

Opportunities and Challenges of Environmental Assessment under CEAA 2012

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1.0 Abstract

The objective of this study was to review how implementation of the Canadian Environmental Assessment Act 2012, as a part of the Canadian Federal Budget Bill (C-38), will affect environmental assessment, and ultimately sustainability, in Canada. CEAA 2012 governs environmental assessment in Canada, and there are serious questions about what effects some of the changes will have on the environmental assessment process. Due to the recent nature of the changes, an extensive analysis has not been conducted on professional perception and logistical implications of the new law. This study aims to interpret specific changes from CEAA 1995 to CEAA 2012, and offer insight into what these legal changes may mean for how environmental assessment is carried out, and its future in Canada. Interviews were conducted with sixteen individuals that have professional experience or knowledge of environmental assessment in Canada. The interviewees are from four pre-determined groups: Provincial (Nova Scotia) Government, Federal Government, industry and academia. The study examined the changes from the point of view of the energy sector, an industry that is increasingly important economically in Canada. Interview data were analyzed in a SWOT analysis and used to conduct a case study using an environmental assessment for a fossil fuel project completed under CEAA 1995 and compared to methodology under CEAA 2012.

Keywords

Canadian Environmental Impact Assessment, Canadian Environmental Law, Environmental Assessment, Sustainability, Sustainable Development

2.0 Introduction

2.1 Rationale

In April 2012, the Government of Canada released a budget bill, which included changes to the Canadian Environmental Assessment Act (CEAA 1995). These changes resulted in an updated version of the Act called 'CEAA 2012', which officially came into effect in July 2012 (Gibson, 2012). CEAA provides a legal framework for environmental assessments in Canada (Canada, 2012). These assessments are completed prior to a physical development in order to assess the environmental consequences of that development to a particular area (Noble, 2010). Environmental assessments are intended to support sustainable development and are essential for environmental protection (Usher, 2000). Preserving biodiversity and critical habitats is essential to a sustainable society, and environmental assessment is a legally-defined process that ensures identification and management of risk from human development (Usher, 2000). Since CEAA governs environmental assessment, changes to the Act have the potential to change the level of environmental protection in Canada. This has not yet been reviewed in a comprehensive manner. Here, I will examine how changes in CEAA will impact the way environmental assessment is conducted in Canada and how sustainable development and environmental protection will be affected.

2.2 Framing of Research

Many once thought of Canada as a leader in sustainability and environmental awareness, but recent environmental legislation has brought that into question (The Canadian Press, 2012). Due to the recent nature of the changes to CEAA, there is not a significant quantity of literature available reflecting these changes and what effects they

may have on the environment in Canada. A few reviews have been completed by academics regarding the significant changes to the act, and what effects the changes will have on the environmental assessment process. However, these reviews have largely been the individual's own analysis, rather than a range of perspectives from individuals working or involved in environmental assessment.

It is crucial to examine the intersection of development and science, and how this affects broader goals of sustainability. Since development is essential for humankind moving forward, it is important to ensure that we are developing in an environmentally and socially responsible manner. Environmental protection and conservation are essential for sustainable development, and it's critical to examine how government regulated processes will influence these objectives. In environmental conservation it is critical to be proactive rather than reactive, as in many cases, biodiversity can easily be irreversibly damaged. By examining the effects of this legislation early on, we can identify benefits that may be gained as well as changes that should be addressed.

2.3 Background and Definitions

Federal environmental assessment as a concept began in the early 1970s, as a result of rising public awareness of environmental issues, and observation of our neighbours (the US) who had developed the National Environmental Policy Act (Gibson, 2002). In the mid-to late-70s, the Federal Environmental Assessment and Review Process (FEARP) was further developed and strengthened, though the guidelines were often not followed (Gibson, 2002). It was not until 1990, that consideration and deliberation began to develop the Canadian Environmental Assessment Act, with input from environmental groups (Gibson,

2002). CEAA was eventually enacted in 1995, with glitches being worked out in the late 1990s (Gibson, 2002). Amendments were made in 2003, after the required 5 year reassessment of the legislation took place (Gibson, 2002; Canadian Environmental Assessment Agency, 2012). In the 2010 Omnibus Budget Bill, CEAA saw 40% budget cuts, and increased discretionary power given to the Minister, as well as changes to the requirement for public involvement in comprehensive studies (May, 2012). A complete overhaul of CEAA was being developed and was announced in 2012. The official opposition (New Democratic Party) and the Liberal Party both responded to the Conservatives changes negatively and felt that the changes should be delayed until further consultation took place to better inform decision-making (Warawa, 2012). However, in April 2012, CEAA 2012 was announced, and officially came into effect in July (Gibson, 2012).

Environmental assessment is an important step in development, and ensures that significant environmental harm is avoided as much as possible. EA's intention is to ensure that development in Canada happens in a sustainable manner (Canada, 2012).

Environmental assessment is a comprehensive process that aims to consider important socioeconomic and biophysical considerations in order to inform decision-making (Noble, 2010). It involves consideration of ecology, vulnerability, quantification of data and modeling, to determine risk factors in an area, and ultimately decide if the benefits of development outweigh those risks (Beanlands & Duinker, 1983). Factors of concern include Species at Risk, Migratory Birds, certain fish species outlined in the Fisheries Act, and other ecosystems of concern such as wetlands (Canada, 2012). During completion of EA, information about valued ecosystem components (VECs), such as soil, noise, water quality,

etc is gathered as baseline data. These VECs are monitored throughout development and operation in order to determine changes from the baseline (Noble, 2010).

CEAA is a legislative document that governs environmental assessments at the federal level (Gibson, 2012). Perhaps most importantly, CEAA determines whether an environmental assessment is even necessary for any given project. The Act lays out certain conditions, which indicate a need for EA prior to development (Canada, 2012). The Act also outlines which stakeholders can be involved in the process.

The budget bill released in April is the Government of Canada's economic plan for the year (Canada, Economic Action Plan, 2012). The bill, presented to the House of Commons at the end of March by the Finance Minister, laid out the federal government budget for the 2012-2013 fiscal year (Canada, Economic Action Plan, 2012). It outlined any changes to government programs and service. The general theme of the budget bill for 2012 was "Jobs, Growth and Long-term Prosperity Act" (The Canadian Press, 2012). The focus of the bill was on boosting Canada's economy especially with job creation. Changes to CEAA were very much aligned with economic considerations, and the stated intention was to streamline development projects to boost the Canadian economy in the short term (Gibson, 2012). The Government of Canada has been repeatedly explicit that the state of our current economy is their top priority (The Canadian Press, 2012), and this was well-reflected in the budget bill.

One of the defined purposes of CEAA is to promote sustainable development "to achieve or maintain a healthy environment and a healthy economy"(Canada, 2012). According to the Brundtland Commission, sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). The

term sustainability does not have one single definition; rather it means different things to different people. It is difficult to quantify sustainability, and often individuals are confused about its meaning (Goodland, 1995). Nevertheless, the concept of sustainability is becoming increasingly important, and the need for focusing on sustainable development is becoming apparent. In CEAA, the term “sustainable development” is referenced using the Brundtland Commission definition, and both the federal and provincial government have sustainability mandates.

In this report, the term energy project refers to non-renewable energy development projects such as oil drilling, oil sands, natural gas pipelines or coal development. I will not discuss renewable energy, as many renewable energy projects are solely dealt with provincially, and thus CEAA does not always apply. Non-renewable energy projects are an important focus for many reasons. First, the Harper government has been accused of centering the changes to environmental legislation on oil sands development (Stewart, 2012). Therefore, it seems important to assess the changes in terms of the type of project they were meant to address. In addition, there is growing concern about energy and energy security, an issue that leaves many conflicted (Stewart, 2012).

2.4 Overview of Literature Review Findings

Several authors have discussed the importance of various factors to environmental assessment in order for it to be a fair, thorough and effective process. Some of these factors include: public education, traditional ecological knowledge, and concrete, measurable sustainability goals (Wood & Deddejour, 1992; Sinclair et al., 2008; Grima & Mason, 1983; Usher, 2000).

The International Association for Impact Assessment is an international body that promotes the development and quality of impact assessment practices globally. They have released a report that outlines the “best practices” for Environmental Impact Assessment, which includes 14 factors that must be considered in conjunction with one another in order to achieve a “best-practice” EA. This document insists that EA be: purposive, rigorous, practical, relevant, cost-effective, efficient, focused, adaptive, participative, interdisciplinary, credible, integrated, transparent and systematic (International Association for Impact Assessment, 1999).

Due to the recent nature of the federal EA changes, the literature is largely undecided on CEAA 2012. The consensus in the literature is that the changes to CEAA will certainly mean changes for environmental assessment in Canada, though it is not yet clear on what these changes will mean for overall environmental protection.

2.5 Overview of Project

In this project, I hope to examine the effect of CEAA 2012 on environmental assessment in Canada, especially in regards to the energy sector. By gaining the professional opinion of individuals with knowledge and experience, I intend to make judgments about whether this piece of environmental legislation serves to improve sustainability in Canada or not.

My research question is as follows:

How will the recent changes to the Canadian Environmental Assessment Act affect how environmental assessments in the energy sector are conducted in Canada and how will this subsequently affect sustainable development and environmental protection?

The objectives of this research are:

1. To establish how the federal environmental assessment law has functioned up to 2012.
2. To investigate how recent changes to the Act will affect environmental assessments in the future.
3. To assess how provincial and federal roles and responsibilities will change with the changes to CEAA.
4. To determine if the changes can be expected to improve environmental protection and sustainability in Canada or not.
5. To conduct a case study of an energy development to illustrate changes to the environmental assessment process as a result of changes to the Canadian Environmental Assessment Act.

The scope of the study was limited to projects involving physical works in the energy sector. By limiting the EIA scope, I was able to complete a case study and examine the repercussions of changes to CEAA more thoroughly. The Government of Canada is particularly interested in assisting energy development projects (The Canadian Press, 2012), so it is important to examine how this sector may be affected. Since the nature of this project is an honours thesis, there is a time constraint of approximately eight months; this limits the number of interviews that can be conducted. I interviewed 16 individuals, which was manageable given the time frame but enough to provide a reasonable and realistic diversity of opinions on CEAA's future.

Throughout the course of this study, assumptions were required in order to draw conclusions. An important assumption in this study was that the professionals contacted for interviews were honest about their knowledge of CEAA. Simply because they worked in the field, it does not necessarily follow that all participants were equally knowledgeable, though all of their answers had equal weight in this project. In addition, it was assumed that all participants answered with their honest opinions, regardless of the nature of their employment. This became an important limitation, because there was no way to be sure if participants were answering dishonestly.

2.6 Overview of Methods

This research was conducted using qualitative analysis, including a literature search, a set of interviews and a SWOT analysis. First, a review of the relevant literature was performed. Due to the recent nature of the changes, secondary sources were also examined because of the scarcity of primary literature. Next, interviews were performed. Up to five individuals from each of the Provincial (Nova Scotia) Government, Federal Government, industry and academia. Interviewees were selected based on experience with Canadian environmental assessment. Interviewees were asked a set of 13 questions that relate to the changes in CEAA and what these changes will mean for environmental assessment in Canada (see Appendix). The results from the interviews were analyzed using a S.W.O.T. (Strengths, Weaknesses, Opportunities, Threats) method. In addition, a case study was completed. This consisted of analyzing an environmental assessment for an energy project that had been completed under CEAA 1995 and comparing it to methodology under CEAA 2012.

3.0 Literature Review

3.1 Search Strategy

The formal search method began using the ScienceDirect search engine and the Prowler Search Engine through the Dalhousie Libraries website. The formal search criteria were limited to Canadian articles, or articles with Canadian content, in order to be relevant to Canadian environmental law. The search was limited to peer-reviewed journals initially. Keywords or phrases searched were: Canadian Environmental Impact Assessment, Canadian Environmental Law, Environmental Assessment, Sustainability, and Sustainable Development. This formal search was supplemented with searches in GoogleScholar, GoogleNews and review of additional materials given to me by my supervisor.

3.2 What is known about an Environmental Assessment Framework?

Environmental assessment is the most widely used environmental management tool in the world (Noble, 2010). It is intended to identify environmental consequences of an action, enhance the positive impacts and mitigate the negative ones (Noble, 2010). It should be undertaken prior to planning of a development so that changes to development plans can occur as knowledge of the potential environmental impact improves, though this is not often the case (Wood & Dejedour, 1992). Environmental assessment has developed over the last 40 years, as growing concern about anthropogenic effects on the environment have driven measures to prevent and mitigate any further damage (Morgan, 2012). A general environmental assessment framework encompasses baseline data collection, project planning, scoping, assessment of impacts, mitigation and management/monitoring. Many of

these steps are iterative, and the results are compiled into an environmental impact assessment report (Figure 1).

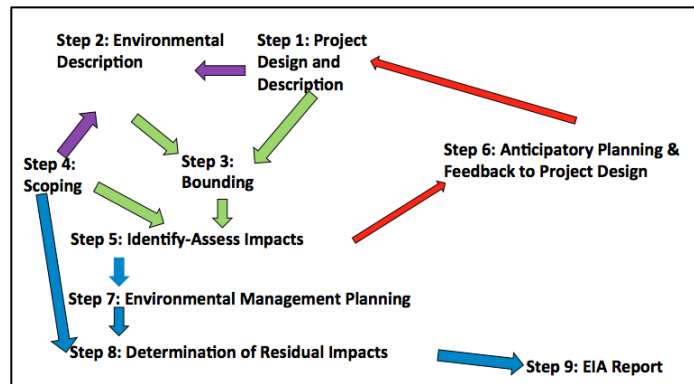


Figure 1. General Framework for Environmental Assessment (from Lane, 2012).

An important development in EA has been the inclusion of the diverse public and stakeholder voices in the EA process (Sinclair et al., 2008). Sinclair and colleagues described the importance of public involvement in EA, as it is one of the few ways in which individuals are able to participate directly in environmental management and have their voices heard (2008). While there is consensus in the literature that public involvement is an essential part of a democratic EA process, Sinclair & Diduck acknowledge that there is more than one reason to believe this (1995). They draw from Grima & Mason (1983), who describe four essential reasons for public involvement: (1) that it is a crucial part of the government-citizen relationship, (2) it is beneficial to the planning process, (3) public input can be compared to a “commodity” in a market system because local residents often have useful knowledge, and (4) that it is essential for governments to maintain good rapport with the community that elects them. In the environmental assessment framework given by Noble, public participation is critical in all steps of the process, and is iterative (See Figure 2).

In addition, developers and business people have a lot to learn from the community. Paci et al. felt that aboriginal and community knowledge was essential for a successful and fair EA process (2002), however, in CEAA 2012, there is simply mention that Traditional Ecological Knowledge “may” be taken into account (Canada, 2012). The Assembly of First Nations is concerned about their involvement in environmental assessments under CEAA 2012, and feel that their rights have not been taken seriously in this legislation (Assembly of First Nations, 2012). It is unclear, as of yet, how big a role Traditional Ecological Knowledge will play in environmental assessments under CEAA 2012.

In CEAA 2012 the Canadian Government recognizes the importance of sustainable development in order to maintain both a healthy economy and a healthy environment. The term “sustainable development” has, however, been widely criticized because it is non-specific and provides no concrete goals or targets in and of itself (Giddings et al., 2002). Thus, its stand-alone inclusion in CEAA 2012 does not have any substantial meaning. Sustainability is usually thought of as the intersection of economy, society and environment (Giddings et al., 2002). Inevitably, CEAA 2012 will affect these factors through steps such as triggering, timelines, public involvement and Aboriginal Consultation.

The International Association for Impact Assessment has a “Best Practice” guide for Environmental Assessment. As mentioned above, the 14 basic principles are: purposive, rigorous, practical, relevant, cost-effective, efficient, focused, adaptive, participative, interdisciplinary, credible, integrated, transparent and systematic (International Association for Impact Assessment, 1999). In addition, the IAIA has 10 basic operating principles (Figure 2)

Screening - to determine whether or not a proposal should be subject to EIA and, if so, at what level of detail.

Scoping - to identify the issues and impacts that are likely to be important and to establish terms of reference for EIA.

Examination of alternatives - to establish the preferred or most environmentally sound and benign option for achieving proposal objectives.

Impact analysis - to identify and predict the likely environmental, social and other related effects of the proposal.

Mitigation and impact management - to establish the measures that are necessary to avoid, minimize or offset predicted adverse impacts and, where appropriate, to incorporate these into an environmental management plan or system.

Evaluation of significance - to determine the relative importance and acceptability of residual impacts (i.e., impacts that cannot be mitigated).

Preparation of environmental impact statement (EIS) or report - to document clearly and impartially impacts of the proposal, the proposed measures for mitigation, the significance of effects, and the concerns of the interested public and the communities affected by the proposal.

Review of the EIS - to determine whether the report meets its terms of reference, provides a satisfactory assessment of the proposal(s) and contains the information required for decision making.

Decision making - to approve or reject the proposal and to establish the terms and conditions for its implementation.

Follow up - to ensure that the terms and condition of approval are met; to monitor the impacts of development and the effectiveness of mitigation measures; to strengthen future EIA applications and mitigation measures; and, where required, to undertake environmental audit and process evaluation to optimize environmental management.*

Figure 2. International Association for Impact Assessment Operating Principles (From International Association for Impact Assessment, 1999).

These are steps that should be included for the process to meet the 14 Basic Principles, and for the process to be considered a fair process and to carry out its purpose.

Another important concept in the realm of environmental assessment is Strategic Environmental Assessment, which focuses on examining all possible environmental effects that could exist as a result of plans, policies or programs (Wood & Dejeddour, 1992).

Strategic Environmental Assessment tends to occur earlier in the development process, as it is undertaken prior to the policy/plan/program initiation. This gets decision-makers making environmental goals while considering financial implications, rather than leaving environmental concerns until much later in the process when plans are more difficult to change or adapt (Wood & Dejeddour, 1992).

3.3 What are the Significant Changes from CEAA 1995?

In order to properly assess what CEAA 2012 will mean for environmental assessment and sustainability in Canada, it is essential to first understand the most significant and relevant changes. Outlined below are key changes from CEAA 1995.

Table 1. Changes from CEAA 1995 to CEAA 2012. Adapted from The Canadian Environmental Assessment Agency, 2012, with information from CEAA 1995 & CEAA 2012.

	CEAA 1995 Process (Updated in 2003)	CEAA 2012
1. Triggering	<ul style="list-style-type: none"> every project applies if triggered (list of triggers) 	<ul style="list-style-type: none"> projects excluded unless on “project list”
2. Responsible Authority	<ul style="list-style-type: none"> any of up to 40 government departments 	<ul style="list-style-type: none"> consolidated with CEA Agency, NEB & CNSC (CEAA, 2012, paragraph 15).
3. Screening	<ul style="list-style-type: none"> screening part of EA process 	<ul style="list-style-type: none"> screening is now simply project registration (CEAA, 2012, s. 8).
4. Scoping	<ul style="list-style-type: none"> applies broadly to many project types and sizes 	<ul style="list-style-type: none"> focused on large projects of “federal interest”
5. Process Options	<ul style="list-style-type: none"> screening, comprehensive study, review panel, mediation 	<ul style="list-style-type: none"> standard EA, review panel
6. Public Participation	<ul style="list-style-type: none"> public input accepted at various project stages, open public participation 	<ul style="list-style-type: none"> shorter time frames for input (20 days), involvement limited to “interested party”, as defined by NEB or Review Panel (CEAA, 2012, s. 19c).
7. Environmental Effect	<ul style="list-style-type: none"> any change in biophysical environment and ripple effects (social, economic, cultural, etc.) 	<ul style="list-style-type: none"> limited to certain effects considered of “federal interest” (CEAA, 2012, paragraph 5).
8. Timelines	<ul style="list-style-type: none"> timelines not broadly applied 	<ul style="list-style-type: none"> timelines apply to all EAs (365 days for Standard EA, 2 years for Review Panel) (CEAA, 2012, s. 27(2)).
9. Enforceability	<ul style="list-style-type: none"> no real ability to enforce EA or set conditions 	<ul style="list-style-type: none"> EA conditions are enforceable
10. Provincial/Federal Interaction	<ul style="list-style-type: none"> some provincial and federal harmonization 	<ul style="list-style-type: none"> provincial harmonization still available- substitution & equivalency are now options

First, the way a project is triggered (1) has been changed in CEAA 2012. In CEAA 1995, generally all projects that occurred on federal lands, with federal funding, or required permits under other federal laws were required to undergo EA (Gibson, 2012). In CEAA 2012, all projects are excluded unless they are on a specific project list (Gibson, 2012). The process will exclude many more projects than the previous Act (Figure 3).

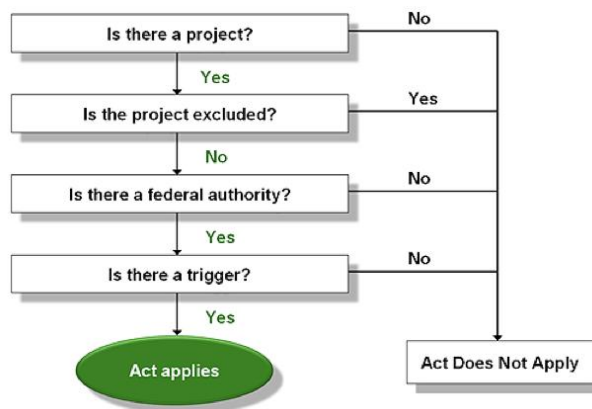


Figure 3. Decision-making flow chart for determining if CEAA 2012 applies (Canadian Environmental Assessment Agency, 2012).

Next, the Responsible Authority (RA) on projects has changed (2). In CEAA 2012, the RA has been shifted from any of over 40 government departments who had an interest in and/or knowledge of the development, to being consolidated to only 3 departments (Kamermans, 2012). The RA can now only be the Canadian Environmental Assessment Agency, the National Energy Board, or the Canadian Nuclear Safety Commission (CEAA 2012, s.15). There is some concern about why the NEB and CNSC were not subject to this

change, and why they are still able to carry out self-environmental assessments (Doelle, 2012).

The screening process has also been changed in CEAA 2012 (3). Screenings comprised over 99% of the environmental assessments carried out under CEAA 1995 (Doelle, 2012). The screenings involved a smaller-scale self-assessment, but in CEAA 2012, the screenings are essentially eliminated as any sort of assessment, and are simply registration of the project (CEAA, 2012 s. 8). This is troubling because the vast majority of projects that were assessed as screenings are now, in essence, excluded from this legislation (Doelle, 2012).

The scope of federal environmental assessments have also been reduced in CEAA 2012 (4). Environmental assessments under CEAA 2012 will only take place for projects of environmental concern for the Government of Canada (CEAA, 2012). The focus of CEAA 2012 has been narrowed to concentrate on effects on environmental components that are under federal jurisdiction (Gibson, 2012). Previously all effects on the biophysical environment and resulting socioeconomic effects were examined. However, in CEAA 2012, the definition of environmental effect is narrowed to only impacts on a few specific groups (CEAA, 2012. s.5).

The available process options (5) have been narrowed from CEAA 1995. Under CEAA 1995, there were 4 options available for EA: screenings, comprehensive studies, panel reviews and mediation (Doelle, 2012). Under CEAA 2012, there are only 2 process options: EA reviews and review panels (Doelle, 2012).

By limiting the scope of assessments to projects of federal concern, and by imposing stricter timelines, public involvement appears to be discouraged from the process (6)

(Gibson, 2012). Since the National Energy Board will be taking over responsibility for all EAs that relate to energy (Canada, 2012; Doelle 2012; Gibson, 2012), the National Energy Board Act will mandate public involvement, as well as which members of the public are considered to be an “interested party” (Canada, s. 19). Those not considered an “interested party” would not be able to participate in all steps of the federal EA process (Doelle, 2012). As mentioned above, community participation is essential in the EA process, and yet it seems that CEAA 2012 is restricting such involvement (Gibson, 2012). In restricting this involvement, the public voice is lost, and individuals are not able to contribute their insight. This certainly affects the way environmental assessment is carried out, and public opinion and trust in developers.

The definition of “environmental effect” has also changed from the CEAA 1995 legislation to CEAA 2012 (7). In the old act, environmental effect typically referred to any impact on any aspect of the biophysical environment, and the resulting socioeconomic impacts (Doelle, 2012). In CEAA 2012, the definition of environmental effect is restricted only to areas of federal jurisdiction listed in section 5 of the act (Doelle, 2012). These include impacts on federal lands, impacts on Migratory Birds, aquatic species under the Species at Risk Act, fish protected under the Fisheries Act, and impacts on aboriginals (CEAA, 2012, s. 5). This narrowing of the definition also contributes to a reduction in the scope of the EA, which has huge consequences for environmental protection.

In addition, CEAA 2012 includes mention of completion of assessments in a “timely manner” (Canada, 2012 s. 4.1.f). Timelines (8) for the screening process and public involvement have now been imposed (Canada, 2012 s. 10). For the panel process, time limits of one year to eighteen months have been introduced in order to come to a decision

(Canada, 2012 s. 27). According to Section 38 of CEAA 2012, from the time of the Minister's referral of a project to a panel until the Minister's decision has been reached, the process cannot exceed 2 years (Canada 2012).

Under CEAA 2012, conditions of environmental assessments are now enforceable (9). So, when review panels or the Minister makes decisions about projects, with provisions, these provisions are now legally enforceable (Canadian Environmental Assessment Agency, 2012). This would seem to be a benefit for environmental protection.

Finally, the provincial and federal roles in EA have changed with CEAA 2012 (10). In CEAA 1995, harmonization was available, however, CEAA 2012 goes further to encourage both harmonization and substitution or equivalency (Doelle, 2012). A main goal in offering these various options was to reduce redundancies and inefficiencies (Doelle, 2012). Equivalency allows for projects to be exempted from the federal EA process if the provincial process is considered adequate and the proponent is able to identify and mitigate adverse environmental effects (Doelle, 2012).

Another key difference in CEAA 2012 from CEAA 1995 seems to be the decision-making process. Most of the decision-making power now rests with the Minister of the Environment, in cases where the Canadian Environmental Assessment Agency is the responsible authority (Doelle, 2012). The Minister will now determine if the project is likely to cause significant environmental effects, and then decide if it must undergo environmental assessment. Ultimately, the Minister has the decision about whether or not a project is approved, and under what conditions (Doelle, 2012).

Consensus in the literature is that CEAA 2012 will have negative effects on the efficacy of environmental assessment (Doelle, 2012; Gibson, 2012). Conflict exists between

the purposes of CEAA and what effects the policies written in the Act will have on the environment. An example of this is in Section 4 of the new Act, where the purpose is stated: “to protect components of the environment [...] from significant adverse environmental effects caused by a designated project” (Canada, 2012). Gibson (2012) argues that CEAA 2012 signals a weakening in environmental law in Canada, and that the main purpose of CEAA 2012 was to expedite and promote development to boost a shaky economy.

4.0 Methods

4.1 Overview of Methodology

This section will describe my study design, a detailed review of the methodology, as well as outline limitations and assumptions in the study. In order to accomplish the objectives, interviews and a case study were carried out. The interview process consisted of 16 separate interviews with qualified individuals in different sectors. Interview notes were taken at each meeting and compiled into a SWOT (Strengths-Weaknesses-Opportunities-Threats) table for analysis. After this qualitative analysis, a case study was conducted, using an environmental assessment for a project completed under CEAA 1992. The methodology of the environmental assessment was examined and compared to methodology under CEAA 2012.

4.2 Limit of Study Area

The study area was limited in scope to individuals who work or reside in the Halifax Regional Municipality because of logistical necessities, and my limited ability to travel much further for interviews the short study period. The interaction between the provincial government and federal government is examined in the study, so it is best to restrict

provincial results to Nova Scotia, as different provinces and territories have different environmental assessment laws (Carver et al., 2010).

4.3 Experimental Design

The methodology for this study assessed the effect of CEAA 2012. Using the knowledge of individuals in four diverse groups, specific changes to the Act were assessed in relation to the environmental assessment process and sustainability in Canada. All participants were from a provincial or federal government, a non-renewable energy industry or an academic institution. These participants were selected for their knowledge or experience in environmental assessment. This was assumed by the nature of their employment, information available about them online, and individuals recommended by other organizations or persons contacted. In all, the industry group was the largest, with five participants, and the Provincial Government was the smallest, with only two. Sixteen interviews provides a significant amount of data, and is reasonable given the time frame and scope of the project to draw conclusions about CEAA 2012's effects on in environmental assessment and sustainability in Canada.

4.4 Detailed Methodology

4.4.1 Recruitment

First, recruitment of participants occurred. Individuals were contacted via email or telephone. Their contact information was obtained through their respective organization's website. The first email/telephone call briefly explained details of the study, and allowed individuals to decide if they'd like to decline immediately, or to determine if they were interested in participating. Individuals indicated their interest in the study by responding to the email positively or otherwise conveying to me through further contact that they'd like

more information. At this time, secondary contact occurred, during which individuals were sent a contract form, which outlined the study in more detail. In addition, at this time, interviews either via telephone or email were scheduled with the participant. If interviews were by telephone, participants sent electronic consent forms, but if interviews were in person, each participant signed the consent form at the in-person interview.

4.4.2 Interviews

The interviews took place at a location where the participant felt comfortable (ie. Their office or a public place), which was decided when the meeting was scheduled. During the interview, handwritten notes were taken for transcription of responses. Transcribed responses and any electronic data, which may be attributed to a specific individual, were stored in a locked drawer. After each interview, participant names were coded, and any identifying features stripped from the interview results if participants decided not to allow quotation or attribution. This ensured anonymity and discretion if participants did not wish to be identified.

4.4.3 Data Analysis

Interview data was then organized into a SWOT table, one for each of the four participant groups, and a summary table that combines all participant interview results. The organization was based on specific changes identified in the comparison table (Table 1). These were established as important amendments CEEA 2012 through the literature review, and the interview questions were structured around these issues.

Then, a case study was conducted, using an environmental assessment for a non-renewable energy project completed under CEEA 1995. The project I chose was the Sable Offshore Gas Project, approved in 1997. This environmental assessment was compared to

the methodology outlined under CEAA 2012 in order to demonstrate how changes in the Act will concretely affect how environmental assessments are carried out in Canada.

The SWOT (Strengths/Weaknesses/Opportunities/Threats) analysis is a commonly used qualitative analysis method, often in a business context. SWOT is used to identify key factors in strategies and situations (Internet Centre for Management and Business Administration, 2010). The Strengths and Weaknesses (SW) generally refer to the present, while the Opportunities and Threats (OT) generally refers to the future. While there are criticisms that SWOT analysis is not rigorously analytical (Yuksel & Dag deviren, 2007), it has been lauded as a useful tool to assess any level of human organization that aims to achieve a goal (Rizzo & Kim, 2005). CEAA attempts to achieve environmental protection and sustainability in Canada. In this study, it will be used to identify the key components of CEAA, which governs the Canadian strategy for environmental assessment.

4.5 Limitations/Assumptions

While the methodology can achieve the objectives for this study, there are limitations.

First, temporal limitations are present in the study. Time constraints for the project limited the number of interviewees for the study. While it would be ideal to capture as many perspectives as possible, 16 interviews from individuals across four diverse groups still captured a good representation of distinct individuals that participate or have knowledge about environmental assessment.

An assumption inherent to the study is that participants gave honest answers in the interview, and that the results captured their true thoughts and opinions. Since the study questions the efficacy of a law in Canada, some individuals may have felt uncomfortable

participating or responding honestly. It is for this reason that all precautions were taken to maintain anonymity of participants if they so choose.

Another limitation of the study is that since participants only expressed their opinions and views, the study may not be completely representative of all effects of CEAA 2012 on environmental assessment. Due to the recent nature of the law, some effects are not yet known, so individuals, while they may be very well versed in this field, may not know all answers or outcomes.

5.0 Results

Interview results were compiled into SWOT tables, organized by group (Table 2, 3, 4, and 5).

5.1 Interview Results

Table 2. SWOT table for Industry responses.

	Strengths	Weaknesses	Opportunities	Threats
Triggers/ Screening Process (1, 3)				<ul style="list-style-type: none"> fewer projects subject to full EA- things could be falling through the cracks
Timeline (8)	<ul style="list-style-type: none"> Right direction, better to be more timely less risk to industry 	<ul style="list-style-type: none"> too short 	<ul style="list-style-type: none"> if proponent can increase rate of projects (due to shorter timelines), they can contribute more to NGO and env. initiatives 	<ul style="list-style-type: none"> not enough time for public input & aboriginal consultation
Budget	<ul style="list-style-type: none"> process will be more cost effective in general cheaper for proponents- don't have to pay consultants for as much work cheaper for government 		<ul style="list-style-type: none"> more money for environmental initiatives 	
Public Participation (6)	<ul style="list-style-type: none"> Better for industry, tries to strike a better balance 	<ul style="list-style-type: none"> process should be open, and this seems to make it less open 		<ul style="list-style-type: none"> public is unsure of their role
Provincial/ Federal Interaction (10)	<ul style="list-style-type: none"> more provincial EAs better harmonization 	<ul style="list-style-type: none"> resources?? (NS has a lot of large EAs, given its small footprint and population) 	<ul style="list-style-type: none"> might be easier to have provinces do majority a lot of useless duplication before- more efficient now 	<ul style="list-style-type: none"> things could fall through the cracks
Sustainability & Environmental Protection (7, 4, 9)	<ul style="list-style-type: none"> could be better sustainability due to economics 	<ul style="list-style-type: none"> not better env. Protection (but not worse) less protection 	<ul style="list-style-type: none"> industry sets standards, wants to be responsible SEAs could help with sustainability if EA process is sped up, and less \$ spent, more \$ for env stewardship 	<ul style="list-style-type: none"> chance that RA could succumb to political pressures increased risk that cumulative effects of multiple projects will not be as well examined

Industry, perhaps as expected, generally has a positive view on many of the changes in CEAA 2012, though there were still criticisms in some cases (Table 2). In general, industry personnel appreciated the addition of government timelines to the process, as it provides more certainty to the proponent, encouraging development, though there was still disagreement about the appropriateness of the length. Better harmonization/substitution legislation for provincial and federal processes were also appreciated, as many industry participants felt that often the two processes were taking place for a single project, but were not aligned, creating a lot of bureaucratic inefficiencies.

Individuals also expressed that while the legislation does not necessarily promote better sustainability and environmental protection, industry has changed significantly in the past few decades, and environmental and social responsibility are now priorities. They maintained that most companies recognize the value of going above and beyond legal obligation in terms of environmental protection, and many enjoy healthy and beneficial relationships with environmental and social NGOs. An idea presented by many was that if industry had to expend less financial resources for environmental assessments, they could perhaps reallocate those resources to environmental stewardship programs.

Table 3. SWOT table for Federal Government responses.

	Strengths	Weaknesses	Opportunities	Threats
Triggering/ Screening Process (1, 3)	<ul style="list-style-type: none"> reduces redundancy 	<ul style="list-style-type: none"> could miss smaller projects that will have a large impact 		<ul style="list-style-type: none"> “list” as a concept is problematic, it is very black or white
Timeline (8)	<ul style="list-style-type: none"> gives more certainty to proponents 	<ul style="list-style-type: none"> timelines still too long not a lot of flexibility 	<ul style="list-style-type: none"> calls for proponents to give better quality projects 	<ul style="list-style-type: none"> still a lot of bureaucratic “nonsense” may be more difficult to live up to “duty to consult” within those timelines projects will be approved without a full, proper assessment
Budget	<ul style="list-style-type: none"> as a whole, more cost effective 	<ul style="list-style-type: none"> process is still not cost effective 	<ul style="list-style-type: none"> resources spent on bigger projects with more impacts 	<ul style="list-style-type: none"> we will pay for this in the long run (remediation, markets drying up)
Public Participation (6)	<ul style="list-style-type: none"> “interested party” also applies to proponents, could help with efficiency 			<ul style="list-style-type: none"> public involvement at hearings should not be limited
Provincial/ Federal Interaction (10)	<ul style="list-style-type: none"> better harmonization inclusion of equivalency reduces redundancy 	<ul style="list-style-type: none"> provincial legislation not as strong as federal 		<ul style="list-style-type: none"> provinces don’t have the resources to take on additional EAs
Sustainability & Environmental Protection (7, 4, 9)	<ul style="list-style-type: none"> resources can now be focused on bigger issues more certainty- process and timelines are better understood, improvement for sustainability enforceable decision-making 	<ul style="list-style-type: none"> weighted heavily towards industry, does not protect environment does not think about long term not holistic 	<ul style="list-style-type: none"> allows for more resources to be spent on larger projects with potentially more impact 	<ul style="list-style-type: none"> Agency is now the lead- does not always have the best expertise trying to put too many “non EA” issues into EA interaction with other environmental legislation changes hurts Canada’s trade relationship

Participants in the federal government group had widely varied perspectives on the adoption of CEAA 2012 (Table 3). Some participants expressed that the project list will be more efficient and reduce the number of EAs required for projects that shouldn't have needed them anyway. However, the project list was viewed as very problematic, as it is a black or white concept. For example, 40 years ago, we would not have understood the enormity and impacts of the oil sands, and simply because it was not understood at the time, it would not have been included on a project list (Leslie, pers. comm.).

While some Federal Government participants felt that the focus on larger projects was more efficient, and that giving industry more certainty could benefit sustainability, the general sentiment was that CEAA 2012 was developed for economic interests, is not holistic, and- coupled with changes to other federal environmental legislation- CEAA 2012 does a worse job of protecting the environment in Canada.

Table 4. SWOT table of responses from academia.

	Strengths	Weaknesses	Opportunities	Threats
Triggering/ Screening Process (1, 3)		<ul style="list-style-type: none"> • adds uncertainty • results in later public involvement 		<ul style="list-style-type: none"> • fewer projects will be assessed
Timeline (8)	<ul style="list-style-type: none"> • good to include timelines, encourages development, more certainty for proponents • increase in efficiency (getting job done with least amount of time and money) 	<ul style="list-style-type: none"> • want to be thorough, need adequate time • decrease in effectiveness (getting job done well) 		<ul style="list-style-type: none"> • could result in snap decisions about “interested party” to expedite process to meet timeline
Budget	<ul style="list-style-type: none"> • could translate into savings • will cost less 	<ul style="list-style-type: none"> • will be less effective 		
Public Participation (6)		<ul style="list-style-type: none"> • raises public anxiety • reduced transparency, shorter timelines 		<ul style="list-style-type: none"> • discourages public involvement
Provincial/ Federal Interaction (10)		<ul style="list-style-type: none"> • puts pressure on provinces to do more EAs 	<ul style="list-style-type: none"> • some provincial processes are better 	
Sustainability & Environmental Protection (7, 4, 9)		<ul style="list-style-type: none"> • none of the changes contribute to sustainability/ environmental protection • scope is reduced 		<ul style="list-style-type: none"> • less informed decision-making

Perspectives from academia were generally pessimistic about the efficacy of CEAA 2012 (Table 4). While participants agreed that many of the changes would likely result in cost savings, these savings would be accompanied by a less effective process. The difference between an efficient and effective process needs to be clearly differentiated (Duinker, pers. comm.). The process will likely be more cost efficient, meaning that the EAs will likely be completed in less time and with less money. However, the process is certainly not more cost effective, because these savings result in a less rigorous process, and likely less environmental protection (Duinker, pers. comm.).

Timelines were a major concern, as not only could they lead to quick decision making about public involvement, but also they could result in less informed decision-making. In general, none of the academic participants felt that CEAA 2012 improved sustainability and environmental protection in Canada

Table 5. SWOT table of Provincial Government Responses.

	Strengths	Weaknesses	Opportunities	Threats
Triggering/ Screening Process (1, 3)	<ul style="list-style-type: none"> triggers will be clearer 		<ul style="list-style-type: none"> what the triggers are will be very important for the efficacy of the law 	
Timeline (8)	<ul style="list-style-type: none"> good for proponents will mean that the focus will be shifted to the most important parts 			
Budget	<ul style="list-style-type: none"> less expensive for proponent perhaps cost reduction for government, many fewer screenings 			
Public Participation (6)				<ul style="list-style-type: none"> “interested party” may offend public could reduce participation
Provincial/ Federal Interaction (10)	<ul style="list-style-type: none"> substitution may be a good thing 	<ul style="list-style-type: none"> gaps between provincial and federal EA 		<ul style="list-style-type: none"> something could “fall through the cracks”
Sustainability & Environmental Protection (7, 4, 9)		<ul style="list-style-type: none"> changes don’t promote sustainability 		

While Provincial Government participants felt that CEAA 2012 does not promote or contribute to sustainability, benefits of the changes were still commended. A benefit identified was cost savings for both the government and proponents. The changes will give certainty to proponents of development, which will allow for more confident investment in that development. In addition, it was pointed out that the imposition of timelines would shift the EA focus to the most important or significant impacts.

Better harmonization and substitution regulations were seen as a benefit of CEAA 2012, in order to reduce redundancy, but could still be a problem because some provincial processes are less rigorous than the federal process under CEAA 1995. It was suggested that ultimately, the final project list will determine how effective the legislated EA process in Canada will be.

In order to better analyze the spectrum of responses, all results were compiled into a single, summary SWOT table (Table 6).

Table 6. Summary SWOT table of responses from all participants.

	Strengths	Weaknesses	Opportunities	Threats
Triggering/ Screening Process (1, 3)	<ul style="list-style-type: none"> will be clearer more concise 	<ul style="list-style-type: none"> uncertainty later public involvement small projects still have big impacts 	<ul style="list-style-type: none"> what the triggers are will be very important 	<ul style="list-style-type: none"> fewer projects subject to full EA- things could be falling through the cracks “list” problematic
Timeline (8)	<ul style="list-style-type: none"> focus will be shifted to the most important parts encourages development, more certainty for proponents increase in efficiency (getting job done with least amount of time and money) less risk to industry 	<ul style="list-style-type: none"> decrease in effectiveness (getting job done well) too short timelines still too long not a lot of flexibility 	<ul style="list-style-type: none"> if proponent can increase rate of projects they can contribute more to NGO and env. Initiatives could mean better thought-out projects 	<ul style="list-style-type: none"> could result in snap decisions about “interested party” to expedite process to meet timeline not enough time for public input & aboriginal consultation may be more difficult to live up to “duty to consult” within those timelines projects will be approved without a full, proper assessment
Budget	<ul style="list-style-type: none"> perhaps cost reduction for government could translate into savings process will be more cost effective in general cheaper for proponents- don’t have to pay consultants for as much as a whole, more cost effective 	<ul style="list-style-type: none"> will be less cost effective process is still not cost effective 	<ul style="list-style-type: none"> more money for environmental initiatives resources spent on bigger projects with more impacts 	<ul style="list-style-type: none"> we will pay for this in the long run (remediation, markets drying up)
Public Participation (6)	<ul style="list-style-type: none"> Better for industry, tries to strike a better balance “interested party” could help with efficiency 	<ul style="list-style-type: none"> raises public anxiety reduced transparency, shorter timelines less open process 	<ul style="list-style-type: none"> public anxiety about involvement 	<ul style="list-style-type: none"> “interested party” may offend public discourages public involvement public unsure of their role
Provincial/ Federal Interaction (10)	<ul style="list-style-type: none"> substitution may be a good thing more provincial EAs better harmonization inclusion of equivalency reduces redundancy 	<ul style="list-style-type: none"> gaps between provincial and federal EA puts pressure on provinces to do more EAs resources?? provincial legislation not as strong as federal 	<ul style="list-style-type: none"> some provincial processes are better might be easier to have provinces do majority more efficient now 	<ul style="list-style-type: none"> something could “fall through the cracks”

Sustainability & Environmental Protection (7, 4, 9)	<ul style="list-style-type: none"> • could be better sustainability due to economics • resources can now be focused on bigger issues • more certainty- process and timelines are better understood, improvement for sustainability • enforceable decision-making 	<ul style="list-style-type: none"> • none of the changes contribute to sustainability/ environmental protection • scope is reduced • not better env. Protection (but not worse) • less protection • weighted heavily towards industry, does not protect environment • does not think about long term • not holistic 	<ul style="list-style-type: none"> • industry sets standards, wants to be responsible • SEAs could help with sustainability • if EA process is sped up, and less \$ spent, more \$ for env stewardship • allows for more resources to be spent on larger projects with potentially more impact 	<ul style="list-style-type: none"> • less informed decision-making • chance that RA could succumb to political pressures • increased risk that cumulative effects of multiple projects will not be as well examined • Agency is now the lead- does not always have the best expertise • trying to put too many “non EA” issues into EA • interaction with other environmental legislation changes • hurts Canada’s trade relationship
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As is illustrated in the above table, there was a broad spectrum of responses from all participants. For all identified changes, both negative and positive effects were perceived.

5.2 Other Comments

Throughout the course of the interviews, other comments about CEAA 2012 and the EA process in Canada were presented that were not applicable to the categories in the SWOT table. Some of the comments were made by more than one individual, and some were just novel. Here, I will present some of these ideas to add to the data given in the SWOT tables.

First, one of the interview questions discussed Strategic Environmental Assessment (SEA), and whether or not it could be a useful tool for policymakers. In general, participants felt that SEAs were positive, and that it should be a goal for policy moving forward, but that it was not something that needed to be included in legislation such as CEAA 2012. Some participants felt strongly that using SEAs could actually help focus and simplify the EA process.

A key issue that most of the contributors took with CEAA 2012, even if they were in support of the new legislation, was the method of delivery by the Government of Canada. Many felt that the delivery of the changes in an omnibus budget bill, without much consultation caused public anxiety. In addition, some individuals expressed that the decision-making process for the changes was not an open democratic process. Concerns were also expressed about living up to the duty to consult Aboriginal Peoples in short timelines, and the lack of explicit language about this duty in the Act.

In the interviews, it was mentioned that CEAA 2012 may be more efficient (getting the job done with the least time and money), but it is certainly less effective (getting the job done well) (Duinker, pers. comm.). This is an important distinction, because we are gaining efficiency in this process, at the cost of effectiveness, in a process that was not all that

effective anyways (Duinker, pers. comm). Several interview participants pointed out that since CEAA 2012, CEAA 1995 has become a “lesser of two evils”, as it was a process that was not all that effective anyways.

6. Case Study

6.1 Project Description

The Sable Offshore Gas Project was proposed as a project to the National Energy Board in June 1996 after feasibility studies and landowner consultation (Fitzpatrick & Sinclair, 2003). The project is located off the coast of Nova Scotia, along the Scotian Shelf. Drilling occurs in this area, and the natural gas is then shipped via pipeline to Goldboro, Nova Scotia, where a gas plant is located. The North Atlantic Pipeline then pumps the natural gas through New Brunswick and into the United States via Maine (see figure 3) (Canadian Environmental Assessment Agency et al., 1997).

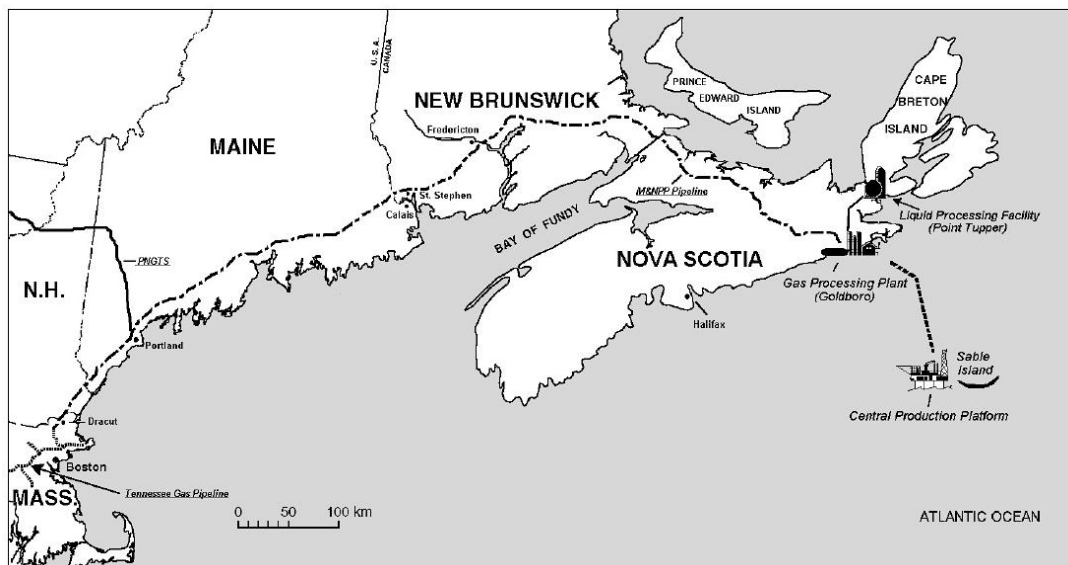


Figure 3. Map of Project location. (From Canadian Environmental Assessment Agency et al., 1997).

It is a massive undertaking, with various owners, such as Shell and Mobile Oil, Imperial Oil Resources Limited and Nova Scotia Resources Limited that uses the Maritimes and North Atlantic Pipeline to deliver gas to the United States and Atlantic Canada (Fitzpatrick & Sinclair, 2003). Together, with the Maritimes and Northeast Pipeline Project, it underwent a Joint Public Review Panel, and was approved in October 1997 (Canadian Environmental Assessment Agency et al., 1997). Environmental assessments were completed for both projects, and a Review Panel decision made, in accordance with regulations under CEAA 1995, the Nova Scotia Environment Act, the National Energy Board, and the Canadian Offshore Petroleum Board regulations (Fitzpatrick & Sinclair, 2003).

6.2 EA Process

Table 7. Outline of Sable Offshore Energy Project Development Environmental Assessment process under CEEA 1995, and how it may have been different under CEEA 2012. Details of process from: The Joint Public Review Panel Report: Sable Gas Projects, 1997.

	CEEA 1995 Process (Updated in 2003)	CEEA 2012
1. Triggering	<ul style="list-style-type: none"> triggered federal EA (variety of reasons) 	<ul style="list-style-type: none"> would still likely trigger federal EA
2. Responsible Authority	<ul style="list-style-type: none"> Canada-Nova Scotia Offshore Petroleum Board (CNSOPB), National Energy Board (NEB), Fisheries and Oceans Canada, Industry Canada, Environment Canada 	<ul style="list-style-type: none"> National Energy Board (NEB)
3. Screening	-	-
4. Scoping	<ul style="list-style-type: none"> required to consider all environmental and socioeconomic effects 	<ul style="list-style-type: none"> focused on large projects of “federal interest”
5. Process Options	<ul style="list-style-type: none"> comprehensive study and review panel 	<ul style="list-style-type: none"> could undergo standard EA, review panel
6. Public Participation	<ul style="list-style-type: none"> public hearings for 4 months in NS and NB participant funding by federal government Aboriginal consultation + collaboration 	<ul style="list-style-type: none"> shorter time frames for input (20 days), involvement limited to “interested party”, as defined by NEB or Review Panel
7. Environmental Effect	<ul style="list-style-type: none"> any change in biophysical environment and ripple effects (social, economic, cultural, etc.) many species, habitats considered 	<ul style="list-style-type: none"> limited to certain effects considered of “federal interest” only species, land of “federal interest” would need to be considered
8. Timelines	<ul style="list-style-type: none"> took ~1.5 years government time-underwent Joint Panel Review 	<ul style="list-style-type: none"> timelines apply to all EAs (365 days for Standard EA, 2 years for Review Panel)
9. Enforceability	<ul style="list-style-type: none"> no real ability to enforce EA conditions 	<ul style="list-style-type: none"> EA conditions are enforceable
10. Provincial/Federal Interaction	<ul style="list-style-type: none"> some harmonization occurred 	<ul style="list-style-type: none"> would likely still include harmonization, maybe substitution

6.3 Discussion of Case Study

Some of the key steps in the EA process are highlighted above (Table 7), specific to the Sable Gas Project. These key steps are actually aligned with some of the changes from CEAA 1995 to CEAA 2012, though some of the steps remain the same under both pieces of legislation. Here, I will discuss the main differences in the process.

The first main difference would be the Responsible Authority (2). Under CEAA 1995, the Responsible Authority on the Sable Gas Project was made up of 5 different departments: the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB), the National Energy Board (NEB), Fisheries and Oceans Canada, Industry Canada and Environment Canada (Canadian Environmental Assessment Agency et al., 1997). This diversity in government departments provided different perspectives, which made the process more holistic (Leslie, pers. comm). In CEAA 2012, the Responsible Authority for this project would likely be solely the National Energy Board. This consolidation of power could leave room for the RA to be politically influenced.

Another change in the process is the scoping, and definition of environmental effects. The scope of the EA for the Sable Gas Project was very broad and included all environmental and resulting socioeconomic impacts of the project. This is unlike the CEAA 2012, where environmental effects only are only considered for species/habitats over which the federal government has jurisdiction (CEAA 2012, s. 5.1).

The timelines for this project (approximately 1.5 years of government time) would still be satisfactory under CEAA 2012, which limit government time to 2 years for review panels (CEAA, 2012).

Therefore, there are some differences in the way that the Sable Gas Project would have been assessed under CEAA 2012. Most notably, the Responsible Authority would now be solely the NEB and the scope of the EA could have been narrowed. Some other differences are that the timelines would be restricted (though this project fits in with the timelines) and there could have been an option for improved harmonization, or substitution/equivalency. However, a few of the steps would have been the same anyways. This does not necessarily mean that these steps have conserved elements of sustainability because they've not changed, as many of the changes were made from CEAA 1995, a legislated process that was "not all that efficient anyways" (Duinker, pers. comm; Mushkat, pers. comm).

Environmental assessments serve to fully investigate biophysical and socioeconomic impacts of a proposed project prior to development, ensuring that mitigation measures may be undertaken and plans may be adjusted to lessen negative and increase positive impacts (Noble, 2010). In this particular case study, concerns were raised about the potential impacts of this project on the sensitive ecosystem in the Gully, impacts on the aquaculture in County Harbour and the project detracting from the rural lifestyle that existed in the area (the Joint Public Review Panel Report: Sable Gas Projects, 1997). In the review panel report, these, and other, issues were investigated. Mitigation measures were recommended for each potential negative impact that could not be avoided. The EA process allowed for the public to voice these concerns, and have their significance detailed in the report, along with mitigation measures. This undoubtedly lessens negative environmental and socioeconomic impacts, as there are not other vehicles for this information to be gathered and presented.

White's Point Quarry was a proposed project by Bilcon Nova Scotia Corporation within Nova Scotia that underwent a provincial and federal review. The project was rejected by the minister of Environment and Labour in 2007 (Nova Scotia Government, 2012). The Minister felt that the project's negative impacts outweighed the potential positive ones. This is an example of where the project was not considered to be aligned with a purpose of CEAA, to promote sustainability, and thus was rejected.

7. Discussion

7.1 Provincial and Federal Interaction

As mentioned in the literature review, CEAA 2012 will likely lead to a reduction in federal assessments and an increase in provincial assessments. This is the result various changes in the Act, including the narrowing of scope of federal assessments, the elimination of the former screening process and introduction of a project list rather than triggers, and the introduction of substitution or equivalency for provinces to essentially take over from the federal process. To some interview participants, this was a positive change, and to others, it was negative.

Some interviewees felt that the increase of provincial assessments due to a decrease in federal assessments would ultimately be a good thing so that the provinces are able to have more control about what kinds of developments are taking place right in "their own backyard", and claimed that some provinces had really pushed for this change within the legislation. Other benefits of this offloading to the provinces, were that it could reduce redundancies, and that the provincial processes may already, or have the opportunity to

become better and more rigorous than the federal process. Oftentimes, harmonization was occurring between federal and provincial governments during the process, wherein the federal and provincial EAs would be occurring simultaneously. This was thought by some participants to be superfluous, and a waste of resources. They felt that giving the option of substitution would be better, so that if provinces were able to prove that their processes would be adequate, they would be able to complete the EAs without federal input.

Some participants expressed that there are provincial processes that are stricter, so it would be beneficial environmentally for the provinces to undergo more of their own assessments. In addition, there was the thought that perhaps this could incite provinces to make changes in their own environmental assessment legislation to pick up the slack and ensure that development occurred sustainably in the province.

The participants who felt that the off-loading of many EAs onto the provinces was a bad thing tended to express that they either felt provinces were not equipped with adequate resources to take this over, or that the provincial processes were not as rigorous as the previous federal process had been. I also wondered how the provinces would take on additional responsibilities without additional resources, but this question has yet to be answered. Those who communicated that the provincial processes were not as rigorous feared that this would lead to a lot of environmental effects being missed, or not even considered. This was consistent with findings in the literature (Gibson, 2012). This discrepancy between environmental assessment regulations across the provinces could lead to a “race to the bottom”, wherein the proponent seeks out the province with the least strict EA legislation to develop projects (Forsdyke, R., pers. comm.).

It is unclear, as of yet, whether the decrease in federal and increase in provincial EAs will be a good thing or bad thing for environmental assessment. This issue of jurisdiction is one that will be critical for environmental protection and development, and if provincial legislation is improved, could be better for environmental protection.

7.2 Sustainability and Environmental Protection

While there were participants who expressed ways in which the changes to CEAA may contribute to sustainability in Canada, such as perhaps freeing up additional resources for environmental stewardship, and being able to enforce the conditions of EA decisions, in general, sustainability and environmental protection were not considered to be improved as a result of CEAA 2012. Out of 16 interviewees, 2 individuals expressed that sustainability could potentially be improved as a result of this legislation, likely only for economic reasons. Perhaps the most telling result of the interviews was that out of the 16 participants, not one single person felt that CEAA 2012 would improve environmental protection in Canada.

These results are the most telling because in CEAA 2012, a purpose of the legislation is: “to encourage federal authorities to take actions that promote sustainable development in order to achieve or maintain a healthy environment and a healthy economy” (CEAA, 2012, s. 4(1)h). So, the position of the individuals interviewed is essentially that the Act does not fulfill one of its explicit purposes. This is certainly in agreement with the literature (Gibson, 2012;Doelle, 2012), which suggests that CEAA 2012 is detrimental to any progress made during the last 40 years.

Anxiety over economic uncertainty seems to have lead to the development of CEAA 2012, but at what cost? In a time when we are becoming increasingly aware of the

environmental crisis we've created, it seems backwards to erase any progress we've made in protecting our resources.

8.0 Conclusions

This study aimed to examine the changes made from CEAA 1995 to CEAA 2012, to investigate what these changes will mean for the future of EA in Canada, to determine how these changes will affect the provincial and federal roles in the EA process, and to establish whether or not these changes will contribute to sustainability. The study asked: How will the recent changes to the Canadian Environmental Assessment Act affect how environmental assessments in the energy sector are conducted in Canada and how will this affect sustainable development and environmental protection? The study aimed specifically to examine (1) how the environmental assessment law functioned up to 2012, (2) how the specific changes will affect environmental assessments in the future, (3) how these changes will affect environmental protection and sustainability, and (4) how these changes will impact provincial and federal roles in EA.

This study found that (1) the previous legislation (CEAA 1995), while not exactly an extremely robust piece of environmental legislation, was perhaps more effective. Interview participants described CEAA 1995 as being more comprehensive, and requiring more projects to undergo federal assessment, as well as being more inclusive of the public. This is consistent with findings in the literature review. (Doelle, 2012; Gibson, 2012; Assembly of First Nations, 2012; EcoJustice, 2012).

This study also found that (2), in the future, CEAA 2012 will certainly impact how environmental assessments are carried out in the future. First of all, less projects will be

examined federally, so individual projects will undergo different types of EA depending on which province the project occurs in. In addition, the projects that will undergo federal assessment will generally be much narrower in scope, will have to be completed according to timelines, will likely involve less input from the public, and will have enforceable EA conditions.

Perhaps most importantly, this study found that CEAA 2012 is unlikely to contribute to sustainability or environmental protection in Canada (3). Findings suggest that as a result of this legislation, environmental protection will likely suffer. This is consistent with opinions expressed in the literature (Doelle, 2012; Gibson, 2012; Assembly of First Nations, 2012; EcoJustice, 2012).

Finally, this study found that provincial and federal roles will certainly change as a result of this new legislation (4). Likely, many more projects will be assessed provincially, and many less projects will be assessed federally. This means that the provinces will now shoulder more of the responsibility in coordinating EAs. These statements were reinforced in the literature (Doelle, 2012).

There are, however, limitations to this study. Since CEAA 2012 is so recent, there is no way of truly knowing the effects of the legislation until it is used in real life. The effects of the changes expressed in this study are only opinions of a variety of individuals who have experience in EA in Canada, and those who've written papers that I reviewed. More will be known about these effects in the coming months and years. In the future, studies could interview more individuals to gather a larger range of perspectives. In addition, future research could look at ways to address some of the changes that are seen as negative, and determine ways to improve the legislation.

This study could be used by government officials to determine areas of concern about CEAA 2012 by professionals. Results of the study could also be used to address gaps, and possible areas for improvement when amendments to CEAA are made, or when the Act undergoes a full review in 2017. I recommend the government allow the process to be more transparent when making significant changes to environmental legislation in the future, and allow more public input. Public involvement should be encouraged in the process, and the Duty to Consult Aboriginals should be clearly outlined in legislation. In the meantime, I recommend that the provinces and territories take this opportunity to improve their own environmental assessment legislation, since it seems as though it will be this level of government responsible for the majority of EAs anyways.

The changes to the Canadian Environmental Assessment Act made in 2012 have generally been harmful to sustainability and environmental protection in Canada. While there are some changes that may be beneficial, the Government of Canada has generally been criticized for the introduction of this legislation (CEAA 2012), and these findings serve to support that criticism.

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11.0 Appendix- Interview Questions

Interview Questions

1. What do you think of the changes to the way the Act is triggered?
2. What effect do you believe firmer timelines for completion of EIA will have?
3. What do you think of the changes to public involvement?
4. What do you think of the decision not to include Strategic Environmental Assessment in the Act?
5. Do you feel that the changes to CEAA will better protect the environment in Canada or not? Why?
6. Do you feel that changes to CEAA will promote better sustainability in Canada or not? Why?
7. How do you think the changes will affect the jurisdictional boundaries between provincial and federal EIA roles and responsibilities?
8. Do you think the changes to CEAA will generally make EIA more or less cost effective? Why?
9. What do you see as the main strengths to the old CEAA?
10. What do you see as the main weaknesses of the old CEAA?
11. What do you see as the main strengths to CEAA 2012?
12. What do you see as the main weaknesses to CEAA 2012?
13. Is there anything else you'd like to say about CEAA 2012 and EIA in Canada?