SUSTAINABLE DEVELOPMENT STRATEGY 2007-2009

Environment Canada's Sustainable Development Strategy 2007–2009



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SUSTAINABLE DEVELOPMENT STRATEGY 2007-2009

Environment Canada's Sustainable Development Strategy 2007–2009



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Sustainable development means development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

It 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.

From: Auditor General Act (1995 amendments)

Minister's Message

I'm pleased to present to Parliament and Canadians Environment Canada's fourth sustainable development strategy. Canada's New Government understands that protecting and sustaining our natural environment is central to our quality of life, our prosperity, and the health and well-being of Canadians. Environmental, economic and social integration in an accountable government and in society at large is really the foundation for longer-term sustainable development.

Environment Canada's *Sustainable Development Strategy* 2007–2009 highlights for Canadians key commitments that Environment Canada will undertake over the next three years, and demonstrates how we as a government will better reflect the social and economic factors that underpin Environment Canada's commitment to environmental sustainability.

This past year, Environment Canada accepted a new challenge as the formal lead among federal departments to develop a coordinated approach to sustainable development strategies. It has been a pleasure for me to observe the considerable progress achieved as a result of this collaborative action among federal departments.

For the first time in the preparation of sustainable development strategies, departments and agencies will be reporting on their progress in key areas, including clean air, clean water, reducing greenhouse gas emissions, sustainable communities, sustainable development and use of natural resources, and governance for sustainable development.

These measures clearly support the environmental approach of this government and our commitment to initiatives, such as *Canada's Clean Air Act*, a comprehensive plan that will achieve real results for Canadians where it matters most — in their homes and communities.

Our government is pursuing an environmental approach that is practical and results-oriented, protects our health, and preserves our natural heritage now and into the future. It is an approach that involves collaboration across all orders of government, industry, and stakeholders — and one that will provide lasting benefits for Canadians.

The framework outlined in the following pages provides a strong basis upon which to build creative solutions, take concrete action, and work collaboratively at the community, national and international levels to achieve a more sustainable quality of life, now and for generations to come.

Rona Ambrose, P.C., M.P. Minister of the Environment

Environment Canada iii

Preface

Under the 1995 amendments to the *Auditor General Act*, specified federal departments and agencies are required to prepare and update a sustainable development strategy (SDS) every three years. These strategies are a key element of the government's approach to sustainable development. They outline the goals, objectives and commitments to be undertaken by a department to better incorporate sustainable development into departmental policies, programs and operations.

Sustainable Development Strategy 2007–2009 (SDS 2007–2009) is Environment Canada's fourth strategy. It outlines the actions that Environment Canada will undertake over the next three years to strengthen the integration of sustainable development into the planning and delivery of the Department's strategic outcomes.

This Strategy highlights for Canadians the Department's commitment to sustainable development within its own activities as well as its commitment to the coordinated federal approach for the fourth round of departmental SDSs. In the spring of 2006, Environment Canada led a government-wide initiative to strengthen coherence and accountability across departmental SDSs that resulted in a set of federal sustainable development goals and a common reporting framework.

The Strategy builds on the strengths of the Department's three previous sustainable development strategies, is responsive to the Department's integrated policy approach and supporting management framework, and demonstrates leadership on the coordinated federal approach to the fourth round of departmental sustainable development strategies.

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Chapter 1 - Introduction

Environment Canada has a broad mandate with a strong focus on environmental sustainability. The Department's mandate includes preserving the quality of the natural environment, renewable resources and water, providing meteorological services, and coordinating the environmental policies and programs of the Government of Canada. The Department's services and products contribute significantly to the health, well-being, prosperity, and quality of life of Canadians and their communities.

Canada is rich in natural assets, containing within its borders 20 percent of the world's natural areas, 10 percent of the world's forests, and 7 percent of the world's renewable fresh water. These resources contribute significantly to Canada's economic prosperity at the same time as providing services essential to ecosystem health and the well-being of Canadians.

Though our quality of life is fundamentally dependent upon the environment, human activity and a growing population are placing increasing strains on the natural functions of the earth's ecosystems.

The effects of environmental degradation on human health are being felt in many Canadian communities. For example, in recent years, the number and severity of smog days across Canada have been on the rise. Air pollution is linked in varying degrees

Environment Canada's Mandate

- The preservation and enhancement of the quality of the natural environment, including water, air and soil quality;
- Renewable resources, including migratory birds and other nondomestic flora and fauna;
- · Water:
- · Meteorology;
- Enforcement of any rules or regulation made by the International Joint Commission relating to boundary waters; and
- Coordination of the policies and programs of the Government of Canada respecting the preservation and enhancement of the quality of the natural environment.

Department of the Environment Act

with a wide variety of health concerns including asthma and cardiovascular disease and contributes to thousands of premature deaths annually. It also has real consequences for nature, including contributing to the acidification of lakes, the bio-accumulation of toxics, and the loss of biodiversity.

While Canada is recognized around the world for its natural wealth in water resources, they are increasingly at risk from growing demand and from pollutants resulting from chemicals and sewage. Industries such as pulp and paper, agriculture, oil and gas, electric power generation, transportation, tourism, and recreation rely on the water services of Canada's ecosystems.

In a country where natural resources are a major engine of economic development and job creation, environmental degradation can result in real economic costs today and in the future, including foregone resource and labour productivity and an increased burden on the health care system. Domestically and internationally, there is a clear need to ensure sustainable management of our resources and environment.

Canadians are also vulnerable to climatic and weather conditions such as extremes in temperature and precipitation, sea ice conditions, variable water levels, and extreme weather events and natural disasters. These conditions can affect the environment, the health of Canadians, their property and businesses, and the broader Canadian economy in a negative and often costly way.

Environment Canada has developed a new integrated policy approach and supporting management framework that enables the Department to better respond to the increasingly complex range of environmental challenges facing Canadians. At the same time, the policy approach and framework strengthen the Department's capacity to provide policy leadership and coordination across the government-wide environmental sustainability agenda.

This new approach has established a focused set of departmental priorities, allocated resources to achieve those priorities, and established effective reporting systems to measure progress, thereby strengthening the Department's ability to be accountable to Canadians.

It is grounded in the view that achieving the highest levels of environmental quality is a means to enhance Canadians' quality of life, including their health and well-being, preserve Canada's natural environment, and strengthen Canada's long-term competitiveness.

1.1 Environment Canada's Approach to Sustainable Development

For over two decades, sustainable development has been advanced as a means of reconciling human development with the earth's ecological systems. The Government of Canada has recognized sustainable development in legislation as "a continually evolving concept based on the integration of social, economic and environmental concerns" (Auditor General Act, 1995 amendments).

The integration of environmental sustainability with economic competitiveness and productivity and social equity lies at the core of sustainable development — and at

the core of Environment Canada's fourth sustainable development strategy. It is an approach that seeks to ensure that in meeting our current needs, we do not jeopardize the ability of future generations to meet their needs.

As the lead federal department for the environment, Environment Canada has clear responsibility for supporting the environmental "pillar" of sustainable development. This is recognized in the Department's management framework, which focuses on three key outcomes:

Environmental Protection, Weather and Environmental Services, and Ecosystem Sustainability.

The Department also provides environmental information, programs and services that enable decision makers to better integrate the true cost and value of the environment into social and economic decision making. A number of examples of Environment Canada's contribution are highlighted throughout this document.

Because of the Department's clear focus on environmental sustainability, SDS 2007–2009 focuses on strengthening Environment Canada's capacity over the coming three years to integrate social and economic considerations into our own policy, program and operational decision making both within the Department and, where appropriate,

in cooperation with partners. By building our capacity to support forward looking, integrated decision making, we will enhance our success in protecting, adapting to, and conserving Canada's environment now and in the longer term.

Thus, SDS 2007–2009 provides an opportunity for the Department to

- strengthen our departmental capacity
 to support sustainable development at
 the same time as continuing to advance
 our role in providing the environmental
 information, programs, and services that
 better enable Canadians to work toward
 sustainable development; and
- continue to provide leadership on coordinating government-wide efforts to strengthen the sustainable development strategy process.

1.2 SDS 2007–2009: Responding to an Evolving Context

Environment Canada's fourth SDS builds on the strong foundation established in its three previous strategies. It also aligns with the Department's new integrated policy approach and management framework, and supports the coordinated federal approach developed for the fourth round of departmental sustainable development strategies.

1.2.1 Building on a Strong Foundation

Over three rounds of strategies, Environment Canada has advanced the integration of sustainable development into its policies, programs, and operations, in particular through the use of integrative policy approaches that guided the second and third SDSs: Information for Decision Making; Innovative Instruments; and Partnerships for Sustainable Development. These integrative approaches have helped to shape the tools and strategies that support more balanced, integrated decision making. They will

continue to inform departmental actions in advancing sustainable development.

Nevertheless, departmental progress reports on SDS 2004–2006, internal consultations and an issue scan identified challenges and weaknesses in the Department's SDS process, mainly in the area of internal management systems. These challenges include the need for more targeted and measurable commitments, more outcome-based performance reporting, and better monitoring and assessment systems.

In SDS 2007–2009, therefore, Environment Canada is continuing its work to strengthen results-based performance measurement and reporting, to ensure that roles and responsibilities are clearly defined, and to target a limited number of significant commitments. These commitments demonstrate areas in which the Department

will achieve tangible progress over the coming three years.

The Strategy draws upon the above-mentioned issue scan, prepared in advance of internal consultations on the Strategy's framework. It identified significant environmental, economic, and social opportunities and challenges for Environment Canada and provided a foundation for the development of the Strategy's commitments.

Departmental consultations, which were conducted throughout the process of renewing the Strategy, served to confirm the approach being taken, identify challenges and opportunities for SDS 2007–2009, validate the goals and objectives of the the logic model, and develop commitments representative of each area of the Department.

1.2.2 Departmental Context

Over the past two years, Environment Canada has developed and implemented a new integrated policy approach. The approach and its supporting management framework, the Results Management Structure, were designed to strengthen the Department's capacity to deliver on our strategic outcomes, measure progress, and be accountable for results achieved. It is based on the Department's three current strategic outcomes:

• Environmental Protection: Canadians and their environment are protected from the effects of pollution and waste;

- Weather and Environmental Services:
 Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians; and
- Ecosystem Sustainability: Canada's natural capital is restored, conserved, and enhanced.

The Department's new management framework has provided the opportunity to more closely align our sustainable development strategy, and its planning and reporting systems, with those of the Results Management Structure. The logic model for SDS 2007–2009 structurally mirrors elements of the Department's Results Management Structure but builds a sustainable development perspective into its goals, objectives, outcomes, and commitments.

It is anticipated that this alignment will strengthen the integration of sustainable development into the delivery of the Department's strategic outcomes, provide a strong management structure to support the delivery of SDS commitments, ensure that roles and responsibilities are clearly defined, and strengthen results-based performance measurement and reporting. (Additional detail on performance measurement and reporting are provided in Chapter 4.)

However, as a strategic policy document, the SDS has also been designed to retain the flexibility required to respond to shifts in policy direction and therefore, the Strategy's logic model.

A logic model is a graphic that identifies the causal linkages between the activities of a policy, program or initiative and the achievement of its outcomes. It illustrates the connection between planned work or activities and intended results.

1.2.3 Federal Context

Environment Canada's SDS 2007–2009 has also been informed by the coordinated federal approach for the fourth round of departmental sustainable development strategies — a government-wide initiative led by Environment Canada to strengthen coherence and accountability across departmental SDSs. Many of the commitments in SDS 2007–2009 support the federal sustainable development goals that were developed under this initiative.

Based on the guidance document, *Coordinating* the Fourth Round of Departmental Sustainable Development Strategies, departments, including Environment Canada, have contributed to the federal sustainable development goals, where appropriate to their mandate, at the

same time as continuing to advance their own departmental SDS commitments.

It is intended that by identifying how departmental activities support broader federal goals and objectives in respect of sustainable development, that Canadians will gain a clearer picture of how the federal government works, in an ongoing, coordinated way, to ensure improvements in our quality of life. At the same time, this improved coordination will strengthen accountability, drive government-wide performance, and focus and stimulate activity in some key areas.

More information on how the Government is working across departmental mandates to advance sustainable development is available in Chapter 2, "Working Government WideWide: A New Approach."

Chapter 2 -Working Government Wide: A New Approach

Sustainable development is a key goal of public policy, in Canada and internationally. It is an inherently interdependent concept that cuts across departmental mandates and conventional policy sectors and calls for coordinated interdepartmental action.

After ten years of implementation, sustainable development strategies have demonstrated that they can make a difference at the departmental level. As the Office of the Commissioner of the Environment and Sustainable Development has noted, the exercise of renewing departmental sustainable development strategies every three years has led to the development of important new commitments.²

While the federal government has also made progress with horizontal collaboration in support of sustainable development, challenges remain. Under the current departmental approach, sustainable development has largely been compartmentalized along institutional lines and collaborative work on government-wide initiatives has been limited.

In 2005, Environment Canada assumed the responsibility to provide leadership, guidance and coordination of the departmental sustainable development strategy process in order to promote greater government-wide coherence and maximize effectiveness.

The fourth round of SDSs provides an opportunity to implement initial elements of a new coordinated federal approach to sustainable development. Environment Canada led an interdepartmental collaborative process that resulted in the development of a guidance document for use by federal departments and agencies in the preparation of the fourth round of SDSs, Coordinating the Fourth Round of Departmental Sustainable Development Strategies.

The guidance provides the foundation for a government-wide report on key federal sustainable development issues for the first time since the obligation to prepare sustainable development strategies came into effect.

Based on the collaborative process developed for the fourth round of SDSs, departments and agencies are working on:

- building coherence across the sustainable development strategy process based on a set of common federal sustainable development goals (see Tables A and B); and
- strengthening accountability to Canadians by developing common formatting standards to enable government-wide reporting on the federal sustainable development goals.

² Office of the Auditor General of Canada, June 21, 2006 *CESD views on sustainable development strategies* (presentation to the Interdepartmental Network on Sustainable Development Strategies).

Table A

Federal Sustainable Development Goals: Environmental Quality

Goals	1. Clean and secure water for people, marine and freshwater ecosystems	2. Clean air for people to breathe and ecosystems to function well	3. Reduce greenhouse gas emissions
Objectives and Associated Outcomes	1.1 People have access to clean water	2.1 Reduce the risks to human health and well-being caused by air quality	3.1 Increase resilience to a changing climate
	1.1.1 Water pollution is reduced	2.1.1 Emissions of and exposure to harmful indoor and outdoor air contaminants are reduced	3.1.1 Impacts of climate change are understood and vulnerability is reduced
	1.1.2 Drinking water quality and wastewater management is improved, such as on federal lands and First Nations reserves		3.1.2 Canada adapts to a changing climate
	1.2 People use water efficiently	2.2 Canada's clean air solutions support long-term competitiveness	3.2 Develop and deploy longer- term solutions to address climate change
	1.2.1 Water efficiency and sustainable water use is improved	2.2.1 Clean air solutions are supported and promoted (including market mechanisms and the development of environmental technologies)	3.2.1 Support for clean technologies is provided (such as building, transportation, and industrial processes)
			3.2.2 Renewable and clean energy is promoted
	1.3 Conserve and protect aquatic ecosystems (marine and freshwater) and biodiversity	2.3 Reduce the environmental impacts of air pollution on ecosystems, natural and built heritage	3.3 Mitigate and reduce emissions that contribute to climate change
	1.3.1 Marine and freshwater resources are protected and continue to support ecosystems and biodiversity	2.3.1 Threats to ecosystems, natural, and built heritage from the effects of air pollution are reduced and mitigated	3.3.1 Emissions are reduced
	1.3.2 Knowledge of water resources is increased		

2.1 The Fourth Round: Building Coherence

The federal sustainable development goals developed for the fourth round of SDSs focus on issues that integrate environmental sustainability with human health and economic productivity and competitiveness. The goals focus on both environmental quality (Clean Air, Clean Water, and Reduce Greenhouse Gas Emissions: see Table A), and sustainable development management (Sustainable Communities, Sustainable Development and Use of Natural Resources, and Governance for Sustainable Development: see Table B).

This approach recognizes the fundamental linkages across the environmental, social and economic spheres. It also recognizes the need to ensure that economic development supports social progress and respects the environment; that human and ecosystem health are fundamental to productivity and social equity; and that environmental policy supports prosperity and builds strong communities.

The goals were developed through extensive interdepartmental collaboration and reflect issues that have been identified as priorities in previous rounds of departmental SDSs and that are current government priorities. Departments were encouraged to develop departmental commitments that support the federal sustainable development goals, where appropriate to their mandate, at the same time as continuing to advance their own departmental SDS commitments.

The federal sustainable development goals aim to build coherence across departmental SDSs by establishing shared direction on key strategic issues that articulate the Government's commitment to sustainable development; build momentum for sustainable development across the federal family; and leverage action among relevant players.

The preparation of guidance for departmental sustainable development strategies is viewed

as an iterative process. Although some specific federal goals have been identified for this round of strategies, the intent of subsequent guidance is to broaden the focus of the federal goals and deepen the integration of social, economic, and environmental issues.

2.1.1 Greening Government Operations

The federal sustainable development goals include a set of government-wide targets developed as part of a results-oriented approach to the greening of government operations under an initiative led by Public Works and Government Services Canada, together with Environment Canada and Treasury Board of Canada Secretariat.

A set of government-wide targets and common performance measures was developed in the following three priority areas: building energy (energy efficiency in federal buildings); vehicle fleets; and green procurement. Further opportunities for greening government operations under this initiative were also identified in the areas of waste management, facilities and land-use management, regulatory compliance, and green stewardship.

Departments and agencies are expected to commit to the government-wide targets for the three priority areas and use the specifically identified performance measures, where appropriate to the nature of their operations. The three priority areas, targets, and associated performance measures are reflected under the federal sustainable development goals of Reduce Greenhouse Gas Emissions and Governance for Sustainable Development.

These measures demonstrate the Government's commitment to leading by example on environmental stewardship initiatives, including the reduction of greenhouse gas emissions in federal operations, and support the Government's national approach to reducing emissions of air pollutants and greenhouse gases.

Table B

Federal Sustainable Development Goals: Sustainable Development Management

40					
Goals	4. Communities enjoy a prosperous economy, a vibrant and equitable society, and a healthy environment for current and future generations	5. Sustainable development and use of natural resources	6. Strengthen federal governance and decision making to support sustainable development		
Objectives and Associated Outcomes	4.1 Maintain and foster social well-being within communities	5.1 Reduce adverse effects on ecosystem and public health from the use of resources	6.1 Organizational structures and processes support meaningful and significant sustainable development objectives		
	4.1.1 Communities are well positioned to advance sustainable social development	5.1.1 Integration of knowledge about health and environmental effects into decisions is increased	6.1.1 SDS commitments are integrated into the key planning and reporting processes of departments and agencies		
			6.1.2 Clear and effective governance mechanisms to integrate sustainable development in decision making, e.g., Strategic Environmental Assessment (SEA)		
	4.2 Encourage vibrant, competitive local economies	5.2 Maintain and strengthen the competitiveness of the Canadian economy through the sustainable development and use of natural resources			
	4.2.1 Communities are well positioned to adapt and to maintain or generate sustainable economic activities	5.2.1 Sustainable consumption and production of natural resources is promoted			
	4.3 Promote a high level of environmental quality in communities	5.3 Encourage responsible use of natural resources that conserves and protects environmental quality			
	4.3.1 Canadian communities are actively engaged in sound environmental and natural resource management practices, stewardship initiatives, and biodiversity conservation	5.3.1 Environmentally sustainable use of natural resources is promoted			
	4.3.2 Risks to human and ecosystem health from harmful substances are reduced (including clean up of federal contaminated sites)				

2.2 The Fourth Round: Strengthening Accountability

Accountability for the Government's progress on sustainable development has also been strengthened for the fourth round of SDSs through the establishment of measures that enable federal level reporting.

A common reporting format for the federal sustainable development goals has been developed. It will enable coordinated, government-wide reporting on federal sustainable development goals for the first time since the establishment of the sustainable development strategy process. Over the longer term, this will strengthen the Government's ability to measure and report on results, and to communicate to Canadians its sustainable development priorities, including the broad goals and objectives for which it can be held accountable.

A set of common graphic standards for the production of all department and agency SDSs was also developed and will continue to be used to ensure consistency across the strategies. The establishment of a "common look and feel" will increase the accessibility of the documents to Canadians.

Following tabling of the fourth round of departmental sustainable development strategies, a federal level "roll-up" report on the sustainable development goals will be compiled by Environment Canada. The report, based on departmental SDS commitments under each federal sustainable development goal, is intended to:

- provide a basis for departments to assess the scope and relevance of their departmental SDS commitments in relation to the federal sustainable development goals;
- facilitate the identification of trends and comparisons among departments;
- encourage government-wide performance on the federal sustainable development goals; and
- contribute to the transparency and accountability of the sustainable development strategy reporting process.

2.3 Moving Forward

Following the tabling of the fourth round of departmental sustainable development strategies, Environment Canada will continue its collaborative work with other departments and agencies to strengthen the coherence and effectiveness of the SDS process.

For example, Environment Canada will be working in the coming year with departments and agencies to review the status of current management systems for the sustainable development strategy process. Based on this assessment, Environment Canada will work

with the Treasury Board of Canada Secretariat, where appropriate, to determine how existing tools and mechanisms can be strengthened or better applied within departments to improve management planning and accountability for strategy commitments.

Departments and agencies will also continue their ongoing collaborative work on specific issues that contribute to advancing sustainable development across government. For Environment Canada, this includes initiatives such as:

- Working Group on Economic Instruments, a collaborative initiative led by Transport Canada in partnership with Finance Canada, Natural Resources Canada, Industry Canada, and Environment Canada, with the intent of exploring the use of market incentives to increase the production and purchase of environmentally friendly motor vehicles; and
- the design and delivery of new Government of Canada sustainable development training material for policy staff across government, an initiative led by Health Canada with the participation of several departments and agencies and in cooperation with the Canada School of Public Service.

2006 Report of the Commissioner of the Environment and Sustainable Development

In her 2006 report, the
Commissioner recommended that
Environment Canada should work
with departments and agencies to
identify ways to improve the planning,
implementation, and monitoring of
commitments. Where appropriate,
Environment Canada should seek advice
and support from the Treasury Board of
Canada Secretariat on establishing or
strengthening appropriate management
processes for departments and agencies
to support their commitments.

Chapter 3 - SDS 2007-2009 Logic Model and Commitments

Environment Canada's SDS 2007–2009 strengthens the integration of sustainable development in the planning and delivery of the Department's strategic outcomes, as demonstrated in the Strategy's logic model. It outlines the linkages between the activities of the Strategy and the achievement of its long-term outcomes and provides the basis for developing performance measurement and evaluation strategies (see Table C).

The logic model is guided by the Strategy's vision of attaining "the highest level of environmental quality as a means to enhance the health and well-being of Canadians,

SDS 2007–2009: Elements of the Logic Model

Goals: Establish the overall sense of direction and set the long-term parameters for action (10 years)

Objectives: Define the overall aim arising under each goal for the intermediate term (5–8 years)

Outcomes: Occur after commitment has been achieved — tangible progress would be reported within the three-year time frame of the SDS

Commitments: Action(s) to be undertaken during the period of the SDS to achieve the related outcome and to contribute to the related objective and goal

preserve our natural environment, and advance our long-term competitiveness for current and future generations."

The Strategy's four long-term goals reflect the strategic outcomes of the Department's Results Management Structure but build in a sustainable development perspective, emphasizing Environment Canada's capacity to integrate social and economic considerations in the planning and delivery of departmental priorities. They are:

- Canadians and their environment are protected from the effects of pollution and waste in support of a sustainable economy;
- Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians;
- Canada's natural capital is managed to protect and enhance its capacity to provide ecological goods and services that provide enduring social and economic benefits; and
- Strengthened integrated decision making in the delivery of departmental strategic outcomes.

The logic model for SDS 2007–2009 is supported by an internal action plan that identifies targets, timelines, performance measures, and accountabilities for each of the Strategy's commitments. It provides the foundation for defining accountability, monitoring progress, and reporting on results achieved.

The following pages outline the commitments that Environment Canada will undertake over the next three years under SDS 2007–2009.

Several of these commitments support the federal sustainable development goals and are identified as such.

Table C

Logic Model - Sustainable Development Strategy 2007–2009

Attain the highest level of environmental quality as a means to enhance the health and well-being of Canadians, preserve our natural environment, and advance our long-term competitiveness for current and future generations

1. Canadians and their environment are protected from the effects of pollution and waste in support of a sustainable economy 1.1 Risks to Canadians

- 2. Weather and
 environmental
 predictions and
 services reduce
 risks and contribute
 to the well being of
 Canadians
- 3. Canada's natural capital is managed to protect and enhance its capacity to provide ecological goods and services that provide enduring social and economic benefits
- 4. Strengthened integrated decision making in the delivery of departmental strategic outcomes

and the economy posed by air pollutants, greenhouse gases or other harmful or dangerous substances in the environment are reduced

- 2.1 Improved knowledge and information of weather and environmental conditions influences decision making
- 3.1 Biodiversity is conserved and biological resources are used in a sustainable manner
- 4.1 Integrated policy advice and information strategies enable effective decision making

- 1.2 Canadians adopt sustainable consumption and production approaches
- 2.2 Canadians are informed of, and respond appropriately to, current and predicted environmental conditions
- 3.2 Water is safe, clean and secure for people and ecosystems and is used sustainably
- 4.2 Relations with other governments and partners are effectively managed in support of sustainable development
- 3.3 Canadians adopt approaches that ensure the sustainable use and management of natural capital and working landscapes
- 4.3 Departmental operations are managed sustainably and their negative impacts are reduced and/or mitigated

utcome: Short Term

(Intermediate Term Outcomes)

Objectives

Outcomes and Commitments as outlined in the following pages

(The logic model is supported by an Internal Action Plan that outlines activities, targets and performance measures.)

Goal 1: Canadians and their environment are protected from the effects of pollution and waste in support of a sustainable economy

The health of Canadians, our economic and social progress, and our quality of life are fundamentally linked to the quality of our environment. Pollutants and other harmful or dangerous substances pose considerable threats to our well-being and have significant negative effects on air, water, and land. There are also real economic costs associated with pollution and waste, for example in the foregone resource and labour productivity and the increased burden on the health care system associated with air pollution.

Environment Canada works to protect the health of Canadians and their environment by developing and implementing strategies, programs, and partnerships that reduce the risks posed by pollutants or other harmful or dangerous substances in the environment, and that promote the adoption of sustainable consumption and production approaches by Canadians.

In recent months, Environment Canada has been taking action on a number of initiatives that focus on real outcomes and achievable results and that will contribute to a healthier environment today and for future generations. These initiatives include action to reduce the release of mercury into the environment, reductions to the release of toxic substances from smelters, and the and the proposed *Canada's Clean Air Act*, a comprehensive and integrated approach to tackle air pollution and greenhouse gas emissions.

At the same time as working to reduce and manage the risks posed by pollutants, Environment Canada continues to advance longer-term initiatives that support more sustainable consumption patterns and forms of production. Commitments in SDS 2007–2009 reflect the results-oriented approach being taken by the Department to advance environmental sustainability and to enable Canadians to better integrate the true value of the environment into their decision making.

Objective 1.1: Risks to Canadians and the economy posed by air pollutants, greenhouse gases or other harmful or dangerous substances in the environment are reduced

The health of Canadians, our ecosystems, and our economic productivity are being adversely affected by air pollution and greenhouse gas emissions. In response to this critical issue, the Government has proposed *Canada's Clean Air Act*, which takes an integrated, nationally-consistent approach to the reduction of air pollutants and greenhouse gas emissions. With this Act, the Government has committed to take measures that will achieve tangible

benefits for the protection of human health and the environment. The Government is also committed to emissions monitoring and transparent and accountable reporting that will ensure that the reductions occur on schedule.

The implementation of national emissions reduction requirements under a broad regulatory framework will address all major sources of air emissions. It will not only improve domestic air quality, but will

also strengthen Canada's ability to engage effectively in international discussions on air emissions. Through Environment Canada's SDS 2007–2009, the Department is committed to taking action to reduce air emissions for key sectors across Canada.

In addition to air emissions, there is also an increasing awareness of the connection between exposure to certain toxic substances in the environment and a variety of chronic diseases, developmental disorders, and other health problems in humans. These substances can also pose a threat to wildlife and the integrity of natural ecosystems. In order to protect against risks posed by pollution, waste, and substances of concern, those risks must be assessed, understood, and managed, taking into account the full management cycle, including the disposal or recycling of products containing toxic substances.

1.1.1 **SDS Outcome**: Air quality is improved for the benefit of the health of Canadians and Canadian economy

SDS Commitment: Actions are taken to reduce air pollutants and greenhouse gas emissions for key sectors across Canada

Federal SD Goal II Federal SD Goal III

1.1.2 **SDS Outcome**: Risks to Canadians and impacts on the environment posed by toxic and other harmful substances are assessed and managed

SDS Commitment: Development of a risk-based priority-setting approach for assessing and managing toxic substances

Federal SD Goal I Federal SD Goal II Federal SD Goal VI

Air Quality Health Index

Environment Canada and Health Canada are collaborating with provincial environment and health departments, local health agencies and non-governmental organizations to develop an Air Quality Health Index (AQHI). The new index is a personal health protection tool that, when implemented, will provide Canadians with a more accurate description of the health risks associated with current and forecasted air quality conditions in their communities.

The focus of the AQHI is on characterizing the health risks associated with the mixture of pollutants that are known to have a deleterious effect on human health and that can be regulated, such as ground-level ozone, particulate matter, and nitrogen dioxide. It provides both "at risk" populations and the general public with health messages outlining actions that can be taken to limit exposure to poor air quality. It uses a 1–10 scale, similar to the UV index, to communicate these risks and is the first multi-pollutant index of its kind.

to the UV index, to communicate these risks and is the first multi-pollutant index of its kind.

The AQHI has been pilot tested in British Columbia and Nova Scotia and will be made available for adoption by provinces and municipalities in the spring of 2007.

Objective 1.2: Canadians adopt sustainable consumption and production approaches

Environmental sustainability requires a societal shift towards more sustainable production and consumption practices that do not release harmful substances or result in substantial energy or material waste at any stage in the product cycle. The generation and dissemination of environmental and pollution information is a critical link in informing Canadians about the effects of their actions on the environment, human and ecosystem health, and economic outcomes.

This Strategy focuses on strengthening the integrated and harmonized collection of industrial pollutant data for various Environment Canada programs and those of other provincial, regional and private sector partners. This approach is intended to reduce the efforts required by industry to report, and of government to collect and ensure consistency in the data being used and published in different jurisdictions. It will also increase the confidence in and value of the information used in guiding decision making and setting priorities.

Canadian industry, as the largest driver of economic development in the Canadian economy, is a powerful partner for sustainable development. Building partnerships and integrated strategies with corporate sector actors, including small- and medium-sized enterprises, is an important area of focus for the Department.

The Department is committed to providing the information, tools, and best practices that will enable market actors to better integrate environmental considerations into their decision making and, thereby, to strengthen the business case for environmental and sustainability performance.

1.2.1 **SDS Outcome**: Canadians are informed of environmental pollution and are engaged in measures to address it

SDS Commitment: Adopt a more harmonized and integrated approach to the collection of information on pollutant release and other related data from Canadian industry to inform Canadians and support decision making

Federal SD Goal V Federal SD Goal VI

1.2.2 **SDS Outcome**: Sector-based and other approaches promote sustainable consumption and production

SDS Commitment: Advance sustainable consumption and production through initiatives, such as Corporate Environmental Innovation, that help integrate environmental considerations into decision making by Canadians, companies, investors and other market actors

Federal SD Goal V

Corporate Environmental Innovation

Environment Canada's Corporate Environmental Innovation (CEI) initiative is a partnership-based government initiative to accelerate sustainability innovation and improve environmental performance in the corporate sector. The primary activities of CEI include research projects and information dissemination aimed at expanding corporate engagement in sustainable development.

Corporate sustainability leadership is encouraged and supported by CEI, which brings together the private sector, academics, non-governmental organizations and other government departments in three project areas: Knowledge and Information; Linking Sustainable Development to Business Value; and Tools and Capacity. Through this approach, CEI supports the long-term protection of the environment and the health of Canadians while also supporting the link between corporate sustainability and financial performance. CEI also makes an important contribution to broader Government of Canada initiatives such as the SDSs.

For further information on Environment Canada's Corporate Environmental Innovation, please see: www.ec.gc.ca/cei-iee/default.asp?lang=En&n=DC145895-1

Goal 2: Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians

The weather and environmental services provided by the Meteorological Service of Canada play an important role in protecting human health, promoting economic competitiveness, and supporting environmental sustainability. The essential scientific information that the Service provides is a cornerstone of support to effective policy development within Environment Canada, other federal departments and agencies, and other levels of government.

The Department's work also assists weathersensitive industries, such as transportation, energy, fisheries, forestry, and tourism, to improve the safety of their operations and their economic efficiency at the same time as reducing the impact of their activities on the environment.

As the complexity and range of environmental sustainability challenges increase, so too must our weather and related environmental information in support of the government's environmental agenda. This includes areas such as conserving and enhancing Canada's water resources; promoting a clean air agenda; working to better understand, manage, and respond to a changing climate;

and supporting sustainable decisions to protect Canada's natural environment.

The commitments under the following two objectives are clear evidence of Environment Canada's role in providing environmental knowledge, information, and services to the public and private sectors to enable decision makers to better integrate environmental information into social and economic decision making.

Objective 2.1: Improved knowledge and information of weather and environmental conditions influences decision making

Every day, citizens, government, industry and communities make short- and long-term decisions that are sensitive to weather, climate, and environmental conditions. The importance of atmospheric and related environmental prediction and adaptation science has increased as Canadians become more vulnerable to changes in weather, climate, and environmental conditions. This vulnerability has increased, in part, due to population concentrations in urban areas, increasing dependency on electricity, aging in Canada's essential infrastructure, and greater integration into the global economic community.

The availability of timely observational data and information is critical to generating

knowledge and information for environmental prediction, air quality forecasts, water quality and supply analyses, climate change responses, and actions in support of ecosystem sustainability. A multi-disciplinary environmental prediction capability also supports policy and decision making on key government issues such as clean air, clean water, clean land, energy, health and safety, and economic competitiveness.

The following commitments focus on the provision of information to help Canadians minimize risks and improve the resilience of our social, economic, and environmental systems to high-impact environmental events.

2.1.1 **SDS Outcome**: Environmental monitoring allows Environment Canada to identify, analyze and predict weather, air, water and climate conditions

SDS Commitment: Through consultations with stakeholders, identify the gaps in hydrometric and climate data currently provided, where changes could permit more informed decision making

Federal SD Goal II Federal SD Goal III

2.1.2 **SDS Outcome**: Environmental prediction science supports weather and environmental services, decision making and policy development

SDS Commitment: Develop a multi-disciplinary environmental prediction capability that supports policy and decision making on key government issues such as clean air, clean water, clean land, energy, health and safety, and economic competitiveness

Federal SD Goal VI

Objective 2.2: Canadians are informed of, and respond appropriately to, current and predicted environmental conditions

Environment Canada produces weather and environmental forecasts, warnings, and information, 24 hours a day, every day. It also produces air quality forecasts and information products for emergency response, such as forecasts of concentrations of hazardous substances.

Timely warnings of changing weather and environmental conditions contribute to the prevention, increased preparedness, and mitigation of harm from natural disasters. Nearly ninety percent of natural disasters are related to weather, climate or water. Environment Canada also works to ensure that Canadians have the science-based advice

they need to respond to the vulnerabilities and opportunities of our changing climate.

Domestic and international partnerships are critical to the success of many of these initiatives. Environment Canada's work is carried out in close partnership with a variety of government and non-government organizations. For example, by improving the effective use of meteorological and ice information, Environment Canada's partners will be better able to improve their decision-making processes, reduce the impact of their activities on the environment, and reduce the impact of the environment on their activities.

2.2.1 **SDS Outcome**: Weather and environmental forecasts and warnings are produced to enable the public to take action to protect their safety and well-being

SDS Commitment: Improve safety and security margins for all Canadians from environmental hazards through forecasts, precision improvements, and increased warning advance notice that will permit citizens to take appropriate actions

Federal SD Goal IV

2.2.2 **SDS Outcome**: Canadians are better informed through improved weather and environmental services and leveraged partnership opportunities

SDS Commitment: Increase access by Canadians to water quantity and climatic information to make more sound environmental and economic decisions

Federal SD Goal II Federal SD Goal III Federal SD Goal IV

(CONTINUED ON NEXT PAGE)

2.2.3 **SDS Outcome**: Canadians benefit from the creation and use of meteorological and environmental information by Environment Canada and federal/provincial/territorial partners, in support of programs of common interest

SDS Commitment: Improve quality service to enable partners to use meteorological and ice information to its fullest to improve the safety of their operations and their economic efficiency while reducing the impact of their activities on the environment

Federal SD Goal IV Federal SD Goal VI

2.2.4 **SDS Outcome**: Impacts of atmospheric and climate change are analyzed and understood, and adaptive strategies are developed and implemented

SDS Commitment: Provide Canadians with the scientific information and tools needed to understand and manage their vulnerabilities and opportunities due to our changing climate in ways which balance social, economic, and environmental needs

Federal SD Goal III

Project OPPortunity

provision of weather information.

Environment Canada, in collaboration with the Ontario Provincial Police (OPP), put in place a pilot project named Project OPPortunity in response to a serious weather-related collision that took place in 1999 on Ontario's key transportation corridor, highway 401, near Windsor, when heavy fog suddenly blanketed the roadway. A coroner's inquest recommended that Environment Canada investigate ways to work more closely with the OPP in the

The Project includes a password-protected Web page available to the OPP and the Meteorological Service of Canada displaying current weather observations and weather warnings, forecasts, radar and satellite imagery, and the automated delivery of specific weather warnings affecting the OPP dispatch area. The OPP Provincial Communications Centres (PCCs) also engage in active communications with Environment Canada. This allows PCC staff to report severe weather and/or atmospheric conditions based on field reports from police officers who patrol the highway, in real time, to the meteorologists who forecast the weather in Environment Canada's severe weather office in Toronto.

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Goal 3: Canada's natural capital is managed to protect and enhance its capacity to provide ecological goods and services that provide enduring social and economic benefits

Stewardship of our natural capital is essential if we are to ensure that it is sustained for present and future generations. Natural capital includes the land and water resources that anchor our quality of life and support economic activity; the raw materials used in the production of manufactured goods; and the living ecosystems that cleanse polluted air and water, reinvigorate soil, and contribute to a predictable and stable climate.

Canada's prosperity and well-being are dependent, to a significant extent, on the state of its natural capital. Natural resources have contributed and continue to provide economic benefits to Canadians. As well, biodiversity provides ecosystem goods and services essential to human health and well-being and promotes ecological and economic resilience.

Though Canada has an abundance of natural capital, increasing pressures created by

human activity are affecting its capacity to continue to provide all of the essential assets and services that are needed now and for future generations. Our growing developmental footprint and unsustainable consumption patterns coupled with the cumulative effects of pollutants, invasive alien species, and a changing climate, for example, are degrading ecosystems and reducing species and spaces to a significant degree.

Environment Canada addresses these challenges under three broad areas: the conservation and protection of biodiversity; the conservation and protection of aquatic ecosystems; and the sustainable use and management of natural capital and working landscapes. Strategy commitments in these areas serve to value and protect our natural capital in order to better understand the costs and benefits of our actions on environmental sustainability.

Objective 3.1: Biodiversity is conserved and biological resources are used in a sustainable manner

Canada is rich in its native biodiversity — we are home to almost 20 percent of the world's wilderness, 25 percent of the world's wetlands, 10 percent of the world's forests, and 7 percent of the globe's renewable freshwater, as well as extensive wildlife resources.

To provide effective management planning to sustain this biodiversity, Environment Canada takes an integrated, ecosystemsbased approach to species and landscape management. This approach is based on partnerships that engage all parties with interests and responsibilities in conservation planning and implementation. It provides a complement to initiatives that flow from legal obligations under the Canada Wildlife Act, the Migratory Birds Convention Act, 1994, the Species at Risk Act, the Canadian Environmental Protection Act 1999, and the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act.

Environment Canada will be working with its partners in government, the private sector and non-governmental organizations, for example, to propose a strategy and regulatory framework for the management of incidental take of migratory birds.³ This approach and proposed amendments are intended to address the need to balance the economic and social benefits of sustainable resource harvesting with the environmental implications of habitat loss.

Partnerships are also critical for the conservation of significant habitats and the

sustainable management of landscapes. As habitat loss is the greatest threat to biodiversity, the assessment of land-use changes brought about by the development and use of natural resources and growing urbanization is essential. The work associated with the implementation of the *Biodiversity Outcomes Framework for Canada*⁴ will ensure that national priorities for the conservation of biodiversity are considered in land-use decisions at provincial and federal levels of government.

3.1.1 **SDS Outcome**: Wildlife will be conserved and protected for the benefit of present and future generations

SDS Commitment: Establish regulations for incidental take under the *Migratory Birds ConventionAct, 1994* to ensure effective conservation of migratory bird populations while fostering sustainable economic development

Federal SD Goal IV

3.1.2 **SDS Outcome**: Biodiversity is conserved and biological resources are used in a sustainable manner

SDS Commitment: A national biodiversity outcomes framework is implemented in partnership with provincial and territorial governments to provide improved coordinated action such as better monitoring and reporting of status and trends, engagement of Canadians in conservation planning, implementation, and reporting

Federal SD Goal IV

³ Incidental take is defined as taking that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

The Biodiversity Outcomes Framework for Canada developed jointly by federal, provincial and territorial governments, is a tool to manage, measure, and report on biodiversity conservation in Canada and to assist governments in more directly engaging Canadians in conservation planning, implementation and reporting.

Objective 3.2: Water is safe, clean and secure for people and ecosystems and is used sustainably

Water — its availability, quality, and many uses by people and nature — is essential to each pillar of sustainable development. While Canada is recognized around the world for its natural wealth in water resources, these resources are at risk. Economic development is being challenged in some parts of Canada due to limited water supply. Human health can be compromised by contaminated drinking water. Excessive water use and the cumulative impacts of use on water quality have clear negative impacts on ecosystem health and ecosystem services such as flood mitigation and recreation.

Environment Canada works to preserve this important resource by strengthening federal,

provincial, territorial and international collaboration with a view to identifying benefits and incentives for the sustainable use of water and ensuring that Canadian water related interests are protected globally. Partnerships and collaboration are key to Canada's approach to promoting sustainable water use.

To ensure that policy and decision makers have the appropriate knowledge and information, SDS 2007–2009 focuses on the development and promotion of more effective science-based instruments, tools, and strategies for integrated water management and sustainable water use.

3.2.1 **SDS Outcome**: Aquatic ecosystems are conserved and protected

SDS Commitment: New scientific knowledge/instruments/tools and strategic options are developed and made available to encourage sustainable water use by sectors and federal/provincial/territorial governments, water resource managers, industry, municipalities, and Canadians

Federal SD Goal I

Objective 3.3: Canadians adopt approaches that ensure the sustainable use and management of natural capital and working landscapes

Priority Ecosystem Initiatives have been developed by Environment Canada to respond to the unique environmental and sustainability issues of targeted ecosystems. These include Atlantic Coastal Action Program (see following Box), Georgia Basin Ecosystem, Great Lakes Basin Ecosystem, Northern Ecosystem, St. Lawrence River Ecosystem,

and the Western Boreal Ecosystem. Ecosystem management is a science-based, place-focused planning framework that deliberately integrates environmental, economic, and social objectives.

This Strategy focuses on the development and implementation of innovative tools for use in new programs with priority ecosystems.

It is intended that the use of tools such as indicators and ecological targets will provide decision makers with a better understanding of ecosystem changes and the ability to measure progress on actions taken within the ecosystems.

Environmental assessment is another key tool in assessing the state of ecosystem

sustainability and promoting integrated decision making. By identifying mitigative measures to protect the environment, the environmental assessment process provides a foundation to change the behaviours of proponents, and thus better protect and conserve our natural capital.

3.3.1 **SDS Outcome**: Integrated information and knowledge enables integrated approaches to protecting and conserving priority ecosystems

SDS Commitment: Ensure improved integration of social and economic factors in the development and implementation of new programs for priority ecosystems

Federal SD Goal I Federal SD Goal IV Federal SD Goal VI

3.3.2 **SDS Outcome**: Assessment and decision making support the health of the ecosystem

SDS Commitment: Influence decision makers by improving the effectiveness of Environment Canada's involvement in the environmental assessment process

Federal SD Goal VI

The Atlantic Coastal Action Program

The Atlantic Coastal Action Program (ACAP) is a unique community-based program initiated by Environment Canada in 1991 to help Atlantic Canadians restore and sustain watersheds and adjacent coastal areas. The success of ACAP relies on local involvement and support with the recognition that local organizations are the most effective champions to achieve sustainable development in their communities.

The ACAP involves 16 sites across Atlantic Canada, each of which has formed an incorporated, non-profit organization. While Environment Canada contributes to project funding, community stakeholders contribute most of the resources through volunteer labor, in-kind contributions, and financial support. The ACAP is part of a broader network of Ecosystem Initiatives that work to respond to the unique problems of targeted areas and communities and help to improve the understanding of the inter-related dynamics of environmental, economic, and social systems.

For more information on ACAP, please see:

http://atlantic-web1.ns.ec.gc.ca/community/acap/default.asp?lang=En&n=085FF7FC-1

PHOTO: © JIM MOYES 2004

Goal 4: Strengthened integrated decision making in the delivery of departmental strategic outcomes

Integrated decision making is a key element of Environment Canada's approach to sustainable development. It demands a horizontal perspective that incorporates economic, social, and environmental considerations; a long-term focus that seeks to conserve and enhance social, economic, and natural capital now and into the future; and recognition of the interdependence between domestic and global activities.

Environment Canada works toward integrated decision making using approaches such as: development of a strong knowledge base that puts human and natural capital on an equal footing with economic capital, and that informs public debate and encourages

integrated decision making; partnerships that enable horizontal decision making at the government, community, and corporate levels; and, finally, leadership by example in our departmental operations. These approaches are outlined in further detail under each of the following three objectives.

Commitments under this goal demonstrate how Environment Canada is using these approaches to strengthen its work on integrated policy advice and information strategies, its partnerships with other government and key stakeholders, and its environmental stewardship within the Department and across the federal government.

Objective 4.1: Integrated policy advice and information strategies enable effective decision making

Environment Canada applies a broad range of research, analysis, information, and policy tools in its work to support policy development, regulation and effective integrated decision making within the Department and with its partners and stakeholders.

Sound science is the foundation of Environment Canada's work. The Department's Science Plan, for example, provides a strategic framework by which departmental science activities are aligned with government and departmental priorities, and opportunities are created for internal science integration and external collaboration with science partners.

Sound science, relevant and timely information, and meaningful indicators

provide a strong base for informed public debate and effective decision making. Commitments under this objective highlight some key areas where the Department is strengthening environmental, social and economic linkages and building its capacity for integrated decision making. These include: the development and use of integrated environmental sustainability indicators; educational initiatives that increase access to sustainable development themes and topics within the formal education sector; and research and analysis that support integrated policy development within the Department and, with respect to the sustainable development strategy process, with other federal departments and agencies.

4.1.1 **SDS Outcome**: Integrated strategic policy with respect to sustainable development is developed and influences federal sustainable development approaches

SDS Commitment: In its role to provide leadership, coordination and guidance on SDSs, Environment Canada will be a source of sustainable development policy advice and will work interdepartmentally to improve the management and accountability of departmental SDSs

Federal SD Goal VI

4.1.2 **SDS Outcome**: Ensure integrated and strategic policy research and economic analysis supports decision making within the Department

SDS Commitment: A robust approach is developed and used to ensure Environment Canada's implementation of the *Species at Risk Act* better integrates the socio-economic dimensions of sustainable development

Federal SD Goal VI

4.1.3 **SDS Outcome**: Information and indicators are strategically managed, integrated and reported to ensure relevance and utility in assessing progress on sustainable development issues

SDS Commitment: Develop a strategy and action plan to guide the development, reporting and/or realignment of environmental sustainability indicators in line with departmental priorities and to better integrate social, health and economic considerations into the reporting of the indicators

Federal SD Goal VI

4.1.4 **SDS Outcome**: Education and engagement empower Canadians to take action for sustainable development

SDS Commitment: Increase access of educators and interested Canadians to curriculum-linked learning material on sustainable development themes and topics (e.g. energy sustainability) through strategic partnerships with expert organizations responsible for content development and dissemination

Federal SD Goal IV

4.1.5 **SDS Outcome**: Economic and environmental management concepts are linked and used to guide and integrate departmental decisions for air, water, land and biodiversity and the goods and services they produce

SDS Commitment: A federal model for action is designed and launched in one or more watersheds and demonstrates practical techniques for managing water as a capital asset

Federal SD Goal I

Children's Health and the Environment

Children are more vulnerable to environmental health risks than adults because of their unique physiological, developmental and behavioural characteristics. In 2006, North America's Commission for Environmental Cooperation published an integrated, first-ever regional report entitled *Children's Health and the Environment*

in North America: a First Report on Available Indicators and Measures. The report provides indicators for a series of children's health and environmental issues, focusing on three major areas: asthma and respiratory diseases associated with outdoor and indoor air pollution; lead and other chemicals in the home released from industrial sources; and waterborne diseases associated with drinking water and sanitation.

Environment Canada contributed to this report in partnership with other federal departments, international public health organizations and the governments of Mexico and the United States.

The goal of the report is to provide decision makers and the public with understandable information on the status of key parameters related to children's health and demonstrates a commitment to continuing to work together to ensure a safe and healthy environment for our children.

For more information, please see: www.cec.org/pubs_docs/documents/index.cfm?varlan=english&ID=1917

Objective 4.2: Relations with other governments and partners are effectively managed in support of sustainable development

The environment is a shared responsibility. Effective and sustainable management of Canada's environment requires partnerships with a broad range of sectors and stakeholders — including provinces and territories, Aboriginal peoples, industry, non-governmental organizations, academia, and communities.

Commitments under this objective focus on Environment Canada's partnerships in two key areas — with provinces and territories, and internationally — as well

as ensuring the effective engagement of partners in Environment Canada's policy development process.

Environment Canada's partnerships and consultations work is aimed at advancing constructive consultation on and participation in departmental priorities. Public involvement and stakeholder engagement helps to ensure the systematic integration of economic, social, and environmental considerations.

4.2.1 **SDS Outcome**: Partnerships with other levels of governments are managed effectively

SDS Commitment: Advance an effective process to work cooperatively with provinces and territories to inform the Department's strategic decision making in pursuing work on intergovernmental issues

Federal SD Goal VI

4.2.2 **SDS Outcome**: Canada's environmental interests are protected and promoted internationally in support of sustainable development

SDS Commitment: Country and institutional strategies are developed to advance Canada's environmental priorities internationally in a way that supports our economic and social objectives

Federal SD Goal VI

4.2.3 **SDS Outcome**: Collaboration with stakeholders is strengthened through partnerships and consultations

SDS Commitment: Guidelines on Aboriginal and stakeholder consultation are established and in use to ensure effective engagement of all partners and stakeholders in Environment Canada's policy development process

Federal SD Goal IV Federal SD Goal VI

Objective 4.3: Departmental operations are managed sustainably and their negative impacts are reduced and/or mitigated

In SDS 2007–2009, Environment Canada continues its commitment to leadership on environmental stewardship both within the Department and across the federal government. By adopting sustainable development practices that reduce our ecological footprint and assisting federal employees to make responsible decisions, we will be contributing to the sustainability of the environment for present and future generations.

Over the past year, Environment Canada worked with Public Works and Government Services Canada, and Treasury Board of Canada Secretariat, to facilitate a government-wide approach to the greening of government operations. For the fourth round of departmental sustainable development strategies, government-wide targets and common performance measures were established for three priorities: building energy, vehicle fleets, and green procurement. Further opportunities for greening government operations under this initiative were also identified in the areas of waste management; facilities, land use, and contaminated sites; regulatory compliance; and green stewardship.

Departments and agencies will report their performance annually through the Sustainable Development Performance Report section of their Departmental Performance

Reports based on the common targets and performance measures. Reporting in a consistent manner on the three priorities will make it easier to develop a government-wide report on these aspects of federal operations.

Environment Canada's support of this initiative is evidenced in the following departmental commitments that address the three priority and other areas including solid waste, water, contaminated sites, and green stewardship.

4.3.1 SDS Outcome: Departmental assets, operations and activities are managed in an environmentally sustainable manner

SDS Commitment: To prevent, reduce, minimize or eliminate air, land and water pollution that result from the Department's activities and operations through the following:

A. Procurement: To mitigate the impact of government activities on the environment, support the greening of government operations and stimulate innovation and market development of, and demand for, environmentally preferred goods and services, making these available for other sectors of society

Federal SD Goal VI

B. Building Energy: To reduce greenhouse gas and other air emissions from buildings owned and occupied by the federal government

Federal SD Goal III

C. Vehicle Fleet: To improve the environmental performance of the Government of Canada's vehicle fleets

Federal SD Goal III

D. Water: To actively ensure the responsible stewardship of water resources and wastewater management in all Environment Canada buildings and operations

Federal SD Goal I

- **E. Solid Waste**: To maximize the amount of solid waste diverted from landfills by reducing the amount of waste generated, reusing products where appropriate and taking advantage of recycling opportunities
- **F. Contaminated Sites**: To increase the public visibility of and accountability for action on federal contaminated sites

Federal SD Goal IV

G. Green Stewardship: To encourage and support all employees in incorporating environmental responsibilities into their work duties and everyday decision making

Environment Canada will continue to provide support and leadership on the broader federal agenda for greening government operations by working closely with the Office of Greening Government Operations (Public Works and Government Services Canada). By practising sound environmental management in its own operations, the government will be setting an important example as well as making a substantial impact on Canada's overall environmental performance.

Vehicle Fleets

Environment Canada is actively working to reduce the negative impacts of its vehicle fleet. Through a newly developed policy on fleet management,

the Department has articulated roles, responsibilities and accountabilities around fleet management; has stipulated

a list of accepted vehicles eligible for purchase by Environment Canada; and has outlined a list of Codes of Practice for responsible vehicle operation and maintenance. On the ground, this means that the Department is increasing its purchase of hybrid vehicles, reducing the size of many vehicles purchased, increasing education on ethanol blended fuel purchasing, and taking a stronger stance against unnecessary idling through the increased use of anti-idling signs around our vehicle depots and the installation of anti-idling devices in a number of our vehicles.

Environment Canada's work in this area is also helping to influence government-wide fleet management practices. Learning from Environment Canada's experience, other federal organizations and the Office of Greening Government Operations is tailoring a Statement of Work so that other departments can undertake a similar process of fleet review and renewal, thereby assisting in greening the entire federal fleet.



Chapter 4 Performance Framework for SDS 2007–2009

Environment Canada recognizes the importance of an effective management system for the Department's sustainable development strategy. Therefore, a Performance Framework has been developed that focuses on the following key aspects: performance measurement, results-based reporting, evaluation, and accountability. These are areas identified, internally as well as in reports by the Commissioner of the Environment and Sustainable Development, as requiring further effort.

SDS Management Systems

A good management system is a cyclical process that links an organization's objectives, action plans, and results.

A well-designed system provides a structured process for continual improvement; it is a strong indicator that intended results will be accomplished.

(2001 Report of the Commissioner of the Environment and Sustainable Development)

The Strategy's Performance Framework strengthens the linkages between planning, delivery, and evaluation, and ensures clear accountability for each of the Strategy's commitments. These measures should contribute to clear and credible public performance reporting that is useful for Canadians.

Performance Measurement: Performance information is the foundation of results-based management. In SDS 2007–2009 we have continued to move towards performance measures at the commitment level (short-term) that are specific, measurable, achievable, realistic, and time bound. It is important to note however, that measuring the performance of environmental outcomes over the longer-term can be challenging as:

- changes in environmental conditions often take decades to become visible;
- attribution is difficult in the areas of environment and sustainable development given the number of players involved to successfully implement solutions; and
- harm avoided through changed behaviour and preventative action can be difficult to demonstrate and measure.

Results-based Reporting: Results-based reporting against planned activities and target dates will continue to be reported in the Sustainable Development Strategy Performance Report section of the *Departmental Performance Report* (DPR), on annual basis. Environment Canada will, however, broaden the degree to which activities undertaken in support of the Strategy are reflected in the DPR and the Department's *Report on Plans and Priorities*, including departmental performance contributing to the federal sustainable development goals.

Environment Canada will also work towards a semi-annual reporting cycle for the Strategy's commitments. Reports, based on this cycle, will be forwarded to the Department's Executive Management Council. Semi-annual reporting at the commitment level should ensure sufficient monitoring of implementation, the degree of progress, and the effectiveness of management systems to determine if adjustments are required.

Evaluation: SDS 2007–2009 will be the subject of an evaluation in early 2009 to provide a cumulative and comprehensive assessment of the Strategy. It will assess key issue areas including relevance, role and fit, effectiveness, and design and delivery. The information generated will be used to inform the design and implementation of subsequent strategies.

Information to support the Performance Framework will be drawn from Results Chain templates completed for each of the Strategy's commitments (see Table D). The templates clearly outline the linkages connecting results to the commitments, outcomes, intermediate-term objectives and long-term goals. They also define activities, target dates and performance measures and clear accountability for each commitment. This information is intended to provide the

foundation for performance measurement, results-based reporting, evaluation and accountability for SDS 2007–2009.

Accountability: Departmental accountabilities have been established for each SDS commitment to enable the monitoring of management practices, on an ongoing basis, and to establish responsibility for reporting on progress against the commitment.

Environment Canada will also continue to strengthen our management systems based on interdepartmental work to be undertaken in response to the 2006 Report of the Commissioner of the Environment and Sustainable Development.

Environment Canada has committed to work with departments and agencies to review the current status of departmental planning, implementation, and monitoring systems for sustainable development strategy commitments, identifying strengths, gaps, and challenges. Based on this assessment, Environment Canada will work with the Treasury Board of Canada Secretariat, where appropriate, to determine how existing tools and mechanisms can be strengthened or better applied within departments to improve management planning and accountability for strategy commitments.

Table D

Environment Canada 2007–2009 Sustainable Development Strategy: Commitment Results Chain

SDS Goal (Strategic Outcome):

Establishes the overall sense of direction and sets the long-term parameters for action (10 years).

SDS Objective (Intermediate Outcome):

Defines the overall aim arising under each goal for the intermediate term (5–8 years).

SDS Outcome:	Performance Measures/Results:
Occurs after commitment has been achieved – tangible progress would be reported within the three-year time frame of the SDS.	A means of measuring any element of the logic model (strategic outcome, objective, commitment, output, activity), with the intent of gauging its performance (e.g. % reduction of GHG emissions).
SDS Commitment:	Performance Measures/Results:
Action(s) to be undertaken during the period of the SDS to achieve the related outcome and to contribute to the related objective and goal.	
Activities and Target Dates:	Strategic Outcomes: Results Management Structure
Activities and target dates as drawn from existing work planning and projected new activities.	

Rationale:

The context for the choice of this commitment and the challenges that require an SDS perspective to better deliver on departmental outcomes.

Contact Information:

Group/Division/Individuals responsible for development of commitment and subsequent reporting.

Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is a systematic and comprehensive process undertaken to ensure that careful consideration is given to the potential environmental effects of a proposed policy, plan or program during the development of the proposal.

The aim of SEA is to minimize adverse and optimize positive environmental outcomes of a policy, plan or program within the constraints of social acceptability and economic feasibility.

A key tool for enabling the federal government to make important progress towards meeting its sustainable development goals, the SEA is thus a complementary mechanism to the SDSs. The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, 2004 outlines the SEA responsibilities and process for federal departments and agencies. It emphasizes the importance of public accountability and engagement in policy, plan and program development, requiring departments and agencies to prepare a public statement of environmental effects whenever an SEA has been conducted.

Environment Canada supports the broader federal community's work on SEA through consulting with other departments and agencies and providing expert policy, technical and scientific analysis and advice on sustainable development and the potential environmental effects of policy, plan and program initiatives.

For more information on the Cabinet Directive, please see: www.ceaa.gc.ca/016/directive_e.htm

A Strategic Environmental Assessment has been conducted on Environment Canada's *Sustainable Development Strategy 2007–2009*. The Assessment clearly demonstrates environmental benefits for Canada's natural environment.