options available, and associated env uncertainty / variability
- 2) SEA acceptance is strongly influenced by the nature / distribution of corporation's activities (PPPs in single "environment" with one "public")
- 3) SEA use is motivated by perceived need to bring structure, rigour, integration and documentation to *internal* procedures
- 4) Key focus of strategic planning is addressing *environmental compliance* requirements in PPP selection (cost differences between options, likelihood of receiving approvals) or to influence env regulation – Many "softer" environmental issues deferred to the lower stages of planning (esp project design options)
- 5) SEA is typically rejected in situations where corporation perceives limited predictive ability at early planning stages

Some Initial Propositions – *For Discussion ...*

- 6) Perceived separation or "planning divide" between corporate planning and eventual projects.
- 7) Key rationale for SEA-related consultation is to facilitate stakeholder learning and early support about overall "PPP wide" (often non environmental) public issues - Not proactive management of specific environmental issues that may "trickle down" to project level
- 8) Legitimacy through SEA consultation may be sought in situations where the corporation has limited planning latitude and anticipates future need to implement unpopular PPP decisions
- 9) A key objective of SEA consultation is also often to seek stakeholder support and assistance in "convincing" third parties of PPP need / appropriateness as compared to other alternatives

The End. Thank you....

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APPENDIX C: SUMMARY OF RESEARCH RESULTS SENT TO PARTICIPANTS

**STRATEGIC ENVIRONMENTAL ASSESSMENT:
ITS POTENTIAL ADOPTION AND USE IN CORPORATE STRATEGIC PLANNING AND
DECISION-MAKING**

Summary of PhD Research Results for Interviewees and Focus Group Participants

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INTRODUCTION

Strategic Environmental Assessment (SEA) is a systematic process for assessing and evaluating the potential environmental effects of proposed policies, plans and programmes (PPPs) and their alternatives, in order to identify and address such issues at the early (pre-project) stages of strategic planning and decision-making. Although SEA is a key aspect of current and evolving environmental assessment theory and practice, the primary focus thus far has been on its statutory application to public-sector planning initiatives. Despite previous observations that SEA should also be applicable and of interest to corporations, there has been very little evidence or investigation of its potential voluntary adoption and application in this context. Important questions therefore remain about what might motivate or deter a corporation from deciding to use SEA, and if so, the particular timing or stage of planning at which it is to be applied, the environmental issues upon which it would focus, and the SEA approach and methods to be used.

The purpose of this research has therefore been to investigate whether, why, when and how corporations may choose to voluntarily adopt and apply SEA as part of their strategic planning and decision-making processes, including the key factors and situations that influence such decisions. In doing so, the study and its associated data collection, analysis and interpretation have focused on addressing the following research questions:

- 1) Would corporations decide to voluntarily adopt and implement an SEA approach?

- 2) What are the main considerations in, and determinants (motivations / deterrents) of, corporate decisions around whether or not to voluntarily adopt SEA, and how and to what degree do these factors influence such decisions?
- 3) Are the various determinants of corporate decisions around SEA use derived from or influenced by particular contextual elements (including internal and/or external factors)?
- 4) If a corporation were to decide to voluntarily adopt SEA, what factors then influence its decisions about the SEA approach to be used (including the stage of planning to which it is applied, and the analytical and/or consultative methods to be used)?

RESEARCH APPROACH AND METHODS

In investigating this subject and addressing the research purpose and questions identified above, the study has adopted a qualitative, inductive and largely exploratory approach. This is due to the lack of previous research on this particular subject, as well as the overall inapplicability and inadequacy of existing knowledge, theory and past research to understanding corporate decision-making about SEA, particularly given the various dimensions and unique characteristics of corporate SEA use as compared to other, more traditional areas of SEA application and other types of (more downstream) corporate environmental initiatives.

The research methods involved conducting semi-structured interviews with 54 representatives from 25 Canadian electricity utilities in late 2013 and early 2014, in order to identify, document, analyse and understand their views and decision-making about the possible voluntarily adoption and application of SEA. This was followed by three focus group sessions involving (and coordinated through) a number of industry associations representing electrical utilities in several Canadian jurisdictions, which were undertaken in June and July 2015 as part of the associated analysis and interpretation of the study's results.

SUMMARY OVERVIEW OF RESEARCH RESULTS

When each of the 54 interviewees were asked whether they would implement, support or recommend SEA adoption and application:

- 24 (44.4 percent) stated that they would implement, support or recommend SEA;
- 17 (31.5 percent) stated that they would not implement, support or recommend SEA; and
- 13 (24.1 percent) were unsure or vague in their views and responses.

The results of the study indicate that a variety of factors are considered by corporations in decision-making about the potential use of SEA. In particular, the research has found overall perspectives and decisions about SEA use (and particularly, its acceptance) by corporate representatives to be based on and influenced by a number of key factors and fundamental considerations, including (see attached Figure 1):

- 1) ***Environmental Uncertainty and Risk in Strategic Planning***: An important and initial determinant of SEA-related decisions by a corporation, a number of issues and factors were found to be particularly relevant and influential in that regard, including:
 - a) ***Presence and Sources of Environmental Uncertainty and Risk***: Whether or not the corporation considers there to be important environmental issues associated with its current or future activities, and particularly, the type and level of uncertainty and risk that are perceived to be associated with these in its strategic planning processes. A number of contextual factors were also identified as potential sources of same and determined their influence, including issues related to corporate characteristics and planning contexts (e.g., multiple and diverse planning options, long-term horizons), as well as the nature and degree

of associated environmental issues and interests associated with the corporation and its activities (especially, those issues which do not have applicable standards associated with them or are particularly dynamic in nature); and

- b) *“PPP wide” Nature of Environmental Risk*: Namely, whether the perceived environmental risks are considered to relate to all or most of the strategic initiative in question or to only specific portions of it (including one or more individual projects), often due to the geographically focussed or dispersed nature of the company’s business activities.

These situations of enhanced PPP-wide environmental uncertainty and risk often originate in or are enhanced by particular corporate characteristics, planning situations and contexts (see Figure 1). Areas of perceived environmental uncertainty and risk are also then influential in associated corporate perspectives and decisions about the particular types of environmental issues that should be considered and addressed at the strategic level through SEA, and thus, the associated objectives and outcomes of its use.

- 2) ***The Perceived Need for Environmental Proactivity in Strategic Planning***: A corporation’s perceived need to proactively address environmental risks at the strategic level as opposed to at later stages of planning or in PPP implementation. These perspectives and decisions were found to be based on the following issues and considerations:

- a) *Consequences and Reversibility of PPP Level Environmental Risk*: The potential implications of carrying important yet unanticipated or unresolved environmental issues and risk into PPP decisions and their implementation, including whether and how these can be effectively managed (avoided or reduced) or even reversed at the more downstream stages of planning or implementation. In some cases these were again found to be derived from and influenced by particular contextual factors and other contributors; and a

- b) *Desire for Increased Rigour and Rationality in Corporate Planning*: This involved an apparent tendency by some corporations to attempt to address environmental uncertainty and risk at the strategic planning level (and their associated discomfort with same) by seeking to increase the levels or rigour and documentation associated with their existing, internal processes in identifying and understanding environmental issues.
- 3) ***SEA Objectives, Outcomes and Associated Focus***: The particular rationale for, and objectives and desired outcomes of, identifying, understanding and addressing these environmental risks early in strategic planning through SEA. These perspectives translate into a number of different potential objectives, timings and planned areas of focus for SEA application, including:
- a) *Environmental Risk Management through PPP Selection or Avoidance*: The planned management (avoidance or reduction) of certain types and levels of environmental risks in strategic planning (usually larger, PPP wide “showstopping” issues only) through SEA use. This also includes associated considerations related to the potential and desired business benefits and other outcomes that may be associated with addressing environmental risk at the strategic level through SEA.
- b) *Understanding Environmental Risk and Associated Preparedness*: In some cases, an emphasis on using SEA as a means of providing a better understanding and increased comfort and general preparedness around environmental issues and risk as the company makes its strategic planning decisions and proceeds into their eventual implementation, as opposed to a specific desire to purposively manage these at the strategic level through PPP selection; and
- c) *Downstream Management of Environmental Issues and Risk*: Associated decisions about the particular stage(s) of the planning process at which SEA would be applied, and particularly, at what level of planning certain types and levels environmental risks would be addressed. In some cases, this involved

wanting to implement and use SEA-like processes at a “post PPP but pre-Project EA” stage of development planning to address certain types of environmental issues and stakeholder concerns.

4) ***SEA Applicability and Effectiveness***: In cases where there is perceived environmental uncertainty and risk and a recognized need and desire to attempt to understand and potentially manage these in corporate strategic planning (for whatever rationale and purpose), corporate decisions and perspectives around potential SEA use were found to move to considerations about the overall applicability and likely effectiveness of its application in that regard. This includes the following:

a) ***SEA Compatibility with Corporate Processes and Cultures***: SEA's overall applicability and compatibility with the corporation's planning processes, systems and overall cultures; and

b) ***Perceived SEA Utility and Effectiveness***: The perceived ability of SEA to achieve the specific objectives and desired outcomes of its adoption and application by a corporation, as described above. In some cases this was influenced by a perceived lack of predictability and manageability of environmental issues at the PPP stage, as well as previous experiences and lessons in that regard.

In some cases these issues were again found to be derived from and influenced by particular corporate characteristics and other contextual factors (Figure 1).

5) ***SEA Consultation***: In addition to exploring corporation's decision-making about the possible adoption and use of SEA overall - particularly, as an internal and primarily analytical process - the study also investigated whether or not they might choose to conduct public and stakeholder consultation activities as part of any such SEA exercise. A majority of respondents did not support SEA consultation or were unable or unwilling to state specifically and definitively that they would do so.

In exploring views and decisions about the potential use of SEA consultation in corporate strategic planning, a number of issues and considerations related to the potential need for, and applicability and challenges of, such initiatives were raised, including by those that rejected it and others that were interested in its use. In addition to the perceived need and ability to consult and the risks associated with voluntarily releasing information and engaging with stakeholders in corporate strategic planning, the study's results also provide insights into the expected and desired outcomes and benefits of such engagement, particularly in terms of the potential stakeholder learning and transformative effects of SEA. A key consideration was therefore found to be whether a productive and successful engagement (learning) process was considered likely to occur, along with other issues around consultation risks also influencing corporate views about the potential nature, timing and scope of any such engagement, including the stage of planning at which it would occur and the possible selection of stakeholders that would be consulted.

As a key outcome of the study, these research findings have been used in the development and discussion of a conceptual framework (see attached Figure 1) that identifies the occurrence, influence and interrelationships of these factors and the manner and order in which they are recognized and considered in corporate decisions about SEA and its use.

In addition to providing an opportunity to generate new knowledge in relation to this previously uninvestigated subject, this research has also provided an interesting and unique context through which to investigate and evaluate longstanding and more recent and evolving theoretical perspectives about SEA, as reflected in the current literature. The study's results highlight a number of new and important dimensions of how SEA is viewed and potentially used in certain contexts, including issues related to its perceived purpose and objectives, approaches, and potential and desired outcomes, which are presented and evaluated in order to contribute to the further advancement of SEA theory.

Figure 1: Summary of Key Determinants of Corporate Decision-making about Potential SEA Use

