An Evaluation of Canada's Environmental Sustainability Planning System and the Federal Sustainable Development Act

by

Jenna Bedore

B.Sc., Queen's University, 2008

Research Project Submitted In Partial Fulfillment of the
Requirements for the Degree of
Master of Resource Management

in the
School of Resource and Environmental Management
Faculty of Environment

Report No.: 579

© Jenna Bedore 2013

SIMON FRASER UNIVERSITY

Summer 2013

All rights reserved.
However, in accordance with the *Copyright Act of Canada*, this work may be reproduced, without authorization, under the conditions for "Fair Dealing." Therefore, limited reproduction of this work for the purposes of private study, research, criticism, review and news reporting is likely to be in accordance with the law, particularly if cited appropriately.

Approval

Name:	**Jenna Bedore**
Degree:	**Master of Resource Management (Planning)**
Report No.:	**579**
Title of Project:	***An Evaluation of Canada's Environmental Sustainability Planning System and the Federal Sustainable Development Act***
Examining Committee:	**Chair:** Mykol Knighton MRM Candidate

Thomas Gunton
Senior Supervisor
Professor

Murray Rutherford
Supervisor
Associate Professor

Date Defended/Approved: August 8, 2013

Partial Copyright Licence

The author, whose copyright is declared on the title page of this work, has granted to Simon Fraser University the right to lend this thesis, project or extended essay to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users.

The author has further granted permission to Simon Fraser University to keep or make a digital copy for use in its circulating collection (currently available to the public at the "Institutional Repository" link of the SFU Library website (www.lib.sfu.ca) at http://summit/sfu.ca and, without changing the content, to translate the thesis/project or extended essays, if technically possible, to any medium or format for the purpose of preservation of the digital work.

The author has further agreed that permission for multiple copying of this work for scholarly purposes may be granted by either the author or the Dean of Graduate Studies.

It is understood that copying or publication of this work for financial gain shall not be allowed without the author's written permission.

Permission for public performance, or limited permission for private scholarly use, of any multimedia materials forming part of this work, may have been granted by the author. This information may be found on the separately catalogued multimedia material and in the signed Partial Copyright Licence.

While licensing SFU to permit the above uses, the author retains copyright in the thesis, project or extended essays, including the right to change the work for subsequent purposes, including editing and publishing the work in whole or in part, and licensing other parties, as the author may desire.

The original Partial Copyright Licence attesting to these terms, and signed by this author, may be found in the original bound copy of this work, retained in the Simon Fraser University Archive.

Simon Fraser University Library
Burnaby, British Columbia, Canada

revised Fall 2011

Abstract

The Canadian government passed a comprehensive *Federal Sustainable Development Act* in 2008, which gives legislative basis to international best practices for sustainable development planning and addresses deficiencies that were identified in Canada's previous environmental planning system. The *Act* mandates the preparation of the new Federal Sustainable Development Strategy, which was published in 2010. The new legislation and strategy represent a significant advance in sustainable development planning that can provide a model for other jurisdictions. This paper evaluates these Canadian innovations in sustainable development planning against best practices criteria. The evaluation concludes that these new initiatives have improved the sustainable development planning system in Canada. Despite these improvements, there remain significant deficiencies in the Canadian system primarily related to the failure to set comprehensive sustainable development targets and prepare strategies to meet these targets. With improvements to address these deficiencies, the Canadian sustainable development planning system could act as a model for other jurisdictions on planning for sustainable development.

Keywords: Environmental Planning; National Sustainable Development Strategy; Sustainability Planning; Canadian Environmental Sustainability Planning System; Policy Evaluation

I dedicate this work to my family.
Thank you for all of your love a support.

Acknowledgements

I would like to thank my supervisor Dr. Thomas Gunton for his guidance and input throughout my degree. I would also like to acknowledge Dr. Murray Rutherford whose thoughtful insight was always appreciated. I offer my gratitude to the hardworking and knowledgeable staff and faculty of the School of Resource and Environmental Management for their ongoing support and inspiration. I would also like to express my gratitude to SFU for their financial support. A big thanks goes to my incredible REM community, who challenged me, motivated me and inspired me over the course of this degree.

To my family- thank you for always being so proud of me. And finally, thank you Mykol, for your ongoing love and support.

Table of Contents

Approval ii
Partial Copyright Licence iii
Abstract iv
Dedication v
Acknowledgements vi
Table of Contents vii
List of Tables xi
List of Figures xii
List of Acronyms xiii

1. INTRODUCTION 1
1.1. Introduction 1
1.2. Purpose and Research Objectives 3
1.3. Methodology 3
1.4. Structure of the Report 4
Chapter 1: Introduction 4
Chapter 2: Sustainable Development Planning 5
Chapter 3: Environmental Sustainability Planning in Canada 5
Chapter 4. Methodology and Best Practices 5
Chapter 5: Evaluation of Canada's Environmental Sustainability Planning System 5
Chapter 6: Conclusions and Policy Recommendations 5

2. INTERNATIONAL SUSTAINABLE DEVELOPMENT PLANNING 6
2.1. Introduction 6
2.2. Evolution of the Concept of Sustainable Development 6
2.3. International Efforts Towards Sustainable Development 8
2.3.1. United Nations Conference on Environment and Development: 1992 8
2.3.2. National Sustainable Development Strategies 9
2.3.3. International Progress Towards Completion and Implementation of NSDS 13
2.3.4. Challenges to NSDS Development and Implementation 14
2.4. Summary 15

3. ENVIRONMENTAL SUSTAINABILITY PLANNING IN CANADA 16
3.1. Introduction 16
3.2. The Canadian Context for Sustainable Development Planning 16
3.2.1. Natural Resource Use in Canada 16
3.2.2. Political and Legal Structure 17
3.3. History of the Federal Government's Environmental Sustainability Planning 19
3.3.1. International Involvement 19
3.3.2. Early Domestic Action 20
3.3.3. Implementing Rio's Ideas 22
3.3.4. A Deficient System 26
3.4. Canada's Current Environmental Sustainability Planning System 28

3.4.1. Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada 2010-2013 29
3.4.1.1 Overview of the Document 29
3.4.1.2 Chapters 1 and 2: Context and Environmental Decision Making in Canada 30
3.4.1.3 Chapter 3: Framework for Sustainable Development Planning and Reporting 31
3.4.1.4 Chapter 4: Priorities for Environmental Sustainability 35
3.4.1.5 The Progress Report on the Federal Sustainable Development Strategy 2010-2013 36
3.4.1.6 The 2012 Progress Report of the Federal Sustainable Development Strategy 37
3.4.1.7 Responsible Authorities/Bodies 38
3.4.1.7.1 Environment Canada 38
3.4.1.7.2 Sustainable Development Office 39
3.4.1.7.3 Commissioner of the Environment and Sustainable Development (CESD) 39
3.4.1.7.4 Sustainable Development Advisory Council 40
3.4.1.7.5 Public Works and Government Services Canada (PWGSC) 40
3.4.1.7.6 Treasury Board Secretariat 40
3.4.1.7.7 Cabinet (Privy Council Office) 41
3.4.1.7.8 Other Governmental Department and Agencies 41
3.4.1.7.9 Consultation 41
3.4.2. Environmental Sustainability Legislation 42
3.4.2.1 Auditor General Act 42
3.4.2.2 Canadian Environmental Assessment Act, 2012 (CEAA 2012) 43
3.4.2.3 Canadian Environmental Protection Act 44
3.4.2.4 Species at Risk Act 44
3.4.2.5 Ocean's Act 46
3.4.2.6 Canada Water Act 46
3.4.2.7 Fisheries Act 47
3.4.2.8 Federal Sustainable Development Act 47
3.4.3. Environmental Sustainability Initiatives 48
3.4.3.1 Cabinet Directive on Environmental Assessment of Policy Plan and Program Proposals 49
3.4.3.2 Canadian Environmental Sustainability Indicators 50
3.4.3.3 Clean Air Agenda 50
3.5. Summary 51

4. METHODOLOGY 52
4.1. Introduction 52
4.2. Best Practices Review 52
4.2.1. Comprehensive goals with measurable targets 55
4.2.2. Effective strategy 56
4.2.3. Integration 56
4.2.4. Monitoring 56
4.2.5. Leadership and accountability 57

4.2.6. Adaptive management 57
4.2.7. Stakeholder collaboration 57
4.2.8. Legal framework 58
4.3. Evaluating Best Practice Performance 58
4.4. Data Collection 63
4.4.1. Evaluation Guide 64
4.4.2. Data Limitations 64

5. ANALYSIS AND FINDINGS 66
5.1. Introduction 66
5.2. Canada's ESPS Evaluation 66
5.2.1. Comprehensive Goals and Measurable Targets 66
5.2.2. Effective Environmental Sustainability Strategy 69
5.2.3. Integration 72
5.2.4. Monitoring 73
5.2.5. Leadership and Accountability 76
5.2.6. Adaptive Management 80
5.2.7. Stakeholder Collaboration 81
5.2.8. Legal Framework 85
5.2.9. Evaluation Scores 88
5.3. Comparison of Results with the Previous CESPS Evaluation 89

6. CONCLUSIONS AND RECOMMENDATIONS 94
6.1. Introduction 94
6.2. Evaluation Summary 94
6.3. Recommendations for Improving Canada's Environmental Sustainability Planning System 97
6.3.1. Implement all aspects of the Federal Sustainable Development Act 98
6.3.2. Expand on current sustainability goals and develop short-, medium- and long-term targets with timelines for all environmental goals 98
6.3.3. Demonstrate quantifiably how proposed initiatives will meet sustainability goals, targets and timelines and at what cost 98
6.3.4. Expand the scope of the FSDS and CESPS to integrate social, economic and environmental objectives. 99
6.3.5. Upgrade the current monitoring system to include all aspects of sustainable development and report on progress relative to targets and other jurisdictions, as well as on regulatory non-compliance 99
6.3.6. Incorporate mandatory adaptive management processes and make them legally binding 100
6.3.7. Assign responsibility for meeting specific targets to the departmental Ministers responsible for individual implementation strategies. 100
6.3.8. Design and adequately resource regular multi-stakeholder processes that are mandatory, legislated, and based on consensus decision-making 100
6.3.9. Amend the FSDA to create a legislative basis for all missing best practice components of the environmental sustainability planning system. 101
6.4. Study Limitations 101

REFERENCES 103
Literature Cited 103
Legislation Cited 108
APPENDICES 110
Appendix A. Material Reviewed for Analysis of the CESPS 111
Appendix B. Evaluation Guide 114
Appendix C. Completed Evaluation Guide 121

List of Tables

Table 1. CESI Tracking of Air Quality Indicators (from the FSDS)..... 34

Table 2. Summary of best practice studies reviewed by Ellis et al. (2010). 54

Table 3. Best Practice Criteria and associated Indicators to Evaluate the ESPS..... 60

Table 4. Benchmark Environmental Sustainability Goals (adapted from Boyd 2004)..... 62

Table 5 Benchmark Environmental Sustainability Categories (adapted from Boyd 2004)..... 62

Table 6. "Comprehensive Goals and Measurable Targets" Criterion evaluation for Canada's ESPS. 66

Table 7. "Effective Strategy" criterion evaluation for Canada's ESPS. 69

Table 8. "Integration" criterion evaluation for Canada's ESPS. 72

Table 9. "Monitoring" criterion evaluation for Canada's ESPS. 73

Table 10. "Leadership and Accountability" criterion evaluation for Canada's ESPS..... 77

Table 11. "Adaptive Management" criterion evaluation for Canada's ESPS. 80

Table 12. "Stakeholder Collaboration" criterion evaluation for Canada's CESPS. 81

Table 13. "Legal Framework" criterion evaluation for Canada's ESPS. 85

Table 14. Canada's ESPS Evaluation Scores..... 89

Table 15. A comparison of Canada's current ESPS against the older decentralized system that existed before the Federal Sustainable Development Act (pre-2008). Indicators showing improvement are provided in bold. 91

Table 16. Comparison of the current ESPS and the previous (pre-2008) ESPS based on number of indicators in each of the performance rating categories..... 93

Table 17. Summary of the Canadian ESPS deficiencies and Recommendations 94

List of Figures

Figure 1. Definition of NSDS 10

Figure 2. Advantages of National Sustainable Development Strategies 11

List of Acronyms

AGA	Auditor General Act
CCME	Canadian Council of Ministers of the Environment
CEAA	Canadian Environmental Assessment Act
CEPA	Canadian Environmental Protection Act
CESD	Commissioner of the environment and Sustainable Development
CESI	Canadian Environmental Sustainability Indicators
CESPS	Canadian Environmental Sustainability Planning System
CO_2e	Carbon Dioxide Equivalent
CWA	Canada's Water Act
DPR	Departmental Progress Report
EMS	Expenditure Management System
ESPS	Environmental Sustainability Planning System
FSC	Forest Stewardship Council
FSDA	Federal Sustainable Development Act
FSDS	Federal Sustainable Development Strategy
GDP	Gross Domestic Product
GGO	Greening Government Operations
GHG	Greenhouse gas
IISD	International Institute for Sustainable Development
IUCN	International Union for Conservation of Nature
NAC	National Advisory Council
NRTEE	National Round Table on Environment and Economy
NSDS	National Sustainable Development Strategy
NTFEE	National Task Force on Environment and Economy
OA	Oceans Act
OECD	Organization for Economic Cooperation and Development
PM	Particulate Matter
RPP	Report on Plans and Priorities
SARA	Species At Risk Act
SD	Sustainable Development
SDAC	Sustainable Development Advisory Council
SDO	Sustainable Development Office
SDS	Sustainable Development Strategy
SEA	Strategic Environmental Assessment
SWAG	Sustainability Within A Generation

toe	Ton of Oil Equivalent
UN	United Nations
UNCED	United Nation Conference on Environment and Development
UN DESA	United Nations Department of Economic and Social Affairs
UNEP	United Nations Environmental Programme
UNGA	United Nations General Assembly
VOC	Volatile Organic Carbon
WCED	World Commission on Environment and Development
WSSD	World Summit on Sustainable Development

1. INTRODUCTION

1.1. Introduction

The concept of sustainable development has become the focus of international, national and local governments as a mechanism to manage the social, economic and environmental impacts of a growing human population. The prevalence of this concept in global dialogue, the increasing number of global sustainability summits and the expanding body of research that reports and monitors sustainability initiatives, are all evidence of the focus on sustainable development (Ellis et al., 2010). The field of sustainability originated in the 1970's in response to an increasing societal awareness of global environmental degradation (Lafferty and Meadowcraft, 2000). In addition to an environmental focus, the field evolved to encompass social and economic considerations that were recognized as having spatial and temporal relevance. The World Commission on Environment and Development defined *sustainable development* as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). This paper deals with evaluating the planning process for the environmental pillar of sustainable development in Canada. To avoid confusion with broader definitions of sustainable development, this study uses the term environmental planning system (ESPS).

Members of the international community have embraced the concept of sustainable development in a number of international gatherings. Sustainability was the focus of the United Nations Conference on Environment and Development (UNCED), held in Rio in 1992. In response to growing international concern about environmental degradation, all 191 attending countries, including Canada, became signatories of *Agenda 21* (Lafferty and Meadowcraft, 2000). *Agenda 21* is a non-binding document that provides core guiding principles for international sustainable development. By ratifying *Agenda 21*, governments committed to prepare a national sustainable development strategy (NSDS). The purpose of an NSDS is to "translate the summit's

ideas and commitments into concrete policies and actions" (OECD, 2006a). The commitment was reaffirmed at the 2002 World Summit on Sustainable Development (WSSD) (UN DESA, 2004).

Nations have attempted to fulfill their commitment to produce an NSDS in a variety of ways, resulting in differing outcomes and levels of success. While there are several definitions of NSDS, most definitions describe it as a process rather than a fixed plan. Other key components include adaptability, coordination, and inclusivity (OECD, 2001; UNDESA 2002, IISD, 2004; OECD, 2006a). These components are most often incorporated into a single, comprehensive formal government policy. Countries such as Sweden and the United Kingdom have met their commitment to produce National Sustainable Development Strategies by creating integrated single document strategies that have comprehensive goals and targets. These two countries also rank in the top 10 developed nations for environmental performance (Gunton and Calbick, 2010). While some nations that have succeeded in fulfilling their commitments to produce NSDS, the majority of countries have made little progress in implementation (UN DESA, 2004).

Previous studies show that Canada has failed to fulfill its commitment to produce and implement an NSDS. Canada attempted to meet its international commitments to develop an NSDS by using a decentralized planning system that required each federal governmental department to submit its own Sustainable Development Strategy (SDS) (CESD, 2005). This environmental planning system was found to be deficient and failed to fully meet international best practices (Ellis et al., 2010; Gunton and Joseph, 2006; CESD, 2005). It is therefore no surprise that Canada is ranked 24th out of 25 developed nations for environmental performance (Gunton and Calbick, 2010). These evaluations stress the need for improvement of Canada's sustainable development planning.

The *Federal Sustainable Development Act* (*FSDA*) was passed in 2008 in order to address the deficiencies of the previous system. The *Act* gives legislative basis to international best practices and requires the creation of an all-inclusive NSDS, which was completed in Fall 2010 (*Federal Sustainable Development Act* [S.C. 2008, c. 33]; Canada, 2010). This new single-document NSDS is an attempt to provide Canada with a more centralized and effective environmental planning system.

1.2. Purpose and Research Objectives

The purpose of this research is to evaluate the Canadian environmental sustainability planning system (CESPS), including the new *Federal Sustainable Development Act* (*FSDA*) and the resulting Federal Sustainable Development Strategy (FSDS), to determine if it meets international best practice guidelines. The specific objectives of this research are to:

1. Use best practice criteria for evaluating Canada's ESPS including the *FSDA* and FSDS,
2. Compare the rating of Canada's environmental sustainability planning system to the rating it received before the establishment of the *FSDA*/FSDS to determine if improvements have been made and,
3. Identify the strengths and weaknesses of the *FSDA* and FSDS and make recommendations for improvement.

This research will identify strengths and weaknesses of CESPS and highlight areas for improvement. The evaluation is a *process* evaluation and not an *outcome* evaluation. To clarify, the research is concerned with the planning process to achieve environmental sustainability. It is not an evaluation of the end result or outcomes of environmental sustainability planning.

1.3. Methodology

This research uses a methodology for evaluating environmental planning processes that was developed and successfully applied by the Sustainable Planning Research Group in the School of Resource and Environmental Management (Ellis *et al.*, 2010; Gunton and Joseph, 2006). This methodology is an integration and extension of previous international best practices for environmental planning system evaluation (Ellis *et al.,* 2010). Although the studies used to develop the criteria often focused solely on

NSDS, the same principles can be extended to the CESPS. The steps in this research project include:

1. Review relevant literature pertaining to international best practices for environmental planning process evaluation.
2. Identify and define the best practice principles and indicators to use in environmental planning process evaluation. The study will rely on the indicators and best practices used by Ellis *et al.*, adjusted for any new findings based on the updated literature review.
3. Evaluate the new CESPS, including the *FSDA* and FSDS based on the best practices, by assigning an overall rating (**fully met, largely met, partially met, not met**) to each of the indicators.
4. Assign points to each indicator rating and calculate the aggregate score of Canada's new CESPS.
5. Compare this evaluation of the new CESPS to the evaluation of Canada's previous decentralized environmental planning system to determine if improvements have been made and if those improvements meet international best practices.
6. Based on the evaluation results, identify the strengths and weaknesses of current processes, and recommend methods for improvement.

1.4. Structure of the Report

Chapter 1: Introduction

The first chapter includes an overview of the research objectives, methodology and structure of the report.

Chapter 2: Sustainable Development Planning

This chapter outlines the history of international sustainable development, including international initiatives and the progress that has been made towards developing NSDS internationally.

Chapter 3: Environmental Sustainability Planning in Canada

This chapter includes an overview of Canada's environmental sustainability planning system including history, initiatives, and legislation. A more detailed description of the FSDS and other important parts of the CESPS are provided.

Chapter 4. Methodology and Best Practices

This chapter outlines the methodology developed by Ellis *et al.* (2010) that will be used for the evaluation of Canada's environmental sustainability planning system. It also investigates and documents any new developments in international best practices that are used when evaluating the CESPS.

Chapter 5: Evaluation of Canada's Environmental Sustainability Planning System

In this chapter the international best practices methodology discussed above (Ellis *et al*. 2010) is used to evaluate Canada's current environmental sustainability planning system (including the new FSDS legislation and strategy). The results for each indicator are discussed, compared and analyzed. Then the results of the evaluation are compared with the evaluation of the CESPS that was performed by Ellis et al. in 2010, before the *FSDA* and FSDS were enacted.

Chapter 6: Conclusions and Policy Recommendations

Strengths and weakness of the current CESPS in relation to the previous system and to international standards are identified and discussed. Recommendations for the future direction of Canadian environmental sustainability policy are provided, as well as general final remarks.

2. INTERNATIONAL SUSTAINABLE DEVELOPMENT PLANNING

2.1. Introduction

This literature review covers the evolution of international sustainable development planning and National Sustainable Development Strategy theory. A summary of international efforts, progress and challenges in NSDS planning is provided to contextualize the discussion of Canada's progress in developing and implementing its own NSDS.

2.2. Evolution of the Concept of Sustainable Development

The environment (local and global) has only become a key concern of national and international institutions within the past 40 years (Kates, Parris, & Leiserowitz, 2005). Recognition of deteriorating environmental trends led to the 1972 Stockholm Conference on the Human Environment, where the conflicts between environment and development were clearly acknowledged. This conference also led to the creation of the United Nations Environmental Programme (UNEP) and the International Institute for Environment and Development (IIED), organizations that promoted environmental initiatives, such as national level conservation strategies (Dalal-Clayton & Bass, 2002).

The 1980's brought the concept of sustainability into further prominence following the efforts of several international organizations. The World Conservation Strategy, created by the International Union for the Conservation of Nature (IUCN) in 1980, proposed the conservation of nature as a means to assist human development. It argued specifically for sustainable development and sustainable utilization of species, ecosystems and resources, and emphasized the need to 'main stream' conservation

values into the development process (Dalal-Clayton & Bass, 2002; International Union for the Conservation of Nature, 1980).

The most commonly referenced definition of sustainable development was provided by the World Commission on Environment and Development (WCED) in its 1987 publication, *Our Common Future.* The report provides the following definition:

> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development contains within it two key concepts:
>
> - the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and
> - the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. (WCED, 1987, p.43)

The WCED was created by the United Nations General Assembly (UNGA) in 1983. It was chaired by then Prime Minister of Norway Gro Harlem Brundtland, thus earning the name the "*Brundtland Commission*." The commission's membership was split between developed and developing countries (Kates et al., 2005). The Brundtland Commission's report, *Our Common Future,* emphasized the social and economic dimensions of sustainability in addition to environmental conservation, and stressed that all three objectives are complementary and interdependent in development (Dalal-Clayton & Bass, 2002). The Brundtland Commission argued:

> - Meeting essential needs depends in part on achieving full growth potential, and sustainable development clearly requires economic growth in places where such needs are not being met. Elsewhere, it can be consistent with economic growth, provided the content of growth reflects the broad principles of sustainability and non-exploitation of others. But growth by itself is not enough. High levels of productive activity and widespread poverty can coexist, and can endanger the environment. Hence sustainable development requires that societies meet human needs both by increasing productive potential and by ensuring equitable opportunities for all. (WCED, 1987, p.44)

Achieving sustainable development is considered to be a universal challenge that takes a unique form for each nation, depending on a variety of factors including peace and security, economic interests, political systems, institutional arrangements and

cultural norms. Agreeing on how to address this challenge requires a degree of pluralism and negotiation (Dalal-Clayton & Bass, 2002). According to the UNDESA:

> Sustainable development is incremental and builds on what already exists. Its achievement is as much a process as a fixed goal. Sustainable development is not an activity that has to be left to the long term. Rather, it constitutes a set of short, medium and long term actions, activities and practices that aim to deal with immediate concerns while at the same time address long-term issues. (UNDESA, 2002)

2.3. International Efforts Towards Sustainable Development

2.3.1. United Nations Conference on Environment and Development: 1992

The release of the *Brundtland Report,* and the growing awareness of environment and development issues on the global scale, led to several international meetings including the United Nation Conference on Environment and Development (the Rio Earth Summit) in Rio de Janiero in 1992. Representatives from 191 countries met in Rio to discuss a global program of action for sustainable development (Dalal-Clayton & Bass, 2002).

The conference produced a number of important agreements and conventions including, Agenda 21, the Rio Declaration on Environment and Development, the Statement of Forest Principles, the United Nations Framework Convention on Climate Change, and the United Nations Convention on Biological Diversity (United Nations-Department of Public Information, 1997). These agreements cover more than 40 different sectors and topics and focus on aspects of national legislation, measures, plans and programs, and the use of legal and economic instruments in sustainability planning and management (Dalal-Clayton & Bass, 2002).

All of the 191 countries in attendance at the Rio Earth Summit, including Canada, became signatories of *Agenda 21* (Lafferty and Meadowcraft, 2000). *Agenda 21* is an extremely influential, but non-binding, document that outlines the core guiding principles for international sustainable development. It provides policy-makers from around the world with a point of reference for linking social, economic and environmental issues and

stresses the importance of national sustainable development strategies (NSDS) in working towards global sustainable development (Dalal-Clayton & Bass, 2002).

By ratifying *Agenda 21*, governments committed to "adopt national strategies for sustainable development (which should) build upon and harmonise the various sectoral, economic, social and environmental policies and plans that are operating in the country. Its goals should be to ensure socially responsible economic development for the benefit of future generations" (UNCED 1993). The UN Commission on Sustainable Development (UNCSD) was set up after the Rio conference, to coordinate the implementation of the UN programme. The Commission carries out regular reviews of the global situation in relation to sustainability, the results achieved, and the obstacles, preparing recommendations to help attain goals adopted by the international community.

2.3.2. National Sustainable Development Strategies

The purpose of an NSDS is to "translate the summit's ideas and commitments into concrete policies and actions" (OECD 2006a). *Agenda 21* does not provide a concrete definition of an NSDS, and provides little guidance regarding the development, content, depth and breadth of these strategies. Ellis (2008) provides a summary of several interpretations provided in the literature (Figure 1.).

Figure 1. Definition of NSDS

IISD 2004: NSDS is a process that represents a transition from the traditional fixed plan, towards operating an adaptive system that can continuously improve.

OECD 2006: NSDS is commonly thought to be a process (with a strong emphasis on learning) which leads to a document or plan that needs to remain dynamic. There is a distinction between NSDSs and strategy documents, which are tools to make the strategy explicit and record the policies and actions agreed by the participants.

EEAC 2005: SD strategies cannot be implemented like a 'plan', but need flexible approaches on the government side with at the same time firm and accountable objectives, and ideally also quantitative targets.

Carew-Reid et al. 1994: A means of planning and taking actions to change or strengthen values, knowledge, technologies and institutions.

OECD 2001: A coordinated set of participatory and continuously improving processes of analysis, debate, capacity-strengthening, planning and investment, which integrates the economic, social and environmental objectives of society, seeking trade-offs where this is not possible.

UNDESA 2002: NSDS is a coordinated, participatory and iterative process of thoughts and actions to achieve economic, environmental and social objectives in a balanced and integrated manner.

- Includes: situation analysis, formulation of polices and action plans, implementation, monitoring and regular review
- Cyclical and interactive process of planning, participation and action in which the emphasis is on managing process towards sustainability goals rather than producing a plan as an end product.

UN DESA 2004: The UN Guidance document describes a national

Several themes are apparent in the definitions provided in the above figure. Firstly, a NSDS should be an iterative and adaptive process, rather than a fixed "plan" in order to allow for continuous improvement and accountability. As such, there is no one type of approach by which NSDS should be undertaken. Every country needs to determine, for itself, how best to approach the preparation and implementation of its sustainable development strategy, depending upon the relevant political, historical, cultural, ecological circumstances (UNDESA, 2002). What is important is consistency in applying the underlying concepts of sustainability; ensuring that economic, social and environment objectives are balanced and integrated.

Furthermore, the overall objective of NSDS development is not to develop a new plan or a separate planning process along side existing ones. Instead, it constitutes an improvement or restructuring of the decision making process so that consideration of all three sustainability objectives is integrated and public participation is assured (UNDESA, 2002).

At its full potential, an NSDS can support the environmental infrastructure upon which economic and social development are dependent (Dalal-Clayton and Bass 2002). The UNDESA (2002) reported on several of the advantages conferred to countries via successful NSDS planning and implementation (Figure 2.).

Figure 2. Advantages of National Sustainable Development Strategies

Facilitating decision-making and improving the effectiveness of public policy:

- Help to define choices, goals, targets and policies for sustainable development, and the underlying values;
- Analyze economic, ecological and social issues in a comprehensive and integrated way;
- Promote the development of government policies on sustainable development and building consensus around them;
- Identify and evaluate options (legal reforms, institutional development, etc.) for addressing priority issues;
- Harmonize policies and strategies across sectors and geographic

areas;

- Better prepare and position a country to benefit from such processes like globalization and growth in science and technology;
- Encourage and facilitate institutional and behavioral change for sustainable development.

Enhancing the mobilization of resources:

- Facilitate the mobilization of a nation's human (including people's energies and creativity), financial and material resources, both internally (national) and externally (international), in support of sustainable development;
- Help countries to coordinate donor support - e.g., through donor round tables to consider support for a coherent set of projects and policy initiatives prioritized through a strategy;
- Help to meet reporting requirements under international conventions.

More efficient allocation of resources:

- Facilitate the efficient allocation of rather limited national resources on the basis of priorities set through participatory processes;
- Help identify development projects and programmes and guides their implementation;
- Improve the sharing of benefits that accrue to development on a more equitable basis through bringing up concerns of underprivileged groups to the forefront of the development agenda;
- Facilitate dealing with policy issues such as access to resources, land and property rights that impact on intergenerational benefits.

Resolving conflicts:

- Help to reconcile differences among groups of society and government departments through exposing differences and encouraging open dialogue;
- Facilitate the understanding of differing, at times contradictory policy objectives by quantifying benefits/losses and clarifying tradeoffs.

Building human and institutional capacity:

- Through clearly articulating goals and means to achieve them, a

national sustainable development strategy helps to mobilize capacity, maintain and retain capacity and build it where necessary;

- Help build multidisciplinary capacities that can immediately be harnessed to solve complex and multidisciplinary problems;
- Help also build institutions and policy environment for sustained economic growth and social transformation.

(UNDESA, 2002)

2.3.3. International Progress Towards Completion and Implementation of NSDS

While 191 countries became signatories of Agenda 21, progress in the completion and implementation of these strategies has been variable and insufficient. Five years after the Rio Earth Summit, the 1997 Special Session of the General Assembly met to review international advances in sustainable development planning, reiterate the importance of NSDS, and set a target of 2002 for producing national sustainable development strategies (UNDESA, 2009a).

Subsequently, the 2002 World Summit on Sustainable Development (WSSD), held in Johannesburg, noted the lack of progress in NSDS development and implementation. Countries were urged to "take immediate steps to make progress in the formulation and elaboration of NSDS and to begin their implementation by 2005" (OECD, 2006a). Accordingly, the Programme for Further Implementation of Agenda 21, and the Commitments to the Rio principles, were strongly reaffirmed during the WSSD (UNDESA, 2009b). Additionally, the concept of three mutually reinforcing pillars of sustainable development was incorporated into the 2002 Johannesburg Plan of Implementation (JPOI) (UNDESA, 2011).

Despite the commitments made at Rio and the WSSD, many NSDS development and implementation targets were not reached by 2005. According to an assessment of the status of national strategies in 2004, only 22 of a total of 191 countries had strategies that were being implemented, while another 45 countries had strategy documents that were in the process of being developed or waiting for government approval (UNDESA,

2004). By 2009, 106 Member States of the UN were implementing an NSDS, as per their reporting to the UN CSD or its Secretariat (UNDESA, 2009a).

Twenty-seven OECD countries have prepared formal strategies or plans. Of these, Australia, Finland, France, Japan, Luxembourg, the Netherlands, Sweden, Switzerland and the United Kingdom formulated strategies relatively early and some (*e.g.,* the United Kingdom) have since revised their strategies. Austria, Canada, the Czech Republic, Denmark, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Mexico, New Zealand, Norway, Poland, Portugal Spain and the Slovak Republic prepared their first national strategies more recently (OECD, 2006a; UNDESA, 2009a).

In 2001, the European Union also developed a sustainable development strategy for its Member countries and revised it in 2006, while the Nordic Strategy for Sustainable Development (Denmark, Finland, Iceland, Norway and Sweden) was revised in 2005. Belgium, Turkey and the United States are the three remaining OECD countries that do not have national sustainable development strategies (OECD, 2006a; UNDESA, 2009a).

Approaches to sustainable development have varied, reflecting the diversity of challenges faced by individual countries. However, having an NSDS is still considered an important aspect of sustainable development planning. According to the OECD, NSDS "represent the most visible manifestation of the importance of sustainable development for the policy agendas of individual OECD governments" (OECD, 2006b).

2.3.4. Challenges to NSDS Development and Implementation

As noted above, many countries have struggled with NSDS development and implementation, despite having recognized the importance of NSDS in national level SD planning. One of the long-standing challenges associated with sustainable development planning is the perceived conflict between economic prosperity and environmental protection. Sustainability requires restructuring current development practices, which is often interpreted as a potential risk to economic growth of a nation. Furthermore, political goals are often focused on increasing the wealth and power of the nation and efforts to integrate environmental objectives into decisions may be viewed as too expensive or risky to endorse (IISD, 2004). However, as economies rely on the health of natural resources and other ecological functions, long-term economic stability is actually

dependent on integrating these environmental objectives into decision-making. In order to overcome this challenge, the misconception that environmental protection results in economic failure must be abandoned. Environmental and economic objectives must be placed within a common policy framework in which a variety of parallel objectives can be recognized (Roseland & Connelly, 2005).

The conflicting nature of the short-term electoral structure and the long-term planning focus required for environmental sustainability is another impediment to NSDS implementation (OECD 2001). The typical turnover rate for politicians is a two to five year term while the long-term vision required for NSDS planning is a minimum of twenty to twenty-five years. Furthermore, any effort by a politician in power can be overturned by future officials, more easily in cases where NSDSs are not enshrined in law.

Finally, putting in place a strategy development process involves additional costs, which can be an impediment to NSDS development and implementation. Reforming laws and institutions, engaging the civil society and private sector in the strategy process, and developing new skills, constitute a financial burden to a country. However, the absence of coordination, contradicting policies and strategies, and the neglect of the environment or social sectors entails greater costs that can span over several generations (UNDESA, 2002). Ensuring there is adequate funding to support NSDS requires sustainability goals to be integrated into the national budget.

2.4. Summary

Sustainable development as a concept, as a goal, and as a movement has spread rapidly since its inception, and is now central to the mission of many international organizations, national institutions, corporate enterprises, and locales (OECD, 2006b). NSDS have been recognized internationally as the most visible manifestation of the importance of sustainable development for the policy agendas of national governments and are important tools in the planning and implementation of sustainable development. Despite having made a commitment to produce NSDS 20 years ago, many nations have made little progress in implementation.

3. ENVIRONMENTAL SUSTAINABILITY PLANNING IN CANADA

3.1. Introduction

This chapter consists of an overview of Canada's environmental sustainability planning system (CESPS). First, Canada's economic, physical and political landscape, as they relate to sustainability challenges and opportunities, are discussed. The chapter then reviews the history of environmental sustainability planning in Canada, as well as elements of the current CESPS including: relevant federal environmental legislation, cabinet directives, monitoring systems, sustainable development strategies, and sectorally based environmental initiatives.

3.2. The Canadian Context for Sustainable Development Planning

3.2.1. Natural Resource Use in Canada

Environmental sustainability is particularly important in Canada due to its extensive natural resource base and economic dependence on the extraction of these resources. Canada is the second largest country in the world, with almost 10 million km^2 of land and water. This land supports many uses, from agriculture and forestry to space for settlements, parks and recreation (Canada, 2011a). Canada's natural assets constitute approximately 10% of the world's renewable freshwater supply, 10% of its forest and significant reserves of oil, gas and other minerals; a significant share of the world's natural heritage. Forests cover 45% of Canada's land base and provide habitat for two thirds of Canada's wildlife, while urban and industrial areas represent less than 3% of Canada's land base (OECD, 2001). As a consequence, the diversity and richness of Canada's natural resources is very significant. Canada possesses the world's third

largest forest resource, (OECD, 2004) and forestry and forest product industries account for 1.73% of Canada's GDP. Agriculture and food industries account for 2.96% of the total GDP, Mining and oil and gas extraction industries account for more than 8.53% of GDP and utilities account for 2.44% of total GDP (Canada, 2011a). Although fisheries activity in freshwater, and the Pacific and Atlantic oceans has decreased considerably in the past 15 years, it represented 0.3% of GDP in 1991 and now represents approximately 0.13% of total GDP (Canada, 2011a). Environmental sustainability planning in Canada is challenged with balancing the country's reliance on natural resources for economic growth and conservation of its natural assets.

When compared to other OECD countries on a per capita basis, Canada is a large consumer of natural resources and energy and, consequently, a large generator of pollution and waste. A study by Gunton and Calbick (2010) found that Canada's water consumption of 1,590 cubic meters/capita is second highest in the OECD, and is more than double the OECD average. Additionally, Canada's energy consumption is among the highest rates in the OECD. Canada's rate of energy consumption of 6.3 millions of tonnes of oil equivalent (toe) per capita is 66% higher than the OECD average (Gunton and Calbick, 2010). Canada is also ranked 25th of 25 OECD countries for carbon monoxide emissions (kg./capita), volatile organic carbon (VOC) emissions (kg./capita) and nuclear waste(kg./capita), and ranks amongst the worst OECD countries for sulphur oxide emissions (kg./capita) , nitrogen oxide emissions (kg./capita), vehicular use (km/capita), and green house gas emissions (tonnes/capita). GHG emissions have increased in absolute terms by 26.2% between 1990 and 2007, despite Canada's previous binding commitment under the Kyoto Protocol to reduce emissions by 6% from 1990 levels by 2008-2012(Gunton and Calbick, 2010). This heavy consumption of natural resources, coupled with a history of economic dependence on the export of natural resources presents a large challenge for environmental sustainability planning.

3.2.2. Political and Legal Structure

Canada is a constitutional monarchy and a federal state founded by the *British North America Act, 1867*; revised and renamed the *Constitution Act, 1867* (OECD, 2002). The formation of the Federation provided a strong central government and Parliament, but also allowed for an ample measure of autonomy and self-government for

the uniting provinces and territories, which exhibit divergences in economic interest, language, religion, law and education (Forsey & Office, 1988). Canada's political system is organized in vertical and horizontal tiers: political jurisdiction is divided between federal, and provincial/territorial governments, and there are many sectoral ministries within the top two tiers of government (Forsey & Office, 1988). Provinces have also delegated some functions to provincially created local governments. Additionally, aboriginal governments have authority by virtue of inherent and constitutionally protected rights and powers defined in treaties (Boyd, 2003).

A distribution of powers between the two orders of government, federal and provincial, is set out in the *Constitution Act, 1867*. However, as jurisdiction over environmental protection is not explicitly laid out in the constitution, and since economic and environmental interests of these governments overlap, confusion and disagreement over environmental responsibility exists. Canada is divided into 10 provinces and three territories, each with its own legislature and administration. Responsibility for natural resources (minerals, forests, fisheries) resides mostly under provincial power through sections 92 and 92 A of the *Constitution Act,* 1867 ((U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, Appendix II, No.5), while the federal government has jurisdiction over fisheries and oceans. Additionally, federal departments such as Environment, Transport, Public Works and Government Services, Natural Resources, Fisheries and Oceans, Agriculture and Agri-Foods, and Health and Finance, all have responsibilities related to sustainable development. Although each territory has legislative powers that are similar to those of the provinces, in general, the federal government retains control over most of the territories' land and natural resources (IISD, 2004). Municipal governments legally fall under provincial jurisdiction, but still hold important planning responsibilities, such as land use planning, transportation, waste and wastewater management and local air quality (Lafferty and Meadowcroft 2000). This complex and overlapping authority can jeopardize effective environmental management and sustainable development planning.

3.3. History of the Federal Government's Environmental Sustainability Planning

The federal government has made varying levels of international and national progress towards sustainable development over the past two decades. As the body responsible for many of our laws, policies and international agreements, and as the largest landowner, buyer and employer in Canada (OECD, 2002), the federal government has a tremendous amount of influence in sustainable development planning. This influence, and responsibility extends past its own operations to the promotion and integration of the concept of sustainable development at all levels of government and in all non-governmental sectors. The following section provides a summary of the history of sustainable development in Canada.

3.3.1. International Involvement

Canada showed strong leadership in the early stages of international sustainable development initiatives. However, in recent years Canada's leadership in environmental agreements has dwindled. The growing presence of environmental concerns (pesticide use, acid rain, green house gases) on the political agenda of the late 1980s and early 1990s was the driving force for raising the issue of sustainable development (OECD 2001). Exercising strong advocacy for international partnerships, Canada was one of the strongest proponents for the Montreal Protocol on Substances that Deplete the Ozone Layer, an agreement signed by 24 countries that established measures for controlling the production and consumption of ozone-depleting substances (Boyd, 2003). The Montreal Protocol is considered the first major effort at global co-operation to protect the environment (OECD, 2001). Additionally, Canada acted as headquarters for the Bruntland Commission's research (WCED, 1987) and was a major player in the Earth Summit in Rio in 1992 (OECD, 2002). In 1997, representatives from Canada and 160 other countries met in Kyoto, Japan and agreed to a Protocol that set targets for reductions in greenhouse gas emissions. Canada, at the time lead by the Liberal party, also reaffirmed the commitments it made at Rio at the 2002 World Summit on Sustainable Development (UN DESA, 2004). While Canada was one of the first countries to ratify Kyoto, the target to reduce greenhouse gas emissions 25 percent below 1990 emissions by the 2008-2012 period was not met, and Canada, under the

leadership of the Progressive Conservative government, formally withdrew from its obligations under Kyoto in December of 2011 (Canada, 2012a). Prior to formally withdrawing from Kyoto, Canada became a signatory to the Copenhagen Accord in 2009, an international agreement with a significantly less ambitious target of reducing economy-wide GHG emissions by 17% below 2005 levels by 2020 (Canada, 2012a).

3.3.2. Early Domestic Action

Mirroring its commitment to international leadership in environmental sustainability, Canada's domestic action in environmental sustainability has also fluctuated over the course of the past 3 decades (IISD, 2004). Domestic action started early in Canada with the creation of the National Task Force on Environment and Economy (NTFEE) in 1985. The NTFEE was created by the Canadian Council of Resource and Environment Ministers with the intention of "providing a forum for discussion on environment-economy integration between multi-level government ministers and senior managers of the non-government sector" (Laffery and Meadowcraft, 2000). Action groups and provincial roundtables similar to the NTFEE were created by the federal and provincial governments in 1990, but by the late 1990's, most of these provincial groups had disbanded (Lafferty and Meadowcraft).

Environmental sustainability remained a focus for the Canadian government in the early 1990's. The *Green Plan,* a policy framework and action plan for sustainable development, launched in 1990, emphasized national parks, monitoring and educational programs, environmental research and quantitative environmental targets on specific issues. The *Plan* was accompanied by substantial additional funding; C$3 billion over five years, compared with the normal federal environmental expenditure of C$1.3billion and presented at the Rio Earth Summit in 1992 (OECD, 2001).

Momentum towards environmental sustainability continued with the creation of the National Roundtable on the Environment and the Economy by an Act of Parliament in 1993 (OECD, 2001). The NRTEE was an independent advisory body that provided decision makers, opinion leaders and the Canadian public with reliable information about the state of the environment and the economy (NRTEE, 2012). Its purpose was to serve as a catalyst in identifying, explaining and promoting the principles and practices of

sustainable development. NRTEE was composed of members from a variety of backgrounds, including, academia, business, labour, environmental organizations and aboriginal people, which afforded it a high level of recognized neutrality. This, combined with its legal stability, contributed to the credibility of the numerous reports, consultations and recommendations that it produced (OECD, 2001). The National Roundtable on the Environment and the Economy acted as the independent multi-stakeholder committee providing guidance on sustainable development issues until March 31, 2013 when its funding was terminated by the federal government.

Federal efforts towards sustainable development waned in the mid to late nineties due to lack of resources and a decline in political, public and media interest. Desire to reduce the national debt and increase fiscal security resulted in a reduction of funding to both federal and provincial environmental departments (OECD, 2001). In 1994/95 Environment Canada's budget stopped increasing, and by 1998/99 the budget had been reduced by more than 30% (OECD, 2001). These budgetary cuts challenged the sustainable development agenda by affecting quantity and allocation of resources. The *Green Plan,* previously praised as being one of the most progressive and ambitious policies of the day, was impacted as more than 70% of the money originally targeted for its implementation was never allotted (Boyd 2003). This financial divestment in the sustainable development agenda, was accompanied by a decline in public and media interest, pushing it further down the political agenda (OECD, 2001).

At the turn of the new millennium, an increase in federal spending on the environment, and a need to reinvigorate efforts towards international and domestic environmental commitments put sustainable development back on the political agenda (OECD, 2001). The environment and sustainable development were named as priorities in the Governor General's 'Speech from the Throne' in 1999. Similarly, the 'Speech from the Throne' two years later highlighted four themes that are critical to sustainable development:

1. Building a world-leading economy driven by innovation, ideas and talent;

2. creating a more inclusive society where children get the right start in life, where quality health services are available to all, and where Canadians enjoy strong and safe communities;
3. ensuring a clean, healthy environment for Canadians and the preservation of natural spaces;
4. and enhancing the Canadian voice in the world and its shared sense of citizenship. (OECD 2001)

In 2001, this formal commitment to sustainable development by the Governor General was accompanied by a $650 million dollar budget for Environment Canada. This represents an increase of $100 million from the 1998 budget (Boyd, 2003).

In the years following the 2001 'Speech from the Throne', Canada's efforts in environmental sustainability planning continued to vary depending on the political climate and public interest. In the past decade, more emphasis has been put on meeting the specific commitments that were established at the Earth Summit in Rio in 1992. One important commitment was to translate the summit's ideas and commitments into concrete policies and actions by developing a National Sustainable Development Strategy (OECD, 2006). Specific efforts towards this commitment and others are outlined in the next section of this report.

3.3.3. Implementing Rio's Ideas

One of the most important steps taken by Canada towards meeting the commitments that it made in Rio, was amending the *Auditor General Act* (AGA) (R.S.C 1985, c. A-17) in 1995 (OECD, 2001). The first of two important amendments required ministers of 24 federal departments to prepare sustainable development strategies (SDS) every three years and report annually on implementation progress (Canada, 2002a). Rather than have one integrated national strategy, Canada assigned responsibility for the creation of sustainable development strategies to individual government departments and agencies, allowing each department to incorporate elements of environmental sustainability directly into its mandate (IISD, 2004; OECD,

2002). Departmental commitments, presented in the form of goals, objectives, targets and actions, were the emphasis of most SDS. These commitments, developed in consultation with stakeholders, described how each department intended to reduce the negative impacts of internal operations on sustainability, as well as promote sustainable development through its policies and programs (IISD, 2004). Along with amendments to the AGA, the government, lead by the Liberals, released *A Guide to Green Government,* in 1995. The *Guide* promotes an "approach to public policy that is comprehensive, integrated, open and accountable" and outlines expectations for the content of each SDS, as well as the process for its development (IISD, 2004). The *Guide* also outlines five objectives that are intended to serve as a common starting point for SDS:

1. Sustaining natural resources: sustainable jobs, communities and industries;
2. Protecting the health of Canadians and of ecosystems;
3. Meeting international obligations;
4. Promoting equity; and
5. Improving quality of life and well-being (Canada, 1995a).

In addition to independent auditing, departments are also required to report on progress made towards their SDS commitments through annual Departmental Performance Reports (DPR) (IISD, 2004). The incorporation of SDS progress within existing departmental reports creates necessary linkages with the departmental planning process. Separate from the SDS process, all departments are also required to publish an annual Report on Plans and Priorities (RPP) (IISD, 2004). RPPs outline an organization's priorities as well as the proposed allocation of resources to meet those priorities.

The second important amendment to the *Auditor General Act* legislated the creation of the position of Commissioner of the Environment and Sustainable Development (CESD). This institution provides an independent audit of the federal government in regards to sustainable development (OCED, 2001). More specifically, the Commissioner is responsible for:

- Review of departmental sustainable development strategies and their implementation.
- Audits of the federal government's management of environment and sustainable development issues.
- Studies aimed at improving understanding and strengthening management practices.
- Monitoring of petitions. (OECD, 2001).

The Commissioner is appointed by, and reports to, the Auditor General, which affords it a high level of authority and legal stability. The Commissioner is mandated to prepare a *Green Report,* a review of the departmental SDSs for the House of Commons. Departmental SDSs were tabled for the first time in 1997, again in 2001, 2004, 2006 and in 2012. The Commissioner's first report in 1997 identified a long standing gap in implementation of SDS and concluded that: "In many areas, the federal government's performance falls short of its stated objectives. This gap reflects the failure to translate policy direction into effective action" (CESD 1997). The report cited other weaknesses in sustainability planning that had been previously identified by the Office of the Auditor General: a lack of co-ordination among departments and across jurisdictions; and inadequate review of performance and provision of information to Parliament (CESD, 1997).

The CESD's second report in 1998 evaluated the SDSs for 28 federal departments; 24 of the departments were legally required to develop an SDS, while 4 others developed theirs voluntarily (CESD, 1998). This initial review noted that while producing SDSs raised awareness of sustainable development in the participating departments, there were also weaknesses in the strategies, two of them fundamental. According to the CESD:

- Almost all departments failed to set clear targets that they, parliamentarians and the public could use to judge whether or not the strategy is being successfully implemented.
- Many of the strategies appear to be more a restatement of the status quo than a commitment to change to better protect our environment and promote sustainable development. (CESD, 1998, p.48)

The CESD's third audit of departmental SDSs in 2001/2002 showed only moderate progress. While departments reported that they had met an average of 35% of the commitments in their strategies (an increase of 15% since the 1998 evaluation), the

CESD was concerned about the adequacy of the performance information provided to parliament (CESD, 2001). Despite the guidance provided by the Treasury Board Secretariat, departments and agencies did not consistently follow the recommended reporting format when tabling SDSs. Departments had difficulty identifying relevant and measurable commitments, and many failed to demonstrate understanding of sustainable development in the context of their mandate (CESD, 2001; IISD, 2004). In its 2002 report the CESD concluded that "if the strategies are to evolve to their full potential, direction and support from the center of government are essential" and strategies need to focus on what departments need to do differently to further sustainable development, rather than focus on what they do well (CESD, 2002).

Following the release of the third round of departmental SDSs, the CESD released another evaluation in 2005. This report examined whether the government gave adequate government-wide direction on preparing their 2004 strategies, reported on the federal government's actions to implement six international commitments it made at the 2002 World Summit on Sustainable Development in Johannesburg, and assessed actions by nine departments to implement 10 commitments they had made in their 2001 and 2004 strategies (CESD, 2005). Again, the CESD noted failure to follow reporting guidelines, as well as a lack of quality and relevance in SDS reporting. Additionally, the CESD found that the committee of deputy ministers responsible for overseeing SDS guidance could not agree on priorities for the 2004 strategies, and failed to develop the promised federal strategy; leaving departments with little approved direction on how to co-ordinate their strategies and leaving Parliament and the Public with little idea as to the government's overall plan for sustainable development in Canada (CESD, 2005). The CESD (2005) also noted that the government still lacked an action plan for its 2002 World Summit commitments. At this point the CESD provided an updated framework for preparing strategies that includes the following elements:

- **Role and fit.** The role of the strategy and how it fits with other plans and strategies is clearly indicated.
- **Vision.** A vision for sustainable development is included.
- **Goals and objectives**. Goals and objectives clearly express the long-term results to be achieved.
- **Linking goals and objectives with targets and actions.** Targets and actions are clearly linked to goals and objectives.

- **Clear targets**. Targets are clear – they are clearly stated and understandable.
- **Measurable targets**. Targets provide a deadline and a clear deliverable.
- **Lessons learned**. Lessons learned from previous strategies are included.
- **Changes**. Changes between previous and current strategies are identified. (CESD, 2005 p. 16)

3.3.4. A Deficient System

In 2007, the CESD released its 10th annual report in which it concluded that the government's approach to producing and using sustainable development strategies was not working to deliver progress toward sustainable development (CESD, 2007). More specifically, the CESD found that progress on previous recommendations was unsatisfactory, progress on implementing sustainable development strategy commitments was unsatisfactory, and the guidance for SDS development provided by Environment Canada on behalf of the federal government was ambiguous and optional (CESD, 2007). Additionally, despite a long-standing federal commitment to do so, the government still had not put in place a federal sustainable development strategy to guide the efforts of the 32 departments producing SDS (CESD, 2007). Based on this unsatisfactory evaluation, the CESD recommended that the "federal government should carry out a thorough documented review of its current approach to the preparation and use of sustainable development strategies and should act on the results"(CESD, 2007). The CESD suggested the following items be addressed in the review:

- federal goals for sustainable development, including specific performance expectations, indicators, and targets that will serve as objectively verifiable benchmarks against which progress can be measured;
- how departmental sustainable development strategies should fit with and contribute to the achievement of the federal goals, and how existing tools such as strategic environmental assessment should fit with and contribute to departmental sustainable development strategies;
- the strengths, weaknesses, opportunities, and constraints associated with the current approach to producing, implementing, and reporting on departmental sustainable development strategies, including the key opportunities for improvement; and
- roles and responsibilities, including which departments and central agencies must do what to ensure that the opportunities for improvement are acted on, that the government's expectations for sustainable development strategies are met, and that key parties have the necessary authority and are held accountable. (CESD, 2007, p 43)

Environment Canada, acting on behalf of the Conservative government, formally agreed with the CESD recommendation that it review its approach to clarify its expectations and revitalize the process. It committed to completing a review by the end of October 2008 (CESD, 2007).

In addition to the compelling evidence from the CESD that supported a revised approach to environmental sustainable development, several reports from independent academic researchers also concluded that Canada was failing to meet its international commitment to produce an NSDS and work towards sustainable development. In 2006, Gunton and Joseph evaluated Canada's NSDS planning system using eight established international best practice criteria for environmental sustainability planning. They concluded that Canada did not fully meet any of the eight best practices criteria and only partially met three criteria (Gunton and Joseph, 2006). They also provided recommendations for improvement by ways of a draft, single-document NSDS whose content addresses many of the deficiencies of the previous system. In addition to an unsatisfactory planning system, the outcomes of this system, as measured by environmental indicators was also found to be unsatisfactory; Canada ranked 28th among 30 OECD countries for environmental performance (Gunton and Calbick, 2005). In 2010, a study by Ellis et al. again found Canada's environmental planning system to be deficient and failing to fully meet international best practices (Ellis et al., 2010). It is therefore no surprise that Canada is now ranked 24th out of 25 developed nations for environmental performance (Gunton and Calbick, 2010). These evaluations stress the need for improvement of Canada's environmental planning system.

The *Federal Sustainable Development Act* (*FSDA*) was introduced to parliament by a member of the opposition and was passed in 2008 in order to address the deficiencies of the previous system. The *FSDS* gives legislative basis to international best practices and requires the creation of an all-inclusive NSDS, which was completed in Fall 2010 (*Federal Sustainable Development Act* [S.C. 2008, c. 33]; Canada, 2010). A detailed description of the *Federal Sustainable Development Act* can be found in the Environmental Legislation section (see section 3.4.2.8). Upon the creation of the *FSDA*, the AGA was amended to reflect the inclusion of departmental SDS responsibilities in the new *FSDA*. This new single-document NSDS is an attempt to provide Canada with a more centralized environmental planning system.

3.4. Canada's Current Environmental Sustainability Planning System

For the purpose of this study Canada's ESPS is defined as consisting of the following components:

- Canada's FSDS and associated Progress Reports
- The federal environmental plans, programs and initiatives not directly included, but referenced in the FSDS and/ or included in Ellis' 2010 evaluation.
- Federal environmental legislation

Canada's FSDS promotes a new integrated sustainability planning framework that claims to put environmental priorities on equal footing with economic and social pillars of sustainability (Canada, 2010b). This new overarching sustainability strategy is complemented by more focused strategies that are supposed to address specific environmental challenges such as the loss of biodiversity and the management of hazardous chemicals. The FSDS is also supported by departmental sustainability strategies that detail how departmental initiatives comply with, or contribute to the FSDS. Only those initiatives that were referenced in the NSDS are understood to be a part of Canada's ESPS for the purpose of this study.

In addition to the new FSDS and supporting initiatives, a diversity of legislation augments Canada's environmental sustainability planning system. Environmental legislation provides a legal framework for the interaction of society's members with the environment. It is important to note that the federal government in Canada does not have full jurisdiction with respect to various environmental issues and thus, some issues are addressed at the provincial level and not included in this evaluation.

These components represent the federal government efforts to plan for environmental sustainability in Canada. Each of these areas is therefore addressed below in more detail.

3.4.1. Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada 2010-2013

The national sustainability strategy *Planning for a Sustainable Future* plays an important role in Canada's ESPS(Canada, 2010b). The stated aim of the strategy is to put the Government of Canada's environmental priorities on equal footing with its social and economic priorities by addressing gaps in the current sustainability planning system in a transparent and accountable way. It is important to note that the FSDS itself does not establish new goals and targets, with the exception of those for greening government operations. Rather the FSDS attempts to make the process and outcomes of decision-making more transparent. The strategy establishes the high-level policy elements of the CESPS, including the framework for environmental sustainability planning and reporting and the all-of government federal priorities for environmental sustainability (Canada, 2010b).

The following section will summarize the structure and content of the strategy document. The various governmental departments and offices that are responsible for developing and implementing the strategy will also be highlighted. The content of the FSDS Progress Report, which was tabled in 2011, will also be summarized.

3.4.1.1 Overview of the Document

Canada's FSDS, *Planning for a Sustainable Future* is a national-level policy document that focuses on the environmental pillar of sustainability. As Canada's first comprehensive government wide FSDS, it is a preliminary document that establishes the policy framework and priorities for environmental sustainability planning, and calls for subsequent progress reports and policy directives to provide more detailed accounts of certain aspects of the ESPS. It is important to note that the FSDS proposes a framework for only the environmental pillar of sustainability, and is comprised of goals, targets and implementation strategies for environmental initiatives rather than for all three pillars of sustainability. The FSDS focuses on environmental sustainability as the first step in integrating environmental concerns with economic and social considerations, with the assumption that this will set in motion a process that over time will improve the way these three pillars of sustainability are considered.

The FSDS is subdivided into six chapters: the first chapter describes the context and purpose of the document; the second chapter outlines guiding principles of SD planning and highlights the links between SD and Canadian society; the third chapter provides the policy framework for environmental sustainability planning in Canada; the fourth chapter presents Canada's specific priorities in the form of goals, targets and implementation strategies; and the remaining chapters indicate the process for moving forward with the implementation of the FSDS and related initiatives. The following sections describe the relevant parts of the FSDS in more detail.

3.4.1.2 Chapters 1 and 2: Context and Environmental Decision Making in Canada

Chapter 1 of the FSDS outlines the context in which the strategy was developed. More specifically, Chapter 1 discusses the importance of sustainable development and summarizes the history of sustainable development at the international and national level as well as introducing some of the limitations of Canada's previous ESPS and how the FSDS addresses these gaps.

A summary of the stakeholder consultation process is also included. The *Federal Sustainable Development Act* requires a draft of the FSDS to be submitted for public consultation for a period of not less than 120 days before the final FSDS is tabled in Parliament. The public consultation undertaken by the Sustainable Development office at Environment Canada helped inform the FSDS. Feedback was also received from stakeholders including the CESD, Parliamentarians, and non-governmental organizations. According to the FSDS, stakeholder comments are incorporated by:

- Providing more clarity and detail on concepts such as transparency, accountability, and integration into the Expenditure Management System;
- Highlighting the significance of the sustainable development principles;
- Clarifying how the Canadian Environmental Sustainability Indicators (CESI) will be used to measure progress;
- Adding additional targets and a broader range of departmental programs and initiatives;

- Improving the quality and measurability of the goals, targets, and implementation strategies;
- Providing additional information on the role of federal departments; and,
- Integrating the economic and social dimensions of sustainable development.

The FSDS outlines the various roles and responsibilities of governments, industry and citizens in Chapter 2 and describes how the federal government is attempting to support other stakeholders in carrying out their responsibilities. Through the FSDS, the federal government defines its two new environmental sustainability responsibilities as 1) providing a new level of transparency to environmental decision making by providing a complete picture of the federal environmental goals, targets and implementation strategies in the FSDS, and; 2) strengthening the incorporation of environmental considerations in federal decision making through a revision of the *Strategic Environmental Assessment* process. The FSDS points to the precautionary principle as a guiding principle in environmental sustainability policy. The precautionary principle states "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost- effective measures to prevent environmental degradation" (Canada, 2010b, p.7). The context provided in Chapter 1 of the FSDS and the overview of the environmental decision making process in Canada provided in the second chapter are integral to fully understanding the priorities and frameworks presented in the subsequent chapters.

3.4.1.3 Chapter 3: Framework for Sustainable Development Planning and Reporting

The strategy provides the opportunity to improve the CESPS via three main elements. Firstly, the FSDS represents the first national level document that outlines sustainability actions and priorities for the entire federal service. Second, the FSDS proposes a framework for linking Canada's sustainable development planning and reporting to the existing federal core expenditure planning and reporting system, with the aim of ensuring decision makers take into account the environmental consequences of their policies and programs. Finally, the strategy attempts to establish effective measurement, monitoring and reporting systems which will enable the government to

track and report on progress. A more detailed explanation of the three components of the sustainability framework is provided below.

1. Integration of All Government Activities

The FSDS integrates Canada's sustainability priorities and actions under common "themes". This approach attempts to create a common language among departments and to help departments to work towards the goals that were identified as important to Canadians. It will also help to identify where gaps exist and where goals need to be strengthened.

The first four themes chosen for the FSDS are:

I) Addressing Climate Change and Air Quality;

2) Maintaining Water Quality and Availability;

3) Protecting Nature; and

4) Shrinking the Environmental Footprint – Beginning with Government.

Although the first three themes are not new to government, providing a horizontal overview of the three themes across government is new in Canada. The fourth theme reinforces the whole of government approach and acknowledges federal government operations as an important area for improvement in environmental sustainability. Under this theme, the FSDS lays out goals and targets intended to help to reduce its own environmental footprint.

2. Linking to the Core Expenditure Planning and Reporting System

The second key element of the FSDS framework aims to connect sustainable development planning and reporting to the federal government's core expenditure planning and reporting system. Linking the FSDS to the Expenditure Management System provides access to financial and non-financial performance information related to environmental sustainability. It brings together information on existing federal government activities and links them to environmental decisions. In doing so, this approach hopes to address some of the past criticism expressed by the CESD and other stakeholders.

The FSDS requires that all departments and agencies named in the annex of the *Federal Sustainable Development Act* or under schedule 1 of the *Financial Administration Act* (Appendix A) use the existing federal government core planning and reporting system (EMS) to plan, monitor and report on their respective sustainable development activities. This system is comprised of 2 key documents:

1) The **Reports on Plans and Priorities (RPPs)** outline activities and expenditures for each department and agency over a 3 year period, and detail where the resources for these actions will come from**;** and
2) The **Departmental Performance Reports (DPRs)** provide an overview of the accomplishments achieved by the organization compared to what it proposed in the RPP.

Due to the integrated nature of the Expenditure Management System, departments are considered to be effectively completing their Departmental Sustainable Development Strategies through the completion of their RPPs, as RPPs are expected to contain objectives and plans that comply with, and contribute to, the FSDS. It is important to note that the current FSDS outlines implementation strategies that reflect **existing** departmental initiatives related to goals and targets and no new goals, targets or initiatives have been established. The FSDS doesn't require Canada's goals and targets to meet any international standards, but expects that "over time, departments and agencies will contribute to the development of new goals and targets by leading new initiatives which are appropriate to their mandate".

3. Measuring, Monitoring and Reporting on Progress

Via the third element of the framework, the FSDS provides a more concerted effort to report and track progress of the goals, targets, and implementation strategies. For the first three themes of the FSDS, environmental indicators are used to track progress on goals and targets, and existing departmental performance measures are used to assess implementation strategies. For the fourth theme "Shrinking the Environmental Footprint – Beginning with Government" a performance reporting framework has been developed that establishes common performance measures that each FSDS department reports on in their Reports on Plans and Priorities and Departmental Performance Reports.

Information needed by the SDO to assess progress on goals and targets is to come mainly from the Canadian Environmental Sustainability Indicators (CESI) initiative (described in more detail in section 3.4.3.2) and from other indicators provided by other federal departments. Potential CESI indicators are evaluated against the following criteria during FSDS development to determine if they can effectively measure progress on the goals and targets of the FSDS:

- Policy relevance (represents the FSDS goals and targets);
- Utility (meets the needs of decision-makers and the public);
- Soundness (provides consistent and solid methodology, comparable over time); and
- Data availability (uses existing high-quality data with adequate coverage).

An example of how these indicators and criteria are used can be found in Table 1.

Table 1. CESI Tracking of Air Quality Indicators (from the FSDS)

FSDS THEME	***Theme I:*** Addressing Climate Change and Air Quality
GOAL	***Goal 2*:** Air Pollution – Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems.
SELECTED INDICATOR	***Ambient air concentration indicators - CESI currently reports on ground-level Ozone and PM2.5***
INDICATOR CRITERIA	***Policy Relevance*** • Air quality indicators track measures of long-term exposure to Canadians of ground-level **ozone** and **fine particulate matter** (PM2.5). • These indicators include measures of two key elements of smog and are two of the most widespread air pollutants to which people are exposed leading to serious health problems. ***Utility*** • Selected indicators inform policy analysts, decision-makers, and the public as to whether progress is being made towards improved air quality, in terms of reduced population exposure to ground-level ozone and PM2.5 over the longer term. ***Soundness*** • Strict standards in place to measure air quality

	pollutants (endorsed by the Canadian Council of Ministers of the Environment). ***Data Availability*** • Environment Canada has 188 monitoring stations for ground-level ozone and 146 for fine particulates (PM2.5). This provides adequate national coverage for these two substances

3.4.1.4 Chapter 4: Priorities for Environmental Sustainability

Chapter 4 lays out the federal priorities for environmental sustainability under the 4 themes, and describes the criteria used to develop and assess the associated goals, targets and implementation strategies.

The current goals, targets and implementation strategies outlined in the FSDS were taken from key commitments made by the Government of Canada in policy and planning documents such as the Speech from the Throne, the Federal Budget, Memoranda to Cabinet, Treasury Board submissions, departmental Reports on Plans and Priorities and Departmental Performance Reports. As previously indicated, the goals, targets, and strategies in the FSDS are a compilation of those already existence and are have not been developed specifically to comply with international benchmarks for sustainability. The government expects that the existing goals, targets, and strategies will evolve over time as new policy decisions are made. According to the FSDS, the criteria used by the federal government to develop and evaluate goals states that goals should be:

- Aspirational;
- Take a long-term view;
- Address important challenges and problems;
- Remain attuned to environmental information, data and indicators;
- Encourage flexibility in the choice of strategies for achievement; and
- Reflect domestic and international priorities and commitments.

Targets are more specific in nature. In some cases, targets are already strong, and in others they require further development by the Sustainable Development Office

(SDO). The federal government uses the following criteria to develop and evaluate targets. Targets must:

- Meet the SMART (Specific, Measurable, Achievable, Relevant and Time-bound) criteria;
- Take a medium-term view;
- Fall within federal jurisdiction and departmental mandates;
- Remain informed by environmental baseline data and indicators;
- Be consistent with Government of Canada priorities; and
- Reflect the precautionary principle.

Departments undertake implementation strategies as a means of reaching the targets set out in the FSDS. The implementation strategies should:

- Meet the SMART (Specific, Measurable, Achievable, Relevant and Time-bound) criteria;
- Take a short-term view;
- Fit within the reporting and planning structures of the federal government;
- Identify resources and activities; and
- Contribute to the related target.

It is important to note that while all 28 departments listed in the FSDS must produce Departmental Sustainable Development Strategies, only some have mandates that include programming specifically related to the goals listed in the FSDS under the priorities of Addressing Climate Change and Air Quality, Maintaining Water Quality and Availability, and Protecting Nature. A full list of FSDS goals, targets and implementation strategies can be found in the evaluation guide in Appendix C.

3.4.1.5 The Progress Report on the Federal Sustainable Development Strategy 2010-2013

The Sustainable Development Office tabled the first FSDS Progress Report in June 2011, as per the requirements of the *Federal Sustainable Development Act* to report on the implementation of the FSDS at least every three years. This first FSDS Progress Report describes the current state of implementation of the FSDS with a focus on the systems and procedures put in place to implement it (Canada, 2011c).

A large portion of the 2010-2013 Progress Report is dedicated to explaining the "Plan, Do, Check, Improve" Implementation System. The Progress Report outlines the following accomplishments towards the implementation of the FSDS:

- Establishing a Sustainable Development Office;
- Putting in place a management framework for the FSDS (found in Annex 1 of the Report);
- Putting in place a way to integrate Departmental Sustainable Development Strategies into the expenditure management system for the first time;
- Developing greening government operations targets, implementation strategies, and guidance;
- Revising the guidelines for strategic environmental assessment requiring consideration of, and public reporting on, FSDS goals and targets; and
- Establishing a performance measurement system for the FSDS to effectively monitor and report on progress. This includes a suite of environmental indicators and performance measures for Themes I-III, and common performance measures for Theme IV.

The second section of the Progress Report details progress towards developing and evaluating the indicators used in FSDS performance measurement, and Annexes and Appendices provide important details and examples of the proposed Performance Management Framework. The Performance Management Framework uses performance indicators such as *"% of participating departments reporting they have adequate capacity for integrated planning and reporting*" to assess progress on the *FSDA*'s purpose of making environmental decision-making more transparent and accountable. The Progress Report also outlines specific Headline and Target Indicators that will be used to monitor progress towards the goals and targets set by the FSDS. While the FSDS provides an overview of Canada's CESPS, the Progress Report contains a much more detailed account of the processes and systems that are being implemented, and gaps that still exist.

3.4.1.6 The 2012 Progress Report of the Federal Sustainable Development Strategy

The 2012 Progress Report of the Federal Sustainable Development Strategy (FSDS) focuses on planning outcomes and highlights the progress of 27 federal departments and agencies towards achieving the goals and targets set out in the first cycle of the FSDS (2010–2013) (Canada, 2013). As the first progress report of its kind

under the *FSDA*, this report provides information on FSDS goals, targets and selected implementation strategies organized by four themes that represent key environmental priorities for Canadians.

The 2012 report presents information using indicators from the Canadian Environmental Sustainability Indicators (CESI) program. The information presented includes:

- Trends over time, such as emission levels of greenhouse gases and air pollutants, the release of pollutants into water, and the sustainability of biological resources, such as wood supply;
- Current measures of status, such as of major fish stocks, species at risk and availability of water; and
- Baselines that have recently been established to track progress in key areas, such as exposures to chemicals

The report highlights key actions from selected implementation strategies of FSDS departments and agencies, and directs readers to more detailed information available on departmental websites. It also highlights sustainability challenges that Canada faces, which, hopefully will be addressed in future FSDS as part of the "plan-do-check-improve" system.

3.4.1.7 Responsible Authorities/Bodies

A variety of federal institutions are involved in developing, implementing, evaluating and reporting on Canada's FSDS. The following section provides an overview of the roles and responsibilities of the various departments and agencies, FSDS committees and stakeholders in meeting the requirements of the FSDS.

3.4.1.7.1 Environment Canada

The following are the responsibilities of the **Minister** of the Environment under the *Federal Sustainable Development Act* (2008):

- Establish a Sustainable Development Office within the Department of Environment Canada [s.7(1)];
- Establish a Sustainable Development Advisory Council (SDAC) [s.8 (1)];
- Develop a Federal Sustainable Development Strategy (FSDS) every three years [s.9 (1)];

- Consult with the SDAC, the appropriate Parliamentary committees and the public on the draft strategy [s.9 (3)];
- Submit the draft FSDS to the Commissioner of the Environment and Sustainable Development (CESD) for review and comment [s.9 (4)];
- Submit the Federal Sustainable Development Strategy to the Governor in Council for approval [s.10 (1)]; and
- Table the FSDS, and subsequent Progress Reports on the federal government's progress in implementing the FSDS, in both Houses of Parliament [s.10(2), s.7(2)].

Additionally, as with all federal departments named in the *FSDA,* The Minister of the Environment is responsible for the development of Environment Canada's Departmental Sustainable Development Strategy [s.11(1)].

3.4.1.7.2 Sustainable Development Office

The Sustainable Development Office is mandated by the *FSDA* to develop and maintain systems and procedures to monitor progress on implementation of the Federal Sustainable Development Strategy and to provide the Minister with a Progress Report on the implementation of the FSDS, at least once every three years [s.7(1), s.7(2)]. In addition to its legislated responsibilities, the SDO:

- Provides overall leadership and coordination on matters related to the FSDS;
- Supports the Minister in developing the FSDS;
- Implements and maintains the FSDS Management Framework; and
- Contributes to the development of guidance and direction to departments/agencies on meeting the requirements of the *Act.* (Canada, 2011c).

3.4.1.7.3 Commissioner of the Environment and Sustainable Development (CESD)

Under the *Auditor General Act* (1985), the CESD "provides parliamentarians with objective, independent analysis and recommendations on the federal government's efforts to protect the environment and foster sustainable development". Under the *FSDA*, the CESD is required to review draft FSDS and comment as to whether the targets and implementation strategies can be assessed [s.9(4)].

3.4.1.7.4 Sustainable Development Advisory Council

In compliance with the *FSDA*, the Minister of the Environment must appoint a Sustainable Development Advisory Council composed of one representative from each province and territory, and three representatives from each of the following:

(*a*) Aboriginal peoples;

(*b*) environmental non-governmental organizations;

(*c*) organizations representative of business; and

(*d*) organizations representative of labour.

The Committee, chaired by the Minister of the Environment, is responsible for providing advice to the Minister on draft FSDS. Input provided by the members can be submitted to the Minister during SDAC meetings or in writing as part of the SDO's consultation process on the draft FSDS (Canada, 2011c). As of February 2013, the SDAC has not been appointed.

3.4.1.7.5 Public Works and Government Services Canada (PWGSC)

With the support of Environment Canada, PWGSC is the lead on Theme four "Shrinking the Environmental Footprint – Beginning with Government." PWGSC provides oversight on the greening of government operations by assisting other federal departments and agencies establish targets, implementation strategies, and performance measures to reduce the Government of Canada's environmental footprint, and monitoring and compiling results on progress for use in the FSDS Progress Reports. As with all other federal departments named in the *FSDA,* The Minister of Public Works and Government Services Canada is responsible for the development of PWGSC's own Departmental Sustainable Development Strategy [s.11(1)].

3.4.1.7.6 Treasury Board Secretariat

The Treasury Board of Canada Secretariat (TBS) is responsible for the Government of Canada's Expenditure Management System (EMS). The TBS assists in the integration of the FSDS with the EMS by providing guidance to departments on how to meet their requirements for planning and reporting on sustainable development activities through existing RPPs and DPRs. Again, as with all other departments, the TBS must also complete a DSDS.

3.4.1.7.7 Cabinet (Privy Council Office)

The *FSDA* provides a special role for Cabinet in the oversight of the FSDS development and implementation. The *Act* requires a committee of the Queen's Privy Council for Canada (Cabinet's secretary), consisting of a Chairperson and other members of the Queen's Privy Council for Canada be given oversight [s.6].

3.4.1.7.8 Other Governmental Department and Agencies

As previously mentioned, section 11(1) of the *FSDA* mandates departments and agencies to "prepare a sustainable development strategy containing objectives and plans for the department or agency that complies with and contributes to the Federal Sustainable Development Strategy, appropriate to the department or agency's mandate". The list of these departments and agencies can be found in Appendix A. Departments are to fulfill this requirement by integrating their sustainable development initiatives and reporting into their RPP and DPR as well as including additional details on their respective contributions to sustainable development on their respective departmental websites (Canada, 2011c). Intergovernmental committees such as the Interdepartmental Assistant Deputy Minister Committee and the Interdepartmental Director General Committee are responsible for addressing gaps or issues not covered by departmental mandates and providing strategic direction, advanced thinking, and decision making on key issues associated with the implementation of the *FSDA* (Canada, 2011c).

3.4.1.7.9 Consultation

As mandated by the *Act*, the Minister must consult with stakeholders and Canadians for input into the FSDS. For each draft FSDS, there is a minimum 120- day consultation period with the related House of Commons Standing Committee/s, stakeholders and Canadians [s.9(3)]. The feedback received from stakeholders and the public is summarized in a Consultation Synthesis Report and informs the final FSDS and subsequent Progress Reports (Canada, 2011c).

3.4.2. Environmental Sustainability Legislation

The central federal environmental laws in Canada are the *Auditor General Act* (*AGA*), the *Canadian Environmental Assessment Act, 2012 (CEAA*), the *Canadian Environmental Protection Act, 1999* (*CEPA*), the *Species at Risk Act* (*SARA*), the *Oceans Act* (*OA*), *Canada's Water Act* (*CWA*), the *Fisheries Act* (*FA*) and the *Federal Sustainable Development Act* (*FSDA*). Ellis (2008) summarizes these acts, and an updated description is provided below. For a full list of federal legislation included in this evaluation, see Appendix A.

3.4.2.1 Auditor General Act

The role of Auditor General under the *Auditor General Act* as it pertains to the CESPS is to audit the federal government's financial expense accounts as well to monitor progress towards sustainable development goals (R.S.C. 1985, c. A-17). The *AGA* requires the Auditor General to report to the House of Commons on activities that have not considered environmental effects, either through improper use of procedure to measure the effectiveness of programs (s.7.2.e), or not initially accounting for detrimental effects of financial expenses on the environment (s.7.2.f). As mentioned previously, the *AGA* requires the Auditor General to appoint the Commissioner of the Environment and Sustainable Development (s.15) and details the Commissioner's duties in relation to environmental and other aspects of sustainable development, including:

- (*a*) the extent to which category I departments have contributed to meeting the targets set out in the Federal Sustainable Development Strategy and have met the objectives, and implemented the plans, set out in their own sustainable development strategies laid before the Houses of Parliament under section 11 of the *Federal Sustainable Development Act*;
- (*b*) the number of petitions recorded as required by subsection 22(1), the subject-matter of the petitions and their status; and
- (*c*) the exercising of the authority of the Governor in Council under subsections 11(3) and (4) of the *Federal Sustainable Development Act*. (s. 23)

Public involvement is described in section 22, where received public petitions about an environmental subject must be forwarded to the corresponding department and addressed by the appropriate minister within a legislated timeline.

3.4.2.2 Canadian Environmental Assessment Act, 2012 (CEAA 2012)

In 1995, the *Canadian Environmental Assessment Act* (CEAA) came into force to provide the framework for federal environmental assessments (S.C. 1992, c.37). In 2012 this *CEAA* was repealed and replaced with the new *Canadian Environmental Assessment Act,* 2012 (S.C. 2012, c. 19). *CEAA 2012* supports the goals of environmental sustainability by requiring environmental assessments to detect and prevent undesirable environmental impact of 'designated projects'. By considering the potential impacts of such projects, the government purports to ensure that there are no significant adverse environmental effects.

A key goal stated in *CEAA 2012* 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 (s.4.1.h). This objective is pursued by considering projects carefully using the precautionary principle, with consideration of cumulative effects of these physical activities (s. 4.2, s.4.1.i). As there may be other jurisdictions legally responsible for carrying out assessments of projects, *CEAA 2012* establishes avenues for cooperation. Section 4 of *CEAA 2012* endorses the federal government's cooperation and communication with provincial governments and Aboriginal people (s.4.1. c-d).

CEAA 2012 is administered by the Canadian Environmental Assessment Agency, an independent agency that falls under the responsibility of the Minister of the Environment (s. 105). Among many other responsibilities, the Agency is responsible for ensuring monitoring of and compliance with the *Canadian Environmental Assessment Act, 2012* and related regulations (s.105. e-f).

In 2012, significant amendments to *CEAA* (S.C. 1992, c.37) resulted in changes to the way in which assessments are triggered. In accordance with the new *CEAA 2012*, projects are only triggered for assessment if they appear on the list of 'designated projects', a list much smaller than before, and while smaller projects or types of projects that do not trigger *CEAA* 2012 will still be subject to existing permitting and authorization requirements, they will not be required to undergo environmental assessments. Additionally, Responsible Authorities under the *Act* are reduced to only three agencies (Canadian Environmental Assessment Agency, National Energy Board and Canadian

Nuclear Safety Commission) and there is now broader reliance on substitution of provincial and territorial environmental assessment processes (s.17).

3.4.2.3 Canadian Environmental Protection Act

The *Canadian Environmental Protection Act* (CEPA) is an important component of Canadian sustainability planning because it mandates target setting, planning, monitoring, and transparent reporting on a number of long term objectives including; pollution prevention, sustainable development, elimination of the most persistent and bioaccumulative toxic substances, control of pollutants and wastes, protection of biodiversity, and fulfillment of any international environmental obligations regarding the environment (S.C. 1999, c.33).

CEPA recognizes environmental protection as a fundamental aspect of human well-being and is co-administered by the Minister of the Environment and the Minister of Health. In pursuit of *CEPA*'s goals, consideration of the social, environmental and economic benefits accruing from environmental protection are mandated. This means that *CEPA* functions under the precautionary principle (s.2.1.a) and reinforces the polluter pays concept (preamble).

CEPA requires government to develop pollution prevention plans (s.44) and empowers government to request pollution plans from other parties within Canada, complete with specific direction and timelines for action (s.56, 57). *CEPA* also provides several avenues for stakeholder participation including a provision to establish the National Advisory Council (NAC) (s.6). The NAC is a committee comprised of a variety of federal, aboriginal and provincial representatives whose mandate is to advise the Minister on proposed regulations under the act, to advise the Minister on a cooperative, coordinated intergovernmental approach for the management of toxic substances, and on other matters that are of mutual interest to participating parties (s.6.1).

3.4.2.4 Species at Risk Act

The *Species at Risk Act* (*SARA*) was passed in 2002 as a means to meet Canada's commitments under the International Convention on Biological Diversity (1992). The goals of the *Act* are to prevent Canadian indigenous species, subspecies and distinct populations of wildlife from becoming extirpated or extinct, to provide for the

protection and recovery of endangered or threatened species, and to encourage the management of other species to prevent them from becoming at risk (S.C. 2002, c.29). The goals of the *Act* are pursued primarily through the legal protection and conservation of at risk species and their critical habitats. Most of *SARA*'s protective provisions only apply to federal lands, unless the species involved are aquatic species or migratory birds, or the Governor in Council makes a special order extending the protection of the *Act* to specific species on non-federal lands (s. 32-34). While *SARA* provides the legislative basis for the protection of biodiversity, the *Act* and associated policy directives stress voluntary stewardship as the primary avenue for the accomplishment of these goals (s. 10).

SARA requires that the best available knowledge be used to define objectives in a recovery strategy for endangered and threatened species and it provides for action plans to identify specific recovery actions with specific timelines (summary). Additionally, *SARA* creates prohibitions and reasonable sanctions to protect listed threatened and endangered species and their critical habitat, and recognizes that compensation may be needed to ensure fairness following the imposition of the critical habitat prohibitions (s.97; s.64).

SARA promotes public participation through the use of a public registry. The registry assists in making documents and decisions under the *Act* more accessible to the public. Stakeholders are engaged through a consultation process that includes all levels of government, private sector, Aboriginal people and those impacted by *SARA* decisions (s.39). Socioeconomic considerations are not part of the recovery planning process, but are included in the recovery implementation and initial species listing phases.

The *Species at Risk Act* also establishes the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as an independent body of experts responsible for assessing and identifying species at risk (s. 14). *SARA* requires that COSEWIC's assessments are to be reported to the Minister of the Environment and to the Canadian Endangered Species Conservation Council (an advisory council composed of ministers from provincial and territorial governments and the federal ministers from Environment, and Fisheries and Oceans) and it authorizes the Governor in Council to establish by regulation the official list of species at risk based on this

process (s. 27). Once on the list of 'Wildlife Species at Risk', species listed as “endangered” or “threatened” receive immediate protection if they are on federal lands, are an aquatic species or a migratory bird. Species that are listed as “special concern” are not provided with any protection other than a species management plan. Three hundred and forty-five species are on the list since the law was passed (Canada, 2012b). Monitoring of the status of these species and their habitat is mandated and species are reassessed after 10 years (s.24).

3.4.2.5 Ocean’s Act

The *Ocean’s Act* (*OA*) was adopted in 1996 with the purpose of reaffirming Canada’s role as a world leader in oceans and marine resource management and affirming in Canadian domestic law Canada’s sovereign rights, jurisdiction and responsibilities in the exclusive economic zone of Canada (S.C. 1996, c.31; preamble). The *Act*’s jurisdiction covers estuaries, coastal waters and marine waters. The *OA* promotes sustainable development with several goals including: promoting the understanding of oceans, ocean processes, marine resources and marine ecosystems to foster the sustainable development of the oceans and their resources, and promoting the ecosystem based approach to conservation as fundamental to maintaining biological diversity and productivity in the marine environment (preamble).

The goals of the *Act* are primarily met through a commitment to develop a national ocean strategy that encapsulates the principles of sustainable development, integrated management and the precautionary principle (s.29; s.30). This strategy includes three aspects: establishing marine protected areas (s.35), creating an integrated management plan (s.31) and setting high environmental quality guidelines (s.32.d). The *OA* also provides the opportunity for consultation with ministers, boards and agencies of the Government of Canada, with provincial and territorial governments and with affected aboriginal organizations, coastal communities and other persons and bodies when exercising its powers related to the national ocean strategy (s.33.2).

3.4.2.6 Canada Water Act

The *Canada Water Act* (*CWA*) was adopted to provide for the management of the water resources of Canada, including research and the planning and implementation of programs relating to the conservation, development and utilization of water resources

(R.S.C. 1985, c. C-11). As water management covers a number of governmental jurisdictions, the *CWA* calls for partnership between federal and provincial governments via intergovernmental committees, with the purpose of optimizing the use of Canada's water resource (s. 4). The *CWA* also empowers the Minister to develop water quality management areas (s.15.4) and water quality management plans (s.15.2.c). Additionally, it establishes provisions for monitoring water quality; however, it is the Minister's discretion as to when to utilize this condition (s. 15).

3.4.2.7 Fisheries Act

Considered one of Canada's strongest environmental laws, the *Fisheries Act* (*FA*) was adopted with the goal of protecting Canada's fisheries via fisheries management, pollution prevention and habitat protection (R.S.C.1985, c. F-14). The goals of this act are achieved through prohibiting damage to fish habitat (s.35) and dumping of deleterious substances into waters that may impact fish (s.36.3), ensuring adequate flow of water in rivers and streams (s.20-22), and empowering the federal government to control and regulate all fishing activities (s.31.1). Sustainable development is further promoted through the creation of a plan for sustainable fish harvesting.

An amendment in 2012 now allows provinces to be exempt from certain provisions under the act, provided that the province has a similar act in place (s.4.2). Additionally, the amendment has allowed for more exemptions when it comes to the killing of fish and the harmful alteration or disruption, or the destruction, of fish habitat (s. 32; s.35).

3.4.2.8 Federal Sustainable Development Act

The *Federal Sustainable Development Act* (*FSDA*) was enacted in 2008 and mandates the development and implementation of a Federal Sustainable Development Strategy and the development of goals and targets with respect to sustainable development in Canada (S.C. 2008, c.33). The *Act* establishes the federal government's acceptance of the basic principle that "sustainable development is based on an ecologically efficient use of natural, social and economic resources and acknowledges the need to integrate environmental, economic and social factors in the making of all decisions by government." (s.5). The *FSDA* provides the legal framework for the

development and implementation of the Federal Sustainable Development Strategy, including the requirement for the precautionary principle to be the basis of the strategy, with the purpose of making environmental decision making more transparent and accountable to Parliament (s.3).

As per the *FSDA,* the Minister of the environment is required to prepare a Federal Sustainable Development Strategy every 3 years (s.9.1). This strategy must set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target (s.9.2). With respect to FSDS development, the *Act* provides the requirement for federal departments to produce departmental SDS that contribute to the FSDS (s.11).

The *Act* also requires the establishment of the Sustainable Development Office within the Department of the Environment to develop and maintain systems and procedures to monitor progress on implementation of the FSDS and requires that the Sustainable Development Office provide the Minister with a report on the progress of the federal government in implementing the FSDS once every three years (s.7).

The *FSDA* provides for stakeholder participation by requiring the creation of a Sustainable Development Advisory Council, which is composed of one representative from each province and 3 individuals each from Aboriginal peoples, environmental non-governmental organizations, organizations representative of business, and organizations representative of labour (s.8). However, the appointed representatives must hold office without remuneration and shall not be reimbursed for expenses incurred in the course of their duties (s8.3). .Additionally, the *Act* mandates consultation on the draft strategy with both the public and the CESD via a 120-day review and comment period (s.3; s.4).

3.4.3. Environmental Sustainability Initiatives

The federal environmental sustainability initiatives that contribute most significantly to Canada's ESPS are listed below. For a full list of environmental sustainability related federal programs included in this evaluation see Appendix A.

3.4.3.1 Cabinet Directive on Environmental Assessment of Policy Plan and Program Proposals.

One of the key drivers for integrating sustainable development considerations into departmental plans and priorities is the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals.* Incorporating environmental considerations into departmental decisions through the use of Strategic Environmental Assessments (SEAs) began in 1990. An environmental assessment was to be conducted in the following cases:

1. The proposal is submitted to an individual minister or Cabinet for approval; and
2. Implementation of the proposal may result in important environmental effects, either positive or negative.

This commitment to integrate sustainable development was strengthened through amendments to the *Directive* in 1999, which clarified department responsibility and provided a link between SEAs and SDSs (IISD, 2004). However, as of 2004, the quality of SEAs varied widely, and the lack of enforcement from central government limited the consistent application of SEA for government proposals (IISD, 2004).

The federal government committed to the strengthening of SEAs by issuing *New Guidelines for Implementing the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* at the same time the FSDS was tabled in Parliament in 2010 (Canada, 2011c). The Guidelines include three important changes:

1. Applying FSDS goals and targets when undertaking SEAs;
2. Reporting on the results of SEAs in Departmental Performance Reports; and
3. Describing positive or negative contributions of the proposals to the achievement of the FSDS goals and targets in SEA public statements.

The *Directive* requires that a strategic environmental assessment consider the "scope and nature of the likely environmental effects, the need for mitigation to reduce or eliminate adverse effects, and the likely importance of any adverse environmental effects, taking mitigation into account" (Canada 2010a). The SEA should be equally weighted with both economic and social impact assessments when contributing to the development of policy plans or programs, and departments and agencies are urged to

use existing mechanisms for engaging the public to the fullest extent possible, (Canada 2010a). The Canadian Environmental Assessment Agency (CEAA) is responsible for the application of SEAs.

3.4.3.2 Canadian Environmental Sustainability Indicators

The Canadian Environmental Sustainability Indicators (CESI) program is the main instrument used to measure outcomes and progress of the Federal Sustainable Development Strategy and responds to Environment Canada's commitments under the *Canadian Environmental Protection Act* and the *Department of the Environment Act* to report to Canadians on the state of the environment (Canada, 2011b). CESI provides data and information to track Canada's performance on environmental sustainability issues under 3 broad categories; climate change and air quality, water quality and availability, and the protection of nature. These indicators are the culmination of many years of national-level environmental indicator work, previously known as the Canadian National Environmental Indicator Series (Canada, 2011b).

The indicators are prepared by Environment Canada with the support of other federal government departments, such as Health Canada, Statistics Canada, Natural Resources Canada, Agriculture and Agri-Food Canada, as well as provincial and territorial government departments and available for Canadian to view on the internet in the form of graphics, explanatory text, interactive maps and downloadable data (Canada, 2011b).

3.4.3.3 Clean Air Agenda

The Government of Canada claims that through the Clean Air Agenda (CAA), it has been working towards making tangible improvements in Canada's environment by addressing the challenges of climate change and air pollution. Since 2007, the CAA has been supporting

- regulatory initiatives in the industrial, transportation, consumer and commercial sectors; and
- a range of complementary program measures, such as the ecoACTION programming to reduce greenhouse gas emissions, ways to improve indoor air quality, approaches for adapting to the impacts of climate change, and engagement at the international level.

The CAA is managed through a horizontal management, accountability and reporting framework. This framework facilitates comprehensive and systematic review of planning for and reporting on the financial and non-financial performance of CAA programming. Progress towards the CAA outcomes has been reported publically through this horizontal framework since 2007.

The 44 programs of the CAA are organized within seven themes: clean air regulatory agenda (CARA), clean energy, clean transportation, indoor air quality, international actions, adaptation, and management and accountability (Canada, 2012c).

3.5. Summary

The Canadian Environmental Sustainability Planning System is complex and constantly changing. For the purpose of this study, Canada's ESPS is defined as consisting of the following components:

- The Canada's FSDS and associated Progress Reports;
- The federal environmental plans, programs and initiatives not directly included, but referenced in the FSDS; and
- Federal environmental legislation.

The components detailed above, and those listed in the appendices will be evaluated to determine if Canada's ESPS meets international best practices.

4. METHODOLOGY

4.1. Introduction

This chapter outlines the methodology used to evaluate Canada' environmental sustainability planning system. The chapter begins with a summary of the methodology's development and a justification for its use. Next is a detailed description of the eight best practices used in this evaluation, followed by an explanation of the methods used to collect and analyze relevant data.

4.2. Best Practices Review

Strategies for environmental sustainability planning have been evaluated ever since the world community committed to preparing national sustainable development strategies at the WCED in 1992. There is no single method, specific entry point or ideal coordinating mechanism for NSDS, and strategies therefore differ markedly across nations. However, most evaluations have focused on identifying key issues and challenges to environmental sustainability planning to improve planning and policy making (OECD, 2001).

It is essential to remember that an environmental planning system (ESPS) is subtly different from an NSDS. While evaluations of NSDS assess the balance between social, economic, *and* environmental objectives, ESPS evaluations focus primarily on how well *environmental* objectives have been integrated into governmental strategic planning and policy initiatives. A recent focus on economic objectives in the national decision-making process has resulted in both NSDS and ESPS promoting the inclusion of more environmental concerns within this process. The concepts of an environmental planning system and NSDS are therefore comparable in their intent, and thus, their evaluations are currently performed using similar methods. The methodology described in this paper deals with evaluating the planning process for the environmental pillar of

sustainable development. To avoid confusion with broader definitions of sustainable development, this study uses the term environmental sustainability planning system (ESPS).

It is important to recognize that while evaluations of environmental sustainability planning can include evaluations of both the *outcomes* of planning (e.g. amount of greenhouse gas emissions) as well as the elements of successful planning *processes* (e.g. have GHG emissions goals and targets been established), this study is restricted to evaluating only the elements of the planning *process*. The elements of successful planning process are identified as best practices, and the evaluation assesses the degree to which a given planning process meets these best practice criteria. Best practices provide important benchmarks for evaluating planning for sustainable development, and the degree to which they are met can help identify the strengths and weaknesses of a given ESPS.

In the past two decades, more than a dozen NSDS evaluation methodologies have been produced, resulting in a large list of best practice criteria. In 2010, Ellis et al. systematically reviewed these methodologies and based on this review developed an integrated, comprehensive evaluation framework that could be used to evaluate the Canadian environmental sustainability planning system. Table 2 provides a list of the methodologies, and a more detailed description of the review is provided in Ellis *et.al.* (2010). Collectively, the studies reviewed by Ellis (2010) referred to a total of eight different best practices a strategy or plan should adhere to in order to be effective in its process. The eight best practices are as follows:

- Comprehensive goals and targets,
- Effective strategy,
- Integration,
- Leadership and accountability,
- Monitoring,
- Adaptive management,
- Stakeholder collaboration, and
- Legal framework

Table 2. Summary of best practice studies reviewed by Ellis et al. (2010).

	Comprehensive Goals with Measurable Targets	Effective Strategy	Integration	Monitoring	Leadership and Accountability	Adaptive Management	Stakeholder Collaboration	Legal Frame work
World Bank 1995	X	X	X	X		X	X	X
Kenny and Meadowcroft 1999	X	X	X	X	X		X	X
Meadowcroft and Lafferty 2000	X		X	X			X	X
OECD 2001	X	X	X	X	X	X	X	
UN DESA 2002	X	X	X	X	X		X	
Dalal-Clayton and Bass 2002	X	X	X	X	X	X	X	
EU 2004	X		X	X	X		X	
IISD 2004	X	X	X	X	X	X	X	X
OECD 2004	X	X	X	X			X	
CESD 2005	X	X	X	X		X	X	
OECD 2006			X	X	X	X	X	
Gunton et al. 2006	X	X	X	X	X	X	X	X
Gunton and Joseph 2006	X	X	X	X	X	X	X	X

In addition to producing the most comprehensive list of international best practices to date, the Ellis study addressed weaknesses in earlier methodologies by developing more precise definitions of best practice criteria, and by establishing a list of 45 detailed indicators, in the form of questions, to assess the degree to which each criterion is met. The methodology was then applied to a case study example; the evaluation of Canada's ESPS. The conclusions and recommendations put forward by the case study contributed to the creation of Canada's new *Federal Sustainable Development Act* and resulting Federal Sustainable Development Strategy.

A study of the German ESPS by Zeiger (2012) included an updated review of international best practices used in the Ellis evaluation of ESPS. The methodology developed and applied by Ellis and updated by Zieger will be used in this evaluation of Canada's environmental sustainability planning system (CESPS).

The eight best practice criteria used by Ellis (2010) and Zeiger (2012) are defined as follows.

4.2.1. Comprehensive goals with measurable targets

An effective environmental sustainability strategy requires goals that are clearly outlined, tangible and specific enough, to define the end-results that they are aiming for. There should be an integrated, comprehensive statement of goals that covers the economic, social and environmental aspects of sustainability. A key element of goals is the provision of measurable targets that allow for progress to be monitored (see 4.2.4). These should be scientifically based, measurable, with short (1-5 yr), medium(5-15yr) and long-term (15-50yr) target timelines to achieve environmental sustainability. The short time frame is important in assessing, whether progress is being made and what adjustments in strategy are required. The long-term targets, on the other hand, ensure that the strategy addresses intergenerational equity criterion of sustainable development.

4.2.2. Effective strategy

The next best practice is the development of a comprehensive list of programs and initiatives necessary to achieve the goals, and targets. Strategies must quantifiably show how the proposed actions in the strategy will attain the goals and targets. This requires a cause-and-effect analysis and clearly allocated responsibilities for implementation, as well as commitment of necessary resources for implementation, including financial resources. Funding of the strategy implementation should further be continuous rather than one-off and can be achieved through a) integrating national strategies into the financial budget or by b) acquiring private funding. The latter can be feasible under certain circumstances but should be avoided to ensure the longevity of the process (see OECD 2001). Funding provisions may originate from all levels of government (local, regional, national or supra-national) as long as the sources are clearly defined.

4.2.3. Integration

For national strategies to be successful, they need to integrate objectives from all three pillars of sustainable development (economic, environment and social). Integration must also occur horizontally across all government departments on the federal level, as well as spatially across local, provincial, national and international levels of government.

4.2.4. Monitoring

Ongoing and long-term monitoring is crucial, in order to ensure that strategy goals and targets are met and that sustainability is achieved. Monitoring therefore allows for well-founded and necessary adjustments in the strategy and highlights the iterative and flexible nature of environmental sustainability planning. Trends should be monitored in relation to established targets.

Indicators should be developed to simplify and streamline the monitoring process. These indicators should cover all relevant areas of environmental sustainability, in order to address the whole spectrum of environmental issues relevant to the overarching task.

Monitoring should further be transparent and is therefore best pursued by an independent body, which provides decision-makers and the wider public with appropriate information and relevant feedback on progress to-date.

4.2.5. Leadership and accountability

Development and implementation of a national strategy should be the responsibility of a high level interdepartmental committee within government. By assuming full responsibility, senior governments are then accountable for policy changes and infrastructure adaptation needed for sustainable changes

4.2.6. Adaptive management

Adaptive management is a natural extension of the monitoring process outlined above. It refers to the existence of a formal obligatory process that periodically reviews and adapts the national strategy or plan, based on performance deficiencies identified during monitoring.

4.2.7. Stakeholder collaboration

Government planning must ensure adequate participation opportunities for stakeholders. Collaboration among a broad range of stakeholders including civil society, businesses, communities, and non-governmental organizations is vital in ensuring that plans reflect the public interest and garner the stakeholder support necessary for effective implementation. Collaboration must occur through all steps of the process: development, implementation and monitoring.

The benefits of stakeholder collaboration are two-fold: On the one hand it ensures that the strategy continues to adequately reflect public interest and has the backing of all relevant stakeholder groups. This is crucial to the strategy's effective implementation and the achievement of necessary structural changes. Collaboration also ensures that the strategy is based on all available information and addresses all relevant issues.

4.2.8. Legal framework

An environmental sustainability plan should be required by law. Further, the process, through which it is developed, implemented and monitored, including requirements for goals and targets, plans and their amendments and stakeholder participation must be enshrined in law. This provision creates transparency, accountability and the necessary certainty for the sustainability message to permeate all sectors of society.

4.3. Evaluating Best Practice Performance

An objective and transparent assessment of the degree to which the Canadian Environmental Sustainability Planning System meets best practice criteria is challenging. Other studies have utilized qualitative tools to perform similar evaluations. For example, Gunton and Joseph's (2007) evaluation of Canada's ESPS was based on a descriptive four tier system of fully met, largely met, partially met and not met. This approach lacks transparency because it is based on a subjective assessment by the evaluator. To address this problem, Gunton et al. (2006) and Ellis, et al. (2010) refined the evaluative approach to use more transparent and quantitative methods wherever possible. Under this refined approach, the eight best practice criteria are assessed by answering 43 specific questions (see Table 3). The methodology applied here follows the approach taken in Ellis et al. (2010). This enables a direct comparison with their results.

The evaluation is completed by assigning a performance rating for each of the 43 indicators, and then assigning an overall rating for each of the 8 criterion based on the indicator ratings. For some indicators the rating consists of a simple dichotomous assessment (yes or no). For other indicators it is possible to assign a numerical rating based on quantitative data, such as the percentage of environmental objective categories that have measurable targets. In other cases, only a more qualitative assessment can be used. Regardless of the type of assessment (dichotomous, quantitative, or qualitative), overall rating is assigned for each criterion based on the following scale.

- Fully met = no deficiencies.

- Largely met = no major deficiencies.
- Partially met =no more than one major deficiency.
- Not met = two or more major deficiencies.

The final step in the evaluation methodology is to calculate an aggregated score for the countries environmental planning system. To do this, points are assigned to the overall performance ratings for each criterion and summed to calculate an overall score. The points are assigned as follows:

- Fully met =3 points.
- Largely met =2 points.
- Partially met = 1 point.
- Not met = 0 points.

Average scores for each criterion are calculated via the mean score for each component. In the process, quantitative results are converted into ratings according to the following calculation: 0%-49%=Not met; 50%-79%=Partially met; 80%-99%=Largely met; 100%=Fully met.

Where possible, benchmarks for indicators are used to ensure evaluations are as transparent and unbiased as possible. For example, the best practice criteria for comprehensive goals and measurable targets states that “goals and targets should address all aspects of environmental sustainability”. This requires an actual benchmark of widely accepted environmental goals that can be used as a reference point. This study uses the sustainability goals that Gunton et al. (2006) developed based on the *Sustainability Within a Generation* study by the David Suzuki Foundation (Boyd 2004; see Table 4) as a benchmark. This evaluation also uses 43 benchmark environmental sustainability categories developed by Gunton et al. (2006) as a reference point for targets categories and to evaluate the adequacy of the strategy monitoring system (see Table 5).

Table 3. Best Practice Criteria and associated Indicators to Evaluate the ESPS

Best Practice Criterion	Indicator
***1. Comprehensive Goals with Measurable Targets*:**	1. Are there published sustainability goals?
There should be an integrated, comprehensive statement of goals that cover all aspects of environmental sustainability and include scientifically based measurable short, medium and long-term targets with timelines to achieve environmental sustainability.	2. Are the goals published as an integrated goal statement or as separate goal statements?
	3. What proportion of 9 SWAG sustainability goals are fully covered by published goals?
	4. What proportion of 9 SWAG sustainability goals are fully and/or partially covered by published goals?
	5. What proportion of 43 sustainability indicators are covered by measurable targets?
	6. What proportion of 43 sustainability indicators have short (1-5 years), medium (5-15 years) and long term (15-50 years) targets?
***2. Effective Strategy*:**	7. Is there a published Environmental Sustainability Strategy (ESS)?
ESPS should have a strategy that quantitatively shows how sustainability targets will be met including how financial resources will be allocated to meet strategy objectives.	8. Is ESS published as an integrated plan or separate plans?
	9. What proportion of 43 sustainability indicators is covered by an implementation strategy?
	10. What proportion of the 43 sustainability indicators is covered by an implementation strategy that quantifiably shows how initiatives will achieve goals, targets, and timelines?
	11. Are there adequate financial resources and other resources allocated to the strategies objectives? This should involve an estimation of the cost of implementation as well as a budget commitment in the strategy that makes available all necessary funding.
***3. Integration*:**	12. Is there a single plan for the country?
ESPS should integrate economic, social and environmental objectives, both sectorally and spatially.	13. Does this plan integrate economic, social and environmental objectives?
***4. Monitoring*:**	14. Is there a regular public monitoring report measuring sustainability progress?
There should be regular, independent public reporting to assess progress in implementing strategies and achieving targets. Monitoring is necessary to assess success and identify deficiencies that need to be addressed.	15. What proportion of 43 sustainability indicators is included in these reports?
	16. What proportion of Canada's environmental targets is included in these reports?
	17. What proportion of 43 sustainability indicators is assessed relative to targets?
	18. What proportion of 43 sustainability indicators is assessed relative to comparable jurisdictions?
	19. What proportion of 43 sustainability indicators is assessed relative to trends?
	20. Is there regular detailed reporting of noncompliance of permit holders with environmental regulations?
***5. Leadership and Accountability*:**	21. Is there a committee of elected members dedicated to Canada's ESPS?
Responsibility for developing ESPS	22. Is there a senior civil service committee dedicated

should reside with the most senior levels of government to ensure that the plan is a priority and responsibility for implementation must be clearly delineated to ensure accountability.	to Canada's ESPS?
	23. Is there an independent agency dedicated to evaluating Canada's ESPS regularly?
	24. Are the parties responsible for preparing Canada's ESPS strategies clearly identified?
	25. Are the parties responsible for implementing Canada's ESPS strategies clearly identified?
	26. Are the parties responsible for monitoring Canada's ESPS strategies clearly identified?
***6. Adaptive Management*:**	27. Is there a mandatory review and revision of Canada's ESPS based on monitoring results?
There should be mandatory adjustments to ESPS plans to address deficiencies identified during monitoring.	
***7. Stakeholder Collaboration*:**	28. Is there a permanent ESPS multi-stakeholder body?
Development, implementation, and monitoring of the ESPS should be collaboratively managed through permanent and institutionalized multi-stakeholder processes to ensure public support for the plan and that the plan meets public priorities.	29. Are there collaborative, multi-stakeholder processes used to develop ESS?
	30. Are all relevant stakeholder interests included in multi-stakeholder processes?
	31. Is consensus based negotiation used in multi-stakeholder processes?
	32. Do stakeholders meet regularly?
	33. Are there adequate resources to fulfill multi-stakeholder process mandates?
	34. Are multi-stakeholder processes mandatory?
	35. Are multi-stakeholder processes provided for in legislation?
***8. Legal Framework*:**	36. Is there a Canadian ESPS Act?
The process and requirement for ESPS planning should be enshrined in legislation to provide transparency and certainty.	37. Is there a legislative basis for goals and objectives?
	38. Is there a legislative basis for targets?
	39. Is there a legislative requirement to clearly designate responsible parties and show accountability?
	40. Is there a legislative requirement for public consultation?
	41. Is there a legislative requirement for monitoring and reporting?
	42. Is there a legislative requirement for adaptive management?
	43. Is there a legislative requirement for State of Environment Reporting?

Table 4. Benchmark Environmental Sustainability Goals (adapted from Boyd 2004)

Sustainability Challenge	Sustainability Goal
1. Improve Efficiency	Canada reduces energy and material use by at least 75% in order to live within the capacity of the Earth's natural systems while maintaining our quality of life.
2. Shift to Clean Energy	Canada replaces fossil fuels with low-impact renewable energy.
3. Reduce Waste and Pollution	Smart design of Canada's production and consumption processes would reduce environmental health threats.
4. Protect and Conserve Water	Canada implements comprehensive water policies that protect fresh water systems from the threats of climate change and industrial, agricultural and municipal pollution.
5. Clean Air	Canada implements comprehensive air quality policies that eliminate risks to human health.
6. Produce Healthy Food	Canada ensures that its food is healthy and produced in ways that do not compromise its land, water or biodiversity.
7. Conserve, Protect and Restore Nature	Canada effectively protects species and ecosystems by strengthening endangered species legislation and ensuring that land and marine use decisions protect biodiversity.
8. Build Sustainable Cities	Canadian cities become vibrant, clean, liveable, prosperous, sage and sustainable.
9. Promote Global Sustainability	Canada becomes one of the most compassionate and generous nations on Earth, a global leader in securing peace, alleviating poverty, and promoting sustainability in the developing world.

Table 5 Benchmark Environmental Sustainability Categories (adapted from Boyd 2004)

Air Quality	1) Sulphur Concentrations
	2) Nitrogen Concentrations
	3) VOC Concentrations
	4) Particulates Concentrations
	5) Carbon Monoxide Concentrations
	6) Ozone Concentrations
Drinking Water Quality	7) Heavy Metal
	8) Dissolved Solids
	9) Turbidity
Surface Water Quality	10) Heavy Metal Concentrations
	11) Phosphorous Concentrations
	12) Nitrogen Concentrations
	13) Dissolved Oxygen
	14) Biochemical Oxygen Demand

	15) Suspended Solids
	16) Coliform
Pollution Emissions	17) Greenhouse Gases
	18) Nitrogen
	19) Volatile Organic Compounds
	20) Carbon Monoxide
	21) Particulate
	22) Ozone Depleting Substance
	23) Sulfur Oxide
Natural Resource Consumption	24) Energy Consumption
	25) Energy Efficiency
	26) Clean/Renewable Energy Production
	27) Water Conservation
	28) Natural Resource Efficiency
Waste Generation and Treatment	29) Municipal Waste
	30) Hazardous Waste
	31) Sewage Treatment
	32) Recycling
Agriculture Practices	33) Pesticide Use
	34) Fertilizer Use
Protecting Nature	35) Biodiversity
	36) Species at Risk
	37) Protected Areas
	38) Fisheries Harvest (total allowable catch)
	39) Forest Harvest (total allowed cut)
	40) Sustainable Forest Management Certification
Transportation	41) Public Transit Use
	42) Private Transportation Use
Government Procurement	43) Government Green Procurement

4.4. Data Collection

Given the broad scope necessary for evaluating the ESPS of an entire country, it is important to gather all relevant data in a strategic and comprehensive fashion. For this purpose an earlier study by Ellis et al.(2010) developed an evaluation guide that formed the basis for the data collection in conjunction with their assessment of Canada's ESPS. Their guide is used in this study (Appendices B and C). A description of the evaluation guide and an explanation of the study limitations related to data collection can be found below.

4.4.1. Evaluation Guide

The evaluation guide developed by Ellis et al. (2010) is, to a large extent informed by the 43 best practices questions outlined above (see Table 3; an example evaluation guide is provided in Appendix B). To answer these questions, information was gathered by reviewing all government documents that are concerned with the Canadian ESPS. This includes environmental legislation, the relevant components of Canada's FSDS, as well as other national environmental strategies and other relevant government documents (for a full account see Chapter 3 and Appendix C). Due to time constraints, this evaluation guide was not sent to the relevant and responsible departments of the federal government for review.

Once the evaluation guide was complete (see Appendix E), it was used to conduct the evaluation. Data for every component of Canada ESPS was assessed to determine the degree to which best practices are met. The only exception to this is the evaluation of stakeholder consultation. Given the parameters of this study, it was not possible to evaluate the adequacy of stakeholder consultation for every aspect of the CESPS. Therefore, evaluation of stakeholder consultation was limited to reviewing the consultation process used to develop the Federal Sustainable Development Strategy. It is assumed that this provides a good representation of federal stakeholder consultation processes.

The completed evaluation guide formed the basis for the principal evaluation of Canada's ESPS based on the 43 questions presented in Table 3. The results of this evaluation are provided in chapter 5.

4.4.2. Data Limitations

The data collected throughout this study is subject to several limitations. First, it should be noted that although sustainable development actions can occur at the provincial and municipal levels, this study focuses on only federal government initiatives, as the federal government was the signatory on the Rio accord. A number of the deficiencies in Canada ESPS highlighted below might be compensated by initiatives by provincial or local governments. It is recommended that the provincial ESPS be subjected to a similar evaluation, in order to determine to what extent they supplement environmental planning on the federal level.

Secondly, the study reviews the Canadian ESPS as it existed on February 28th, 2013, which marks the end of the data collection period. Canadian environmental policy is dynamic as shown by the changes in the ESPS since the evaluation by Ellis et al. in 2010 (see Chapter 5 for a comparison of the two studies) and therefore some of the findings may no longer be relevant. It is therefore recommended that the evaluation process is repeated at intervals to track changes in the Canadian ESPS over time.

5. ANALYSIS AND FINDINGS

5.1. Introduction

This chapter provides a summary of the results of the evaluation of the Canadian environmental sustainability planning system. The data on which this summary is based can be found in the complete Evaluation Guide in Appendix C. This chapter also includes a comparison of Canada's current ESPS against the older decentralized system that existed before the *Federal Sustainable Development Act* by comparing the results of this evaluation with the results of the study by Ellis et al.(2010).

5.2. Canada's ESPS Evaluation

5.2.1. Comprehensive Goals and Measurable Targets

The first best practice criterion for environmental sustainability planning is to have goals with timelines covering all aspects of sustainability that include measurable short, medium and long term targets. The results for the evaluation of this criterion are summarized in Table 6.

Table 6. "Comprehensive Goals and Measurable Targets" Criterion evaluation for Canada's ESPS.

Components	Assessment	Rating	Discussion
1. Are there published sustainability goals?	Yes	Fully met	Sustainability Goals are published in *Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada* – Canada's NSDS - as well as in a number of additional strategy documents (departmental SDS, Chemicals Management Plan, Clean Air Agenda, Canadian Biodiversity Strategy etc.). A number of goals are also stated in Canada's environmental laws.

2. Are the goals published as an integrated goal statement or as separate goal statements?	Integrated Statement	Largely met	Canada has published most of its environmental sustainability goals in its comprehensive FSDS and in subsequent progress reports to the document. These documents also make reference to supplementary strategy documents where remaining goals can be found. Not all supplementary strategies are referenced in the FSDS, and thus, the criterion is not fully met.
3. What proportion of 9 SWAG sustainability goals are fully covered by published goals?	55.6% (5/9)	Partially met	Only 5 of the 9 SWAG goals are FULLY covered by published goals.
4. What proportion of 9 SWAG sustainability goals are fully and/or partially covered by published goals?	100% (9/9)	Fully met	
5. What proportion of 41* sustainability categories are covered by measurable targets?	70.7% (29/41)	Partially met	29 of the 41* categories are covered by measureable targets. A number of them were however missing: biochemical oxygen in surface water, carbon monoxide in air emissions, energy consumption, energy efficiency, resource efficiency, municipal and hazardous waste, and recycling, fertilizer use, protected areas and public transit use.
6.What proportion of 41* sustainability categories have short (1-5 years), medium (5-15 years) and long term (15-50 years) targets?	0% (0)	Not met	None of the 41 indicators have short, medium AND long term targets in place.

* Only evaluated 41 of the 43 categories as 2 categories fall under provincial jurisdiction.

The first component of this criterion is to have published sustainability goals. This component is fully met in Canada. Canada's FSDS*: A Federal Sustainable Development Strategy for Canada*, contains a comprehensive list goals. The FSDS also makes reference to a number of goals contained in other strategy documents and environmental legislation. Most goals are therefore stated in an integrated manner in a single document. Therefore the second component of this criterion is largely met.

Published goals are assessed in terms of how fully they cover all of the goals outlined in the *Sustainability Within A Generation* (SWAG) document discussed above (see Chapter 4 or Gunton and Joseph, 2006). This benchmarking procedure is meant to ensure that the goals cover all important aspects of environmental sustainability.

The evaluation shows that five of the nine SWAG goals are fully covered by the CESPS. However, the remaining four goals are only partially covered because the current goal statements exclude key elements of the SWAG goals. SWAG goal number one "Improve Energy, Water and Resource Efficiency" is considered to be only partially covered because while there are goal statements regarding specific resources (biological resources) or regarding " sustainable use" there are not any goals that apply to *efficient* use of *all* resources. Comprehensive resource efficiency goals only exist for the Province of Quebec. The SWAG goal "Reduce Waste and Pollution" is considered to be only partially covered because there are only federal waste reduction goals for the federal public service, and not for all Canadians. The SWAG goals "Building Sustainable Cities" and "Promoting Global Sustainability" are only partially covered as the FSDS does not contain any comprehensive published goals relating to these topics.

Goals must also be accompanied by measurable targets with timelines, in order to meet this best practice criterion. To assess whether Canada's ESPS quantitatively tracks or measures all important aspects of environmental sustainability, the list of 41 Environmental Sustainability Categories developed by Gunton et al. (2006) is used as a benchmark. Targets exist for only 29 of the 41 sustainability categories. Targets for biochemical oxygen demand in surface water, carbon monoxide in air emissions, energy consumption, energy efficiency, resource efficiency, municipal and hazardous waste, and recycling, fertilizer use, protected areas and public transit use do not exist. Furthermore, none of the 41 sustainability categories have short (1-5 years) medium (5-15 years) AND long term (15-50 years) targets. Several reports, including the FSDS itself have indicated that the targets and strategies published in the FSDS are merely a compilation of pre-existing departmental environmental goals, target and strategies (CESD, 2010). As many of these targets and strategies were developed by single departments, in isolation from each other, rather than through a comprehensive, multi-departmental collaboration, it is not surprising that Canada's ESPS doesn't cover all sustainability categories.

Overall, the best practice criterion of having comprehensive goals with measurable targets is partially met. This assessment is largely based on the fact that Canada has published an FSDS, and the goals within the FSDS are general enough to cover most of the SWAG goals that are used as a benchmark. However, the evaluation also reveals that there are significant shortcomings with respect to the targets that the Canadian government uses for its ESPS. These targets do not fully encompass all areas deemed important to environmental sustainability and lack time horizons that span across the short, as well as longer term. Also of note, is that many of the targets included in this evaluation are nearly out-dated, and many of the standards for water and air quality were set decades ago. Medium- and long-term targets are necessary to effectively achieve environmental sustainability.

5.2.2. Effective Environmental Sustainability Strategy

According to the evaluation framework applied here, the next best practice criterion is to develop and implement effective environmental sustainability strategies, that quantifiably show how proposed targets will be met within a specified timeline. All of the strategies, initiatives and policies referenced in *A Federal Sustainable Development Strategy for Canada* – the Canadian NSDS – and its progress reports, as well as all federal environmental legislation and additional governmental initiatives, are included in the assessment of this criterion (see section 3.4 and Appendix A for the full description of what constitutes the Canadian ESPS). The findings for each of the components of this criterion are presented in Table 7. A detailed account of the calculations involved in the assessment can be found in the Evaluation Guide provided in Appendix C.

Table 7. "Effective Strategy" criterion evaluation for Canada's ESPS.

Components	Assessment	Rating	Discussion
7. Is there a published Environmental Sustainability Strategy (ESS)?	Yes	Fully met	The federal government has published *: A Federal Sustainable Development Strategy for Canada,* which represents its NSDS. Updates to this strategy occur every 3 years. Other strategy documents, including departmental sustainable development strategies and sector initiatives, also touch on environmental issues. Most, but not all of these strategies are referenced in the FSDS and supplement it.

8. Is ESS published as an integrated plan or separate plans?	Integrated Plan	Largely met	Canada has a published FSDS that references most but not all existing environment-related strategies (see above). As previously discussed, in order to be considered completely integrated, all sustainability strategies would have to be reference in the FSDS.
9. What proportion of 41* sustainability categories is covered by an implementation strategy	65.9% (27/41)	Partially met	The implementation strategies listed in the FSDS are a compilation of pre-existing departmental implementation strategies and do not represent a comprehensive attempt to address all aspects of sustainability. For example- the FSDS strategies addressing surface water quality only mention several specific bodies of water and don't address all surface water in Canada. Therefore, not all environmental sustainability categories are covered by implementation strategies.
10. What proportion of the 41* sustainability categories is covered by an implementation strategy that quantifiably shows how initiatives will achieve goals, targets, and timelines?	5% (2/41)	Not met	Strictly speaking none of the 43 indicators is covered by an implementation strategy that quantifiably shows how certain initiatives will achieve goals, targets or timelines. In order to do so the contribution of each initiative in the strategy would need to be estimated. The strategy should then show how all initiatives collectively result in achieving the targets in time. Only regulatory bans on ozone depleting substances and certain pesticides were considered to meet this criteria as banning the substances infers a goal of 100% reduction of that substance
11. Are there adequate financial resources and other resources allocated to the strategies objectives? This should involve an estimation of the cost of implementation as well as a budget commitment in the strategy that makes available necessary funding.	12.2% (5/41)	Not met	The *FSDA* requires departments to integrate their departmental SDS (these are the strategies listed in the FSDS) with the Expenditure Management System (EMS). This is achieved by including SDS considerations in their Report on Plans and Priorities(RPPs). RPPs require allocation of financial and human resources. While RPPs include a budget commitment for overarching initiatives, they do not include an estimation of the cost of implementation, or budget commitment for each individual strategy. This represents two or more major deficiencies. As above, the bans for pesticides as well as ozone depleting substances were counted as adequate.

* Only 41 of the 43 categories were evaluated as 2 categories fall under provincial jurisdiction.

Canada's federal government has published *the Federal Sustainable Development Strategy* as well as several other strategies that address environmental

sustainability issues. The FSDS is updated every 3 years. The FSDS references most but not all existing environment-related strategies. As previously discussed, in order to be considered completely integrated, all existing sustainability strategies would have to be referenced in the FSDS. As such, indicator 8 of the "effective strategy" criterion is largely met.

Only twenty-seven of the 41 sustainability benchmark categories are covered by an implementation strategy. Therefore, indicator 9 is only partially met. As previously discussed, the implementation strategies listed in the FSDS are a compilation of pre-existing departmental implementation strategies and do not represent a comprehensive, pre-meditated attempt to address all aspects of sustainability. Therefore, it is not surprising that not all environmental sustainability benchmark categories are covered by implementation strategies.

Strictly speaking, none of the 41 sustainability categories is covered by an implementation strategy that quantifiably shows how planned or existing initiatives will achieve the goals, targets and timelines outlined in the ESPS strategy documents. For this criterion to be fulfilled, the contribution of each initiative towards the goal or target should be estimated. The strategy should also outline how all initiatives collectively result in the achievement of the overarching objectives. There are, on the other hand, a number of legally binding restrictions with respect to ozone depleting substances and pesticides set out in federal legislation that will clearly result in meeting associated goals, targets and timelines in these two areas. The legal restrictions and the stipulations of these acts are regarded as *en par* with an implementation strategy. Still, this indicator is not met.

The *Federal Sustainable Development Act* requires departments to integrate their sustainable development strategies into the Expenditure Management System (EMS) by reporting on them in their annual Report on Plans and Priorities (RPPs). While RPPs include a budget commitment for overarching initiatives, they do not include an estimation of the cost of implementation, or budget commitment for each individual strategy. Additionally, when reviewing the draft FSDS, the CESD noted that while departments are now required to include SDS in their RPPs, there are "no proposed improvements to the expenditure management system that might lead to the identification of environmental risks and goals, and there are no proposed improvements

to accountability or reporting mechanisms that might compel departments to do anything more, or differently, in relation to environmental decision making and sustainable development, than what they have done in the past" (CESD, 2010). This represents two or more major deficiencies, therefore indicator 11 is not met.

Overall, the Canadian ESPS does not meet the "effective strategy" best practice criterion. The lack of implementation strategies that quantifiably show how set targets and timelines will be met, and the absence of a sound and guaranteed implementation budget are major deficiencies.

5.2.3. Integration

Integration is an important component of any ESPS, and represents the third best practice criterion of this evaluation. It is defined as having one comprehensive environmental sustainability plan for the entire country that coordinates initiatives on the federal, provincial, regional and local levels (vertical integration) and spans across economic, social and environmental goals (horizontal integration). The findings for each of the components of this criterion are presented in Table 8.

Table 8. "Integration" criterion evaluation for Canada's ESPS.

Components	Assessment	Rating	Discussion
12. Is there a single plan for the country?	Yes	Largely met	Canada has an FSDS that incorporates most of the issues discussed here, or refers to most, but not all of the supplementary strategies.
13. Does this plan integrate economic, social and environmental objectives?	No	Not met	The FSDS does not integrate economic and social sustainability objectives in its environmental component.

As mentioned above, the FSDS and the strategies referenced within it represent an environmental sustainability plan. As not ALL strategies that contribute to CESPS are referenced in the FSDS, indicator 12 "having a single plan for the entire country" is

largely met rather than fully met. While the FSDS discusses the need for involvement of citizens, industry, and provincial and municipal governments in sustainability planning and implementation, there are very few initiatives and implementation strategies that actually reflect meaningful collaboration between the federal government and other levels of government on issues of environmental sustainability. The 'Green Municipal Fund', a federal funding program, is the only example of federal- municipal collaboration that is given in the FSDS.

This evaluation concludes that Canada's FSDS and the CESPS as a whole does not integrate economic, social and environmental objectives. The FSDS focuses almost entirely on environmental issues. A similar conclusion was noted by the European Sustainable Development Network, which found that while the FSDS promotes the balance of environmental issues with economic and social considerations in it's opening paragraphs, it clearly focuses "on environmental sustainability as a first step in integrating environmental concerns with economic and social considerations" (Remmel, 2012).

In conclusion, overall, the best practice criterion of having an integrated CESPS sectorally and spatially is only partially met.

5.2.4. Monitoring

The fourth best practice principle is to have independent monitoring and reporting to track progress relative to targets, past trends, as well as the performance in other jurisdictions. Notably, there are two elements of progress that should be monitored: *implementation progress*, that assesses how successfully a strategy is being implemented over time, and *outcome progress*, that assesses whether given environmental sustainability goals and targets are being met (Ellis et al. 2010). The findings for each of the components of this criterion are presented in Table 9. A detailed account of associated calculations is available in Appendix C.

Table 9. "Monitoring" criterion evaluation for Canada's ESPS.

Components	Assessment	Rating	Discussion

14. Is there a regular public monitoring report measuring sustainability progress?	Yes	Fully met	The Sustainable Development Office produces an FSDS Progress report at least once ever 3 years. To date, it has released the 2011 Progress Report, which focuses on progress made on setting up the systems needed to implement the FSDS, and the 2012 Progress Report ,which reports on progress towards implementation of FSDS strategies, and also includes some outcome reporting on a number of specific goals and targets. The FSDS Progress reports are supported by Canadian Environmental Indicator Series (CESI), which monitors outcome progress for a number of sustainability indicators. The CESI is available online. In addition to the progress report by the SDO, the CESD is mandated to provide annual reports regarding FSDS implementation progress.
15. What proportion of 41 sustainability categories is included in these reports?	60.9% (25/41)	Partially met	25 of the 41 sustainability benchmark categories are included in public reports, mostly in either the FSDS progress reports or the CESI.
16. What proportion of Canada's environmental targets is included in these reports?	69% (20/29)	Partially met	The government has targets for 29 of the 41 sustainability categories but only 20 of the targets are included in public monitoring reports.
17. What proportion of 41* sustainability categories is assessed relative to targets?	2.44% (1/41)	Not met	Only GHG emissions are assessed relative to targets.
18. What proportion of 41* sustainability categories is assessed relative to comparable jurisdictions?	19.5% (8/41)	Not met	8 of the 41 categories were assessed relative to comparable jurisdictions. These include protected areas, national freshwater quality and all air quality categories. Categories are compared to the following 9 jurisdictions: United States, Russia, Germany, Australia, Japan, United Kingdom, Sweden, France and Italy.
19. What proportion of 41* sustainability categories is assessed relative	48.7% (20/41)	Not met	20 out of 41 sustainability categories were assessed relative to trends. Most of the 20 categories are air and water quality categories.

to trends?			
20. Is there regular detailed reporting of noncompliance of permit holders with environmental regulations?	No	Not met	There is no detailed public reporting of non-compliance with environmental regulations, self-reported or otherwise. No such reporting is included in the FSDS. There is, however, a website that lists Environmental Enforcement Notifications and provides information about successful prosecutions across Canada

* Only 41 of the 43 categories were evaluated as 2 categories fall under provincial jurisdiction.

The first best practice evaluation component for the "monitoring" criterion considers whether progress monitoring has regular public reporting. In Canada, sustainability *implementation progress* is reported on via FSDS Progress Reports, while *outcome progress* is included in FSDS Progress Reports as well as via the Canadian Environmental Indicator Series. The Sustainable Development Office produces an FSDS Progress report at least once ever 3 years. To date, it has released the 2011 Progress Report, which focuses on progress made on setting up the systems needed to implement the FSDS, and the 2012 Progress Report, which reports on progress towards implementation of FSDS strategies, and also includes some outcome reporting on a number of specific FSDS goals and targets. The FSDS Progress reports are supported by the Canadian Environmental Indicator Series (CESI), which monitors outcome progress for a number of environmental indicators. The CESI is available online but is not published regularly as it is updated on an 'as available' basis. This component is fully met.

Combined, these monitoring reports cover targets in 25 of the 41 environmental categories in Table 5 (60.9%). Missing categories include those for surface water quality, energy and resource efficiency, clean energy production, fertilizer and pesticide use, as well as private and public transit use. The second component of this criterion is therefore only partially met.

As mentioned above, Canada has set itself environmental targets in 29 of the 41 benchmark environmental categories. However there is only public monitoring and reporting for 20 of these categories. This means that 69% of the targets that Canada

has set for itself are regularly reported on. The Canadian ESPS therefore partially meets the third component of the "monitoring" criterion.

According to best practices it is essential that environmental indicators are assessed relative to targets in order to determine whether or not initiatives are meeting objectives. Of all of the 41 sustainability categories, only one category, GHG emissions, was assessed and reported on relative to targets. Eight of the sustainability indicators are assessed relative to other jurisdictions, and only 20 of the 41 categories (48.7%) are assessed relative to trends. Component four, five and six of this criterion are therefore not met.

An additional shortcoming of the Canadian ESPS is the absence of a public regulatory non-compliance reporting system. This information is also not included in the FSDS. While there is no detailed public reporting of non-compliance with environmental regulations, self-reported or otherwise, there is, however, a website that lists Environmental Enforcement Notifications and provides information about successful prosecutions across Canada. Additionally, the national pollutant release database is Canada's legislated publicly-accessible inventory of pollutant releases and transfers. This component is not met.

In conclusion, this analysis finds that although Canada does have public reporting on environmental sustainability implementation progress and outcome progress, it does not meet international best practices with respect to monitoring. Environmental monitoring and reporting in the Canadian ESPS is also discussed in several other studies (Volkery, 2006;CESD, 2007). Volkery et al. list Canada as an innovator with respect to both progress monitoring and outcome monitoring but do not probe further into its specifics. Volkery does not, however, evaluate the quality of the monitoring process itself.

5.2.5. Leadership and Accountability

The fifth best practice criterion relates to the allocation of responsibility for the development and implementation of Canada's ESPS. According to the international literature, it is best to assign this responsibility to the highest level of the federal

government in order to ensure long-term accountability. The various components of this criterion are assessed in Table 10 and can be found in more detail in Appendix C.

Table 10. "Leadership and Accountability" criterion evaluation for Canada's ESPS.

Components	Assessment	Rating	Discussion
21. Is there a committee of elected members dedicated to Canada's ESPS?	Yes	Largely met	The Standing Committee on Environment and Sustainable Development and the Minister of the Environment both have mandates or specific duties related to the FSDS that are enshrined in law. However, neither has sustainable development as its primary focus .
22. Is there a senior civil service committee dedicated to Canada's ESPS?	Yes	Fully met	In compliance with the *FSDA,* the Sustainable Development Office is responsible for developing and maintaining systems and procedures to monitor progress on the implementation of the FSDS [*s.*7 (1*)*]. While not a senior committee, the SDO also manages several other interdepartmental FSDS committees including the Interdepartmental Assistant Deputy Minister Committee and the Interdepartmental Director General Committee which are responsible for addressing gaps or issues not covered by departmental mandates and providing strategic direction, advanced thinking, and decision making on key issues associated with the implementation of the *Act* .
23. Is there an independent agency dedicated to evaluating Canada's ESPS regularly?	Yes	Fully met	While not entirely independent of the federal government, the Commissioner of the Environment and Sustainable Development (CESD) is housed within the Auditor General's Office, and has the mandate to provide parliamentarians with objective, independent analysis and recommendations on the federal government's efforts to protect the environment and foster sustainable development.
24. Are the parties responsible for preparing Canada's ESPS strategies clearly identified?	Yes	Fully met	The Minster of the Environment is charged with preparing the FSDS as per the *FSDA.* Department Ministers are responsible for preparing their respective departmental SDS (which contribute to the FSDS).

25. Are the parties responsible for implementing Canada's ESPS strategies clearly identified?	Somewhat	Partially met	The federal departments required to implement the departmental SDS and associated strategies are identified in the *FSDA* and in the FSDS. Environment Canada is the overall lead for FSDS implementation, while PWGSC is the lead on Greening Government Operations. However, while departments and agencies are responsible for aspects of implementation, none is identified as having responsibility for meeting a specific target, as required under section 9(2) of the *Act*.
26. Are the parties responsible for monitoring Canada's ESPS strategies clearly identified?	Yes	Fully met	Yes, the Sustainable Development Office is charged with monitoring the implementation of the FSDS. The CESD provides independent auditing of the process.

Various governmental bodies are involved in the management of the Canadian ESPS and the country meets most of the components of this criterion.

There are a variety of elected officials/ committees whose official duties or mandates are related to the FSDS. The Standing Committee on Environment and Sustainable Development, and the Minster of the Environment have mandates or specific duties that are enshrined in law. However, neither has sustainable development as its primary focus. The *FSDA* requires that a Cabinet Committee from the House and/or the Senate have oversight of the development and implementation of the FSDS. The participation of parliamentarians in the context of the FSDS is done through the Standing Committee on Environment and Sustainable Development. The Committee's mandate is to examine, enquire into and report on matters referred to it by the House of Commons, including legislation, departmental activities and spending, reports of the Commissioner of the Environment and Sustainable Development, and other matters related to the general subject matter of the environment and sustainable development.

As previously described, the federal Minister of the Environment also has specific duties related to the CESPS. These duties are:

- Establish a Sustainable Development Office within the Department of Environment Canada [s.7(1)];
- Establish a Sustainable Development Advisory Council (SDAC) [s.8 (1)];

- Develop a Federal Sustainable Development Strategy (FSDS) every three years [s.9 (1)];
- Consult with the SDAC, the appropriate Parliamentary committees and the public on the draft strategy [s.9 (3)];
- Submit the draft FSDS to the Commissioner of the Environment and Sustainable Development (CESD) for review and comment [s.9 (4)];
- Submit the Federal Sustainable Development Strategy to the Governor in Council for approval [s.10 (1)]; and
- Table the FSDS, and subsequent Progress Reports on the federal government's progress in implementing the FSDS, in both Houses of Parliament [s.10(2), s.7(2)]. (Canada, 2011c).

The first component of "Leadership and accountability" criterion is largely met.

In addition to a committee of elected officials, Canada has a senior civil service committee dedicated to the CESPS. The Sustainable Development Office, which is housed in the Strategic Policy Branch of Environment Canada, is responsible for developing and maintaining systems and procedures to monitor progress on the implementation of the FSDS. The SDO also manages several other interdepartmental FSDS committees including the Interdepartmental Assistant Deputy Minister Committee and the Interdepartmental Director General Committee, which are responsible for addressing gaps or issues not covered by departmental mandates and providing strategic direction, advanced thinking, and decision making on key issues associated with the implementation of the *Act.* The second component is fully met.

While not entirely independent of the federal government, the Commissioner of the Environment and Sustainable Development (CESD) is housed within the Auditor General's Office, and has the mandate to provide parliamentarians with objective, independent analysis and recommendations on the federal government's efforts to protect the environment and foster sustainable development. As required under section (4) of the *Auditor General Act,* the CESD is legally mandated to review the draft FSDS and comment as to whether the targets and implementation strategies can be assessed. The CESD is also legally required to review and comment on all FSDS Progress Reports focusing particularly on the fairness of performance information. The CESD releases quarterly reports on a variety of topics related to the CESPS. The requirement of having an independent agency dedicated to evaluating the CESPS is therefore fully met.

The *Federal Sustainable Development Act* clearly assigns responsibilities for preparation, implementation, as well as monitoring of the FSDS. The Minister of the Environment is charged with preparing the FSDS and Department Ministers are responsible for preparing their respective departmental SDS. Departments are also responsible for implementing their departmental sustainable development strategies (which include the individual strategies listed in Annex 1 of the FSDS). While departments implement their own strategies, Environment Canada is the overall lead for FSDS implementation, while PWGSC is the lead on Greening Government Operations. The specific branches within the various departments responsible for implementation are not clearly named in the SDS. One shortfall of Canada's current allocation of responsibilities is that departments and agencies are only responsible for aspects of implementation, and none is identified as having responsibility for meeting an overall target, as required under section 9(2) of the *Act*. The CESD provided a similar observation in its comments on the draft FSDS in 2010 (CESD, 2010).

This evaluation finds that overall, Canada's ESPS largely meets international best practices for leadership and accountability. This is not surprising, as the new *FSDA* and FSDS were created with the purpose of "making environmental decision making more transparent and accountable".

5.2.6. Adaptive Management

The sixth best practice criterion requires a mandatory process of adapting the ESPS in order to address the shortcomings identified during monitoring (see Table 11).

Table 11. "Adaptive Management" criterion evaluation for Canada's ESPS.

Components	Assessment	Discussion
27. Is there a mandatory review and revision of Canada's ESPS based on monitoring results?	Partially met	While Canada's FSDS is subject to review an updating every 3 years, the process of implementing and adapting it is not officially defined and there is no mandatory requirement to address deficiencies identified during monitoring or the CESD evaluation.

While the FSDS must be updated every 3 years, a comprehensive adaptive management process was not identified for the Canadian ESPS. The Minister of the Environment is charged with producing a new FSDS once every three years. As previously discussed, the goals and targets established in the FSDS are a compilation of preexisting departmental goals and targets from the 28 federal departments implicated in the *FSDA*. Correspondingly, the Minister of each of those 28 departments implicated in the *FSDA* must also produce a new departmental SDS at least once every three years and table it in the House of Commons. The *FSDA* does not outline exactly what must be amended nor does it require that all deficiencies be addressed. The CESD provides comments on the FSDS and associated departmental strategies as per its legislative responsibilities in the *Auditor General Act*. The updated FSDS and SDS may take into consideration the recommendations for improvement from the CESD and progress reports, however, it is not a requirement. There is no consequence for not meeting goals or objectives, limiting the pressure to assess and adjust strategies to meet goals. As adaptation is possible, not necessary, this criterion is only partially met.

5.2.7. Stakeholder Collaboration

Stakeholder collaboration is the seventh best practice criterion. All aspects of the ESPS should be collaboratively managed through permanent and institutionalized multi-stakeholder processes to ensure public support for the plan. This also ensures that the plan meets public priorities. It is beyond the scope of this study to consider every stakeholder collaboration process in the CESPS, therefore, only those stakeholder processes directly related to Canada's FSDS are included in this study. The results are summarized in Table 12.

Table 12. "Stakeholder Collaboration" criterion evaluation for Canada's CESPS.

Components	Assessment	Rating	Discussion
28. Is there a permanent ESPS multi-stakeholder body?	No	Not met	The Sustainable Development Advisory Council is a multi-stakeholder body which provides advice to the Minster of the Environment about the draft FSDS and associated issues. While this is provided for in legislation, the Council has not been appointed.
29. Are there collaborative, multi-	Somewhat	Partially met	The development of Canada's FSDS incorporated a multi-stakeholder process during the development of the initial strategy

stakeholder processes used to develop FSDS?			as well subsequent strategies. The FSDS consultation process defined stakeholders as the SDAC, CESD, NGOs, academia and the public. Section 9(3) of the *FSDA* requires that for each draft FSDS there be a minimum 120-day consultation period with the related House of Commons Standing Committee/s, stakeholders and Canadians. The feedback received from stakeholders and Canadians is summarized in a Consultation Synthesis Report produced by the SDO and informs the final FSDS and subsequent Progress Reports. The process is not collaborative , and commentary from the public is merely reviewed and not discussed with the commentator.
30. Are all relevant stakeholder interests included in multi-stakeholder processes?	Yes	Fully met	Yes, anybody can participate in reviewing the FSDS. The government also invites commentary from specific interest groups and incorporates suggestions from the SDAC which itself consists of members that represent a multitude of societal interests (Provincial, territorial, aboriginal, industry, labour, NGOs)
31. Is consensus based negotiation used in multi-stakeholder processes?	No	No met	The SDAC is only an advisory body and the commentary from the public is merely reviewed and not discussed with the commentator. Inclusion of these comments is discretionary.
32. Do stakeholders meet regularly?	No	Not met	Public consultation happens infrequently every 3-4 years and cannot be referred to as a meeting. While the SDAC presumably has meetings, it could not be determined how often SDAC meets.
33. Are there adequate resources to fulfill multi-stakeholder process mandates ?	No	Not met	As per the *FSDA,* members of the SDAC are to hold office without remuneration and shall not be reimbursed for expenses incurred in the course of their duties. The budget for the dialogue with the public that precedes each progress report could not be found and stakeholders wishing to comment on the *FSDA* are not provided with any public resources to help them assess and comment.
34. Are multi-stakeholder processes mandatory?	Somewhat	Partially met	Multi-stakeholder processes are required as per the *FSDA*. However, there is no requirement to include stakeholder suggestions into the draft document.
35. Are multi-stakeholder processes provided for in	Yes	Fully met	The *FSDA* provides for the establishment of the SDAC, the review of the draft by the SDAC, the CESD, the appropriate committee of each house of parliament and the public,

legislation?	and provides the requirement of a 120 consultation period.

The first component of this criterion requires a permanent ESPS multi-stakeholder body. As mandated by the *FSDA*, the Sustainable Development Advisory Council is designed to fulfill this role. The SDAC is supposed to be created and chaired by the Minister of the Environment. and is required to consist of one representative from each province and territory, and three representatives each from industry, labour, aboriginal groups, and NGOs. The SDAC is responsible for providing advice to the Minister of the Environment on drafts of the FSDS. Input provided by the members can be submitted to the Minister during SDAC meetings or in writing as part of the SDO's consultation process on the draft FSDS.

Despite the legislative requirement to appoint such a council, the membership of the council has not been appointed as of February 2013.. Additionally, while the proposed structure of the council represents the interests of a major stakeholder groups, it certainly doesn't represent the interests of all stakeholders. As a result, the first component of the "Stakeholder Collaboration" criterion is not met.

The next component of this criterion requires the ESPS to be developed via a collaborative, multi-stakeholder process. Canada only partially meets this requirement. The development of Canada's FSDS incorporated a multi-stakeholder process during the development of the initial strategy as well as subsequent strategies. The FSDS consultation process defined stakeholders as the SDAC, CESD, NGOs, academia and the public. Section 9(3) of the *FSDA* requires that for each draft FSDS there be a minimum 120- day consultation period with the related House of Commons Standing Committee/s, stakeholders and Canadians. The feedback received from stakeholders and Canadians is summarized in a Consultation Synthesis Report produced by the SDO and informs the final FSDS and subsequent Progress Reports. The process is not collaborative in the sense that there are not a variety of forums for participation. Stakeholders participate in consultation by reading the draft and commenting on it by email. The consultation process does not include an online or in person forums where the general public can get together to discuss the draft and comments are merely reviewed and are not discussed with the commentor. In contrast, the German ESPS

stakeholder collaboration process includes several different forums, such as face-to-face discussion between the chancellery and specific interest groups (Zeiger et al., 2012). The component of using a collaborative, multi-stakeholder process to develop the FSDS is therefore only partially met.

As anyone is allowed to consult on the draft FSDS via email, all stakeholder interests are considered to be taken into account in the FSDS process. The third component of this criterion is therefore fully met.

Consensus based negotiation is a requirement for effective stakeholder collaboration. None of the multi-stakeholder processes discussed here incorporates such an approach. The SDAC is merely an advisory body and the implementation of its recommendations by the government is subject to discretion. The same holds true for the comments and suggestions provided by the general public, as well as specific interest groups during the development of the FSDS. This component is not met.

For any multi-stakeholder process to be effective, it is necessary for participants to meet regularly. Large consultation processes for the draft FSDS only happen once every 3 years, which cannot be considered a meeting. Some references to SDAC meetings have been found, however no information on how often the council meets could be found. The component of having regular stakeholder meetings is therefore not met.

Another important component of the "stakeholder collaboration" best practice criterion is adequate resources to fulfill multi-stakeholder process mandates. This study was not able to determine the budgets associated with most of the processes mentioned above. In any case, the definition of 'adequate' varies with the process, as well as in different locations and a judgment is difficult to justify and always subjective. Additionally, the *FSDA* stipulates that members of the SDAC are to hold office without remuneration and shall not be reimbursed for expenses incurred in the course of their duties. This component is therefore not met.

Two other components of this best practice criterion are that multi-stakeholder processes are mandatory and provided for in legislation. The *FSDA* provides for the establishment of the SDAC, the review of the draft by the SDAC, the CESD, the appropriate committee of each house of parliament and the public, and provides the

requirement of a 120-day consultation period. However, there is not a requirement to incorporate stakeholder comments into the FSDS. As such, the component of multi-stakeholder processes being mandatory is only partially met, while the component requiring stakeholder collaboration to be provided for in legislation is fully met.

Overall, the best practice criterion of "stakeholder collaboration" is not met. While multi stakeholder collaboration is provided for in legislation and there are processes in place, in order to be considered meaningful, consultation must include

- consensus based negotiation
- meeting regularly
- adequate resources are available to fulfill mandate, and ;
- there must be a requirement to include stakeholder feedback into the document.

5.2.8. Legal Framework

According to the eighth and last best practice criterion, the requirement for an ESPS, as well as the process of developing and implementing it, must be enshrined in legislation. For this part of the analysis all relevant federal acts were reviewed and evaluated. The results are summarized in Table 13.

Table 13. "Legal Framework" criterion evaluation for Canada's ESPS.

Components	Assessment	Rating	Discussion
36. Is there a Canadian ESPS Act?	Yes	Fully met	Yes. The *Federal Sustainable Development Act* was passes in 2008. It provides the legislative requirement for the preparation of the FSDS.
37. Is there a legislative basis for goals and objectives?	Yes	Largely met	The *FSDA* requires that the FSDS "shall set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target" [s.9 (2)] However, it does not require that these goals be benchmarked against other jurisdictions to ensure their legitimacy. Most other environmental Acts begin with a goal statement; or include goals as preamble to legislation, purpose statements and objective statements To be fully met, all Acts would require goals and would include the requirement for goals to be benchmarked against other jurisdictions.

38. Is there a legislative basis for targets?	Yes	Largely met	The *FSDA* requires that the FSDS "shall set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target" [s.9 (2)] However, it does not require that these targets be benchmarked against other jurisdictions to ensure their legitimacy. It also does not indicate which sustainability categories the targets must address (for instance there is not a legislated requirement that targets be established for any or all of the 43 environmental categories included in this study). The provisions to develop targets are included in some other legislation as well . CEPA(s.2.I.g; s.54; s.208) mandates the establishment of national standards of environmental quality, guidelines, and codes of practice. The *Oceans Act* (s. 32) empowers the Minister of Fisheries and Oceans to develop Marine Environmental Quality standards. The *Department of the Environment Act* empowers the Minister to develop standards or objectives for environmental quality or pollution control. The *Energy Efficiency Act* provides the Governor in Council the ability to establish energy efficiency standards for energy-using products. However, it does not mandate these targets to be quantitative, or have a timeline.
39. Is there a legislative requirement to clearly designate responsible parties and show accountability?	Yes	Largely met	The *FSDA* legislates responsibilities for FSDS development, implementation and monitoring. As per the *FSDA*, the Minister of the Environment is charged with developing the SDO, appointing and chairing the Sustainable Development Advisory Council and developing the FSDS, submitting it for review by various bodies, and submitting the draft FSDS to the house of commons. Ministers of the 28 departments listed in the *FSDA* are charged with developing and implementing departmental SDS "containing objectives and plans for the department or agency that complies with and contributes to the Federal Sustainable Development Strategy, appropriate to the department or agency's mandate." [s.11(1)]. The SDO is charged with monitoring and reporting on progress of the FSDS, and additional responsibilities are outlined for the SDAC, Privy Council and the Governor in Council.
40. Is there a legislative	Yes	Fully met	Yes, legislative stipulations exist for establishing a public consultation process for

requirement for public consultation?			Canada's FSDS.
41. Is there a legislative requirement for monitoring and reporting?	Yes	Partially Met	The *FSDA* requires that the Sustainable Development Office "shall, at least once every three years after the day on which this *Act* comes into force, provide the Minister with a report on the progress of the federal government in implementing the Federal Sustainable Development Strategy" [s.7 (2)]. Associated policy directives have outlined the contents of these progress monitoring reports, however specific guidance on what should be reported on (trends, targets relative to trends, trends relative to other jurisdictions etc) is not enshrined in law. Progress Monitoring is also included several other pieces of environmental legislation(See corresponding section in the Evaluation Guide in Appendix C).
42. Is there a legislative requirement for adaptive management?	No	Not met	The *FSDA* does not explicitly state a requirement for Adaptive Management. While a new strategy must be produced every 3 years, there is no legislative requirement for the updated strategies to address the shortcomings identified in FSDS progress reports or those identified by the Audit by the Commissioner of the Environment and Sustainable Development..
43. Is there a legislative requirement for State of Environment Reporting?	No	Not met	No such legislative requirement exists.

Canada's *Federal Sustainable Development Act* provides a strong legal basis for environmental sustainable development planning. Most of the components of this best practice criterion are at least partially met. The *FSDA* was passed in 2008 and provides the legislative requirement to clearly designate responsible parties and show accountability, and provides the legal requirement for public consultation. These two components of the "legal framework" best practice are therefore considered fully met.

The *FSDA* also provides a legislative basis for goals and targets. The *FSDA* requires that the FSDS "shall set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target" [s.9 (2)] However, it does not clearly specify how

these goals and targets should be established, and does not require that they be benchmarked against other jurisdictions to ensure their legitimacy. The component "legislative basis for goals and objectives" is therefore considered largely met and the component "legislative basis for targets" is largely met.

Adaptive management is not addressed in the *FSDA*. While a new strategy must be produced every 3 years, there is no legislative requirement for the updated strategies to address the shortcomings identified in FSDS progress reports or those identified by the Audit by the Commissioner of the Environment and Sustainable Development.

As previously discussed, the *FSDA* provides the legislative basis for both implementation and outcome progress monitoring and reporting. While this reporting is required, specific guidance on what should be reported on (trends, targets relative to trends, trends relative to other jurisdictions etc.) is not enshrined in law. The component of having a legislative requirement for monitoring and reporting is therefore partially met.

Finally, the component of having a legislative requirement for State of the Environment Reporting is not met.

Overall, the best practice criterion for "Legal Framework" is partially met. The establishment of the *FSDA* in 2008 provided a strong legislative basis for environmental sustainability planning in Canada, but could be further strengthened by including legislated requirements for adaptive management and state of the environment reporting.

5.2.9. Evaluation Scores

The final step in the evaluation is to calculate the aggregated score for Canada's environmental planning system based on the overall rating for each criterion. Each of the eight criteria is scored on a three-point scale, for a total possible aggregated score of 24. The findings show that the Canadian ESPS does not fully meet any of the best practices. Only one of eight best practice criteria is largely met while four are only partially met and three are considered not met (Table 14). The overall score for the CESPS is 6/24 or 25% (Table 14).

Table 14. Canada's ESPS Evaluation Scores

Best Practice Criterion	Overall Rating	Score
Comprehensive Goals with Measurable Targets	Partially met	1
Effective Strategy	Not met	0
Integration	Partially met	1
Monitoring	Not met	0
Leadership and Accountability	Largely met	2
Adaptive Management	Partially met	1
Stakeholder Collaboration	Not met	0
Legal Framework	Partially met	1
Total		**6/24**

5.3. Comparison of Results with the Previous CESPS Evaluation

This section provides a comparison between this evaluation of Canada's revised ESPS, and the evaluation of Canada's previous decentralized ESPS by Ellis et al. (2010) The development of the *FSDA* and FSDS, as well as other changes to the CESPS were designed to fill the gaps in the CESPS that were initially identified by both the Commissioner of the Environment and Sustainable Development and independent researchers (Ellis *et.al*, 2010). It is useful to compare the new system to the old to determine the effectiveness of these changes.

Overall, Canada's current CESPS rates higher than the old system for each of the eight Best Practice Criteria (Table 15). This is reflected by the increase of the total evaluation score from 0/24 (old system) to 6/24 (current system) and an improvement in the performance rating of 22 individual indicators (Table 15). A comparison of the number of indicators in each of the performance rating categories (fully met, largely met, partially met and not met) reveals that Canada's current ESPS receives eight more "fully met" ratings, four more "largely met" ratings, six more "partially met" ratings and 18 fewer " not met " ratings than the previous environmental planning system (Table 16).

The overarching improvement in the system is the development of the *Federal Sustainable Development Act* (*FSDA*), which requires the development of the Federal Sustainable Development Strategy every three years. This strategy forms the backbone of Canada's CESPS. This is the first time Canada has had a centralized single-document to guide environmental sustainable development planning. An increase in

rating from “not met” to “largely met” under the “Leadership and Accountability” best practice criterion represents an area of particular improvement. This is due in large part to the *FSDA* which establishes the legislative requirement for both a committee of elected members dedicated to Canada's ESPS and a senior civil service committee dedicated to Canada's ESPS. The *FSDA* also establishes the legislative requirement for goals, targets and public consultation, all of which act to further strengthen the CESPS. While overall the “monitoring” best practice criterion is not met, several individual indicators within the criterion have improved.

While the *FSDA* and FSDS act to mitigate some of the deficiencies identified in previous evaluations, deficiencies still exist. Many of these deficiencies are due to failure to fully implement the *FSDA*, while others are deficiencies in the *FSDA* itself. The *FSDA* requires that the FSDS must set out “federal sustainable development goals and targets and an implementation strategy for meeting each target [s. 9(2)]; however, it was found that comprehensive goals with short, medium and long-term targets are missing for 19 of the 41 environmental categories; This is a failure to implement the *Act*. The *FSDA* also requires that the FSDS identify the minister responsible for each target; however, Ministers have only been assigned responsibility for individual implementation strategies, not the overarching targets. This is also considered a failure to implement the *Act*. Another deficiency which can be attributed to a failure to implement the *Act* is failure to meet best practice criteria for monitoring. Only 25 of the 41 environmental indicators are included in public reports.

Several of the deficiencies that were identified are due to deficiencies in the *FSDA* itself. For instance, the *FSDA* does not indicate for which sustainability categories targets must be established, nor does it require that these targets meet international best practices, resulting in the failure to fully meet the “comprehensive goals and measurable targets” best practice criteria. The FSDA also does not require environmental categories to be assessed relative to trends, targets and comparable jurisdictions, resulting in the failure to meet the “ monitoring” best practice criteria. Additionally, the *Act* does not provide the legislative basis for adaptive management or for state of the environment reporting.

One way in which the CESPS has worsened since previous evaluation is that there is no longer a permanent multi-stakeholder body dedicated to the ESPS. The

National Roundtable on the Environment and the Economy acted as the independent multi-stakeholder committee providing guidance on sustainable development issues until March 31, 2013 when its funding was terminated by the federal government. As previously mentioned, despite the legal requirement to create an SDAC, not such council exists. If such a council existed, it still does not have the same mandate as the NRTEE. The NRTEE had a more extensive mandate and undertook research and advocacy activities while the purpose of the SDAC is only to provide guidance on FSDS development.

Overall, the *FSDA* and new CESPS represents a more consistent framework for environmental sustainability planning but still falls short with respect to several integral best practice criteria. A summary of deficiencies of the current CESPS and recommendations can be found in Chapter 6.

Table 15. A comparison of Canada's current ESPS against the older decentralized system that existed before the Federal Sustainable Development Act (pre-2008). Indicators showing improvement are provided in bold.

Best Practice Criterion	Study results (Current CESPS)	Ellis et al. (2010) (Pre-2008 CESPS)
Comprehensive Goals with Measurable Targets		
1. Are there published sustainability goals?	Fully met	Fully met
2. Are the goals published as an integrated goal statement or as separate goal statements?	**Largely met**	**Not met**
3. What proportion of 9 SWAG sustainability goals are fully covered by published goals?	Partially met 56%	Partially met 56%
4. What proportion of 9 SWAG sustainability goals are fully and/or partially covered by published goals?	Fully met 100%	Fully met 100%
5. What proportion of 43 sustainability indicators are covered by measurable targets?	**Partially met 70.7% (29/41)**	**Not met 48%**
6. What proportion of 43 sustainability indicators have short (1-5 years), medium (5-15 years) and long term (15-50 years) targets?	Not met 0% (0/41)	Not met 2.5%
Criterion Total	***Partially met***	***Not met****
Effective Strategy		
7. Is there a published Environmental Sustainability Strategy (ESS)?	Fully met	Fully met
8. Is ESS published as an integrated plan or separate plans?	**Largely met**	**Not met**
9. What proportion of 43 sustainability indicators is covered by an implementation strategy?	**Partially met 65.9%**	**Not met 38%**
10. What proportion of the 43 sustainability indicators is covered by an implementation strategy that quantifiably	Not met 5% (2/41)	Not met 0%

shows how initiatives will achieve goals, targets, and timelines?		
11. Are there adequate financial resources and other resources allocated to the strategies objectives? This should involve an estimation of the cost of implementation as well as a budget commitment in the strategy that makes available all necessary funding.	Not Met 12.2% (5/41)	Not Met0%
Criterion Total	***Not met***	***Not met***
Integration		
12. Is there a single plan for the country?	**Largely met**	**Not met**
13. Does this plan integrate economic, social and environmental objectives?	Not met	Not met
Criterion Total	***Partially met***	***Not met***
Monitoring		
14. Is there a regular public monitoring report measuring sustainability progress?	**Fully met**	**Largely met**
15. What proportion of 43 sustainability indicators is included in these reports?	**Partially met** **60.9%**	**Not met** **40%**
16. What proportion of Canada's environmental targets is included in report?	**Partially met** **69%**	**Not met** **25%**
17. What proportion of 43 sustainability indicators is assessed relative to targets?	Not met 2.44%	Not met 18%
18. What proportion of 43 sustainability indicators is assessed relative to comparable jurisdictions?	Not met 19.5%	Not met 0%
19. What proportion of 43 sustainability indicators is assessed relative to trends?	Not met 48.7%	Not met 38%
20. Is there regular detailed reporting of noncompliance of permit holders with environmental regulations?	Not met	Not met
Criterion Total	***Not met***	***Not met***
Leadership and Accountability		
21. Is there a committee of elected members dedicated to Canada's ESPS?	**Largely met**	**Not met**
22. Is there a senior civil service committee dedicated to Canada's ESPS?	**Fully met**	**Not met**
23. Is there an independent agency dedicated to evaluating Canada's ESPS regularly?	Fully met	Fully met
24. Are the parties responsible for preparing Canada's ESPS strategies clearly identified?	**Fully met**	**Not met***
25. Are the parties responsible for implementing Canada's ESPS strategies clearly identified?	**Partially met**	**Not met ***
26. Are the parties responsible for monitoring Canada's ESPS strategies clearly identified?	**Fully met**	**Not met**
Criterion Total	***Largely met***	***Not met***
Adaptive Management		
27. Is there a mandatory review and revision of Canada's ESPS based on monitoring results?	**Partially met**	**Not met**
Criterion Total	***Partially met***	***Not met***
Stakeholder Collaboration		
28. Is there a permanent ESPS multi-stakeholder body?	Not met	Largely met
29. Are there collaborative, multi-stakeholder processes used to develop ESS?	**Partially met**	**Not met***
30. Are all relevant stakeholder interests included in multi-stakeholder processes?	**Fully met**	**Not met***

31. Is consensus based negotiation used in multi-stakeholder processes?	Not met	Not met
32. Do stakeholders meet regularly?	Not met	Not met
33. Are there adequate resources to fulfill multi-stakeholder process mandates?	Not met	Not met
34. Are multi-stakeholder processes mandatory?	**Partially met**	**Not met**
35. Are multi-stakeholder processes provided for in legislation?	**Fully met**	**Not met**
Criterion Total	***Not met***	***Not met****
Legal Framework		
36. Is there a Canadian ESPS Act?	**Fully met**	**Not met**
37. Is there a legislative basis for goals and objectives?	Largely met	Largely met
38. Is there a legislative basis for targets?	**Largely met**	**Not met**
39. Is there a legislative requirement to clearly designate responsible parties and show accountability?	**Largely met**	**Partially met**
40. Is there a legislative requirement for public consultation?	**Fully met**	**Partially met**
41. Is there a legislative requirement for monitoring and reporting?	Partially met	Partially met
42. Is there a legislative requirement for adaptive management?	Not met	Not met
43. Is there a legislative requirement for State of Environment Reporting?	Not met	Not met
Criterion Total	***Partially met***	***Not met****
Total Score	**6/24= 25**	**0/24= 0%**

* Evaluation scores from the 2010 evaluation have been adjusted to reflect the updated scoring system and ensure consistency in comparisons.

Table 16. Comparison of the current ESPS and the previous (pre-2008) ESPS based on number of indicators in each of the performance rating categories.

Performance Rating	Current ESPS	Previous ESPS	Change
Fully Met	12	4	+8
Largely Met	7	3	+4
Partially Met	10	4	+6
Not Met	14	32	-18

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

The Canadian Environmental Sustainability Planning System was evaluated against international best practices principles for sustainable development planning. This evaluation provides an updated assessment of the CESPS in meeting best practices from that performed by Ellis et al. (2010). Such an evaluation allows decision makers to measure progress in sustainability planning, address deficiencies in the current system, and improve their environmental performance.

6.2. Evaluation Summary

The findings of this study show that the Canadian ESPS only partially meets international best practices (see Table 16 and Chapter 5). One of the criteria – Leadership and Accountability– is largely met. Four of the criteria- Comprehensive Goals and Measurable Targets, Integration, Adaptive Management and Legal Framework are partially met , and the remaining three criteria –Effective Strategy, Monitoring, and Stakeholder Collaboration –are not met . Canada scores 6 out of 24 on the evaluation as a whole. While this evaluation notes an improvement from the previous CESPS (section 5.3), there is still considerable room for improvement, since all eight best practice criteria should be fully included in the ESPS. Deficiencies of the current CESPS and specific recommendations for improvement are included in the following sections.

Table 17. Summary of the Canadian ESPS deficiencies and Recommendations

Criterion	Overall performance	Score	Summary of ESPS Deficiencies	Recommendations

Comprehensive Goals with Measurable Targets	Partially met	1	Only 5 of the 9 SWAG goals are covered by published goals. Not all of the benchmark sustainability indicators are covered by measurable targets. None of the indicators had short-, medium- and long-term targets.	Amend goal statements to include remaining SWAG goals. Develop measurable short-, medium- and long-term targets for the remaining benchmark sustainability indicators to enable a more effective assessment of the progress towards achieving environmental sustainability.
Effective Strategy	Not met	0	None of the indicators are covered by an implementation strategy that quantifiably shows how initiatives will result in targets, goals and timelines being met. Fourteen of the 41 indicators are missing an implementation strategy altogether. While there is allocation of resources - financial or otherwise - to overarching ESPS initiatives, this allocation is not for individual implementation strategies	Develop implementation strategies that estimate the contribution of each initiative towards achieving the overarching targets, goals and timelines. Such strategies should then also show how all initiatives combined will meet these aims. Estimate the cost of implementing ESPS objectives and create a budget commitment in the strategy (via RPPs) that makes available all necessary funding and resources for individual strategies.
Integration	Partially met	1	The FSDS represents a single document sustainability plan, but does not integrate economic and social sustainability objectives in its environmental component nor does it provide for much integration with other levels of government.	Expand the scope of the FSDS and CESPS as a whole to integrate social and economic objectives with the environmental component (which is the current focus) and provide for more vertical integration.

Monitoring	Not met	0	Only 25 of the 41 benchmark indicators is included in monitoring reports, which translates to 20 out of Canada's 29 environmental targets being reported upon publicly. Only 1 of these indicators are assessed relative to targets and less than half are assessed relative to trends. Only 20% of them are assessed relative to other jurisdictions. Canada is also lacking regular, public non-compliance reporting system that exposes permit holders that offend environmental regulations.	Include the remaining 16 benchmark indicators into public monitoring reports and ensure all indicators are assessed relative to targets, as well as trends. A regular comparison to other comparable jurisdictions is also recommended. In addition, a non-compliance reporting system that exposes companies who violate permits can set a powerful example and strengthen environmental compliance.
Leadership and Accountability	Largely Met	2	While departments and agencies are responsible for aspects of implementation, none is identified as having responsibility for meeting a specific target, as required under section 9(2) of the *Act*. Information regarding the SDAC is hard to find,	Assign responsibility for meeting specific targets to the minsters of the agencies responsible for individual implementation strategies as required by section 9(2) of the *FSDA.* Also, the activities of the SDAC should be made public.
Adaptive Management	Partially met	1	There is no official, mandatory process for revising all components of Canada's ESPS based on monitoring results and recommendations of the CESD.	Create an official and MANDATORY process for reviewing and adapting all components of Canada's ESPS in order to continuously address deficiencies.
Stakeholder Collaboration	Not met	0	Consensus-based negotiation is not used in multi-stakeholder processes and they are not mandatory or provided for in legislation. Resources for multi-stakeholder	Consensus-based negotiation ensures that all stakeholder interests are taken into account. It should be included in all engagement processes and result in binding results that are subsequently

			processes remain tenuous and are potentially not adequate, or, in the case of the SDAC, strictly forbidden.	implemented by the government. It is furthermore important to ensure that multi-stakeholder processes are adequately funded to ensure all relevant stakeholders can contribute equally.
Legal Framework	Partially Met	1	The Canadian *FSDA* provides the legislative basis for many aspects of CESPS however it does not provide the legislative requirement for targets for specific sustainability categories, or for those targets to be SMART or benchmarked against comparable jurisdictions. It also doesn't provide for an official and mandatory Adaptive Management process or require State of the Environment Reporting.	It is recommended to revise the *FSDA* to include more specific requirements for the establishment and monitoring of targets (benchmarking, SMART targets etc.). It is further recommended to include the requirement for Adaptive Management and State of the Environment Reporting within the *FSDA.*

6.3. Recommendations for Improving Canada's Environmental Sustainability Planning System

Based on the deficiencies outlined in the previous chapter (and summarized in Table 16), the following actions are recommended to improve environmental planning in the federal government. By adopting these recommendations, Canada can improve its environmental sustainability planning system and work towards a more sustainable future.

6.3.1. *Implement all aspects of the Federal Sustainable Development Act*

The *Federal Sustainable Development Act* represents a powerful tool for sustainable development planning. This evaluation identifies several deficiencies in the CESPS that are due in part to a failure to fully implement the *FSDA.* Fully implementing the *Act* would address several deficiencies related to the establishment of comprehensive goals and measureable targets, and the monitoring of these targets. Specifically, section 8 and section 9(2) must be fully implemented. Working towards sustainable development is no easy feat and we must use all available tools to the fullest extent possible.

6.3.2. *Expand on current sustainability goals and develop short-, medium- and long-term targets with timelines for all environmental goals*

Goals and targets for an NSDS must encompass all important elements of sustainable development. As such, the federal government should amend goal statements in the FSDS to include all SWAG goals. Additionally, environmental goals require a long-term vision. Best practice literature suggests that short-, medium- and long-term targets with timelines are the best way to ensure these goals are met. Targets already exist for some of Canada's SD goals, but no sustainability goals have short (1-5 years), medium (5-15 years) and long term (15-50 years) targets established. Current targets also don't cover the breadth of sustainability categories that are required to meet international best practices. It is recommended that the federal government establish short, medium and long term targets for all benchmark sustainability categories. It is also important that these targets be set at levels required to meet environmental sustainability.

6.3.3. *Demonstrate quantifiably how proposed initiatives will meet sustainability goals, targets and timelines and at what cost*

In the interest of transparency and accountability it is crucial to demonstrate how proposed initiatives and actions will meet environmental objectives in the specified time-frame. An implementation strategy for each goal and target should clearly and quantifiably document how each proposed initiative will contribute to meeting the overall

targets and objectives. The cost of implementing each of these initiatives should further be estimated.

6.3.4. Expand the scope of the FSDS and CESPS to integrate social, economic and environmental objectives.

The development of an integrated NSDS is vital in Canada's pursuit of sustainable development. Integration means an integrated plan sectorally (one that includes all three pillars of sustainable development: environmental, social and economic) and vertically (one that includes all levels of government). Future iterations of the FSDS should include more social and economic considerations. Examples of how to integrate these pillars can be found in the German NSDS. For example, in addition to environmental goals, the German NSDS includes goals related to intergeneration equity, quality of life and international responsibility (Zeiger, 2012). More linkages both to domestic sustainability at the provincial and local level, as well as linkages to international sustainability efforts should also be included. It has long been established that sustainable development requires far reaching policy and institutional reforms and the involvement of all sectors at all levels. Sustainable development is not the responsibility of only government or one or two sectors of society (UNDESA, 2002).

6.3.5. Upgrade the current monitoring system to include all aspects of sustainable development and report on progress relative to targets and other jurisdictions, as well as on regulatory non-compliance

Currently public progress monitoring covers only 25 of the 43 environmental sustainability categories (see Table 9 and 16). These categories provide a good example of what a comprehensive monitoring system should ideally cover. At the very least, monitoring should cover all currently existing environmental goals and targets. Over time, the monitoring system should be expanded to include all 43 environmental sustainability categories. Secondly, monitoring data should be assessed relative to targets and trends, as well as relative to other comparable jurisdictions. A comparison to other jurisdictions helps to create a sense of “what is possible” and should be included in the monitoring system. Finally, reporting on corporate environmental regulatory non-

compliance creates transparency and helps to stigmatize detrimental corporate behavior and thus incentivize compliance and foster consumer support of more environmentally responsible organizations. Non-compliance reporting should therefore be incorporated into Canada's monitoring approach.

6.3.6. Incorporate mandatory adaptive management processes and make them legally binding

An environmental planning system or an NSDS must evolve over time and adapt in order to reflect new information and data that becomes available. This can be accomplished through regular, mandatory revisions based on results from a sound monitoring system (see above) and from auditing by the CESD. Goals and targets that are not met are a good indicator for the need to change the policy approach and to adapt initiatives. The current system requires an updated FSDS every 3 years but does not require that deficiencies identified by the CESD be addressed. The establishment of an official adaptive management process which requires the new FSDS to address the deficiencies identified by the CESD, is recommended

6.3.7. Assign responsibility for meeting specific targets to the departmental Ministers responsible for individual implementation strategies.

Currently, departmental Ministers are responsible for individual initiatives that contribute to reaching targets and goals; however, Ministers are not assigned the responsibility of actually reaching the target or goal as required in section 9(2) of the *Act*. According to the international literature, it is best to assign this responsibility to the highest level of the federal government in order to ensure long-term accountability. It is recommended that the federal government honor the *FSDA* and "identify the minister responsible for meeting each target" [s.9(2)].

6.3.8. Design and adequately resource regular multi-stakeholder processes that are mandatory, legislated, and based on consensus decision-making

Stakeholder consultation is already used in Canadian environmental policy-making. It is, however, important to ensure that results from multi-stakeholder processes

are incorporated into the government's decisions in a transparent manner. In fact, consultation and decision-making should be part of the same process. This type of consensus-based decision-making ensures that all stakeholder interests are represented in final decisions. This maximizes support for policies and initiatives and creates ownership, which, in turn, reduces political friction during implementation. Such an approach is necessary, given the structural changes required to achieve sustainable development. Consensus-based decision-making can be a time-consuming and expensive process and is therefore not appropriate for all decisions; however, important aspects of the process such as the establishment of targets, and the development of the FSDS should involve consensus-based decision-making. Multi-stakeholder processes should be mandatory and rooted in legislation to prevent discretion regarding their use. Necessary resources should be made available to ensure access to the process is not limited.

6.3.9. Amend the FSDA *to create a legislative basis for all missing best practice components of the environmental sustainability planning system.*

As previously discussed, The *Federal Sustainable Development Act* represents an important step in addressing the deficiencies of the previous CESPS. A sound legislative basis is not meant to undermine necessary adaptations of the system, but rather should be a means to ensure that changes to the ESPS only occur after the impact of such changes on all parts of the ESPS have been considered. Incorporating an official and mandatory adaptive management process as well as mandatory state of the environment reporting will further strengthen the CESPS. Additionally, it is recommended to revise the *FSDA* to include more specific requirements for the establishment and monitoring of targets (benchmarking, SMART targets etc.). Legislation should require that established targets be "good targets" in that they should lead to the desired environmental sustainability outcomes.

6.4. Study Limitations

The limitations of the data and information that form the basis of this evaluation are addressed earlier (see Chapter 4). A number of limitations regarding the

methodology and overall approach of this study should, however, also be highlighted. These limitations have been previously noted in Gunton et al. (2006) and Ellis et al. (2010), and will be discussed here.

The first challenge is measuring the degree to which each best practice criterion is met. The subjective nature of this assessment may result in different analysts drawing different conclusions. To limit this constraint, the best practice guidelines were defined as clearly as possible to provide a basis for measuring performance. Additionally, it is recommended that the reader focuses on the key deficiencies identified during the analysis. These are likely to be more useful than specific ratings, which rely to a larger extent on subjective distinctions between major and minor deficiencies.

The second constraint is that the evaluation was conducted between September 2012 and February 2013. Environmental sustainability planning is an ongoing and evolving process and improvements may be made after the evaluation period. Thirdly, as the Canadian environmental sustainability planning system is very complex, a comprehensive review of every aspect was not possible for some aspects of the evaluation, mainly stakeholder processes. Instead, the FSDS and the strategies listed in the FSDS were used as indicators for the system. Additionally, it is important to note that this study focuses on evaluating only the environmental planning process not the outcomes of sustainability planning in Canada. A full evaluation of Canada EPS should include both.

Lastly, the study has focused on only the federal government's ESPS and excludes provincial environmental sustainability policy. Provinces have significant jurisdiction over management of resources and therefore should be included in the assessment. Although an evaluation of provincial ESPSs is not included in this study, an evaluation of provincial ESPSs was performed using a methodology similar to this study and shows that the provincial ESPS have similar deficiencies to the federal system (Gunton et al. 2006). Therefore, the provincial ESPSs do not compensate for the deficiencies in the federal ESPS and inclusion of provincial ESPSs probably would not alter the conclusions of the analysis. An updated evaluation of the provincial ESPS is currently underway and may yield results that affect the conclusions of this evaluation.

REFERENCES

Literature Cited

Bouder, F. 2001. Governance for Sustainable Development in Canada.Paris: OECD Publications.

Boyd, D. 2003. Unnatural Law: Rethinking Canadian Environmental Law and Policy. Vancouver, B.C.: UBC Press. <Online:http://site.ebrary.com/lib/sfu/docDetail.action?docID=10125081>

Boyd, D. 2004. Sustainability Within a Generation: A New Vision for Canada. Vancouver, B.C.: David Suzuki Foundation. <Online:http://www.davidsuzuki.org/publications/downloads/2004/DSF-GG-En-Final.pdf>

Canada. Environment Canada. 1987. Federal Water Policy. <Online: http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=D11549FA-1>

Canada. Environment Canada. 1991. Canada-U.S. Air Quality Agreement. <Online: http://www.ec.gc.ca/Air/default.asp?lang=En&n=83930AC3-1>

Canada. Environment Canada. 1995a. A Guide to Green Government. <Online: http://www.sdinfo.gc.ca/reports/enlggg/Default.cfm>

Canada. Environment Canada. 1995b. Canadian Biodiversity Strategy. <Online: http://www.biodivcanada.ca/560ED58E-0A7A-43D8-8754-C7DD12761EFA/CBS_e.pdf>

Canada. Environment Canada. 1998. Canada-Wide Acid Rain Strategy for Post 2000. <Online: http://www.ccme.ca/assets/pdf/1998_acid_rain_strategy_e.pdf>

Canada. Environment Canada. 2002a. Sustainable Development: A Canadian Perspective. <Online: http://www.ec.gc.ca/Publications/F8ED11E2-A4D5-4774-9EEF-190168EA274A%5CSustainable-Development-A-Canadian-Perspective.pdf>

Canada. Fisheries and Oceans Canada. 2002b. Canada's Oceans Strategy. <Online: http://www.dfo-mpo.gc.ca/oceans/publications/cos-soc/index-eng.asp>

Canada. Environment Canada. 2003. National Action Plan to Encourage Municipal Water Use Efficiency.<Online: http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=39491AB1-1 >

Canada. Environment Canada. 2004. An Invasive Alien Species Strategy for Canada. <Online: http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=1A81B051-1>

Canada. Fisheries and Oceans Canada. 2005a. Oceans Action Plan. <Online: http://www.dfo-mpo.gc.ca/oceans/publications/oap-pao/index-eng.asp>

Canada. Agriculture and Agri Foods Canada. 2005b. Agriculture Policy Framework. <Online: http://publications.gc.ca/site/eng/268229/publication.html>

Canada. Public Works and Government Services. 2006a. Policy on Green Procurement.<Online: http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>

Canada. Indian Affairs and Northern Development. 2006b. Plan of Action for Drinking Water in First Nations Communities. <Online: http://www.aadnc-aandc.gc.ca/eng/1100100034958/1100100034966>

Canada. Environment Canada. 2007a. EcoEnergy for Personal Vehicles. <Online: http://www.nrcan.gc.ca/ecoaction/>

Canada. Environment Canada. 2007b. Regulatory Framework for all Air Emissions. <Online: http://www.ec.gc.ca/doc/media/m_124/report_eng.pdf>

Canada. Indian Affairs and Northern Development. 2009. Canada's Northern Strategy: Our North, Our Heritage, Our future. Ottawa. <Online: http://www.northernstrategy.gc.ca/cns/cns.pdf>

Canada. Privy Council Office and Canadian Environmental Assessment Agency. 2010a. Strategic Environmental Assessment: The Cabinet Directive on Environmental assessment of Policy, Plan and Program Proposals Implementation Guide. <Online:http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=B3186435-1>

Canada. Environment Canada, Sustainable Development Office. 2010b. Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada. <Online: http://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=F93CD795-1>

Canada. Environment Canada. 2010c. Synthesis Report: Public Consultations

Draft Sustainable Development Strategy. <Online: http://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=6686516E-1>

Canada. Statistics Canada. 2011a. Human Activity and the Environment: Detailed Statistics. <Online: http://www.statcan.gc.ca>

Canada. Environment Canada. 2011b. About the Canadian Environmental Sustainability Indicators. <Online: http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=47F48106-1>

Canada. Environment Canada Sustainable Development Office. (2011c). Progress for the Federal Sustainable Development Strategy 2010-2013. <Online: http://www.ec.gc.ca/dd-sd/default.asp?lang=en&n=917F8B09-1>

Canada. Environment Canada. 2012a. A Climate Change Plan for the Purposes of the Kyoto Protocol Implementation Act 2012. <Online:http://www.ec.gc.ca/Publications/default.asp?lang=En&n=EE4F06AE-1&xml=EE4F06AE-13EF-453B-B633-FCB3BAECEB4F&offset=2&toc=show>

Canada. Environment Canada. 2012b. Species at Risk. <Online: http://www.ec.gc.ca/nature/default.asp?lang=En&n=FB5A4CA8-1>

Canada. Treasury Board of Canada Secretariat. 2012c. The Clean Air Agenda: Plans, Spending and Results. Ottawa: Treasury Board of Canada.

Canada. Environment Canada. 2012d. Great Lakes Water Quality Agreement. <Online: http://www.ec.gc.ca/grandslacs-greatlakes/default.asp?lang=En&n=A1C62826-1>

Canada. Fisheries and Oceans Canada. 2012e. Aboriginal Aquatic Resource and Oceans Management Program, and Aboriginal Inland Habitat Program. <Online: http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/aarom-pagrao/index-eng.htm>

Canada. Environment Canada. 2013. The 2012 Progress Report of the Federal Sustainable Development Strategy. <Online: http://www.ec.gc.ca/dd-sd/23E4714E-B774-4CC5-9337-F87B01556727/FSDS-Progress-Report-2012-E-Feb15_WEBv4.pdf>

Canadian Council of Ministers of the Environment. 1998. Guide to the Canada-Wide Accord on Environmental Harmonization.<Online: http://www.ccme.ca/assets/pdf/guide_to_accord_e.pdf>

Canadian Council of Ministers of the Environment. 2012. Guidance Document on Achievement Determination : Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone. <Online: http://www.ccme.ca/assets/pdf/pn_1483_gdad_eng.pdf>

Commissioner of the Environment and Sustainable Development (CESD). 1997. Report of the Commissioner of the Environment and Sustainable Development. Ottawa. <Online: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_199703_e_8081.html>

Commissioner of the Environment and Sustainable Development (CESD). 1998. Report of the Commissioner of the Environment and Sustainable Development. Ottawa. <Online: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_199805_e_1144.html>

Commissioner of the Environment and Sustainable Development (CESD). 2001. Report of the Commissioner of the Environment and Sustainable Development. Ottawa. <Online: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200110_e_1135.html>

Commissioner of the Environment and Sustainable Development (CESD). 2002. Report of the Commissioner of the Environment and Sustainable Development. Ottawa. <Online: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200210_e_1131.html>

Commissioner of the Environment and Sustainable Development (CESD). 2005. Report of the Commissioner of the Environment and Sustainable Development. Ottawa. <Online: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200509_e_1122.html>

Commissioner of the Environment and Sustainable Development (CESD). 2007. Report of the Commissioner of the Environment and Sustainable Development. Ottawa. <Online:http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200710_e_26831.html>

Commissioner of the Environment and Sustainable Development (CESD). 2010. Commissioner of the Environment and Sustainable Development Comments on the Draft Federal Sustainable Development Strategy. Ottawa. <Online: http://www.oag-bvg.gc.ca/internet/English/cesd_fs_e_33888.html>

Dalal-Clayton, B., and Bass, S. 2002. Sustainable Development Strategies: A Resource Book. New York: OECD, Paris and United Nations Program. <Online: http://books.google.ca/books?id=bbWCHRN4h_sC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false>

Ellis, M. 2008. 'An evaluation of Canada's environmental sustainability planning system.' Master's thesis, Simon Fraser University.

Ellis, M., Gunton, T., and Rutherford, M. 2010. A method for evaluating environmental planning systems: A case study of Canada. Journal of Environmental Management 30:1-10.

Forsey, E., and Office, C. 1988. How Canadians govern themselves. Department of the Secretary of State of Canada. <Online:http://www2.parl.gc.ca/content/lop/researchpublications/styles/tsfwbtrds/How.pdf>

Gunton, T., Calbick, K., Bedo, A., Chamberlin, E., Cullen, A., Englund, K., and Heidt, A. 2005. The Maple Leaf in the OECD: Comparing Progress Toward Sustainability. Vancouver:David Suzuki Foundation.

Gunton, T., and Joseph, C. 2006. Toward a National Sustainable Development Strategy for Canada: Putting Canada on the Path to Sustainability Within a Generation. Vancouver: David Suzuki Foundation.

Gunton, T., and Calbick, K. 2010. The Maple Leaf in the OECD: Canada's Environmental Performance. <Online: http://www.davidsuzuki.org/publications/reports/2010/the-maple-leaf-in-the-oecd/>

International Institute of Sustainable Development (IISD), 2004. National Strategies for Sustainable Development: Challenges, Approaches and Innovations in Strategic and Co-ordinated Action. Winnipeg: IISD.

International Union for the Conservation of Nature. 1980. World Conservation Strategy: Living Resource Conservation for Sustainable Development. IUCN. <Online: https://www.google.ca/search?q=World+Conservation+Strategy&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a>

Kates, R., Parris, T., and Leiserowitz, A. 2005. What is Sustainable Development? Goals, Indicators, Values and Practices. Environment: Science and Policy for Sustainable Development 47(3): 8–21.

Lafferty, W., and Meadowcroft, J. (Eds.), 2000. Implementing Sustainable Development. Oxford: Oxford University Press.

National Round Table on the Environment and the Economy. 2012. NRTEE Mission. <Online: http://nrtee-trnee.ca/history>

Organization for Economic Cooperation and Development (OECD). 2001. Strategies for Sustainable Development: Practical Guidance for Development Cooperation. Paris: OECD Publications..

Organization for Economic Cooperation and Development (OECD). 2002. Governance for Sustainable Development: Five OECD Case Studies. Paris: OECD Publications.

Organization for Economic Cooperation and Development (OECD). 2004. OECD Environmental Performance Reviews: Canada. Paris: OECD Publications.

Organization for Economic Cooperation and Development (OECD). 2006a. Good Practices in the National Sustainable Development Strategies of OECD Countries. Paris: OECD Publishing. <Online: http://www.oecd.org/dataoecd/58/42/36655769.pdf>

Organization for Economic Cooperation and Development (OECD). 2006b. Advancing Sustainable Development: Policy Briefing. Paris: OECD Publishing.

Remmel, S. 2012. ESDN Case Study No. 10: Canada's Federal Sustainable Development Strategy. Vienna: European Sustainable Development Network (ESDN). <Online: http://www.sd-network.eu/pdf/case%20studies/ESDN%20Case%20Study_10_Canada%20FSDS.pdf>

Roseland, M., and Connelly, S. 2005. Toward Sustainable Communities: Resources For Citizens And Their Governments. Galiano Island: New Society Publishers.

United Nations Conference on Environment and Development (UNCED). 1993. *The Earth Summit: The United Nations Conference on Environment and Development (UNCED).* London: Graham & Trotman/Martinus Nijhoff.

United Nations Department of Economic and Social Affairs (UN DESA). 2002. Guidance in Preparing a National Sustainable Development Strategy: Managing Sustainable Development in the New Millennium. Background Paper No. 13. <Online:http://www.johannesburgsummit.org/html/documents/backgrounddocs/nsdsreport.pdf>

United Nations Department of Economic and Social Affairs (UNDESA). 2004. Assessment Report on National Sustainable Development Strategies: the Global Picture 2003. Division for Sustainable Development, UN Department of Economic and Social Affairs.

United Nations Department of Economic and Social Affairs (UNDESA). 2009a. Division for Sustainable Development Areas of Work: NSDS. <Online: http://www.un.org/esa/dsd/dsd_aofw_nsds/nsds_index.shtml>

United Nations Department of Economic and Social Affairs (UNDESA). 2009b. Division for Sustainable Development Core Publications: Agenda 21. Agenda 21. <Online: http://www.un.org/esa/dsd/agenda21/>

United Nations Department of Economic and Social Affairs (UNDESA). 2011. Rio+20 - United Nations Conference on Sustainable Development. Institutional framework for sustainable development: Backgrounder.<Online: http://www.uncsd2012.org/index.php?page=view&type=12&nr=228&menu=63>

United Nations Department of Public Information. 1997. Earth Summit: UN Conference on Environment and Development (1992). <Online: http://www.un.org/geninfo/bp/enviro.html>

Volkery, A., Swanson, D., Jacob, K., Bregha, F. and Pinter, L. 2006. Coordination, Challenges, and Innovations in 19 National Sustainable Development Strategies. World Development 34(12): 2047-2063.

WCED. 1987. Report of the World Commission on Environment and Development: Our Common Future. Toronto: Oxford University Press. <Online: http://www.un-documents.net/wced-ocf.htm>

Zeiger, B. 2012. 'Evaluating the German Environmental Planning System.' Master's thesis, Simon Fraser University.

Legislation Cited

Auditor General Act; R.S.C. 1985, c. A-17 <Online: http://laws-lois.justice.gc.ca/eng/acts/a-17/>

Canada Water Act; R.S.C. 1985, c. C-I1 <Online: http://laws-lois.justice.gc.ca/eng/acts/C-11/index.html>

Canadian Environmental Assessment Act, 2012; S.C. 2012, c. 19, s. 52 <Online: http://laws-lois.justice.gc.ca/eng/acts/c-15.21/index.html

Canadian Environmental Protection Act, 1999; S.C. 1999, c.33 <Online: http://laws-lois.justice.gc.ca/eng/acts/c-15.31/>

Constitution Act, 1867; (U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, Appendix IT, No.5 <Online: http://laws.justice.gc.ca/en/const/c1867 e.html>

Constitution Act, 1982; being Schedule B to the Canada Act 1982 (U.K.), 1982, c. 11 <Online: http://laws.justice.gc.ca/en/const/annex e.html>

Federal Sustainable Development Act; S.C. 2008, c. 33 <Online: http://laws-lois.justice.gc.ca/eng/acts/F-8.6/>

Fisheries Act; R.S.C.1985, c. F-14 <Online: http://laws-lois.justice.gc.ca/eng/acts/f-14/>

Oceans Act; S.C. 1996, c.31 <Online: http://laws-lois.justice.gc.ca/eng/acts/O-2.4/>

Species at Risk Act; S.C. 2002, c.29 <Online: http://laws-lois.justice.gc.ca/eng/acts/S-15.3/>

APPENDICES

Appendix A.

Material Reviewed for Analysis of the CESPS

Sector Initiatives

- *Federal Sustainable Development Strategy* and associated progress reports.
- *Departmental Sustainable Development Strategies* from all 28 departments (see below)
- *Chemicals Management Plan*
- *Canada-Wide Accord on Environmental Harmonization*
- *Northern Strategy*
- *Policy on Green Procurement*
- *Eco Initiatives*
- *Canada's Ocean Strategy*
- *Oceans Action Plan*
- *Plan of Action for Drinking Water in First Nations Communities*
- *Comprehensive Approach to Clean Water*
- *Great Lakes Water Quality Agreement*
- *National Action Plan to Encourage Municipal Water Use Efficiency*
- *Federal Water 1987 Policy*
- *Canada's National Programme of Action for the Protection of the Marine Environment from Land-based Activities (NPA)*
- *Aboriginal Aquatic Resource and Oceans Management Program, and Aboriginal Inland Habitat Program*
- *Clean Air Agenda*
- *Canada-U.S. Air Quality Agreement*
- *The Canada-Wide Acid Rain Strategy for Post-2000*
- *Regulatory Framework for All Air Emissions (Clean Air Regulatory Agenda)*
- *Agriculture Policy Framework*
- *Invasive Alien Species Strategy for Canada*
- *Canadian Biodiversity Strategy*
- *The Habitat Stewardship Program/Aboriginal Fund for Species at Risk*
- *First Nations Water and Wastewater Action Plan*
- *Canadian Ambient Air Quality Standards For Fine Particulate Matter And Ozone 2012*

Legislation Reviewed

- *Agricultural and Rural Development Act*
- *Alternative Fuels*
- *Act Arctic Waters Pollution Prevention Act*
- *Atomic Energy Control Act*
- *Auditor General Act*
- *Canada Agricultural Products Act*

- *Canadian Environmental Assessment Act*
- *Canadian Environmental Protection Act*
- *Canada Marine Act*
- *Canada-Newfoundland Atlantic Accord Implementation Act*
- *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act*
- *Canada Petroleum Resources Act Canada Shipping Act - Part (XV)*
- *Canada Water Act*
- *Canada Wildlife Act*
- *Coastal Fisheries Protection Act*
- *Department of the Environment Act*
- *Emergency Preparedness Act*
- *Energy Efficiency Act*
- *Energy Supplies Emergency Act*
- *Environment Week Act*
- *Canadian Fisheries Act*
- *Food and Drugs Act*
- *Federal Sustainable Development Act*
- *International Boundary Waters Treaty Act*
- *International River Improvements Act*
- *James Bay and Northern Quebec Native Claims Settlement Act*
- *Mackenzie Valley Resource Management Act*
- *Manganese-Based Fuel Additives Act*
- *Migratory Birds Convention Act*
- *National Energy Board Act*
- *National Parks Act*
- *National Wildlife Week Act*
- *Oceans Act*
- *Pest Control Products Act*
- *Resources and Technical Surveys Act*
- *Species at Risk Act (2003)*
- *Transportation of Dangerous Goods Act*
- *Wild Animal and Plant Protection and Regulation of International and Inter-provincial Trade Act*

Departments and agencies bound by the *FSDA*.

- Department of Agriculture and Agri-Food
- Department of Canadian Heritage
- Department of Citizenship and Immigration
- Department of the Environment
- Department of Finance
- Department of Fisheries and Oceans
- Department of Foreign Affairs and International Trade
- Department of Health
- Department of Human Resources and Skills Development*
- Department of Indian Affairs and Northern Development
- Department of Industry
- Department of Justice

- Department of National Defence
- Department of Natural Resources
- Department of Public Safety and Emergency Preparedness
- Department of Public Works and Government Services
- Minister of Social Development*
- Department of Transport
- Treasury Board Secretariat of Canada
- Department of Veterans Affairs
- Department of Western Economic Diversification
- Atlantic Canada Opportunities Agency
- Canada Border Services Agency
- Canada Revenue Agency
- Canadian International Development Agency
- Economic Development Agency of Canada for the Regions of Quebec
- Parks Canada Agency
- Public Health Agency of Canada

*** These two departments have merged responsibilities**

Appendix B.

Evaluation Guide

Environmental Sustainability Planning Evaluation Guide for the Federal Government of Canada

Glossary:

ESP – Environmental Sustainability Planning

Comprehensive Goals with Measurable Targets:

1. Does the federal government have a published statement of ESP goals? (please obtain)
2. If there is no published statement of integrated ESP goals for the federal government (as per question 1), is there a statement of goals in preparation? (If yes, what is the planned date for publication)?
3. The following goals (table 1) are based on the David Suzuki *Sustainability within a Generation* (SWAG) report. Which of the following SWAG goals are covered in the federal government published statement from question 1?

Table 1. Qualitative assessment of degree to which federal government published goal statements covers SWAG goals (Adapted from Boyd, 2004).

Goal	Assessment (Fully, Partial, or not included.)
Improve Energy, Water and Resource Efficiency: Canada reduces energy and material use by at least 75% in order to live within the capacity of the Earth's natural systems while maintaining our quality of life.	
Shift to Clean Energy: Canada replaces fossil fuels with low-impact renewable energy.	
Reduce Waste and Pollution: Smart design of Canada's production and consumption processes would reduce environmental and health threats.	
Protect and Conserve Water: Canada implements comprehensive water policies that protect fresh water systems from the threats of climate change and industrial,	

agricultural, and municipal pollution.	
Clean Air: Canada implements comprehensive air quality policies that eliminate risks to human health.	
Promote Healthy Food and Sustainable Agriculture: Canada ensures that its food is healthy and produced in ways that do not compromise our land, water, or biodiversity.	
Conserve, Protect and Restore Nature: Canada effectively protects species and ecosystems by strengthening endangered species legislation and ensuring that land and marine use decisions protect biodiversity.	
Build Sustainable Cities: Canadian cities become vibrant, clean, liveable, prosperous, safe, and sustainable.	
Promoting Global Sustainability: Canada returns to being one of the most compassionate and generous nations on earth, a global leader in securing peace, alleviating poverty, and promoting sustainability in the developing world.	

4. Are the goals published as a single integrated statement of goals?

5. We are trying to identify all environmental targets/standards for the federal government. A sample list of environmental categories for which you may have targets is provided below. Could you identify references for all environmental targets/standards that are used in your jurisdiction so that we are able to fill in the following table?

Table 2. Environmental targets/standards at the federal level

Subject Area	Target	Timeline	Legal Basis (guideline statue, treaty, other)

Air Quality			
Sulphur Concentrations			
Nitrogen Concentrations			
VOC Concentrations			
Particulates Concentrations			
Carbon Monoxide Concentrations			
Ozone Concentrations			
Drinking Water Quality			
Heavy Metal			
Dissolved Solids			
Turbidity			

Surface Water Quality			
Heavy Metal Concentrations			
Phosphorous Concentrations			
Nitrogen Concentrations			
Dissolved Oxygen			
Biochemical Oxygen Demand			
Suspended Solids			
Coliform			
Emissions			
Greenhouse Gas			
Nitrogen			
VOCs			
Carbon Monoxide			
Particulate			
Ozone Depleting Substance			

Hazardous Waste Emissions (list wastes covered)			
Production and Consumption			
Energy Consumption			
Energy Efficiency			
Clean Energy Production			
Water Conservation			
Resource Efficiency			
Waste			
Municipal			
Hazardous			
Sewage Treatment			
Recycling			
Agriculture			
Pesticide Use			
Fertilizer Use			
Preservation			
Biodiversity			
Species at Risk			
Protected Areas			
Fisheries Harvest			
Forest Harvest			
Sustainable Forest Management Certification			
Lifestyle			
Public Transit Use			
Private Transportation Use			
Government Green Procurement			

Other			

***Effective Strategy*:**

1. Is there a published ESP for the federal government? (obtain copy of plan)
2. Are there published strategies indicating how the federal government plans to meet environmental goals and targets (please obtain copies)?

Table 3. Assessment of the key components for effective strategies in department SDS and sector strategies

Strategy	Does the plan or strategies contain measurable targets with timelines?	Does the plan or strategies clearly and quantitatively show how targets will be met?	Does the plan or strategies clearly identify who is responsible for implementation and management?	Does the plan or strategies clearly show that adequate financial and other resources are allocated to implementation?	Are economic, social and environmental goals/objectives integrated into the ESP?

1. If there is no published plan for the federal government, is there an ESP plan in preparation? (If yes, when will it be published?)
2. Does the published ESP in preparation clearly show how the targets will be met?

Accountability and Responsibility:

1. Is there a committee of Cabinet and/or elected officials dedicated to ESP? (If yes obtain name, membership, terms of reference/mandate, date created)
2. Is there a senior management committee of civil servants dedicated to ESP? (If yes obtain name, membership, terms of reference/mandate, and date created)
3. Are the parties responsible for preparing the ESP strategy clearly identified?
4. Are the parties responsible for implementing the ESP strategy clearly identified?
5. Are the parties responsible for monitoring the ESP strategy clearly identified?

D*. Progress Monitoring:*

1. Is there a regular public monitoring report measuring environmental performance? (obtain copy of most recent report)
2. How often is the report published?
3. Which of the following data analysis is contained in the reports: Time Series Trends, Trends Relative to Goals and Targets, Trends Relative to other Jurisdictions (benchmarking).

Table 4. Parameters reported on in the Canadian National Indicator Series 2003 at the federal level.

Parameter	Units	Time Series Trends	Trends Relative to Targets	Trends Relative to other Jurisdictions (benchmarking)

4. Is there regular Public Compliance Reporting in your jurisdiction?
5. Is ESP performance evaluated on a regular basis by an independent agency?
6. If the answer to 5 is yes, obtain name of agency and reference for most recent evaluation reports.

E*. Adaptive Management*:

1. What is the process for amending ESP plans to address deficiencies identified in the monitoring process?
2. Is there a mandatory requirement for the responsible authority to address deficiencies in the ESP? (if yes obtain reference for mandatory authority)

F*. Legal Framework:*

1. Identify the relevant statutes for environmental management for the federal government.
2. Is there s single statute that provides the legal framework for preparing the ESP strategy
3. Which of the following components of the ESP planning process are provided for in legislation?

Table 5. Qualitative assessment of degree to which key planning components are enshrined in legislation.

Goals and Objectives:

Targets

SDS plans

Adaptive Management

Progress Monitoring

Collaborative Process

Accountability and Responsible Parties

G. *Collaborative Process:*

1. Is there a permanent multi-stakeholder committee (such as an Environment and Sustainable Development Roundtable) that deals with ESP issues? (If yes obtain name, membership, mandate, governing statute, and date created)
2. If the answer to 1 is yes, is it established in legislation?
3. Are there multi-stakeholder processes used in the development and management of ESP? (describe process used by strategy)

3a. Does it represent all stakeholder interests?

3b. Does it have the mandate to develop a plan/policy by consensus based negotiation or is it just an advisory group that is consulted.

3c. Is it provided with adequate resources to fulfill its mandate?

3d. What has been the outputs from the committee/group?

3e. Who does it report to?

3f. How often does it meet?

3g. How many of the recommendations are implemented?

3h. Is it mandatory or discretionary?

3i. Is in provided for in legislation?

Appendix C.

Completed Evaluation Guide

Environmental Sustainability Planning Evaluation Guide for the Federal Government of Canada

Glossary:

ESP – Environmental Sustainability Planning

A. *Comprehensive Goals with Measurable Targets*:

- **Does the federal government have a published statement of ESP goals? (please obtain)**

Yes, the Government of Canada published *Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada* in 2010, which forms the guiding document for Canada's environmental sustainability planning. The document is supplemented by the 2011 and 2012 FSDS Progress Reports as well as topic-specific strategy documents (See Appendix A for a full list). A revised FSDS is required every 3 years.

Strategies that are referenced in either the 2010-2013 FSDS or the 2011and 2012 Progress Reports are included here, as well as governmental initiatives that were included in Ellis' evaluation (2010). Relevant goals are outlined once, and not repeated should they occur in multiple strategies. In the interest of completeness, the objectives of the main pieces of environmental legislation are also included regardless of whether they are specifically mentioned in any of the FSDS documents.

A.1.1 Sustainability Strategies

Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada

The federal government strives to ensure the goals are:

- Aspirational;
- Take a long-term view;
- Address important challenges and problems;
- Remain attuned to environmental information, data and indicators;
- Encourage flexibility in the choice of strategies for achievement; and,
- Reflect domestic and international priorities and commitments.

Overall Goals:

- Make environmental decisions transparent and accountable.
- Link sustainable development planning and reporting and the Government's core expenditure planning and reporting system.

- Effective measurement, monitoring and reporting in order to track and report on progress to Canadians.

Theme I: Addressing Climate Change and Air Quality

- ***Goal 1, Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change.***
- Sustained action to build a low-carbon economy and make Canada a world leader in clean electricity generation
- Implement the Copenhagen Accord. The Copenhagen Accord commits Canada to investing $400 million for international climate change efforts this fiscal year (2010-11), and to reducing greenhouse gas emissions 17% below 2005 levels by 2020.
- Develop and implement a climate change and clean energy strategy that is harmonized with that of the United States, our largest trading partner.
- Publish draft regulations for greenhouse gas emissions from vehicles and continue to work with the United States to produce regulations for heavy trucks.
- Table new regulations requiring 5% renewable content in gasoline and diesel fuel.
- Meet commitment of 90% of electricity provided by non-emitting sources by 2020. Work with the United States to continue to reduce emissions through the Canada- United States Clean Energy Dialogue (CED) launched in 2009. The CED will promote the development of a Canada-United States clean energy sector.

- ***Goal 2, Air Pollution: Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems.***
- Move forward with the Clean Air agenda – establish clear national standards
- Consult with provinces, territories and public to set and reach targets for GHG and air pollutant targets.
- Provide publically available info regarding pollutant releases and emissions summaries.
- Clean up contaminated sites

Theme II: Maintaining Water Quality and Availability

- ***Goal 3, Water Quality: Protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems.***
- Restore lakes and marine ecosystems that have been damaged by pollution
- Protection and restore water quality in other priority areas such as the St. Laurence River.
- Manage human activities on the ocean and expand marine protected areas network.
- Preserve and Protect water resources through commitments made under *CEPA.*
- Eliminate dumping of raw sewage into waterways
- Upgrade municipal water, and wastewater infrastructure.

- Undertake important science, research, and monitoring to enhance understanding of the problems facing ecosystems and to evaluate the effectiveness of actions
- Ensure effective stewardship of water resources via the Great Lakes Water Quality Agreement.

- ***Goal 4, Water Availability: Enhance information to ensure that Canadians can manage and use water resources in a manner consistent with the sustainability of the resource.***
- Collaborate with stakeholders on sustainable water management through research, promotion, and distribution of information that will support water efficiency and integrated management
- Limit levels of phosphates in detergents and reduce agricultural run-off
- Introduce legislation to ban all bulk water transfers or exports from Canadian freshwater basins.
- Improve water quality and wastewater management.

THEME III: Protecting Nature

- ***Goal 5, Wildlife Conservation: Maintain or restore populations of wildlife to healthy levels.***
- Protect Species at Risk, Migratory Birds and their habitat
- Promote stewardship activities that protect and restore ecosystems.

- ***Goal 6, Ecosystem/Habitat Conservation and Protection: Maintain productive and resilient ecosystems with the capacity to recover and adapt; and protect areas in ways that leave them unimpaired for present and future generations.***
- Set aside land for national parks, national wildlife areas, national marine conservation areas, and other conservation purposes;
- Negotiate an agreement with Greenland to protect polar bears.
- Invest in monitoring for Marine Protected Areas
- Strengthen the enforcement of environmental laws that protect ecosystems and important habitat

- ***Goal 7, Biological Resources: Sustainable production and consumption of biological resources are within ecosystem limits.***
- Fund first nations to participate in the Forest Sector
- Undertake important research to improve the understanding of ecosystems needed for future policy and regulatory decisions.
- Determine the resilience of the National Protected Areas network in the face of climate change and other stressors.
- Assess risks to Canada's forest biodiversity.

- Prevent the introduction and spread of invasive alien species

THEME IV: Shrinking the Environmental Footprint – Beginning with Government

- ***Goal 8, Greening Government Operations: Minimize the environmental footprint of government operations.***
- Integrate environmental performance into departmental decision-making using the Policy for Green Procurement.
- Ensure all government buildings meet the Canada Green Building Council's Leadership in Energy and Environmental Design (LEED - Canada) Gold level.
- Address the environmentally sound disposal of all federally generated e-waste.

Progress Report For The Federal Sustainable Development Strategy 2010-2013

- Establish a Sustainable Development Office;
- Put in place a management framework for the FSDS;
- Put in place a way to integrate Departmental Sustainable Development Strategies into the expenditure management system for the first time;
- Develop greening government operations targets, implementation strategies, and guidance;
- Revise the guidelines for strategic environmental assessment requiring consideration of, and public reporting on, FSDS goals and targets; and,
- Establishing a performance measurement system for the FSDS to effectively monitor and report on progress. This includes a suite of environmental indicators and performance measures for Themes I-III, and common performance measures for Theme IV

Targets (with departments responsible for monitoring indicated)

- Target 1.1: Climate Change Mitigation Relative to 2005 emission levels, reduce Canada's total greenhouse gas (GHG) emissions 17% by 2020. (EC)
- Target 2.1: Air Pollutants: Reduce air pollutants in order to maintain or improve air quality across the country and achieve the emission targets which are currently under development in consultations with provinces and stakeholders. (EC)
- Target 2.2: *Indoor Air Quality* Help protect the health of Canadians by assessing indoor air pollutants and developing guidelines and other tools to better manage indoor air quality. (HC)
- Target 2.3: Chemicals Management Reduce risks to Canadians and impacts on the environment posed by harmful substances as a result of decreased environmental concentrations and human exposure to such substances. (EC, HC)
- Target 3.1: Freshwater Quality: Complete federal actions to restore beneficial uses in Canadian Areas of Concern in the Great Lakes by 2020. (EC)
- Target 3.2: Freshwater Quality Contribute to the restoration and protection of the Great Lakes by developing and gaining binational acceptance of objectives and strategies for the management of nutrients in the Great Lakes by 2015. (EC)

- Target 3.3: *Freshwater Quality* Complete federal actions to reduce pollutants and restore beneficial uses in hot spots in the St. Lawrence River by 2016. (EC)
- Target 3.4: *Freshwater Quality* Reduce nutrient inputs into Lake Simcoe by 2012. (EC)
- Target 3.5: *Freshwater Quality* By 2012, through strategic collaborations and by increasing scientific knowledge, contribute to the establishment of targets to reduce nutrients in Lake Winnipeg and its basin to support the sustainability of the lake. (EC)
- Target 3.6: *Freshwater Quality* Achieve a value between 81ᑫ–100 on each of the Water Quality and Soil Quality Agri-Environmental Performance Indices by March 31, 2030. (AAFC)
- Target 3.7: *Freshwater Quality* Reduce risks associated with wastewater effluent by 2020 in collaboration with provinces and territories. (Note: risk reduction for wastewater effluents relates both to freshwater and marine). (EC)
- Target 3.8: *Marine Water Quality* Reduce the risks to Canadians and impacts on the marine environment posed by pollution from land-based activities. (EC)
- Target 3.9: *Marine Water Quality* Prevent marine pollution from uncontrolled dumping at sea. Ensure that permitted disposal at sea is sustainable such that 85% of disposal site monitoring events do not identify the need for site management action (such as site closure). (EC)
- Target 3.10: *Drinking Water Quality* Increase the percentage of First Nation communities with acceptable water and wastewater facility risk ratings by 2013.7 (HC, INAC)
- Target 3.11: *Drinking Water Quality* Help protect the health of Canadians by developing health-based water guidelines. (HC)
- Target 3.12: *Chemicals Management* Reduce risks to Canadians and impacts on the environment posed by harmful substances as a result of decreased environmental concentrations and human exposure to such substances. (EC, HC)
- Target 4.1: *Water Resource Management and Use* Promote the conservation and wise use of water to affect a 30 per cent reduction or increased efficiency in water use in various sectors by 2025 (based on 2009 water use levels). (EC)
- Target 5.1: *Terrestrial and Aquatic Wildlife Conservation (Species at Risk)* Population trend (when available) at the time of reassessment is consistent with the recovery strategy for 100% of listed species at risk (for which recovery has been deemed feasible) by 2020. (EC)
- Target 5.2: *Terrestrial and Aquatic Wildlife Conservation (Migratory Birds)* Target for proportion of migratory bird species whose population varies within acceptable bounds of the population goals will be established in 2011 once the Bird Status Database is complete. (EC)
- Target 6.1: *Terrestrial Ecosystems and Habitat* Non-Park Protected Habitat Habitat target to support conservation of priority migratory birds and species at risk will be set by 2015. (EC)
- Target 6.2: *Terrestrial Ecosystems and Habitat* Park Protected Habitat Maintain or improve the overall ecological integrity in all national parks from March 2008 to March 2013. (PCA)

- Target 6.3: *Marine Ecosystems* Improve the conservation of ocean areas and marine ecosystems by 2012. (DFO)
- Target 6.4: *Managing Threats to Ecosystems* Threats of new alien invasive species entering Canada are understood and reduced by 2015. (EC)
- Target 6.5: *Managing Threats to Ecosystems* Reduce the frequency and consequences of environmental emergencies that affect Canada. (EC)
- Target 7.1: *Sustainable Fisheries* Improve the management and conservation of major stocks. (DFO)
- Target 7.2: *Sustainable Aquaculture* To promote the conservation and optimum use of marine resources and the aquatic environment through improved aquaculture management by 2014. (DFO)
- Target 7.3: *Sustainable Forest Management* Improve the management of Canada's forest ecosystems through the development and dissemination of knowledge. (NRCan)
- Target 8.1: As of April 1, 2012, and pursuant to departmental strategic frameworks, new construction and build-to-lease projects, and major renovation projects, will achieve an industry-recognized level of high environmental performance.
- Target 8.2: As of April 1, 2012, and pursuant to departmental strategic frameworks, existing crown buildings over 1000m2 will be assessed for environmental performance using an industry-recognized assessment too
- Target 8.3: As of April 1, 2012, and pursuant to departmental strategic frameworks, new lease or lease renewal projects over 1000m2, where the Crown is the major lessee, will be assessed for environmental performance using an industry-recognized assessment tool.
- Target 8.4: As of April 1, 2012, and pursuant to departmental strategic frameworks, fit-up and refit projects will achieve an industry-recognized level of high environmental performance
- Target 8.5: The federal government will take action now to reduce levels of greenhouse gas emissions from its operations to match the national target of 17% below 2005 by 2020.
- Target 8.6: By March 31, 2014, each department will reuse or recycle all surplus electronic and electrical equipment (EEE) in an environmentally sound and secure manner.
- Target 8.7: By March 31, 2013, each department will achieve an 8:1 average ratio of office employees to printing units. Departments will apply target where building occupancy levels, security considerations, and space configuration allow.
- Target 8.8: By March 31, 2014, each department will reduce internal paper consumption per office employee by 20%. Each department will establish a baseline between 2005-2006 and 2011-2012, and applicable scope.
- Target 8.9: By March 31, 2012, each department will adopt a guide for greening meetings.
- Target 8.10: As of April 1, 2011, each department will establish at least 3 SMART green procurement targets to reduce environmental impacts.

- Target 8.11: As of April 1, 2011, each department will establish SMART targets for training, employee performance evaluations, and management processes and controls, as they pertain to procurement decision-making.

The 2012 Progress Report of the Federal Sustainable Development Strategy

Goals and targets congruent with the *FSDS (2010-2013)* and the *Progress Report For The Federal Sustainable Development Strategy 2010-2013.*

Departmental Sustainable Development Strategies (RPP+ departmental websites) (for the 27 departments found in Appendix A)

1. Department of Agriculture and Agri-Food: 2012-2013

- an economically, socially and environmentally sustainable agriculture, agri-food and agri-based products sector that ensures proper management of available natural resources and adaptability to changing environmental conditions
- sound management of available natural resources and adaptation to changing environmental conditions
- pursue sustainable development efforts that enable the sector to become more profitable while recognizing that strong economic performance by the sector depends on strong environmental performance.
- increased sustainable development of rural communities to strengthen rural competitiveness, innovation and the development of new economic opportunities from existing natural and cultural amenities; and
- increased use by Canadians of the co-operative form of enterprise to develop solutions to their economic and social challenges
- addressing key environmental challenges in Canada including agriculture's impact on water quality and water use, adaptation to the impact of climate change, mitigation of agriculture's greenhouse gas emissions and the exploration of new economic opportunities that contribute to a cleaner environment and healthier living conditions for the Canadian public.

AAFC has three strategic outcomes as follows:

- an environmentally sustainable agriculture, agri-food and agri-based products sector
- a competitive agriculture, agri-food and agri-based products sector that proactively manages risk
- an innovative agriculture, agri-food and agri-based products sector

2. Department of Canadian Heritage: 2012-2013

Vision

- The vision and mission of the Department of Canadian Heritage guide its development and program implementation, particularly in the fields of culture, heritage, identity and values.
- Our mission is to promote an environment in which all Canadians take full advantage of dynamic cultural experiences, celebrate our history and heritage, and participate in building creative communities.
- Our vision is one of a Canada where all Canadians can celebrate our rich cultural diversity and our shared experiences and values, and where all can gain a greater understanding and appreciation of our history, heritage and communities.

Canadian Heritage has a vision of Canada that invests in the future by supporting the arts, our two official languages and our athletes. A Canada that is confident in a world of choice, at the forefront of the creative economy and a leader in the digital world.

Strategic Outcomes

- Canadian artistic expressions and cultural content are created and accessible at home and abroad – this speaks to the creative and economic importance of the continued existence and public availability of Canadian cultural products, artistic work by Canadian creators and performers and Canada's cultural heritage.
- Canadians share, express and appreciate their Canadian identity – this supports the mandate of fostering a stronger Canadian identity through active, engaged, inclusive citizenship and recognition of the importance of both linguistic duality and a shared civic identity.
- Canadians participate and excel in sport – this speaks to the beneficial effects of sport participation on the health and well-being of individuals and to the impact of international achievement in sport on Canadian pride.

3. Department of Citizenship and Immigration: 2012-2013

- build a stronger Canada by helping immigrants and refugees settle and fully integrate into Canadian society and the economy, and by encouraging and facilitating Canadian citizenship
- the Government of Canada is committed to helping Canadian businesses and families achieve a sustainable and prosperous economic recovery.
- Protecting and strengthening the value of Canadian citizenship
- continue to work with our partners to promote integration and to address unjust racial and religious discrimination, including anti-Semitism
- Migration of permanent and temporary residents that strengthens Canada's economy
- Family and humanitarian migration that reunites families and protects the displaced and persecuted.
- New comers and citizens participate to their full potential in fostering an integrated society
- Managed migration that promotes Canadian interests and protects the health, safety and security of Canadians

4. Department of the Environment

- *a clean environment* :Manage substances and waste, and reduce pollution that directly or indirectly harms human health or the environment.
- *a safe environment* by equipping Canadians to make informed decisions on weather, water and climate conditions; and
- *a sustainable environment* by conserving and restoring Canada's natural environment.

Strategic Outcomes

- Canada's natural environment is conserved and restored for present and future generations.

This strategic outcome is aimed at ensuring that land, water and biodiversity are

sustained so that Canadians can enjoy and benefit from their natural legacy over the long term.

- Canadians are equipped to make informed decisions on changing weather, water and climate conditions.
  Canadians need to have the information and services to be able to respond and adapt to immediate and longer-term change in weather, water and climate conditions that affect their health, safety and economic well-being.
- Threats to Canadians and their environment from pollution are minimized.
  This strategic outcome reflects the need for Environment Canada to manage substances and waste, and reduce pollution that directly or indirectly harms human health or the environment.

5. Department of Finance

Vision

Economic and fiscal policy frameworks and decisions that promote equity and enhance the economic, social and environmental well-being of current and future generations.

Strategic Outcomes

- a strong and sustainable economy, resulting in increasing standards of living and improved quality of life for Canadians

Related Goals

- Fiscal Sustainability and a high standard of living for future generations
- Strong Social Foundations
- Integrating sustainable development considerations into policy making
- Shrinking environmental footprint of government
- An economic, social and fiscal framework that supports financial stability, sustainable growth, productivity, competitiveness and economic prosperity
- Supporting sound social policy and the renewal of major transfer program
- Supporting sustainable urban development and infrastructure renewal
- Supporting international development and global financial stability; strengthening governance and accountability, helping to ensure sustainable global growth and supporting the economic advancement of developing countries

6. Department of Fisheries and Oceans

Vision

To advance sustainable aquatic ecosystems and support safe and secure Canadian waters while fostering economic prosperity across maritime sectors and fisheries.

Mission

- Through sound science, forward-looking policy, and operational and service excellence, Fisheries and Oceans Canada employees work collaboratively toward the following strategic outcomes:
- Economically Prosperous Maritime Sectors and Fisheries;
- Sustainable Aquatic Ecosystems; and
- Safe and Secure Waters.

7. Department of Foreign Affairs and International Trade

- Promote democracy and respect for human rights, and contribute to effective global governance and international security.
- Priority Commitments:
- Promote global institutions and partnerships that focus on results, accountability and effective burden sharing;
- Provide targeted contributions to democratic transition and stabilization in the Arab world and principled support for the Middle East peace process;
- Address security challenges including transnational crime, terrorism, and WMD proliferation, and promote security and stability in fragile states;
- Launch operations of the Office of Religious Freedom.
- to assist Canadian negotiators integrate environmental considerations into the negotiating process by providing information on the environmental impacts of the proposed trade agreement; and
- to address public concerns by documenting how environmental factors are being considered in the course of trade negotiations

8. Department of Health

Vision

To help Canadians maintain and improve their health and to make this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system.

Strategic Outcomes

- Canadians are informed of and protected from health risks associated with food, products, substances and environments, and are informed of the benefits of healthy eating
- First Nations and Inuit communities and individuals received health services and benefits that are responsive to their needs so as to improve their health status.

9. Department of Human Resources and Social Development* (amalgamation of Department of Human Resources and Skills Development and the Department of Social Development)

- build a stronger and more competitive Canada, to support Canadians in making choices that help them live productive and rewarding lives, and to improve Canadians' quality of life.
- Green Jobs LMI project- Produce estimates of growth and skills requirements for green jobs.
- Greening government Operations

10. Aboriginal Affairs and Northern Development Canada (AANDC)

Vision

Support Aboriginal people (First Nations, Inuit and Métis) and Northerners in their efforts to:

- improve social well-being and economic prosperity;

develop healthier, more sustainable communities; and

participate more fully in Canada's political, social and economic development - to the benefit of all Canadians.

Strategic Outcomes

The Government: Good governance and co-operative relationships for First Nations, Inuit and Northerners.

The People: Individual, family and community well-being for First Nations and Inuit.

The Land and Economy: Full participation of First Nations, Inuit and Métis individuals and communities in the economy.

The North: Self-reliance, prosperity, and well-being for the people and communities of the North.

Office of the Federal Interlocutor: Socio-economic well-being of Métis, Non-Status Indians and urban Aboriginal people.

11. Department of Industry

Vision:

In support of innovation and competitiveness, Industry Canada works with key partners to promote the benefits of sustainable development, and to encourage the greater adoption of sustainable technologies and practices by Canadian businesses, consumers and communities.

12. Department of Justice

1. Develop guidelines and tools to foster awareness for a sustainable development culture.
2. Build capacity to integrate sustainable development into policy and program development, priority setting and other planning exercises.
3. Increase understanding and promote training among management cadre and Justice staff on the integration and relevance of sustainable development to the work of the Department.
4. Integrate sustainable development considerations in the development of new policies and programs.
5. Incorporate sustainable practices into policy planning and projects.
6. Promote and assess compliance with sustainable development tools and directives in policy and program practices.
7. Greening government Operations

13. Department of National Defence

8. Greening Government Operations through
9. Equipment Acquisition and Disposal;
10. Real Property and Informatics Infrastructure Acquisition and Disposal;
11. Environment Protection and Stewardship; and
12. Internal Services

14. Department of Natural Resources

Vision

NRCan's vision is to improve the quality of life of Canadians by creating a sustainable resource advantage

Goals

13. Fostering the integrated management and sustainable development of Canada's natural resources; and

14. Encouraging the responsible development and use of Canada's natural resources, and the competitiveness of Canada's natural resource products.

15.

Strategic Outcomes

16. Canada's Natural Resources are Globally Competitive

17. Natural Resource Sectors and Consumers are Environmentally Responsible

18. Canadians Have Information to Manage their Lands and Natural Resources, and are Protected from Related Risks

19. Related Goals- contribute to sustainable development by supporting the Clean Air Agenda

15. Department of Public Safety and Emergency Preparedness

20. Greening government operations through:

21. create processes, plans and tools to reduce its volume of computers and office equipment;

22. strengthen its internal processes for reuse, disposal and/or recycling of all surplus electronic and electrical equipment;

23. implement measures to reduce paper consumption;

24. raise awareness of the importance of greening the Department's operations; and

25. include environmental considerations in purchasing decisions in conjunction with traditional interests of price, performance and availability.

16. Department of Public Works and Government Services

Vision

To have the concept of sustainable development reflected in all aspects of PWGSC's role as a provider of services to colleague departments and agencies, as a custodian of real property, and in our own internal operations.

17. Department of Social Development*

** amalgamated with Department of Human Resources and Skills Development**

18. Department of Transport

Vision

26. A transportation system in Canada that is recognized worldwide as safe and secure, efficient and environmentally responsible.

27. The department's vision of a sustainable transportation system is one that integrates and balances social, economic and environmental objectives. This vision is guided by the following principles:

28. highest possible safety and security of life and property – guided by performance–based standards and regulations when necessary;

29. efficient movement of people and goods to support economic prosperity and a sustainable quality of life – based on competitive markets and targeted use of regulation and government funding; and

30. respect for the environmental legacy of future generations of Canadians – guided by environmental assessment and planning processes in transportation decisions and selective use of regulation and government funding.

Related Goals

31. An efficient transportation system

32. A clean transportation system with the following elements

33. Transportation Innovation;

34. Clean Air from Transportation;

35. Clean Water from Transportation; and,

36. Environmental Stewardship of Transportation.

19. Treasury Board Secretariat of Canada

37. Greening Government Operations

20. Department of Veterans Affairs

38. Greening Government Operations

21. Western Economic Diversification Canada

Vision

The western Canadian economy is developed, diversified and sustainable.

Goal: diversify the western Canadian economy by making strategic investments in the commercialization and adoption of clean energy and clean water technologies through the department's Innovation Program Activity.

22. Atlantic Canada Opportunities Agency

39. Greening government operations

40. Dynamic and sustainable communities for Atlantic Canada

41. the Atlantic Energy Gateway initiative will aim to facilitate the development of the Atlantic renewable energy sector by fostering collaboration, common understanding and communication among governments and the private sector in order to maximize and expedite the development of clean and renewable energy resources in the region.

23. Canada Border Services Agency

Vision

In support of its responsibility for providing integrated border services to ensure the security and prosperity of Canada, the CBSA will manage the lawful flow of people and goods while contributing to environmental quality, a prosperous economy and a secure society.

Strategic Outcome

42. International trade and travel is facilitated across Canada's border, and Canada's

43. population is protected from border-related risks (including invasive species)

24. Canada Revenue Agency

44. Greening Government Operations

25. Canadian International Development Agency

45. Greening government operations

Policy on Environmental Sustainability

Objectives for Environmental Sustainability

- To increase the institutional, human resource and technological capacities of developing country governments, organizations and communities to plan and implement development policies, programs and activities that are environmentally sustainable.
- To strengthen the capability of developing countries to contribute to the resolution of global and regional environmental problems, while meeting their development objectives.
- To integrate environmental considerations more effectively into CIDA decision-making and the activities the Agency and its partners carry out, CIDA is augmenting its efforts to achieve the following operational objectives.
- Operational Objectives
- To ensure that environmental considerations, including opportunities for enhancing environmental sustainability, are integrated into sector and cross-sector programs, program assistance, and project planning and implementation, taking into account views of beneficiaries and local communities;
- To promote and support environmental and broader socio-economic policy dialogue, program assistance and projects that directly address environmental issues;
- To implement design measures that minimize negative environmental impacts and enhance environmental benefits of projects, or identify alternatives;
- To encourage and support Canadian, international and developing country partner organizations to develop policies, programs and projects that further the objectives of environmental sustainability;
- To contribute to the development of knowledge and experience in Canada and in developing countries, on undertaking environmentally sustainable forms of development;
- To promote education and awareness among governments and the public in Canada and in developing countries of the importance of environmentally sustainable approaches to development

26. Canada Economic Development for Quebec Regions

Vision

In the long term, Quebec's regions and communities will have increased their development capabilities, dynamism and prosperity in a significant, lasting manner for the benefit of their residents

Goals

46. Finance projects that would, among other things, help to optimize resource use, valuing residual resources, or contribute to eco-efficiency

47. Greening government operations

27. Parks Canada Agency

Mandate

On behalf of the people of Canada, we protect and present nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.

Vision

Canada's treasured natural and historic places will be a living legacy, connecting hearts and minds to a stronger, deeper understanding of the very essence of Canada.

Strategic Outcome

Parks Canada has one strategic outcome as follows: Canadians have a strong sense of connection, through meaningful experiences, to their national parks, national historic sites and national marine conservation areas and these protected places are enjoyed in ways that leave them unimpaired for present and future generations.

28. Public Health Agency of Canada

Strategic Outcome

Canada is able to promote health, reduce health inequalities, and prevent and mitigate disease and injury

Goals

48. Greening government operations

A.1.2 Other Governmental Initiatives

The following are goals found in sector initiatives:

Canada-Wide Accord on Environmental Harmonization

http://www.ccme.ca/assets/pdf/accord_harmonization_e.pdf

Objectives:

49. enhance environmental protection;

50. promote sustainable development; and

51. achieve greater effectiveness, efficiency, accountability, predictability and clarity of environmental management for issues of Canada-wide interest,

Northern Strategy

http://www.northernstrategy.gc.ca/cns/cns.pdf

Vision

self-reliant individuals live in healthy, vital communities, manage their own affairs and shape their own destinies;

the Northern tradition of respect for the land and the environment is paramount and the principles of responsible and sustainable development anchor all decision-making and action;

Priorities

52. Exercising our Arctic Sovereignty
53. Promoting Social and economic Development
54. Protecting our environmental heritage
55. Improving and Devolving Northern Governance

Policy on Green Procurement

http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html

Objective:

It is the objective of this policy to advance the protection of the environment and support sustainable development by integrating environmental performance considerations into the procurement decision-making process.

Expectations

56. Benefit the environment by contributing to environmental objectives, such as:
57. Reducing greenhouse gas emissions and air contaminants;
58. Improving energy and water efficiency;
59. Reducing ozone depleting substances;
60. Reducing waste and supporting reuse and recycling;
61. Reducing hazardous waste; and
62. Reducing toxic and hazardous chemicals and substances

Energy:

**No comprehensive plan exists

Eco Initiatives:

Promoting energy efficiency through the following programs.

http://www.nrcan.gc.ca/ecoaction/

63. ecoENERGY for Renewable Power: encourage the generation of electricity from renewable energy sources such as wind, low-impact hydro, biomass, photovoltaic and geothermal energy (no new contributions after 2011)
64. ecoENERGY Retrofit Initiative- program ended
65. ecoENERGY Efficiency for Buildings: lower emissions and reduce
66. energy use and costs in building sector (non residential)

67. ecoENERGY for Industry: aids the adoption of an energy management standard, and accelerates energy-saving investments and the exchange of best-practices information within Canada's industrial sector.

68. ecoFreight Program: reduce the environmental and health effects of freight transportation through the use of technology.

69. ecoTechnology for Vehicles Program: conducts proactive in-depth safety, environmental and performance testing on a range of new and emerging advanced vehicle technologies for passenger cars and heavy-duty trucks. Results are helping to inform the development of environmental and safety regulations and also codes and standards, to ensure that new innovations can be introduced in Canada in a safe and timely manner.

70. ecoMobility: help municipalities reduce urban passenger transportation emissions by increasing transit ridership and the use of other sustainable transportation options.

71. ecoENERGY for Personal Vehicles Initiative: provide Canadian motorists with information to help reduce fuel consumption and greenhouse gas emissions that contribute to climate change.

72. ecoENERGY for Biofuels Initiative

73. ecoENERGY for Fleets : help trucking companies and other commercial fleet operations cut fuel costs and reduce harmful emissions.

74. ecoAGRICULTURE Biofuels Capital Initiative: Provides repayable contributions for the construction or expansion of transportation biofuel production facilities

75. ecoENERGY Technology Initiative: funding fully allocated:

76.

Water:

Canada's Ocean Strategy

http://www.dfo-mpo.gc.ca/oceans/publications/cos-soc/index-eng.asp

Objectives:

77. Understanding and Protecting the Marine Environment;

78. Supporting Sustainable Economic Opportunities; and

79. International Leadership.

Oceans Action Plan

http://www.dfo-mpo.gc.ca/oceans/publications/oap-pao/index-eng.asp

Commitment:

80. maximizing the use and development of oceans technology,

81. establishing a network of marine protected areas,

82. implementing integrated management plans, and

83. enhancing the enforcement of rules governing oceans and fisheries, including rules governing straddling stocks."

Plan of Action for Drinking Water in First Nations Communities

http://www.aadnc-aandc.gc.ca/eng/1100100034958/1100100034966

Goals:

Helping first nations in the provision of safe, clean, reliable drinking water.

Great Lakes Water Quality Agreement

http://www.ec.gc.ca/grandslacs-greatlakes/default.asp?lang=En&n=B274CBC1-1

Goals:

84. Providing a source of safe, high-quality drinking water;
85. Allowing for unrestricted swimming and other recreational use;
86. Allowing for unrestricted human consumption of the fish and wildlife;
87. Supporting healthy and productive habitats to sustain our native species;
88. Being free from pollutants that could harm people, wildlife or organisms;
89. Being free from nutrients that promote unsightly algae or toxic blooms;
90. Being free from aquatic invasive species;
91. Being free from the harmful impacts of contaminated groundwater;
92. Being free from other substances, materials or conditions that may negatively affect the Great Lakes.

Comprehensive Approach to Clean Water

http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=B1128A3D-1

Goals:

93. Cleaning up our lakes and rivers
94. Managing our vast water resources
95. Reducing pollution at the source
96. Taking action on toxic and other harmful substances
97. Monitoring water quality
98. Investing in infrastructure
99. Investing in water research
100. Making international contributions: through a $2.5-million investment in the United Nations Environment Programme's Global Environment Monitoring System, GEMS/Water. Through that investment, help Canadians to better understand inland water quality issues.

National Action Plan to Encourage Municipal Water Use Efficiency

http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=39491AB1-1

Goal:

The goal of this action plan is to achieve more efficient use of water in Canadian municipalities in order to save money and energy, delay or reduce expansion of existing water and wastewater systems, and conserve water.

Infrastructure Canada Program (FROM 2000 UNTIL 2011)

http://www.infrastructure.gc.ca/prog/other-autres-eng.html

Goals:

The overall planned results are that urban and rural municipal infrastructure in Canada is enhanced and Canadians' quality of life is improved through investments that protect the environment and support long-term community and economic growth.

Federal Water 1987 Policy

http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=D11549FA-1

Note: Despite the date of publication, many of the issues and strategies outlined in the 1987 Policy remain valid today. Sever; changes have been made on EC's website by the goals of the policy remain the same.

Goals:

101. To protect and enhance the quality of the water resource: This goal means anticipating and preventing the contamination of all Canadian waters by harmful substances, and working to encourage the restoration of those waters that are contaminated. It is now realized, however, that more stringent regulations and standards alone cannot protect our water resources without economic incentives (and penalties) to prevent their impairment. This policy emphasizes the promotion of the "polluter pays" principle, which will re-direct the inevitable costs of pollution reduction to those responsible. As a result, costs are distributed more fairly to the benefit of all Canadians and the environment as a whole.

102. To promote the wise and efficient management and use of water: This goal means establishing new ground rules and procedures that respect the value of water to all sectors of society and to the environment. The key innovation is to recognize the value of the resource – both by promoting the realistic pricing of water used, and by respecting the value of recreational water uses and other similar uses where direct charges are not applicable. As a result, governments will be able to reduce their water investments and improve the operating efficiency of water systems through better technology and practices. The private sector and individuals will benefit in direct savings to particular water users, growth of environmental industries, personal health and, ultimately, the peace of mind that comes from knowing that Canada's water will be safe for both present and future generations.

Canada's National Programme of Action for the Protection of the Marine Environment from Land-based Activities (NPA)

http://www.npa-pan.ca/en/publications/npa/toc.cfm

Goals:

103. protect human health;

104. reduce the degradation of the marine environment;

105. remediate damaged areas;

106. promote the conservation and sustainable use of marine resources; and

107. maintain the productive capacity and biodiversity of the marine environment.

Aboriginal Aquatic Resource and Oceans Management Program, and Aboriginal Inland Habitat Program

http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/aarom-pagrao/index-eng.htm

Goals:

The goals of the Aboriginal Aquatic Resource and Oceans Management (AAROM) Program and the Aboriginal Inland Habitat Program (AIHP) are to help Aboriginal groups to participate effectively in multi-stakeholder and other advisory and decision- making processes used for aquatic resources and oceans management

Air:

Clean Air Agenda

Anticipated outcomes:

108. The health, economic and environmental benefits for Canadians have been realized;

109. The risks to the health of Canadians and the environment resulting from exposure to air pollution have been reduced; and,

110. The risks to communities, infrastructure and to the health and safety of Canadians resulting from climate change have been reduced.

Canada-U.S. Air Quality Agreement

http://www.ec.gc.ca/Air/default.asp?lang=En&n=83930AC3-1

Purpose:

The purpose of the Parties is to establish, by this Agreement, a practical and effective instrument to address shared concerns regarding transboundary air pollution.

The Canada-Wide Acid Rain Strategy for Post-2000

Goals: A primary long-term goal of the Strategy is to meet the environmental threshold of critical loads for acid deposition across Canada to seek further *SOz* emission reductions in the U.S.;

111. • to establish new SOz emission reduction targets in eastern Canada (Ontario, Quebec, New Brunswick and Nova Scotia);

112. • to ensure adequate acid rain science and monitoring;

113. • to prevent pollution;

114. • to keep clean areas clean; and

115. • to report annually on emissions and on progress.

Regulatory Framework for All Air Emissions (Clean Air Regulatory Agenda)

http://www.ec.gc.ca/doc/media/m_124/report_eng.pdf

Goal:

The goal of these actions is to improve significantly and measurably the health of Canadians and the environment by reducing emissions of greenhouse gases and air pollutants.

Chemicals:

Chemicals Management Plan

http://www.ec.gc.ca/toxiques-toxics/default.asp?lang=En&n=49FA6607-1

Goals:

116. The protection of Canadians' health and safety, and the environment;

117. Further improving product safety in Canada;

118. Improve the degree of protection against hazardous chemicals

119. Ensure proper management of chemical substances

Agriculture:

Agriculture Policy Framework

http://publications.gc.ca/site/eng/268229/publication.html

Goals:

The APF aims to position Canada as the world leader in food safety, innovation and environmentally responsible agricultural production.

Biodiversity/Nature:

Invasive Alien Species Strategy

http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=1A81B051-1

Goals:

To protect Canada's aquatic and terrestrial ecosystems, and their native biological diversity and domestic plants and animals, from the risks of invasive alien species.

Habitat Conservation Program Strategy

http://www.ec.gc.ca/habitat/default.asp?lang=en&n=C951239D-1

Vision:

Conserve, protect and rehabilitate habitats of significance to migratory birds and species-at-risk in Canada.

Goals:

120. Protected Areas: Identify, designate, and manage protected areas within the terrestrial, fresh water, and marine ecosystems of Canada.

121. Sustainable Land-use: Demonstrate and enhance the stewardship of habitat for migratory birds and species-at-risk.

122. Advance and communicate the science of habitat preservation: Develop and implement strategies to promote and increase awareness about habitat conservation.

Canadian Biodiversity Strategy

http://www.biodivcanada.ca/560ED58E-0A7A-43D8-8754-C7DD12761EFA/CBS_e.pdf

Goals:

123. To conserve biodiversity and sustainably use biological resources.

124. To improve our understanding of ecosystems and increase our resource management capability

125. To promote an understanding of the need to conserve biodiversity and sustainably use biological resources.

126. To maintain or develop incentives and legislation that support the conservation of biodiversity and sustainable use of biological resources.

127. To work with other countries to conserve biodiversity, use biological resources sustainable and share equitably the benefits that arise from the utilization of genetic resources

The Habitat Stewardship Program/Aboriginal Fund for Species at Risk

http://www.sararegistry.gc.ca/approach/strategy/default_e.cfm

Goals:

The goal of the Habitat Stewardship Program is to contribute to the recovery and protection of species listed as endangered, threatened or of special concern.

A.1.3 Environmental Legislation

The following are goals found in federal legislation:

Agricultural and Rural Development Act

Goals and Objectives:

An Act to provide for the rehabilitation and development of rural areas in Canada

Alternative Fuels Act

Goals and Objectives:

Preamble:

WHEREAS Canada has a commitment to environmental reform and thus to better control over the emission of greenhouse gases, notably carbon dioxide, and of other air pollutants;

WHEREAS damage to the environment is caused by the emission of air pollutants by internal combustion engines using conventional fuels;

WHEREAS the federal government is a major user of such engines;

AND WHEREAS government can lead the conversion to less harmful fuels by progressively replacing its motor vehicles with others using alternative fuels, thereby promoting the replacement of petroleum-based fuels for transportation;

Arctic Waters Pollution Prevention Act

Goals and Objectives: An Act to prevent pollution of areas of the arctic waters adjacent to the mainland and islands of the Canadian arctic

Preamble:

WHEREAS Parliament recognizes that recent developments in relation to the exploitation of the natural resources of arctic areas, including the natural resources of the Canadian arctic, and the transportation of those resources to the markets of the world are of potentially great significance to international trade and commerce and to the economy of Canada in particular;

AND WHEREAS Parliament at the same time recognizes and is determined to fulfill its obligation to see that the natural resources of the Canadian arctic are developed and exploited and the arctic waters adjacent to the mainland and islands of the Canadian arctic are navigated only in a manner that takes cognizance of Canada's responsibility for the welfare of the Inuit and other inhabitants of the Canadian arctic and the preservation of the peculiar ecological balance that now exists in the water, ice and land areas of the Canadian arctic;

Atomic Energy Control Act

Goals and objectives: The purpose of this Act is to provide for *(a)* the limitation, to a reasonable level and in a manner that is consistent with Canada's international obligations, of the risks to national security, the health and safety of persons and the environment that are associated with the development, production and use of nuclear energy and the production, possession and use of nuclear substances, prescribed equipment and prescribed information; and

(b) the implementation in Canada of measures to which Canada has agreed respecting international control of the development, production and use of nuclear energy, including the non-proliferation of nuclear weapons and nuclear explosive devices.

Auditor General Act

Goal and Objectives: The purpose of the Commissioner is to provide sustainable development monitoring and reporting on the progress of category I departments towards sustainable development, which is a continually evolving concept based on the integration of social, economic and environmental concerns, and which may be achieved by, among other things, (a) the integration of the environment and the economy;

(b) protecting the health of Canadians; (c) protecting ecosystems; (d) meeting international obligations; (e) promoting equity;

(f) an integrated approach to planning and making decisions that takes into account the environmental and natural resource costs of different economic options and the economic costs of different environmental and natural resource options;

(g) preventing pollution; and (h) respect for nature and the needs of future generations.

Canada Agricultural Products Act

Goal and Objectives: An Act to regulate the marketing of agricultural products in import, export and interprovincial trade and to provide for national standards and grades of agricultural products, for their inspection and grading, for the registration of establishments and for standards governing establishments

Canadian Environmental Assessment Act, 2012

· 4. (1) The purposes of this Act are

(a) to protect the components of the environment that are within the legislative authority of Parliament from significant adverse environmental effects caused by a designated project;

(b) to ensure that designated projects that require the exercise of a power or performance of a duty or function by a federal authority under any Act of Parliament other than this Act to be carried out, are considered in a careful and precautionary manner to avoid significant adverse environmental effects;

(c) to promote cooperation and coordinated action between federal and provincial governments with respect to environmental assessments;

(d) to promote communication and cooperation with aboriginal peoples with respect to environmental assessments;

(e) to ensure that opportunities are provided for meaningful public participation during an environmental assessment;

(f) to ensure that an environmental assessment is completed in a timely manner;

(g) to ensure that projects, as defined in section 66, that are to be carried out on federal lands, or those that are outside Canada and that are to be carried out or financially supported by a federal authority, are considered in a careful and precautionary manner to avoid significant adverse environmental effects;

(h) to encourage federal authorities to take actions that promote sustainable development in order to achieve or maintain a healthy environment and a healthy economy; and

(i) to encourage the study of the cumulative effects of physical activities in a region and the consideration of those study results in environmental assessments.

Mandate

(2) The Government of Canada, the Minister, the Agency, federal authorities and responsible authorities, in the administration of this Act, must exercise their powers in a manner that protects the environment and human health and applies the precautionary principle.

Canadian Environmental Protection Act

Goal and objectives:

Preamble

Whereas the Government of Canada seeks to achieve sustainable development that is based on an ecologically efficient use of natural, social and economic resources and acknowledges the need to integrate environmental, economic and social factors in the making of all decisions by government and private entities;

Whereas the Government of Canada is committed to implementing pollution prevention as a national goal and as the priority approach to environmental protection;

Whereas the Government of Canada acknowledges the need to virtually eliminate the most persistent and bioaccumulative toxic substances and the need to control and manage pollutants and wastes if their release into the environment cannot be prevented;

Whereas the Government of Canada recognizes the importance of an ecosystem approach;

Whereas the Government of Canada will continue to demonstrate national leadership in establishing environmental standards, ecosystem objectives and environmental quality guidelines and codes of practice;

Whereas the Government of Canada is committed to implementing the precautionary principle that, where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation;

Whereas the Government of Canada recognizes that all governments in Canada have authority that enables them to protect the environment and recognizes that all governments face environmental problems that can benefit from cooperative resolution;

Whereas the Government of Canada recognizes. the importance of endeavouring, in cooperation with provinces, territories and aboriginal peoples, to achieve the highest level of environmental quality for all Canadians and ultimately contribute to sustainable development;

Whereas the Government of Canada recognizes that the risk of toxic substances in the environment is a matter of national concern and that toxic substances, once introduced into the environment, cannot always be contained within geographic boundaries;

Whereas the Government of Canada recognizes the integral role of science, as well as the role of traditional aboriginal knowledge, in the process of making decisions relating to the protection of the environment and human health and that environmental or health risks and social, economic and technical matters are to be considered in that process;

Whereas the Government of Canada recognizes the responsibility of users and producers in relation to toxic substances and pollutants and wastes, and has adopted the "polluter pays" principle;

Whereas the Government of Canada is committed to ensuring that its operations and activities on federal and aboriginal lands are carried out in a manner that is consistent with the principles of pollution prevention and the protection of the environment and human health;

Whereas the Government of Canada will endeavour to remove threats to biological diversity through pollution prevention, the control and management of the risk of any adverse effects of the use and release of toxic substances, pollutants and wastes, and the virtual elimination of persistent and bioaccumulative toxic substances;

Whereas the Government of Canada recognizes the need to protect the environment, including its biological diversity, and human health, by ensuring the safe and effective use of biotechnology;

And whereas the Government of Canada must be able to fulfil its international obligations in respect of the environment;

Canada Marine Act

Goal and Objectives:

It is hereby declared that the objective of this Act is to *(a)* implement a National Marine Policy that provides Canada with the marine infrastructure that it needs and that offers effective support for the achievement of local, regional and national social and economic objectives and will promote and safeguard Canada's competitiveness and trade objectives;

(b) base the marine infrastructure and services on international practices and approaches that are consistent with those of Canada's major trading partners in order to foster harmonization of standards among jurisdictions; *(c)* ensure that marine transportation services are organized to satisfy the needs of users and are available at a reasonable cost to the users;

(d) provide for a high level of safety and environmental protection; *(e)* provide a high degree of autonomy for local or regional management of components of the system of services and facilities and be responsive to local needs and priorities; *if)* manage the marine infrastructure and services in a commercial manner that encourages, and takes into account, input from users and the community in which a port or harbour is located; *(g)* provide for the disposition, by transfer or otherwise, of certain ports and port facilities; and *(h)* coordinate with other marine activities and surface and air transportation systems.

Canada Petroleum Resources Act

Goal and Objectives:

An Act to regulate interests in petroleum in relation to frontier lands, to amend the Oil and Gas Production and Conservation Act and to repeal the Canada Oil and Gas Act

Canada Shipping Act - Part (XV)

Goal and Objectives:

The objectives of this Act are to

(a) protect the health and well-being of individuals, including the crews of ships, who participate in marine transportation and commerce;

(b) promote safety in the marine transportation system;

(c) protect the marine environment from damage due to navigation and shipping activities;

(d) develop a regulatory scheme that encourages viable, effective and economical marine transportation and commerce;

(e) promote an efficient marine transportation system;

(f) ensure that Canada can meet its international obligations under bilateral and multilateral agreements with respect to navigation and shipping;

139(g) encourage the hannonization of marine practices;

(h) provide an appropriate liability and compensation regime in relation to incidents involving ships; and

(i) establish an effective inspection and enforcement program.

Canada Water Act

Goal and Objectives: An Act to provide for the management of the water resources of Canada, including research and the planning and implementation of programs relating to the conservation, development and utilization of water resources

Preamble

WHEREAS the demands on the water resources of Canada are increasing rapidly and more knowledge is needed of the nature, extent and distribution of those resources, of the present and future demands thereon and of the means by which those demands may be met;

AND WHEREAS pollution of the water resources of Canada is a significant and rapidly increasing threat to the health, well-being and prosperity of the people of Canada and to the quality of the Canadian environment at large and as a result it has become a matter of urgent national concern

that measures be taken to provide for water quality management in those areas of Canada most critically affected;

AND WHEREAS Parliament desires that, in addition, comprehensive programs be undertaken by the Government of Canada and by the Government of Canada in cooperation with provincial governments, in accordance with the responsibilities of the federal government and each of the provincial governments in relation to water resources, for research and planning with respect to those resources and for their conservation, development and utilization to ensure their optimum use for the benefit of all Canadians;

Canada Wildlife Act

Goal and objectives: An Act respecting wildlife in Canada

Coastal Fisheries Protection Act

Goal and Objectives: An Act to protect the coastal fisheries

Parliament, recognizing

(a) that straddling stocks on the Grand Banks of Newfoundland are a major renewable world food source having provided a livelihood for centuries to fishers,

(b) that those stocks are threatened with extinction,

(c) that there is an urgent need for all fishing vessels to comply in both Canadian fisheries waters and the NAFO Regulatory Area with sound conservation and management measures for those stocks, notably those measures that are taken under the Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, done at Ottawa on October 24, 1978, Canada Treaty Series 1979 No. 11, and

(d) that some foreign fishing vessels continue to fish for those stocks in the NAFO Regulatory Area in a manner that undermines the effectiveness of sound conservation and management measures,

declares that the purpose of section 5.2 is to enable Canada to take urgent action necessary to prevent further destruction of those stocks and to permit their rebuilding, while continuing to seek effective international solutions to the situation referred to in paragraph

Department of the Environment Act

Goals and objectives: An Act respecting the Department of the Environment

Energy Efficiency Act

Goals and Objectives:

An Act respecting the energy efficiency of energy-using products and the use of alternative energy sources

Energy Supplies Emergency Act

Goals and Objectives: An Act to provide a means to conserve the supplies of energy within Canada during periods of national emergency caused by shortages or market disturbances affecting the national security and welfare and the economic stability of Canada

Environment Week Act

Goals and Objectives: An Act respecting Canadian Environment Week

Canadian Fisheries Act

Goals and Objectives: An Act respecting fisheries

Food and Drugs Act

Goals and Objectives: An Act respecting food, drugs, cosmetics and therapeutic devices

International Boundary Waters Treaty Act

Goals and Objectives:

An Act respecting the International Joint Commission established under the treaty of January 11, 1909 relating to boundary waters

International River Improvements Act

Goals and Objectives:

An Act respecting the construction, operation and maintenance of international river improvements

James Bay and Northern Quebec Native Claims Settlement Act

Goals and Objectives:

An Act to approve, give effect to and declare valid certain agreements between the Grand Council of the Crees (of Quebec), the Northern Quebec Inuit Association, the Government of Quebec, la Societe d'energie de la Baie James, la Societe de developpement de la Baie James, la Commission hydro-electrique de Quebec and the Government of Canada and certain other related agreements to which the Government of Canada is a party

Preamble:

WHEREAS the Government of Canada and the Government of Quebec have entered into an Agreement with the Crees and the Inuit inhabiting the Territory within the purview of the 1898 acts respecting the Northwestern, Northern and Northeastern Boundaries of the Province of Quebec and 1912 Quebec Boundaries extension acts, and with the Inuit of Port Burwell;

AND WHEREAS the Government of Canada and the Government of Quebec have assumed certain obligations under the Agreement in favour of the said Crees and Inuit;

AND WHEREAS the Agreement provides, *inter alia,* for the grant to or the setting aside for Crees and Inuit of certain lands in the Territory, the right of the Crees and Inuit to hunt, fish and trap in accordance with the regime established therein, the establishment in the Territory of regional and local governments to ensure the full and active participation of the Crees and Inuit in the administration of the Territory, measures to safeguard and protect their culture and to ensure their involvement in the promotion and development of their culture, the establishment of laws, regulations and procedures to manage and protect the environment in the Territory, remedial and other measures respecting hydro-electric development in the Territory, the creation and continuance of institutions and programs

to promote the economic and social development of the Crees and Inuit and to encourage their full participation in society, an income support program for Cree and Inuit hunters, fishermen and trappers and the payment to the Crees and Inuit of certain monetary compensation~

AND WHEREAS the Agreement further provides in consideration of the rights and benefits set forth therein for the surrender by the said Crees, the Inuit of Quebec and the Inuit of Port Burwell of all their native claims, rights, titles and interests, whatever they may be, in and to the land in the Territory and in Quebec~

AND WHEREAS Parliament and the Government of Canada recognize and affirm a special responsibility for the said Crees and Inuit;

AND WHEREAS it is expedient that Parliament approve, give effect to and declare valid the Agreement~

Mackenzie Valley Resource Management Act

Goals and Objectives: An Act to provide for an integrated system of land and water management in the Mackenzie Valley, to establish certain boards for that purpose and to make consequential amendments to other Acts Preamble

WHEREAS the Gwich'in Comprehensive Land Claim Agreement and the Sahtu Dene and Metis Comprehensive Land Claim Agreement require the establishment of land use planning boards and land and water boards for the settlement areas referred to in those Agreements and the establishment of an environmental impact review board for the Mackenzie Valley, and provide as well for the establishment of a land and water board for an area extending beyond those settlement areas;

WHEREAS the Agreements require that those boards be established as institutions of public government within an integrated and coordinated system of land and water management in the Mackenzie Valley~

AND WHEREAS the intent of the Agreements as acknowledged by the parties is to establish those boards for the purpose of regulating all land and water uses, including deposits of waste, in the settlement areas for which they are established or in the Mackenzie Valley, as the case may be~

The purpose of this Part is to establish a process comprising a preliminary screening, an environmental assessment and an environmental impact review in relation to proposals for developments, and (a) to establish the Review Board as the main instrument in the Mackenzie Valley for the environmental assessment and environmental impact review of developments;

(b) to ensure that the impact on the environment of proposed developments receives careful consideration before actions are taken in connection with them~ and

(c) to ensure that the concerns of aboriginal people and the general public are taken into account in that process.

Manganese-Based Fuel Additives Act

Goals and Objectives: An Act to regulate interprovincial trade in and the importation for commercial purposes of certain manganese-based substances

Migratory Birds Convention Act

Goals and Objectives: An Act to implement a Convention for the protection of migratory birds in Canada and the United States

The purpose of this Act is to implement the Convention by protecting and conserving migratory birds -as populations and individual birds -and their nests.

National Energy Board Act

Goals and Objectives: An Act to establish a National Energy Board

National Parks Act

Goals and Objective: An Act respecting the national parks of Canada

National Round Table on the Environment and the Economy Act

Goals and Objectives: An Act to establish the National Round Table on the Environment and the Economy

The purpose of the Round Table is to play the role of catalyst in identifying, explaining and promoting, in all sectors of Canadian society and in all regions of Canada, principles and practices of sustainable development by

(a) undertaking research and gathering information and analyses on critical issues of sustainable development;

(b) advising governments on ways of integrating environmental and economic

considerations into their decision-making processes and on global issues of sustainable . development;

(*c)* advising those sectors and regions on ways of incorporating principles and practices of sustainable development into their activities;

(d) promoting the understanding and increasing public awareness of the cultural, social, economic and policy changes required to attain sustainable development; and

(e) facilitating and assisting cooperative efforts in Canada to overcome barriers to the attainment of sustainable development.

National Wildlife Week Act

Goals and Objectives: An Act respecting a National Wildlife Week

Canada National Parks Act

Goals and Objectives:

An Act respecting the national parks of Canada

4. (l) The national parks of Canada are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to this Act and the regulations, and the parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations.

8. (2) Maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks.

Canada National Marine Conservation Areas Act

An Act respecting the national marine conservation areas of Canada Preamble Whereas the protection of natural, self-regulating marine ecosystems is important for the maintenance of biological diversity;

Whereas the Government of Canada is committed to adopting the precautionary principle in the conservation and management of the marine environment so that, where there are threats of environmental damage, lack of scientific certainty is not used as a reason for postponing preventive measures;

And whereas Parliament wishes to affirm the need to

establish a system of marine conservation areas that are representative of the Atlantic, Arctic and Pacific Oceans and the Great Lakes and are of sufficient extent and such configuration as to maintain healthy marine ecosystems,

ensure that Canada contributes to international efforts for the establishment of a worldwide network of representative marine protected areas,

consider implications for ecosystems in the planning and management of marine conservation areas so established,

provide opportunities for the people of Canada and of the world to appreciate and enjoy Canada's natural and cultural marine heritage,

recognize that the marine environment is fundamental to the social, cultural and economic well-being of people living in coastal communities,

provide opportunities, through the zoning of marine conservation areas, for the ecologically sustainable use of marine resources for the lasting benefit of coastal communities,

promote an understanding of the marine environment and provide opportunities for research and monitoring,

consider traditional ecological knowledge in the planning and management of marine conservation areas, and

involve federal and provincial ministers and agencies, affected coastal communities, aboriginal organizations, aboriginal governments, bodies established under land claims agreements and other appropriate persons and bodies in the effort to establish and maintain the representative system of marine conservation areas;

4. (1) Marine conservation areas are established in accordance with this Act for the purpose of protecting and conserving representative marine areas for the benefit, education and enjoyment of the people of Canada and the world.

Northern Pipeline Act

Goals and Objectives:

An Act to establish the Northern Pipeline Agency, to facilitate the planning and construction of a pipeline for the transmission of natural gas from Alaska and Northern Canada and to give effect to the Agreement between Canada and the United States of America on principles applicable to a Northern natural gas pipeline

The objects of this Act are (a) to carry out and give effect to the Agreement;

(b) to carry out, through the Agency, federal responsibilities in relation to the pipeline;

(c) to facilitate the efficient and expeditious planning and construction of the pipeline taking into account local and regional interests, the interests of the residents, particularly the native people, and recognizing the responsibilities of the Government of Canada and other governments, as appropriate, to ensure that any native claim related to the land on which the pipeline is to be situated is dealt with in a just and equitable manner;

(d) to facilitate, in relation to the pipeline, consultation and coordination with the governments of the provinces, Yukon and the Northwest Territories;

(e) to maximize the social and economic benefits from the construction and operation of the pipeline including the maximizing of the opportunities for employment of Canadians while at the same time minimizing any adverse effect on the social and environmental conditions of the areas most directly affected by the pipeline; and

(f) to advance national economic and energy interests and to maximize related industrial benefits by ensuring the highest possible degree of Canadian participation in all aspects of the planning and construction of, and procurement for, the pipeline while ensuring that the procurement of goods and services for the pipeline will be on generally competitive terms.

Oceans Act

Goals and Objectives: An Act respecting the oceans of Canada

Preamble

WHEREAS Canada recognizes that the three oceans, the Arctic, the Pacific and the Atlantic, are the common heritage of all Canadians;

WHEREAS Parliament wishes to reaffirm Canada's role as a world leader in oceans and marine resource management;

WHEREAS Parliament wishes to affirm in Canadian domestic law Canada's sovereign rights, jurisdiction and responsibilities in the exclusive economic zone of Canada;

WHEREAS Canada promotes the understanding of oceans, ocean processes, marine resources and marine ecosystems to foster the sustainable development of the oceans and their resources;

WHEREAS Canada holds that conservation, based on an ecosystem approach, is of fundamental importance to maintaining biological diversity and productivity in the marine environment;

WHEREAS Canada promotes the wide application of the precautionary approach to the conservation, management and exploitation of marine resources in order to protect these resources and preserve the marine environment;

WHEREAS Canada recognizes that the oceans and their resources offer significant opportunities for economic diversification and the generation of wealth for the benefit of all Canadians, and in particular for coastal communities;

WHEREAS Canada promotes the integrated management of oceans and marine resources;

AND WHEREAS the Minister of Fisheries and Oceans, in collaboration with other ministers, boards and agencies of the Government of Canada, with provincial and territorial governments and with affected aboriginal organizations, coastal communities and other persons and bodies, including those bodies established under land claims agreements, is encouraging the development and implementation of a national strategy for the management of estuarine, coastal and marine ecosystems;

Pest Control Products Act

Goals and Objectives:

An Act to protect human health and safety and the environment by regulating products used for the control of pests Preamble

WHEREAS the availability and use of pest control products pose potential risks, both directly and indirectly, to the health, safety and well-being of people in Canada and to the environment;

WHEREAS pest management plays a significant role in diverse areas of the economy and other aspects of the quality of life throughout Canada;

WHEREAS pest control products of acceptable risk and value can contribute significantly to the attainment of the goals of sustainable pest management;

WHEREAS the goals of sustainable pest management are to meet society's needs for human health protection, food and fibre production and resource utilization and to conserve or enhance natural resources and the quality of the environment for future generations, in an economically viable manner;

WHEREAS Canada and the provinces and territories have traditionally administered complementary regulatory systems designed to protect people and the environment, including its biological diversity, from unacceptable risks posed by pest control products, and it is important that such an approach be continued in order to achieve mutually desired results efficiently, without regulatory conflict or duplication;

WHEREAS it is in the national interest that the primary objective of the federal regulatory system be to prevent unacceptable risks to people and the environment from the use of pest control products,

the attainment of the objectives of the federal regulatory system continue to be pursued through a scientifically-based national registration system that addresses risks to human health and the environment both before and after registration and applies to the regulation of pest control products throughout Canada,

pest control products of acceptable risk be registered for use only if it is shown that their use would be efficacious and if conditions of registration can be established to prevent adverse health impact or pollution of the environment,

in assessing risks to humans, consideration be given to aggregate exposure to pest control products, cumulative effects of pest control products and the different sensitivities to pest control products of major identifiable subgroups, including pregnant women, infants, children, women and seniors,

pest control products be regulated in a manner that supports sustainable development, being development that meets the needs of the present without compromising the ability of future generations to meet their own needs,

the federal regulatory system be designed to minimize health and environmental risks posed by pest control products and to encourage the development and implementation of innovative, sustainable pest management strategies, for example by facilitating access to pest control products that pose lower risks, and encouraging the development and use of alternative, non-toxic, ecological pest control approaches, strategies and products,

applicable policies of the Government of Canada that are consistent with the objectives of this Act be duly reflected in decisions respecting the regulation of pest control products,

there be cooperation among federal departments in the development of policies to pursue the attainment of the objectives of this Act, and that those policies take into account advice from diverse sources throughout the country,

the provinces and territories and those whose interests and concerns are affected by the federal regulatory system be accorded a reasonable opportunity to participate in the regulatory system in ways that are consistent with the attainment of its objectives, and

the federal regulatory system be administered efficiently and effectively in accordance with the foregoing principles and objectives and in a manner that recognizes the various interests and concerns affected and, where consistent with the primary objective of the system, minimizes the negative impact on economic viability and competitiveness;

AND WHEREAS Canada must be able to fulfil its international obligations in relation to pest management;

Resources and Technical Surveys Act

An Act respecting resources and technical surveys

Species at Risk Act (2003)

Goals and Objectives: The purposes of this Act are to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened.

Wild Animal and Plant Protection and Regulation of International and Inter-provincial Trade Act

Goals and Objectives:

An Act respecting the protection of certain species of wild animals and plants and the regulation of international and interprovincial trade in those species The purpose of this Act is to protect certain species of animals and plants, particularly by implementing the Convention and regulating international and interprovincial trade in animals and plants.

2. If there is no published statement of integrated ESP goals for the federal government (as per question 1), is there a statement of goals in preparation? (If yes, what is the planned date for publication)?

See Q1.

3. The following goals (table 1) are based on the David Suzuki *Sustainability within a Generation* (SWAG) report. Which of the following SWAG goals are covered in the federal government published statement from question 1?

Table 1. Qualitative assessment of degree to which federal government published goal statements covers SWAG goals.

• Goal	Assessment (Fully, Partial, or not included.)
Improve Energy, Water and Resource Efficiency	**PARTIAL:** While there are goal statements regarding specific resources and/ or regarding " sustainable use" there are not any goal(s) that apply to EFFICIENT use of ALL resources, nor is there any mention of reducing "energy and material use by at least 75%". Comprehensive resource efficiency goals only apply to Quebec. **Resources: (Promotes Sustainability NOT Efficiency)** *FSDS &Progress Reports* • Target 7.2: *Sustainable Aquaculture* To promote the conservation and optimum use of marine resources and the aquatic environment through improved aquaculture management by 2014. • Target 7.3: *Sustainable Forest Management* Improve the management of Canada's forest ecosystems through the development and dissemination of knowledge.

Canada Economic Development for Quebec Regions (RPP+website)

- Finance projects that would, among other things, help to optimize resource use, valuing residual resources, or contribute to eco-efficiency.

Canadian Environmental Protection Act

- Whereas the Government of Canada seeks to achieve sustainable development that is based on an ecologically efficient use of natural, social and economic resources …

Canada's National Programme of Action for the Protection of the Marine Environment from Land-based Activities (NPA)

- promote the conservation and sustainable use of marine resources

Canadian Biodiversity Strategy

- conserve… promote understanding of… and incentivize/ legislate the sustainable use of biological resources

Canada National Marine Conservation Areas Act

- provide opportunities for the ecologically sustainable use of marine resources for the lasting benefit of coastal communities,

Natural Resources Canada

- Fostering the integrated management and sustainable development of Canada's natural resources; and
- Encouraging the responsible development and use of Canada's natural resources, and the competitiveness of Canada's natural resource products.

Energy:

FSDS & Progress Reports

No specific Goals about energy efficiency in FSDS except in Greening Government Operations:

- Ensure all government buildings meet the Canada Green Building Council's Leadership in Energy and Environmental Design (LEED - Canada) Gold level.

Policy on Green Procurement

- Improving energy and water efficiency

ecoENERGY 1nitiatives

- ... to improve energy efficiency in housing, buildings, industrial processes and vehicles

Water:

FSDS & Progress Reports

- Goal 4: Collaborate with stakeholders on sustainable water management through research, promotion, and distribution of information that will support water efficiency and integrated management
- Target 4.1: *Water Resource Management and Use* Promote the conservation and wise use of water to affect a 30 per cent reduction or increased efficiency in water use in various sectors by 2025 (based on 2009 water use levels).

National Action Plan to Encourage Municipal Water Use Efficiency

- ... more efficient use of water in Canadian municipalities

	Federal Water 1987 *Policy 1987* • To promote the wise and efficient management and use of water
Shift to Clean Energy	**FULLY** *FSDS &Progress Reports* ***Goal 1, Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change*** • Develop and implement a climate change and clean energy strategy that is harmonized with that of the United States, our largest trading partner. • Table new regulations requiring 5% renewable content in gasoline and diesel fuel. • Develop a performance standard for high-emitting coal-fired thermal electricity generation to transition to low- or non-emitting generation such as renewable energy, high-efficiency natural gas, or thermal power with CCS. (EC) • Meet commitment of 90% of new electricity provided by non-emitting sources by 2020. Work with the United States to continue to reduce emissions through the Canada- United States Clean Energy Dialogue (CED) launched in 2009. The CED will promote the development of a Canada-United States clean energy sector. *Western Economic Diversification Canada (RPP+website)* • diversify the western Canadian economy by making strategic investments in the commercialization and adoption of clean energy and clean water technologies through the department's Innovation Program Activity. *Atlantic Canada Opportunities Agency* • facilitate the development of the Atlantic renewable energy sector by fostering collaboration, common understanding and communication among governments and the private sector in order to maximize and expedite the development of clean and renewable energy resources in the region. *Alternative Fuels Act (1995)* • WHEREAS government can lead the conversion to less harmful fuels by progressively replacing its motor vehicles with others using alternative fuels, thereby promoting the replacement of petroleum- based fuels for transportation*;* *Energy Efficiency Act* • An Act respecting ... the use of alternative energy sources
Reduce Waste and Pollution	**PARTIAL-** Goals for reduction of pollution explicitly stated. Goals for waste reduction only apply to federal departments and not to all Canadians. *FSDS &Progress Reports* • Address the environmentally sound disposal of all federally generated e-waste. • Eliminate dumping of raw sewage into waterways • Target 2.3 & 3.12: *Chemicals Management:* Reduce risks to Canadians and impacts on the environment posed by harmful substances as a result of decreased environmental concentrations and human exposure to such substances.

	• Target 3.3 Freshwater Quality: Complete federal actions to reduce pollutants and restore beneficial uses in hot spots in the St. Lawrence River by 2016. • Target 3.8: *Marine Water Quality* Reduce the risks to Canadians and impacts on the marine environment posed by pollution from land-based activities. • Target 3.9: *Marine Water Quality* Prevent marine pollution from uncontrolled dumping at sea. Ensure that permitted disposal at sea is sustainable such that 85% of disposal site monitoring events do not identify the need for site management action (such as site closure). *Department of the Environment (RPP+ website)* • Threats to Canadians and their environment from pollution are minimized. This strategic outcome reflects the need for Environment Canada to manage substances and waste, and reduce pollution that directly or indirectly harms human health or the environment. *Policy on Green Procurement* • Reducing ozone depleting substances; • Reducing waste and supporting reuse and recycling; • Reducing hazardous waste; and • Reducing toxic and hazardous chemicals and substances *Chemicals Management Plan* • The protection of Canadians' health and safety, and the environment; • Further improving product safety in Canada; • Improve the degree of protection against hazardous chemicals • Ensure proper management of chemical substances *Auditor General Act* • ...preventing pollution *Canada Water Act* (1985) • WHEREAS pollution of the water resources of Canada is a significant and rapidly increasing threat to the health, well-being and prosperity of the people of Canada and to the quality of the Canadian environment at large and as a result it has become a matter of urgent national concern that measures be taken to provide for water quality management in those areas of Canada most critically affected; *Canada Environmental Protection Act* • WHEREAS the Government of Canada acknowledges the need to virtually eliminate the most persistent and bioaccumulative toxic substances and the need to control and manage pollutants and wastes if their release into the environment cannot be prevented *Arctic Waters Pollution Prevention Act* • An Act to prevent pollution of areas of the arctic waters adjacent to the mainland and islands of the Canadian arctic
Protect and Conserve Water	**FULLY**

	FSDS & Progress Reports ***Goal 3, Water Quality: Protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems.*** • Restore lakes and marine ecosystems that have been damaged by pollution • Manage human activities on the ocean and expand marine protected areas network. • Preserve and Protect water resources through commitments made under *CEPA* • Eliminate dumping of raw sewage into waterways • Ensure effective stewardship of water resources via the Great Lakes Water Quality Agreement. Targets 3.1-3.7: Freshwater Quality: • Complete federal actions to restore beneficial uses in Canadian Areas of Concern in the Great Lakes by 2020. • Contribute to the restoration and protection of the Great Lakes by developing and gaining binational acceptance of objectives and strategies for the management of nutrients in the Great Lakes by 2015. • Complete federal actions to reduce pollutants and restore beneficial uses in hot spots in the St. Lawrence River by 2016. • Reduce nutrient inputs into Lake Simcoe by 2012. (EC) • By 2012, through strategic collaborations and by increasing scientific knowledge, contribute to the establishment of targets to reduce nutrients in Lake Winnipeg and its basin to support the sustainability of the lake. (EC) • Reduce risks associated with wastewater effluent by 2020 in collaboration with provinces and territories. (Note: risk reduction for wastewater effluents relates both to freshwater and marine). Target 3.8& 3.9- Marine Water Quality: • Reduce the risks to Canadians and impacts on the marine environment posed by pollution from land-based activities. • Prevent marine pollution from uncontrolled dumping at sea. Ensure that permitted disposal at sea is sustainable such that 85% of disposal site monitoring events do not identify the need for site management action (such as site closure). Target 3.10-3.11 Drinking water Quality. • Increase the percentage of First Nation communities with acceptable water and wastewater facility risk ratings by 2013.7 • Help protect the health of Canadians by developing health-based water guidelines. ***Goal 4, Water Availability: Enhance information to ensure that Canadians can manage and use water resources in a manner consistent with the sustainability of the resource.*** • Limit levels of phosphates in detergents and reduce agricultural run-off • Introduce legislation to ban all bulk water transfers or exports from Canadian freshwater basins.

	• Improve water quality and wastewater management *Plan of Action for Drinking Water in First Nations Communities* • Helping first nations in the provision of safe, clean, reliable drinking water. *Canadian Environmental Assessment Act* • WHEREAS the Government of Canada seeks to achieve sustainable development by conserving and enhancing environmental quality and by encouraging and promoting economic development that conserves and enhances environmental quality; environment" means the components of the Earth, and includes(a) land, water and air, including all layers of the atmosphere, *Oceans Act (1997)* • Excerpts from the preamble: WHEREAS Parliament wishes to reaffirm Canada's role as a world leader in oceans and marine resource management; WHEREAS Canada promotes the understanding of oceans, ocean processes, marine resources and marine ecosystems to foster the sustainable development of the oceans and their resources *Canada Water Act* • An Act to provide for the management of the water resources of Canada, including research and the planning and implementation of programs relating to the conservation, development and utilization of water resources • s.15(1) The objects of each water quality management agency shall be to plan, initiate and carry out programs to restore, preserve and enhance the water quality level in the water quality management area for which the agency is incorporated or named *Oceans Act* • WHEREAS Canada holds that conservation, based on an ecosystem approach, is of fundamental importance to maintaining biological diversity and productivity in the marine environment;
Clean Air	**FULLY** *FSDS &Progress Reports* ***Goal 1, Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change*** • Publish draft regulations for greenhouse gas emissions from vehicles and continue to work with the United States to produce regulations for heavy trucks. • Target 1.1: Climate Change Mitigation Relative to 2005 emission levels, reduce Canada's total greenhouse gas (GHG) emissions 17% by 2020. ***Goal 2, Air Pollution: Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems.*** • Move forward with the Clean Air agenda – establish clear national standards • Target 2.1*: Air Pollutants*: Reduce air pollutants in order to maintain or improve air quality across the country and achieve

	the emission targets which are currently under development in consultations with provinces and stakeholders. • Target 2.2: *Indoor Air Quality:* Help protect the health of Canadians by assessing indoor air pollutants and developing guidelines and other tools to better manage indoor air quality *Regulatory Framework for All Air Emissions* • improve significantly and measurably the health of Canadians and the environment by reducing emissions of greenhouse gases and air pollutants. *Alternative Fuels Act* (1995) • WHEREAS Canada has a commitment to environmental reform and thus to better control over the emission of greenhouse gases, notably carbon dioxide, and of other air pollutants; *Canadian Environmental Assessment Act* • WHEREAS the Government of Canada seeks to achieve sustainable development by conserving and enhancing environmental quality and by encouraging and promoting economic development that conserves and enhances environmental quality; “environment" means the components of the Earth, and includes(a) land, water and air, including all layers of the atmosphere
Promote Healthy Food and Sustainable Agriculture	**FULLY** *FSDS& Progress Reports* • Limit levels of phosphates in detergents and reduce agricultural run-off • Target 3.6 Freshwater Quality: Achieve a value between 81 – 100 on each of the Water Quality and Soil Quality Agri-Environmental Performance Indices by March 31, 2030. *Department of Agriculture and Agri-Food: 2012-2013(RPP+website)* • an economically, socially and environmentally sustainable agriculture, agri-food and agri-based products sector that ensures proper management of available natural resources and adaptability to changing environmental conditions • sound management of available natural resources and adaptation to changing environmental conditions • pursue sustainable development efforts that enable the sector to become more profitable while recognizing that strong economic performance by the sector depends on strong environmental performance. • increased sustainable development of rural communities to strengthen rural competitiveness, innovation and the development of new economic opportunities from existing natural and cultural amenities; and • increased use by Canadians of the co-operative form of enterprise to develop solutions to their economic and social challenges • addressing key environmental challenges in Canada including agriculture's impact on water quality and water use, adaptation to the impact of climate change, mitigation of agriculture's greenhouse gas emissions and the exploration of new economic opportunities that contribute to a cleaner environment and

	healthier living conditions for the Canadian public. *Agriculture Policy Framework* • The APF aims to position Canada as the world leader in food safety, innovation and environmentally responsible agricultural production. *Canada Agricultural Products Act* • An Act to regulate the marketing of agricultural products in import, export and interprovincial trade and to provide for national standards and grades of agricultural products, for their inspection and grading, for the registration of establishments and for standards governing establishments
Conserve, Protect and Restore Nature	**FULLY** *FSDS & Progress Reports* ***Goal 5, Wildlife Conservation: Maintain or restore populations of wildlife to healthy levels.*** • Protect Species at Risk, Migratory Birds and their habitat • Promote stewardship activities that protect and restore ecosystems. • Target 5.1: *Terrestrial and Aquatic Wildlife Conservation (Species at Risk)* Population trend (when available) at the time of reassessment is consistent with the recovery strategy for 100% of listed species at risk (for which recovery has been deemed feasible) by 2020. • Target 5.2: *Terrestrial and Aquatic Wildlife Conservation (Migratory Birds)* Target for proportion of migratory bird species whose population varies within acceptable bounds of the population goals will be established in 2011 once the Bird Status Database is complete. ***Goal 6, Ecosystem/Habitat Conservation and Protection: Maintain productive and resilient ecosystems with the capacity to recover and adapt; and protect areas in ways that leave them unimpaired for present and future generations.*** • Set aside land for national parks, national wildlife areas, national marine conservation areas, and other conservation purposes; • Negotiate an agreement with Greenland to protect polar bears. • Invest in monitoring for Marine Protected Areas • Strengthen the enforcement of environmental laws that protect ecosystems and important habitat • Target 6.1: *Terrestrial Ecosystems and Habitat* Non-Park Protected Habitat Habitat target to support conservation of priority migratory birds and species at risk will be set by 2015. • Target 6.2: *Terrestrial Ecosystems and Habitat* Park Protected Habitat Maintain or improve the overall ecological integrity in all national parks from March 2008 to March 2013. • Target 6.3: *Marine Ecosystems* Improve the conservation of ocean areas and marine ecosystems by 2012. (DFO) • Target 6.4: *Managing Threats to Ecosystems* Threats of new

	alien invasive species entering Canada are understood and reduced by 2015. • Target 6.5: *Managing Threats to Ecosystems* Reduce the frequency and consequences of environmental emergencies that affect Canada ***Goal 7, Biological Resources: Sustainable production and consumption of biological resources are within ecosystem limits***. • Fund first nations to participate in the Forest Sector • Undertake important research to improve the understanding of ecosystems needed for future policy and regulatory decisions. • Determine the resilience of the National Protected Areas network in the face of climate change and other stressors. • Assess risks to Canada's forest biodiversity. • Prevent the introduction and spread of invasive alien species • Target 7.1: *Sustainable Fisheries* Improve the management and conservation of major stocks. • Target 7.2: *Sustainable Aquaculture* To promote the conservation and optimum use of marine resources and the aquatic environment through improved aquaculture management by 2014. • Target 7.3: *Sustainable Forest Management* Improve the management of Canada's forest ecosystems through the development and dissemination of knowledge. *Department of Environment (RPP+website)* • Canada's natural environment is conserved and restored for present and future generations. This strategic outcome is aimed at ensuring that land, water and biodiversity are sustained so that Canadians can enjoy and benefit from their natural legacy over the long term. *Canada Boarder Services Agency (RPP+ website)* • manage the lawful flow of people and goods while contributing to environmental quality, a prosperous economy and a secure society. *Parks Canada Agency (RPP+ website)* • Canadians have a strong sense of connection, through meaningful experiences, to their national parks, national historic sites and national marine conservation areas and these protected places are enjoyed in ways that leave them unimpaired for present and future generations. *Canada's National Programme of Action for the Protection of the Marine Environment from Land-based Activities (NPA)* • protect human health; • reduce the degradation of the marine environment; • remediate damaged areas; • promote the conservation and sustainable use of marine resources; and • maintain the productive capacity and biodiversity of the marine environment.

	• *Habitat Stewardship Program* contribute to the recovery and protection of species listed as endangered, threatened or of special concern. *Canada Wildlife Act* • An Act respecting wildlife in Canada *Coastal Fisheries Protection Act* • An Act to protect the coastal fisheries *Species at Risk Act (2003)* • The purposes of this Act are to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened. *Canada Shipping Act - Part (XV)* • Protect the marine environment from damage due to navigation and shipping activities; *Canada National Parks Act* • Maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks. *Canadian Environmental Assessment Act* WHEREAS the Government of Canada seeks to achieve sustainable development by conserving and enhancing environmental quality and by encouraging and promoting economic development that conserves and enhances environmental quality; “environment" means the components of the Earth, and includes(a) land, water and air, including all layers of the atmosphere
Build Sustainable Cities	**PARTIAL-** Addresses Infrastructure and Transportation but not other aspects of Sustainable Cities. *FSDS & Progress Reports* • Upgrade municipal water, and wastewater infrastructure. *Department of Finance (RPP+ website)* • Economic and fiscal policy frameworks and decisions that promote equity and enhance the economic, social and environmental well-being of current and future generations. • An economic, social and fiscal framework that supports financial stability, sustainable growth, productivity, competitiveness and economic prosperity • Supporting sound social policy and the renewal of major transfer program • Supporting sustainable urban development and infrastructure renewal *Aboriginal Affairs and Northern Development Canada(AANDC) (RPP+website)* Support Aboriginal people (First Nations, Inuit and Métis) and Northerners in their efforts to: • improve social well-being and economic prosperity;

	• develop healthier, more sustainable communities; and • participate more fully in Canada's political, social and economic development - to the benefit of all Canadians. *Department of Transportation (RPP+website)* • A transportation system in Canada that is recognized worldwide as safe and secure, efficient and environmentally responsible. • efficient movement of people and goods to support economic prosperity and a sustainable quality of life – based on competitive markets and targeted use of regulation and government funding; and • respect for the environmental legacy of future generations of Canadians – guided by environmental assessment and planning processes in transportation decisions and selective use of regulation and government funding. • An efficient transportation system • A clean transportation system with the following elements • Transportation Innovation; • Clean Air from Transportation; • Clean Water from Transportation; and, • Environmental Stewardship of Transportation. *Northern Strategy* • self-reliant individuals live in healthy, vital communities, manage their own affairs and shape their own destinies; • the Northern tradition of respect for the land and the environment is paramount and the principles of responsible and sustainable development anchor all decision-making and action; *Comprehensive Approach to Clean Water* *1.* Invest in infrastructure *Infrastructure Canada Program* 2. The overall planned results are that urban and rural municipal infrastructure in Canada is enhanced and Canadians' quality of life is improved through investments that protect the environment and support long-term community
Promoting Global Sustainability	**PARTIAL-** No comprehensive Goals for promoting global sustainability *Department of Finance (RPP+ website)* • Supporting international development and global financial stability; strengthening governance and accountability, helping to ensure sustainable global growth and supporting the economic advancement of developing countries *Department of Foreign Affairs and International Trade (RPP+ website)* • Promote democracy and respect for human rights, and contribute to effective global governance and international security. Priority Commitments: • Promote global institutions and partnerships that focus on results, accountability and effective burden sharing; • to assist Canadian negotiators integrate environmental considerations into the negotiating process by providing information on the environmental impacts of the proposed

	trade agreement; and • to address public concerns by documenting how environmental factors are being considered in the course of trade negotiations. *Comprehensive Approach to Clean Water* • Making international contributions: through a $2.5-million investment in the United Nations Environment Programme's Global Environment Monitoring System, GEMS/Water. Through that investment, help Canadians to better understand inland water quality issues. *Canadian Environmental Assessment Act* • WHEREAS the Government of Canada is committed to exercising leadership within Canada and internationally in anticipating and preventing the degradation of environmental quality and at the same time ensuring that economic development is compatible with the high value Canadians place on environmental quality; *Oceans Act* WHEREAS Parliament wishes to reaffirm Canada's role as a world leader in oceans and marine resource management;

4. Are the goals published as a single integrated statement of goals?

Yes, the FSDS and associated Progress Reports cover the majority of SWAG goals. There are some goals (like those for Agriculture) that are only present in other federal strategies, federal initiatives, or federal legislation, however these strategies are referenced in the FSDS.

5. We are trying to identify all environmental targets/standards for the federal government. A sample list of environmental categories for which you may have targets is provided below. Could you identify references for all environmental targets/standards that are used in your jurisdiction so that we are able to fill in the following table?

Table 2. Environmental targets/standards at the federal level.

Subject Area	**Target**[1]	**Timeline**	**Legal Basis (guideline, statue, treaty, other)**
Air Quality			
Sulphur dioxide Concentrations	PREXISTING STANDARDS Max. Desirable:	Current	Guidelines CCME 2003[2]

(ug/m3)	450 (l-hr); 150 (24-hr); 30 (annual) Max. Tolerable 800 New targets are "in development", but not yet in force. (Target Guideline 2.1: Air Pollutants - Reduce air pollutants in order to maintain or improve air quality across the country and achieve the emission targets which are currently under development in consultations with provinces and stakeholders)		
Nitrogen Concentrations	PREXISTING STANDARDS Max. Desirable 60 (annual) Max. Acceptable 400 (l-hr); 200 (24-hr); 100 (annual) Max Tolerable 1000 (l-hr); 300 (24-hr) New targets are "in development", but not yet in force. (Target Guideline 2.1: Air Pollutants - Reduce air pollutants in order to maintain or improve air quality across the country and achieve the emission targets which are currently under development in consultations with provinces and stakeholders)	Current	Guidelines CCME 2003[2]
VOC Concentrations	No targets specific to VOC- they are considered to be included in the " particulate concentrations" targets. There are *Volatile Organic Compound (VOC) Concentration Limits for Architectural Coatings Regulations* and *Volatile Organic Compound (VOC) Concentration Limits for Automotive Refinishing Products Regulations*	current	
Particulates Concentrations	24 hr Standard (Metric) The 3-year average of the annual 98th percentile of the daily 24-hour average concentrations) 2015: 28 μg/m3 2020: 27 μg/m3 Annual Standard (Metric: The 3-year average of the annual average	Short term, medium term	Guidance Document On Achievement Determination Canadian Ambient Air Quality Standards

	concentrations.) 2015: 10 μg/m3 2020: 8.8 μg/m3		For Fine Particulate Matter And Ozone CCME 2012[3]
Carbon Monoxide Concentrations	Max. Desirable 6 mg/m^3 (8hr) 15 mg/m^3 (1hr) Max. Acceptable 15 mg/m^3 (8hr) 35 mg/m^3 (1hr)	current	Guidelines CCME 2003[2]
Ozone Concentrations	2015 Standards 63ppb (8hr) 2020 Standards 62 ppb (8hr) (Metric The 3-year average of the annual 4th- highest daily maximum 8-hour average concentrations.)	short term, medium term	Guidance Document On Achievement Determination Canadian Ambient Air Quality Standards For Fine Particulate Matter And Ozone CCME 2012
	Max. Desirable 100 μg/m^3 (1hr) Max. Acceptable 160 μg/m^3 (1hr)	current	National Ambient Air Quality Objectives http://www.ec.gc.ca/rnspa-naps/default.asp?lang=En&n=24441DC4-1
Drinking Water Quality			
Heavy Metal	**Maximum Allowable Concentration**		
Aluminum	< 0.1 mg/L(conventional treatment); < 0.2 mg/L (other treatment types) (1998)	current	*Guidelines for Canadian Drinking Water Quality*[4]
Arsenic	0.010 mg/L (2006)		
Cadmium	0.005mg/L (2005)		
Chromium	0.5mg/L (1986)		
Copper	Aesthetic Objective ≤ 1.0 mg/L(1992)		
Iron	Aesthetic Objective ≤ 0.3mg/L (2005)		
Lead	0.01mg/L (1992)		
Manganese	Aesthetic Objective ≤ 0.05 mg/L (1987)		
Mercury	0.001 mg/L (1986)		
Zinc	Aesthetic Objective: ≤ 5.0mg/L		

Dissolved Solids	Aesthetic Objective ≤ 500mg/L (1991)	current	*Guidelines for Canadian Drinking Water Quality*[4]
Turbidity	Guideline Treated water < 0.1 NTU at all times. **Chemically assisted filtration:** ≤ 0.3 in at least 95% of the measurements made, or at least 95% of the time each calendar month, not > 1.0 **Slow sand or diatomaceous earth filtration:** ≤ 1.0 in at least 95% of the measurements made, or at least 95% of the time each calendar month not> 3.0 NTU **Membrane filtration:** ≤ 0.1 in at least 99% of the measurements made, or at least 99% of the time each calendar month not> 0.3 NTU I f membrane filtration is the sale treatment technology employed, some form of virus inactivation* should follow the filtration	current	*Guidelines for Canadian Drinking Water Quality*[4]
Overall	Increase the percentage of First Nation communities with acceptable water and wastewater facility risk ratings by 2013. **50% of First Nations wastewater systems have low risk ratings.** **35% of First Nations drinking water systems have low risk rankings**	2013(short term)	*FSDS 2010* Target 3.10 and HC and AANDC RPP

	Help protect the health of Canadians by developing health-based water guidelines. Five guidelines/guidance documents approved by federal/provincial/territory committees annually	2012 (current)	*FSDS 2010* Target 3.11 and Heath Canada RPP

Surface Water Quality			
Heavy Metal Concentrations	**ug/L**		
Aluminum	Variable 5 µg/L if pH < 6.5 100 µg/L if pH ≥ 6.5	current	*Guidelines for the Protection of Freshwater Aquatic Life*[5]
Arsenic	5 µg/L		
Cadmium	0.018 µg/L (hardness dependent)		
Chromium	8.9 µg/L (Crill) 1.0 µg/L (CrVI)		
Copper	2-4 µg/L		
Iron	300 µg/L		
Lead	1-7 µg/L		
Manganese	No current guideline		
Mercury	0.026 µg/L (inorganic mercury)		
Zinc	30 µg/L		
Phosphorous Concentrations	provides Trigger Ranges for Total Phosphorus (µg/L): ultra-oligotrophic <4 oligotrophic 4-10 mesotrophic 10-20 meso-eutrophic 20-35 eutrophic 35-100 hyper-eutrophic >100	current	*Guidelines for the Protection of Freshwater Aquatic Life*[5]
Nitrogen Concentrations	Nitrate 550 mg/L short term 13 mg/L long term	current	*Guidelines for the Protection of Freshwater Aquatic Life*[5]
Dissolved Oxygen	Lowest acceptable dissolved oxygen concentration: for warm water biota: early life stages = 6000 µg/L for warm water biota: other life stages = 5500 µg/L for cold water biota: early life stages = 9500 µg/L for cold water biota: other life stages = 6500 µg/L	current	*Guidelines for the Protection of Freshwater Aquatic Life*[5]

Biochemical Oxygen Demand	No	No	-
Suspended Solids	TSS: Maximum increase of 25 mg/L, or 10%, above background for short-term exposure (24-hr), or a maximum increase of 5 mg/L above background for longer-term exposure (30-d)	current	*Guidelines for the Protection of Freshwater Aquatic Life*[5]
Coliform	200 fecal coliforms/100mL in recreational waters	current	*Guidelines for Canadian Recreational Water Quality: Third Edition*[6]
Emissions			
Greenhouse Gas	17% reduction from 2005 levels by 2020	2020 (medium term)	*FSDS, Clean Air Agenda* as per the Copenhagen Accord
Nitrogen	600 kilotonne (kt) Cap (40% below 2006 levels)	2012-2015 (short term)	*Regulatory Framework for Air Emissions 2007*
VOCs	360kt Cap (45% below 2006 levels)	2012-2015 (short term)	*Regulatory Framework for Air Emissions 2007*
Carbon Monoxide	none	none	
Particulate	160 kt Cap (20% below 2006 levels)	2012-2015 short term	*Regulatory Framework for Air Emissions 2007*
Ozone Depleting Substance	Use of all ozone depleting substances restricted. Target to eliminate all emissions of these substances	current	*Ozone Depleting Substances Regulation* 1998 under the *Environmental Protection Act*
Sulphur Oxides	840 kt Cap (55% below 2006 levels)	2012-2015 (short term)	*Regulatory Framework for Air Emissions 2007*
Production and Consumption			

Energy Consumption	No	No	No
Energy Efficiency	No Some standards for energy efficiency of consumer products via regulations under the *Energy Efficiency Act.*	No	No
Clean Energy Production	Meet commitment of 90% of new electricity provided by non-emitting sources by 2020.	2020 (medium term)	FSDS
Water Conservation	Promote the conservation and wise use of water to affect a 30 per cent reduction or increased efficiency in water use in various sectors by 2025 (based on 2009 water use levels).	2025 (medium term)	*FSDS 2010* Goal 4, Target 4.1
Resource Efficiency	No	No	No
Waste			
Municipal	No	No	**-**
Hazardous	Reduce risks to Canadians and impacts on the environment posed by harmful substances as a result of decreased environmental concentrations and human exposure to such substances.	No	*FSDS 2010* Target 2.3 and 3.12
Sewage Treatment	Reduce risks associated with wastewater effluent by 2020 in collaboration with provinces and territories. Effluent release regulations via the *Wastewater Systems Effluent Regulations 2012* under the *Fisheries Act*	2020 (medium term)	*FSDS 2010* Target 3.7
Recycling	No	No	**-**
Agriculture			
Pesticide Use	No federal targets, but there are federal standards for pesticide use under the *Pest Control Products Act*	current	*Pest Control Products Act*
	Achieve a value between 81–100 on each of the Water Quality and Soil Quality Agri-Environmental Performance Indices by March 31, 2030	2030 (long term)	*FSDS 2010* Target 3.6
Fertilizer Use	No	No	-

Preservation			
Biodiversity	Proportion of assessed species in the General Status Report whose status is considered to be secure is maintained at level higher than 70%.	Current	Environment Canada RPP and DPR
	Target for proportion of migratory bird species whose population varies within acceptable bounds of the population goals will be established in 2011 once the Bird Status Database is complete.	2011 (Current)	*FSDS 2010* Target 5.2
	Threats of new alien invasive species entering Canada are understood and reduced by 2015	2015 (Short Term)	*FSDS 2010* Target 6.4
Species at Risk	Population trend (when available) at the time of reassessment is consistent with the recovery strategy for 100% of listed species at risk (for which recovery has been deemed feasible) by 2020.	2020 (medium term)	*FSDS 2010* Target 5.1
Protected Areas	No. However, targets are in development (See below) Non-Park Protected Habitat: Habitat target to support conservation of priority migratory birds and species at risk will be set by 2015**.**		*FSDS 2010* Target 6.1
	Park Protected Habitat: Maintain or improve the overall ecological integrity in all national parks from March 2008 to March 2013		*FSDS 2010* Target 6.2
	Improve the conservation of ocean areas and marine ecosystems by 2012.		*FSDS 2010* Target 6.3
Fisheries Harvest	Improve the management and conservation of major stocks.	Current	*FSDS 2010* Target 7.1
	To promote the conservation and optimum use of marine resources and the aquatic environment through improved aquaculture management by 2014.	2014 (short term)	*FSDS 2010* Target 7.2
Forest Harvest*	Annual Allowable Cut are set provincially (Harvest - does not exceed AAC	**-**	**-**
Sustainable Forest	No	No	**-**

Management Certification*			
Lifestyle			
Public Transit Use	No	No	-
Private Transportation Use	No	No	-
Government Green Procurement	Yes, Various. See Theme 4 of FSDS	2011, 2012, 2013, and 2014 (All short term)	*FSDS 2010* Targets 8.1 - 8.11

* not included in evaluation as these sustainability categories are under provincial Jurisdiction.

I. Definitions of "Desirable", "Acceptable", and "Tolerable" Objectives are not provided in the reference source.

2. CCME, 2003. Canadian Environmental Quality Guidelines. Canadian Council of Ministers of the Environment, 1999, updated 2003. See National Ambient Air Quality Objectives at http://www.ec.gc.ca/rnspa-naps/default.asp?lang=En&n=24441DC4-1.

3. CCME, 2012. Guidance Document On Achievement Determination Canadian Ambient Air Quality Standards For Fine Particulate Matter And Ozone. Retrieved from http://www.ccme.ca/assets/pdf/pn_1483_gdad_eng.pdf.

4. Health Canada. 2012 Guidelines for Canadian Drinking Water Quality. Retrieved January 18, 2013 from *http://www.hc-sc.gc.ca/ewh-semt/alt_formats/pdf/pubs/water-eau/2012-sum_guide-res_recom/2012-sum_guide-res_recom-eng.pdf*

5. CCME, 2003. Canadian Environmental Quality Guidelines. Canadian Council of Ministers of the Environment, 1999, updated 2003.

6. Health Canada. 2012. Guidelines for Canadian Recreational Water Quality: Third Edition. Health Canada, Ottawa.

Table 3. Quantity of sustainable indicator short, medium and long term targets

Sustainable indicators	Short term (1-5 years)	Medium term (5-15 years)	Long term (15-50 years)
Air Quality			
Sulphur	1		
Nitrogen dioxide	1		
VOC			
Particulates	1	1	
Carbon Monoxide	1		
Ozone	2	1	
Drinking Water Quality			
Heavy Metal Concentrations	10		
Dissolved Solids	1		
Turbidity	1		

Surface Water Quality			
Heavy Metal Concentrations	9		
Phosphorous Concentrations	1		
Nitrogen Concentrations	1		
Dissolved Oxygen	1		
Biochemical Oxygen Demand			
Suspended Solids	1		
Coliform	1		
Emissions			
Greenhouse Gases	1	1	
Nitrogen	1		
VOCs	1		
Sulphur Dioxide	1		
Carbon Monoxide			
Particulate	1		
Ozone Depleting Substance	1		
Production and Consumption			
Energy Consumption			
Energy Efficiency			
Clean Energy Production	1		
Water Conservation		1	
Resource Efficiency			
Waste			
Municipal			
Hazardous			
Sewage Treatment		11	
Recycling			
Agriculture			
Pesticide Use	1		1
Fertilizer Use			
Preservation			
Biodiversity	3		
Species at Risk		1	
Protected Areas			
Fisheries Harvest	2		

Forest Harvest*			
Sustainable Forest Management Certification*			
Transportation			
Public Transit Use			
Private Transportation Use			1
Government Procurement			
Government Green Procurement	11		
Total: 41	At least 1 target regardless of timeframe: 70.7% (29/41)	Targets for at least 2 timeframes: 7.3% (3/41)	Targets for all timeframes: 0% (0/41)

*** category not included as it is under provincial jurisdiction.**

B Effective Strategy:

1. Is there a published ESP for the federal government? (obtain copy of plan)

Yes. The Federal Government's ESP is called Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada, referred to as FSDS 2010 in the following tables.

2. Are there published strategies indicating how the federal government plans to meet environmental goals and targets (please obtain copies)?

Yes, there are a variety of strategies and reports that outline how most of the government's goals and targets are to be met. These strategies include those mentioned specifically in the FSDS, Departmental Sustainable Development Strategies, and other supplementary sector initiatives. Table 4. Lists 43 sustainability categories and the corresponding strategies that address how goals and targets for these indicators will be met. For the full list of Sector initiatives, see Appendix A.

Table 4. Assessment of the key components for effective strategies in Canada's FSDS and other major environmental sustainability strategies.

Sustainable indicators	Strategy/Policy/Legislation	Does the plan or strategies contain measurable targets with timelines?	Does the plan or strategies clearly and quantitatively show how targets will be met?	Does the plan or strategies clearly identify who is responsible for preparation?	Does the plan or strategies clearly identify who is responsible for implementation?	Does the plan or strategies clearly identify who is responsible for monitoring?	Does the plan or strategies clearly show that adequate financial and other resources are allocated to implementation?
Air Quality							
Sulphur dioxide	Guidelines CCME 2003 And *FSDS:* Implementation Strategies 2.1.1-2.1.38 for air quality and air pollutants and departmental RPP and DPP reports.	Yes standards are included in CCME Guidelines New targets referenced in the FSDS are currently under development	No	Yes (EC)	Yes (EC)	Yes (EC)	No- RPP/DPP only show how resources will be allocated for the larger program (GHG emissions, air pollutant emissions and ambient air quality combined)
Nitrogen dioxide		Yes standards are included in CCME Guidelines New targets referenced in the FSDS are currently under	No	Yes (EC)	Yes (EC)	Yes (EC)	

		development					
VOC		Yes standards are included in CCME Guidelines New targets referenced in the FSDS are currently under development	No	Yes (EC)	Yes (EC)	Yes (EC)	
Carbon Monoxide		Yes standards are included in CCME Guidelines New targets referenced in the FSDS are currently under development	No	Yes (EC)	Yes (EC)	Yes (EC)	
Ozone	FSDS departmental RPP, Guidance Document On Achievement Determination Canadian Ambient Air Quality Standards For Fine Particulate Matter And Ozone 2012	Yes Provides standards for 2015 and 2020	No	Yes (EC and provincial environmental ministries)	Yes (EC and provincial environmental ministries)	Yes (EC and provincial environmental ministries)	No- RPP/DPP only show how resources will be allocated for the larger program
Particulates		Yes, provides standards for 2015 and 2020	No	Yes (EC and provincial enviro	Yes (EC and provincial enviro	Yes (EC and provincial enviro	No- RPP/DPP only show how resources will be allocated

				nmental ministries)	nmental ministries)	nmental ministries)	for the larger program
Drinking Water Quality							
Drinking water Heavy Metal	Included in Guidelines for Canadian Drinking Water Quality but no targets in FSDS	No	No	No	No	No	Nothing to implement
Dissolved Solids		No	No	No	No	No	No
Turbidity		No	No	No	No	No	No
Overall	*FSDS* Implementation Strategies 3.10.1-3.10.11 and *First Nations Water and Wastewater Action Plan*	No	No	Yes (HC and AAND)	Yes (HC and AAND)	Yes (HC and AAND)	No
Surface Water Quality							
Heavy Metal Concentrations	*Guidelines for the Protection of Freshwater Aquatic Life* and *Guidelines for Canadian Recreational Water Quality: Third Edition* And somewhat via *FSDS* Implementation strategies what focus on key bodies of water. Strategies 3.1.1-3.1.10,	No	No	Yes (EC)	Yes (EC)	Yes (EC)	No-RPP/DPP only show how resources will be allocated for the larger program
Phosphorous Concentrations		Yes. For certain bodies of water					
Nitrogen Concentrations		No					
Dissolved Oxygen		No					
Biochemical Oxygen Demand		No					
Suspend		No					

ed Solids	3.3.1-3.3.6, 3.4.1-3.4.3, 3.5.1-3.5.6, 3.6.1-3.6.6, 3.7.1-3.7.3, 3.8.1-3.8.13,						
Coliform		No					
Emissions							
Greenhouse Gases	*FSDS:* Implementation Strategies 1.1.1- 1.1.58	Yes 17% reduction from 2005 levels by 2020	No	Yes , the FSDS indicates which department is responsible for each implementation strategy	Yes , the FSDS indicates which department is responsible for each implementation strategy	Yes (*EC*)	No RPP/DPP only show how resources will be allocated for the larger program (GHG emissions, air pollutant emissions and ambient air quality combined)
Nitrogen	*FSDS*: Implementation Strategies 1.1.1-1.1.58 and 2.1.1-2.1.38 and the *Regulatory Framework for Air emissions*	FSDS: yes Regulatory framework for air emissions: No	No	Yes	Yes	Yes	No- RPP/DPP only show how resources will be allocated for the larger program (GHG emissions, air pollutant emissions and ambient air quality combined)
VOCs		FSDS: yes Regulatory framework for air emissions: No	No	Yes	Yes	Yes	
Sulphur Oxides		FSDS: yes Regulatory	No	Yes	Yes	Yes	

		framework for air emissions: No					
Carbon Monoxide		No	No	Yes (one of many pollutants included in the strategy)	Yes	Yes	
Particulate		FSDS: yes Regulatory framework for air emissions: No	No	Yes	Yes	Yes	
Ozone Depleting Substance	*Ozone Depleting Substances Regulation* 1998 under the *Environmental Protection Act* and *FSDS:* Implementation strategy 2.1.36	Yes (Use restricted)	Yes (Use restricted)	Yes (Use restricted)	Yes (Use restricted)	Yes (Use restricted)	Yes (Use restricted)
Production and Consumption							
Energy Consumption	*No*	No	No	No	No	No)	No
Energy Efficiency	Somewhat *FSDS* Implementation Strategies 1.1.11,	No	No	Yes (EC and TC)	Yes (EC and TC)	Yes (EC and TC)	No

	1.1.13, 1.1.14 only						
Clean Energy Production	*FSDS* Implementation Strategies 1.1.8, 1.1.11, 1.1.20-1.1.34	Yes	No	Yes (NRCan and EC)	Yes (NRCan and EC)	Yes (NRCan and EC)	No, not specifically
Water Conservation	*FSDS* Implementation Strategies 4.1.1- 4.1.12 and Departmental RPP and DPRs	Yes 30 per cent reduction or increased efficiency in water use in various sectors by 2025 (based on 2009 water use levels)	No	Yes (EC)	Yes (EC)	Yes Water Survey of Canada (EC)	No
Resource Efficiency	No (A focus is put on sustainable use, but not efficiency)	No	No	No	No	No	No
Waste							
Municipal	No	No	No	No	No	No	No
Hazardous	*Chemicals Management Plan*, and *FSDS* Implementation Strategies 2.3.1-2.3.11 and 3.12.1-3.12.8	No	No	Yes (EC and HC)	Yes (EC and HC)	Yes (EC and HC)	Yes
Sewage Treatment	*FSDS* Implementation Strategies 3.7.1-3.7.3 and *Wastewater*	No	No	Yes (EC)	Yes (EC)	Yes (EC)	Yes

	Systems Effluent Regulations						
Recycling	No	No	No	No	No	No	No
Agriculture							
Pesticide Use	No target per se but *Pest Control Products Act* restricts use .	Yes (Use restricted)	Yes, (Use restricted)	Yes (HC)	Yes (HC)	Yes (HC)	Yes (for *Pest Control Products Act*)
	FSDS Implementation strategies under for more sustainable Agriculture (3.6.1-3.6.6)	Yes	No	Yes (AAFC)	Yes (AAFC)	Yes (AAFC)	No- AAFC RPP allocated resources for larger program but not for specific targets
Fertilizer Use	*No*	No	No	No	No	No	No
Preservation							
Biodiversity	*FSDS* Implementation Strategies 5.2.1-5.2.8 and 6.4.1-6.4.10	No. Only for general status of species- the rest of the targets are in development	No	Yes (EC)	Yes (EC)	Yes (EC via *Wild Species: Generl Status of Species in Canda*)	No- RPP/DPP only show how resources will be allocated for the larger program

Species at Risk	*Species at Risk Act 2002 and FSDS* Implementation Strategies 5.1.1-5.1.7	Yes (Population trend (when available) at the time of reassessment is consistent with the recovery strategy for 100% of listed species at risk (for which recovery has been deemed feasible) by 2020.)	No	Yes (EC, PC, DFO)	Yes (EC, PC, DFO)	Yes (EC, PC, DFO)	No- RPP/DPP only show how resources will be allocated for the larger program
Protected Areas	*FSDS* Implementation Strategies 6.1.1-6.1.13 and 6.3.1-6.3.9	No	No	Yes (EC and DFO)	Yes (EC and DFO)	Yes (EC and DFO)	No- RPP/DPP only show how resources will be allocated for the larger program
Fisheries Harvest	*FSDS* Implementation Strategies 7.1.1-7.1.4 and 7.2.1-7.2.4	No	No	Yes (DFO)	Yes (DFO)	Yes (DFO, EC)	No- RPP/DPP only show how resources will be allocated for the larger program
Forest Harvest*	No	No	No (this is provincial level responsibility)	No (this is provincial level responsibility)	No (this is provincial level responsibility)	No (this is provincial level responsibility)	No

Sustainable Forest Management Certification*	No	No	No	No	No	No	No
Transportation							
Public Transit Use	No-	No	No	No	No	No	No
Private Transportation Use	No	No	No	No	No	No	No
Government Procurement							
Government Green Procurement	*FSDS* Implementation strategies 8.1.1 through 8.11.7	Yes	No	Yes (all federal departments listed in *FSDA*)	Yes (all federal departments listed in *FSDA*)	Yes (the federal government) Yes (all federal departments listed in *FSDA*) Headed by EC and PWGSC	Yes
Total		18/41= 44%	2/41= 5%	32/41= 78%	32/41= 78%	32/41= 78%	5/41=12.2%

*category not included as it is under provincial jurisdiction

3. If there is no published plan for the federal government, is there an ESP plan in preparation? (If yes, when will it be published?)

N/A

4. Does the published ESP in preparation clearly show how the targets will be met?

N/A

C- Accountability and Responsibility:

1. Is there a committee of Cabinet and/or elected officials dedicated to ESP? (If yes obtain name, membership, terms of reference/mandate, date created).

Yes. The Standing Committee on Environment and Sustainable Development and the Minster of the Environment all have mandates or specific duties related to the FSDS that are enshrined in law. However, neither has sustainable development as its primary focus Descriptions are as follows:

Standing Committee on Environment and Sustainable Development

The *FSDA* requires that a Cabinet Committee from the House and/or the Senate have oversight of the development and implementation of the FSDS. The participation of parliamentarians in the context of the FSDS is done through the Standing Committee on Environment and Sustainable Development and the Senate Committee on Energy, the Environment and Natural Resources.

Date created:

Not explicitly Stated. Committee has existed since before 1995 but was given duties related to the FSDS via the Federal Sustainable Development Act which was passed in 2008.

Mandate:

The House of Commons Standing Committee on Environment and Sustainable Development (ENVI) is a permanent committee established by the Standing Orders of the House of Commons. For a more detailed overview of parliamentary committees, see the Compendium of House of Commons Procedure.

Under Standing Order 108(1), the Committee examines, enquires into and reports on matters referred to it by the House of Commons, including legislation, departmental activities and spending, reports of the Commissioner of the Environment and Sustainable Development, and other matters related to the general subject matter of the environment and sustainable development.

As well, under Standing Order 108(2), the Committee studies and reports on topics itself chooses to examine relating to the mandate, management and operation (including policies, programs and legislation) of Environment Canada, Parks Canada and the Canadian Environmental Assessment Agency.

Current Membership (as of Feb 28, 2013):

Chair

Harold Albrecht

Vice-Chairs

Kirsty Duncan

Megan Anissa Leslie

Members

François Choquette

James Lunney

François Pilon

Anne Minh-Thu Quach

Michelle Rempel

Robert Sopuck

Brian Storseth

Lawrence Toet

Stephen Woodworth

Clerk of the Committee

Guillaume La Perrière

From the Parliamentary Information and Research Service, Library of Parliament

Penny Becklumb

Tim Williams

Minister of the Environment

As previously described, the federal Minister of the Environment has specific duties related to the FSDS, as mandated by the *FSDA*. These duties are:

- Establish a Sustainable Development Office within the Department of Environment Canada [s.7(1)];
- Establish a Sustainable Development Advisory Council (SDAC) [s.8 (1)];
- Develop a Federal Sustainable Development Strategy (FSDS) every three years [s.9 (1)];
- Consult with the SDAC, the appropriate Parliamentary committees and the public on the draft strategy [s.9 (3)];
- Submit the draft FSDS to the Commissioner of the Environment and Sustainable Development (CESD) for review and comment [s.9 (4)];
- Submit the Federal Sustainable Development Strategy to the Governor in Council for approval [s.10 (1)]; and
- Table the FSDS, and subsequent Progress Reports on the federal government's progress in implementing the FSDS, in both Houses of Parliament [s.10(2), s.7(2)]. (Canada, 2011c).

Current Minister: Peter Kent, MP Thornhill Ontario

Date appointed: January 2011

2. Is there a senior management committee of civil servants dedicated to ESP? (If yes obtain name, membership, terms of reference/mandate, and date created)

Yes, in compliance with the *FSDA,* the Sustainable Development Office (which is housed in the Strategic Policy Branch of Environment Canada), is responsible for developing and maintaining systems and procedures to monitor progress on the implementation of the FSDS [*s.*7 (1*)*]. Specifically, it must, at least once every three years, provide the Minister with a Progress Report on implementation of the FSDS [s.7 (2)]. While not a senior committee, the SDO also manages several other interdepartmental FSDS committees including the Interdepartmental Assistant Deputy Minister Committee and the Interdepartmental Director General Committee which are responsible for addressing gaps or issues not covered by departmental mandates and providing strategic direction, advanced thinking, and decision making on key issues associated with the implementation of the *Act* .

3. Are the parties responsible for preparing the ESP strategy clearly identified?

Yes, the Minster of the Environment is charged with this role as per the *FSDA*.

4. Are the parties responsible for implementing the ESP strategy clearly identified?

Yes, Departments required to implement the FSDS are listed in the *FSDA*. Environment Canada is the lead for FSDS implementation, while PWGSC is the lead on Greening Government Operations.

5. Are the parties responsible for monitoring the ESP strategy clearly identified?

Yes, the Sustainable Development Office is charged with monitoring the implementation of the FSDS.

The Commissioner of the Environment and Sustainable Development is mandated by the AGA to provide " *parliamentarians with objective, independent analysis and recommendations on the federal government's efforts to protect the environment and foster sustainable development*". As required under section (4) of the *Act,* the CESD is legally mandated to review the draft FSDS and comment as to whether the targets and implementation strategies can be assessed. The CESD is also legally required to review and comment on all FSDS Progress Reports focusing particularly on the fairness of performance information.

D*. Progress Monitoring:*

1. Is there a regular public monitoring report measuring environmental performance? (obtain copy of most recent report)

Yes, the *FSDA* requires the SDO to produce a public monitoring report. The citation for the most recent report is as follows:

Canada, Environment Canada. (2013). *The 2012 Progress Report of the Federal Sustainable Development Strategy.* Retrieved February 23, 2013 from http://www.ec.gc.ca/dd-sd/23E4714E-B774-4CC5-9337-F87B01556727/FSDS-Progress-Report-2012-E-Feb15_WEBv4.pdf

Additionally, while not included in a formal report, the Canadian Environmental Sustainability Indicators are accessible to the public via an online database.

2. How often is the report published?

At least once every three years after the day on which the *FSDA* came into force.

3. Which of the following data analysis is contained in the reports: Time Series Trends, Trends Relative to Goals and Targets, Trends Relative to other Jurisdictions (benchmarking).

See Table 4.

Table 4. Parameters reported on at the federal level for the 43 sustainability indicators.

Sustainable indicators	Parameter	Units	Contained in Public Reports	Time series Trends	Trends Relative to Targets	Trends Relative to other Jurisdictions (benchmarking)
Air Quality						
Sulphur	Sulphur dioxide concentrations	Parts per billion	Yes National Air Pollutants Surveillance Program and FSDS progress Report 2012	Yes	No	Yes
Nitrogen	Nitrogen dioxide concentrations	Parts per billion	Yes National Air Pollutants Surveillance Program and FSDS progress Report 2012	Yes	No	Yes
VOC	VOC Concentrations (120 species, including	Parts per billion carbon	Yes National Air Pollutants	Yes	No	No

	benzene)		Surveillance Program and FSDS progress Report 2012			
Particulates	Fine Particulate ($PM_{2.5}$) Concentrations	Parts per billion (population weighted)	Yes National Air Pollutants Surveillance Program and FSDS progress Report 2012	Yes	No	Yes
Carbon Monoxide	Carbon Monoxide Concentrations	Parts per billion	Yes National Air Pollutants Surveillance Program and FSDS progress Report 2012	Yes	No	Yes
Ozone	Ozone Concentrations	Parts per billion population weighted	Yes National Air Pollutants Surveillance Program and FSDS progress Report 2012	Yes	No	Yes
Drinking Water Quality						
Heavy Metal Concentrations	Various concentrations of heavy metals	mg/l	No	No	No	No
Dissolved Solids	No	No	No	No	No	No
Turbidity	Turbidity	NTU	No	No	No	No
Overall	Percentage of First Nations wastewater systems and drinking water systems that have low risk ratings	% Index	Yes, AANDC DPR and *FSDS Progress Report 2012*	No	No	No
	Number of guidelines/guidance documents pertaining to drinking water quality have	# (target 5 per year)	Yes, HC DPR and *FSDS Progress Report 2012*	No	No	No

	been approved by the federal/provincial/territorial Committee on Health and the Environment					
Surface Water Quality						
Heavy Metal Concentrations	Mercury, Lead, Cadmium annual national amount release into water	kilograms	Yes, CESI, however not *all* bodies of water in Canada are monitored	Yes	No	No
Phosphorous Concentrations	No	No	No	No	No	No
Nitrogen Concentrations	No	No	No	No	No	No
Dissolved Oxygen	No	No	No	No	No	No
Biochemical Oxygen Demand	No	No	No	No	No	No
Suspended Solids	No	No	No	No	No	No
Coliform	No	No	No	No	No	No
Overall	National freshwater quality 2007, 2009	Number of water monitoring stations under each indicator (Poor, Marginal, Fair, Good, excellent). Indicators determined through combination of PH, chemical,	Yes , CESI, *FSDS Progress Report 2012.*	**No**	**No**	**Yes**

		and physical properties				
Overall	National freshwater quality indicator change between 2003-05 and 2007-09	% station under each indicator. % of stations improving, declining and unchanging also measured	Yes , CESI, *FSDS Progress Report 2012.*	**yes**	**No**	**Yes**
Emissions						
Greenhouse Gases	Carbon equivalent index of GHG emissions	Mt CO_2 equivalent	Yes, FSDS progress report via Canada Emission Trends	Yes	Yes	No
Nitrogen	Total NOx and NH3 emissions	Annual Emissions as % of 1990	Yes, FSDS progress report via Canada Emission Trends	Yes	No	No
VOCs	Total VOC emissions	Annual Emissions as % of 1990 and in kilotonnes	Yes, FSDS progress report via Canada Emission Trends	Yes	No	No
Sulphur Oxides	Total Sulphur oxide emissions	Annual Emissions as % of 1990 and in kilotonnes	Yes, FSDS progress report via Canada Emission Trends	Yes	No	No
Carbon Monoxide	Total Carbon Monoxide emissions	Annual Emissions as % of 1990 and in kilotonnes	Yes, FSDS progress report via Canada Emission Trends	Yes	No	No
Particulate	Total particulate matter (TPM), respirable particulate matter (PM_{10})and fine particulate matter ($PM_{2.5}$)	Annual Emissions as % of 1990 and in kilotonnes	Yes, FSDS progress report via Canada Emission Trends	Yes	No	No

Ozone Depleting Substance	N/A	N/A	No	No	No	No
Production and Consumption						
Energy Consumption	Canadian energy consumption	Exajoules	Yes StatsCan	Yes	No	Yes
	Canadian Fossil Fuel Consumption	Exajoules	Yes Stats Can	Yes	No	Yes
Energy Efficiency	No	No	No	No	No	No
Clean Energy Production	No	No	No	No	No	No
Water Conservation	Threats to water availability in Canada (2009)	% water withdrawn	Yes FSDS Progress report 2012	No	No	No
	Water withdrawal by sector	Million cubic meters		Yes		
Resource Efficiency	No	No	No	No	No	No
Waste						
Municipal	Disposal of residential solid waste 2002 and 2008	Kilograms per capita	Yes, Statistics Canada	No	No	No
Hazardous	Some Mercury, lead, cadmium and polybrominated diphenyl ether (PBDE-47) concentrations in blood and	Various	FSDS,CESI, National Pollutant Release Database	Yes	No	No

	blood plasma and Hexavalent Chromium and Mercury emissions into air					
Sewage Treatment	Municipal Waste water treatment levels	% population receiving treatment level	Yes, *FSDS,* Municipal Water Use Report	Yes	No	No
Recycling	Average diversion rate—the amount of waste diverted as a proportion of waste generated	% (of total waste generated)	Yes, Statistics Canada	No	No	No
Agriculture						
Pesticide Use	No	No	No	No	No	No
Fertilizer Use	No	No	No	No	No	No
Preservation						
Biodiversity	Proportion of assessed species in the General Status Reports whose status is considered to be secure	% Index	Yes, *FSDS Progress Report 2012,* Environment Canada DPR, *Wild Species: General Status of Species in Canada*	Yes	No	No
	Changes in Migratory Bird populations by winter area (interim indicator)	% change				

	Nothing for invasive species-indicators in development	No				
	Percentage of Canadian ecosystems where ecosystem health has been assessed as stable or improving	% Index	*FSDS Progress Report 2010* and *Canadian Biodiversity: Ecosystem Status and Trends*	Yes	No	No
Species at Risk	Percentage of species with population trend consistent with recovery strategy	% Index	Yes (*FSDS Progress Report 2012*)	No	No	No
Protected Areas	Proportion of areas protected in Canada	% Index	Yes (*FSDS Progress Report 2012* DFO and EC DPRs/ Environmental Indicators)	Yes	No	Yes
	Cumulative waterfowl habitat secured in Canada by North American Waterfowl Management Plan partners	Millions of hectares	Yes, *FSDS Progress Report 2012*	Yes	No	No
	Cumulative species at risk habitat secured in Canada by	Thousands of hectares		Yes	No	No

	Habitat Stewardship Program-funded projects					
	Ecological integrity status and trends of national parks, Canada, 2011	% of ecosystems with a certain status		Yes	No	No
Fisheries Harvest	Status of Major fish stocks	Number of stocks per status (critical, cautious, healthy, unknow)	Yes, *FSDS,* CESI and DFO DPR	No	No	No
	Number of major stocks harvested relative to approved levels	% Index		No	No	No
Forest Harvest*	Annual harvest of timber relative to the level of harvest deemed to be sustainable	% of sustainable harvest level actually harvested	Yes, *FSDS,*CESI, *The State of Canada's Forests 2012*	Yes	No	No
Sustainable Forest Management Certification*	Share of forestry activities certified under CSA, SFI and FSC,	% Index	Yes	No	No	No
Transportation						
Public Transit Use	No	No	No	No	No	No
Private Transportation Use	No	No	No	No	No	No

Government Procurement						
Government Green Procurement	Yes, Various	-	Yes, FSDS	No	No	No
Total			**25/41=60.9%** **(Maximum of one count per indicator. One count was given to each "drinking water quality" and "surface water quality", as individual indicators were not monitored, but overall quality was)**	**20/41 =48.7 %**	**1/41= 2.44 %**	**8/41= 19.5 %**

4. Is there regular Public Compliance Reporting in your jurisdiction?

There is no detailed public reporting of non-compliance with environmental regulations, self-reported or otherwise. No such reporting is included in the FSDS.

There is, however, a website that lists Environmental Enforcement Notifications and provides information about successful prosecutions across Canada. Additionally, the National Pollutant Release Inventory is Canada's legislated, publicly-accessible inventory of pollutant releases and transfers.

5. Is ESP performance evaluated on a regular basis by an independent agency?

The FSDS performance is to be evaluated by the CESD. While not entirely independent of the federal government, the CESD is housed within the Auditor General's Office, and has the mandate to provide parliamentarians with objective, independent analysis and recommendations on the federal government's efforts to protect the environment and foster sustainable development.

6. If the answer to 5 is yes, obtain name of agency and reference for most recent evaluation reports.

Commissioner of the Environment and Sustainable Development.

The most recent report relating specifically to sustainable development planning, was released by the CESD in 2008. However, the CESD releases reports at least twice a year on various SD related topics.

E*. Adaptive Management*:

1. What is the process for amending ESP plans to address deficiencies identified in the monitoring process?

The Minister of the Environment is charged with producing a new FSDS once every three years. As previously discussed, the goals and targets established in the FSDS are a compilation of preexisting departmental goals and targets from the 28 federal departments implicated in the *FSDA*. Correspondingly, the Minister of each of those 28 departments implicated in the *FSDA* must also produce a new departmental SDS at least once every three years and table it in the House of Commons. The *FSDA* does not outline exactly what must be amended nor does it require that all deficiencies be addressed. The CESD provides comments on the FSDS and associated departmental strategies as per its legislative responsibilities in the *Auditor General Act*. The updated FSDS and SDS may take into consideration the recommendations for improvement from the CESD and progress reports, however, it is not a requirement. Once the draft updated FSDS is created, it must go through the same consultation and review process as was required for the original FSDS.

2. Is there a mandatory requirement for the responsible authority to address deficiencies in the ESP? (if yes obtain reference for mandatory authority)

No, addressing deficiencies is not mandatory. It is a recommendation from CESD. While there is no mandatory requirement to address deficiencies, FSDS policy promotes a "Plan, Do, Check, Improve" system, which promotes an adaptive management framework.

F*. Legal Framework:*

1. Identify the relevant statutes for environmental management for the federal government.

A full list of relevant statues for environmental management at the federal level can be found in Appendix A. A more detailed description of the 8 most significant statutes can be found in section 3.4.2 of this report. Questions 1a. through 1d. of this section of the evaluation will consider these 8 pieces of federal environmental legislation (*Auditor General Act, Canada Water Act, Canadian Environmental Assessment Act 2012, Canadian Environmental Protection Act, Fisheries Act, Federal Sustainable Development Act, Oceans Act, Species at Risk Act*).

2. Is there s single statute that provides the legal framework for preparing the ESP strategy?

Yes, the *Federal Sustainable Development Act* (S.C. 2008, c.33) provides the legal framework for preparing the Federal Sustainable Development Strategy. A more detailed description of the *Act* can be found in section 3.4.2.8 of this report.

3. Which of the following components of the ESP planning process are provided for in legislation?

See Table 5.

Table 5. Qualitative assessment of degree to which key planning components are enshrined in legislation.

Goals and Objectives:	Largely Met; The *FSDA* requires that the FSDS "shall set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target" [s.9 (2)] However, it does not require that these goals be benchmarked against other jurisdictions to ensure their legitimacy. Most other environmental Acts begin with a goal statement; or include goals as preamble to legislation, purpose statements and objective statements To be Fully met, all Acts would require goals and would include the requirement for goals to be benchmarked against other jurisdictions.
Targets	Largely Met; Q1: does legislation provide legal basis for setting legally binding targets? The *provisions* to develop targets are included in some legislation. CEPA(s.2.I.g; s.54; s.208) mandates the establishment of national standards of environmental quality, guidelines, and codes of practice. The *Oceans Act* (s. 32) empowers the Minister of Fisheries and Oceans to develop Marine Environmental Quality standards. The *Department of the Environment A*ct empowers the Minister to develop standards or objectives for environmental quality or pollution control. The *Energy Efficiency Act* provides the Governor of Council the ability to establish energy efficiency standards for energy-using products. Q2: Does legislation *require* targets to be set? The *FSDA* requires that the FSDS "shall set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target" [s.9 (2)] However, it does not require them to be SMART targets or to be benchmarked against other relevant jurisdictions. Q3: are targets legally binding (are the specific targets in legislation? Some standards for maximum allowable release are provided for in legislation (CEPA) however, most specific targets are not legally binding.

SDS plans	Fully met; Under the *FSDA* "Within two years after this *Act* comes into force and within every three-year period after that, the Minister shall develop, in accordance with this section, a Federal Sustainable Development Strategy based on the precautionary principle"[s.9(1)] Additionally, s. 11(1) requires "Each Minister presiding over a department named in Schedule I to the *Financial Administration Act,* or an agency named in the schedule of this *Act* shall cause the department or agency to prepare a sustainable development strategy containing objectives and plans for the department or agency that complies with and contributes to the Federal Sustainable Development Strategy, appropriate to the department or agency's mandate."
Adaptive Management	Not Met; The *FSDA* does not explicitly state a requirement for Adaptive Management. While a new strategy must be produced every 3 years, there is no legislative requirement for the updated strategies to address the shortcomings identified in FSDS progress reports or those identified by the Audit by the Commissioner of the Environment and Sustainable Development.
Progress Monitoring	Partially Met; The *FSDA* requires that the Sustainable Development Office "shall, at least once every three years after the day on which this *Act* comes into force, provide the Minister with a report on the progress of the federal government in implementing the Federal Sustainable Development Strategy" [s.7 (2)]. Associated policy directives have outlined the contents of these progress monitoring reports, however specific guidance on what should be reported on (trends, targets relative to trends, trends relative to other jurisdictions etc) is not enshrined in law. Progress Monitoring is also included several other pieces of environmental legislation. Under *the Canadian Environmental Protection Act,* monitoring of environmental quality is required (s.44), as well as establishing a national inventory of releases of pollutants (s.48). The *Canadian Environmental Assessment Act* mandates monitoring to ensure quality of assessment and to ensure compliance of the Act. Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was established under *SARA* to assess species status and provide advice to government. Species who are at risk must be reviewed COSEWIC at least once every ten years. Monitoring is also an element of recovery

	strategies.
Collaborative Process	Fully Met; Yes, legislative stipulations exist for establishing a public consultation process for Canada's FSDS. As 120 day public consultation period is required for each draft FSDS.
Accountability and Responsible Parties	Largely Met; The *FSDA* legislates responsibilities for FSDS development, implementation and monitoring. As per the *FSDA*, the Minister of the Environment is charged with, developing the SDO, appointing and chairing the Sustainable Development Advisory Council, developing the FSDS, submitting it for review by various bodies, and submitting the draft FSDS to the house of commons. Ministers of the 28 departments listed in the *FSDA* are charged with developing and implementing departmental SDS "containing objectives and plans for the department or agency that complies with and contributes to the Federal Sustainable Development Strategy, appropriate to the department or agency's mandate." [s.11(1)]. The SDO is charged with monitoring and reporting on progress of the FSDS, and additional responsibilities are outlined for the SDAC, Pricy Council and the Governor in Council.

G. Collaborative Process:

1. Is there a permanent multi-stakeholder committee (such as an Environment and Sustainable Development Roundtable) that deals with ESP issues? (If yes obtain name, membership, mandate, governing statute, and date created)

No there is currently no permanent multi stakeholder committee even though Section 8 (1) of the FSDA states the following:

8. (1) The Minister shall appoint a Sustainable Development Advisory Council composed of one representative from each province and territory, and three representatives from each of the following:

(a) Aboriginal peoples;

(b) environmental non-governmental organizations;

(c) organizations representative of business; and

(d) organizations representative of labour.

Despite this legislative requirement to establish a council, and references to the council in policy documents, no evidence of membership, mandate, meeting minutes or overall existence of this council can be found.

The National Roundtable on the Environment and the Economy, acted as the independent multi-stakeholder committee from 1988 until march 31, 2013 when its funding was terminated by the federal government.

a. Does it represent all stakeholder interests?

No, there are only three representatives from each of the following:

(a) Aboriginal peoples;

(b) environmental non-governmental organizations;

(c) organizations representative of business; and

(d) organizations representative of labour.

b. Does it have the mandate to develop a plan/policy by consensus based negotiation or is it just an advisory group that is consulted.

No.

It is an advisory group that is consulted on the draft FSDS and has no mandate to make official plans or policies. However, while here is no requirement to integrate the SDAC comments into the final FSDS, When the consultation period is over, the SDO, as a practice, prepares two synthesis reports: one on the SDAC's recommendations (available to SDAC members only) and the other on stakeholder and Canadians' recommendations (to be posted for the public on Environment Canada's Federal Sustainable Development Strategy website) (Canada, 2011c).

c. Is it provided with adequate resources to fulfill its mandate?

No. Section 8(3) of the FSDA states "The representatives appointed to the Sustainable Development Advisory Council shall hold office without remuneration and shall not be reimbursed for expenses incurred in the course of their duties."

d. What has been the outputs from the committee/group?

No records of the outputs of this council could be found.

e. Who does it report to?

The SDAC is mandated to report to the Minister of the Environment if its input is requested. It is officially mandated to support the federal government with respect to its sustainability policy and to support the development of the FSDS.

f. How often does it meet?

Unknown. No meeting records could be found.

g. How many of the recommendations are implemented?

No data available as the Consultation Synthesis Report prepared in response to the SDAC's comments is only available to the SDAC and not to the public (Canada, 2011c).

h. Is it mandatory or discretionary?

Implementation of recommendations is discretionary.

2. If the answer to 1 is yes, is it established in legislation?

Yes. See above.

3. Are there multi-stakeholder processes used in the development and management of ESP? (describe process used by strategy)

Yes. Canada's FSDS development incorporates a multi-stakeholder process. Stakeholders, defined as members of the SDAC, CESD, NGOs, Academia, etc., and Canadians are involved in the development of the FSDS by providing input and feedback on the draft FSDS. As mandated by the FSDA, the SDO must consult with stakeholders and Canadians for feedback and input into the FSDS via the comment period. The feedback received from stakeholders and Canadians is summarized in a Consultation Synthesis Report produced by the SDO and informs the final FSDS and subsequent Progress Reports.

Section 9(3) of the Act requires that for each draft FSDS there be a minimum 120- day consultation period with the related House of Commons Standing Committee/s, stakeholders and Canadians. When the consultation period is over, the SDO, as a practice, prepares two synthesis reports: one on the SDAC's recommendations (available to SDAC members only) and the other on stakeholder and Canadians' recommendations (to be posted for the public on Environment Canada's Federal Sustainable Development Strategy website). The stakeholder and Canadian synthesis is made available to departments and agencies prior to the tabling of the final strategy (Canada, 2011c).

Public participation is limited to reading draft FSDS and consultation guidance suggestions online, and providing feedback via email or mail. A summary of public input received is posted online shortly after the consultation period, however individuals do not receive feedback on their individual comments and there is no requirement to include stakeholder feedback into the document/process.

a. Does it represent all stakeholder interests?

Yes- anyone who wants to comment may do so.

b. Does it have the mandate to develop a plan/policy by consensus based negotiation or is it just an advisory group that is consulted.

It is merely consultation

c. Is it provided with adequate resources to fulfill its mandate?

No indication as to what resources were made available for consultation.

d. What has been the outputs from the committee/group?

Comments and suggestions that were integrated into FSDS to an undetermined degree. A summary of input was presented in the 2010 Consultation Synthesis Report (Canada, 2010c).

e. Who does it report to?

The Minister of the Environment is principally responsible for the FSDS consultation and all comment and suggestions from either the public consultation or the other stakeholders go through Environment Canada.

f. How often does it meet?

Public consultation happens infrequently every 3 years when a draft FSDS is produced, and cannot be referred to as a meeting.

g. How many of the recommendations are implemented?

No data available.

h. Is it mandatory or discretionary?

Consultation is mandatory as per the FSDA

i. Is in provided for in legislation?

Yes. Section 9(3) of the Act requires that for each draft FSDS there be a minimum 120- day consultation period with the related House of Commons Standing Committee/s, stakeholders and Canadians.