Environment Canada Environnement Canada

Environment Canada's Sustainable Development Strategy 2004-2006

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Canada

Minister's Message

I am pleased to present to Parliament and Canadians, Environment Canada's third Sustainable Development Strategy. Increasingly, Canadians have come to understand that protecting and sustaining Canada's natural environment is central to the quality of life in our communities, the strength of our economy, and the health and well-being of us all. The integration of environmental quality with economic development and social equity is at the core of sustainable development.

The past three years have been pivotal for Environment Canada as the Government of Canada made significant progress on a number of key environmental and sustainable development issues including Canada's ratification of the Kyoto Protocol and the proclamation into law of the *Species at Risk Act*.

Sustaining our natural environment and quality of life depends on leadership abroad as well as actions at home. Canada was an active participant at the World Summit on Sustainable Development held in Johannesburg, South Africa in 2002. This event was a milestone in achieving global consensus on a plan to implement commitments essential to sustainable development and poverty reduction.

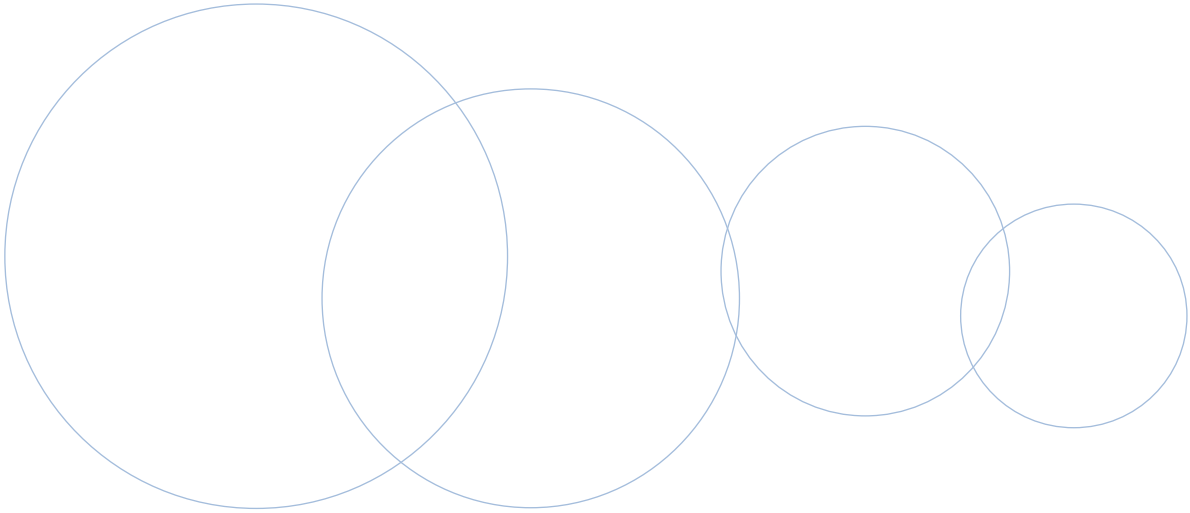
Environment Canada's *Sustainable Development Strategy 2004-2006* highlights for Canadians key commitments that we will undertake over the next three years to further our sustainable development objectives. It builds upon the strengths of our previous Strategy by continuing to advance four themes that have shaped the department's approach in recent years – Information for Decision Making; Innovative Instruments; Partnerships for Sustainable Development; and, Managing for Sustainable Development.

The updated Strategy focuses on building a future shaped by a strong knowledge base which puts human and natural capital on an equal footing with economic capital, informs public debate and ensures integrated decision making. The Strategy calls upon the strategic use of market forces to ensure good economic policy becomes good environmental and social policy. It emphasizes partnerships and governance models that enable horizontal decision making at the government, community and corporate levels. And finally, the Strategy requires leadership by example in our own operations.

In addition to my ongoing responsibilities for Environment Canada and the Canadian Environmental Assessment Agency, as of December 2003 my portfolio also includes the Parks Canada Agency, the Canada Mortgage and Housing Corporation, Infrastructure Canada, the Canada Lands Corporation Limited and Queen's Quay. I intend to extend the concepts and practice of sustainable development to the management of this broadened portfolio, particularly in terms of demonstrating leadership in reducing the ecological footprints of our collective operations. As well, I will be seeking greater convergence and complementarity across the Environment portfolio in future Sustainable Development Strategies.

I believe 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.

David Anderson, P.C., M.P.
Minister of the Environment



Sustainable development is about how to meet the needs of Canadians today, without compromising the ability of future generations to meet their needs. It is not an end point, but an approach to decision making. It recognizes that social, economic and environmental issues are interconnected, and that decisions must incorporate each of these aspects if they are to be good decisions in the longer term. It is an approach that will help Canadians achieve a healthy environment, a prosperous economy, a high standard of living, and a vibrant and just society for current and future generations.

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Introduction

In 1995, amendments were made to the *Auditor General Act* to help strengthen the federal government's performance in promoting and strengthening sustainable development. The amendments required federal departments and agencies to prepare Sustainable Development Strategies (SDSs) within two years, and to update their SDSs at least every three years. Through these same amendments, the Office of the Commissioner of the Environment and Sustainable Development (CESD) was created to assist Parliamentarians to assess progress made by the government on environmental and sustainable development issues.

Sustainable Development Strategy (SDS) 2004-2006 is Environment Canada's third in a series of Sustainable Development Strategies. It renews our commitment to sustainable development and provides the opportunity to enhance our approach to sustainable development within the department, and with our partners. The Strategy outlines the actions that Environment Canada will take over the next three years to meet our sustainable development objectives, to participate in building a government-wide approach to sustainable development, and to address our commitments to the international environmental and sustainable development agenda.

SDS 2004-2006 is guided by four themes that have shaped the department's approach to environmental and sustainable development issues in recent years. The first three themes focus on tools or approaches that promote or enable more balanced, integrated decision making by the department and by Canadians: building the information base on our environment; broadening our mix of policy instruments and ensuring their optimal application; and, building effective partnerships with a range of sectors and stakeholders. The Strategy's fourth theme renews Environment Canada's efforts to be a model in its own operations and to support efforts to promote sustainable development in operational policies and practices government-wide.

SDS 2004-2006 highlights for Canadians key directions and priority commitments that Environment Canada will pursue over the next three years to advance sustainable development.

Sustainable Development

Sustainable development is a key goal for public policy in Canada and the foundation of Environment Canada's approach to environmental management. This understanding is reflected in Environment Canada's Mission Statement which is to *make sustainable development a reality in Canada by helping Canadians live and prosper in an environment that needs to be respected, protected and conserved.*

Balancing economic development, social equity and environmental quality is at the core of sustainable development. It has provided Canadians with a new paradigm, an approach to integrating these three broad objectives in decisions to ensure that in meeting our current needs, we do not jeopardize the ability of generations to come to meet their needs. By improving our understanding of the links between environmental quality, human health and well-being, and economic performance, we are more likely to be able to achieve our objectives in each of these areas rather than in one area at the expense of another.

Sustainable Development: Two Decades and Onwards

Nearly two decades have passed since the United Nations World Commission on Environment and Development advocated sustainable development as a means of reconciling human development with the earth's ecological systems.

During this time, Canadian governments at all levels have made important policy, structural and procedural changes to better integrate environmental quality, economic development and social equity. In Canada's corporate sector, there has been a growing commitment to incorporate social responsibility and to take a proactive approach to environmental management. Many non-governmental organizations and members of civil society have embraced the concept of sustainable development and have played an essential role through advocacy, education and community action.

Though Canada has made some significant gains in the transition towards sustainability, a number of challenges remain. Canadians continue to exert significant and increasing pressure on some areas of the environment. In Canada and other industrialized nations, individual lifestyles and the degree to which more environmentally benign technologies are embraced are important indicators of environmental stress.

In Canada, for example, total energy consumption is growing, despite improvements in energy efficiency; gains made in automobile emissions and public transit use have been largely offset by increases in automobile travel and the use of larger vehicles; greenhouse gas emissions have increased substantially since 1990, the base year for the Kyoto Protocol; and total municipal water use is on the rise, as is total waste disposal.

Putting Canada on a path towards long-term sustainability will require a shift in thinking and new approaches to making economic, social and environmental decisions. It will require moving toward a future shaped by a strong knowledge base that puts human and natural capital on an equal footing with economic capital, informs public debate and ensures integrated decision making. It will require the strategic use of market forces to ensure good economic policy is also good environmental and social policy. It will require the development of innovative partnerships with all sectors of society and it will require governance models that enable horizontal collaboration at the government, community and corporate levels. It will also require continuing progress on international sustainable development and environmental commitments.

Environment Canada's Approach to Sustainable Development

Environment Canada's business is protecting the environment, conserving our natural heritage and predicting weather and environmental change. What we do affects the everyday lives of Canadians.

We work to support sound environmental decisions to protect, conserve and help Canadians adapt to the environment. We work to repair the damage of the past, to collect and communicate information, and to develop and implement policies to prevent future harm.

Many of the key environmental issues now facing Canadians cannot be addressed through a focus on environmental protection alone. Climate change, the loss of biodiversity and the human health threats posed by deteriorating urban air quality, for example, are complex, interdependent and transboundary in nature.

As the number, scale and complexity of environmental issues has increased, Environment Canada has recognized the need to move toward more preventative and integrated approaches to environmental management. This long-term systematic approach to the environment enables us to address current problems while working to ensure a sustainable environment for future generations.

A number of examples of successful efforts to promote this integrated approach to policy and programming decisions are highlighted throughout this document. By building on these early successes and by improving capacity throughout the department for forward-looking, integrated decision making, that incorporates economic and social considerations into our management of environmental issues, we will enhance our success in protecting, conserving and adapting to the environment in the long run.

At the same time, support for sustainable development must be built across governments and throughout Canada. Decision makers at all levels and in all sectors of society need to consistently integrate environmental objectives along with social and economic considerations in their decisions.

In its role as a leading advocate for sustainable development, Environment Canada will continue to demonstrate leadership by reducing the department's ecological footprint and by building capacity and commitment to sustainable development with all sectors of society – provinces and territories, Aboriginal peoples, municipalities, the private sector, non-governmental organizations, communities, and citizens.

Environment Canada will also continue to build on our commitment to global stewardship, focusing our efforts on those areas where the department can make a positive contribution to the international environmental and sustainable development agenda.

This Strategy is focused on two important strategic opportunities for Environment Canada to enhance its contribution to sustainable development:

- strengthening our departmental capacity to integrate social and economic considerations into our policy and programming decisions; and,
- developing and delivering the information, innovative instruments and partnership arrangements that will enable Canadians and Canadian institutions to better support sustainable development.

SDS 2004-2006: Building on a Strong Foundation

Environment Canada's *Sustainable Development Strategy 2001-2003* has provided a strong foundation for the department to advance sustainable development over the past three years. Considerable progress toward our sustainable development goals has been made during this period, though challenges remain. An internal review of *SDS 2001-2003* and departmental consultations, conducted early in 2003, confirmed that the sustainable development framework of *SDS 2001-2003* continued to remain relevant. As such, *SDS 2004-2006* builds upon the strengths of our previous Strategy and uses its framework to advance the department's contribution to sustainable development in some important areas.

The updating process provided the opportunity to review our performance, to refine our outcomes and commitments and to strengthen the results orientation of the Strategy. The SDS framework was updated within the context of current departmental priorities, federal sustainable development initiatives and international commitments and was guided by a Sustainable Development Strategy Advisory Committee, composed of members from each of the department's regions and services.

Departmental consultations were conducted throughout the updating process to confirm the approach taken in updating the Strategy, to validate the themes and outcomes of the proposed Strategy and to develop commitments. Consultation formats included bilateral meetings, presentations to departmental committees and the business planning communities as well as a month-long, department-wide internet-based "eConsultation", on the key themes of the Strategy.

Advice from the Commissioner of the Environment and Sustainable Development (CESD) also influenced the update. The CESD provided direction for departments in updating their Sustainable Development Strategies in her report entitled *Sustainable Development Strategies: Making a Difference* (2003).

The report emphasized that strategies should serve as strategic planning documents that make a real difference to Canadians. She recommended that departments better describe the role and fit of their SDS within their department; that they have fewer goals and objectives and take a longer-term focus; that they clearly link their desired outcomes to the supporting actions; and, that they place a greater emphasis on improved performance measurement and reporting. In the preparation of this Strategy, Environment Canada has made significant efforts to follow this guidance.

Environment Canada has taken steps to more firmly situate *SDS 2004-2006* within the department's planning framework and to demonstrate the influence of the Strategy on the delivery of Environment Canada's policy and programming priorities: moving forward on climate change; sustaining our natural environment; and, reducing the health and safety impacts of environmental threats. The department's business planning community was extensively involved in the updating process, particularly in the identification of commitments, all of which are included in the department's business line plans. The Strategy's commitments reflect those areas where the department is best suited to make real contributions to sustainable development (see Annex B for a description of how the SDS framework supports Environment Canada's departmental priorities).

This Strategy retains the intent and substance of the themes, goals and objectives of *SDS 2001-2003*, however, the outcomes and commitments are distilled and refined to better reflect the current departmental and federal context for environmental and sustainable development priorities and to focus departmental efforts in those areas where we could make the most effective contribution to sustainable development over the next few years. The model for *SDS 2004-2006*, which outlines the rationale linking the Strategy's commitments and intermediate and long-term outcomes with Environment Canada's Mission Statement, can be found in Table A on page 8.

Environment Canada continues to move towards more results-based performance measurement and reporting with this Strategy. Performance measures have been established for each commitment and our performance at the commitment level will be reported annually in the Departmental Performance Report. As well, performance measures will be established at the intermediate-term outcome level and performance evaluation will be conducted at this level at the mid-point and at the end of the three year period of *SDS 2004-2006*. This enhanced level of performance measurement and reporting should provide a more meaningful picture of departmental progress towards sustainable development.

Environment Canada's SDS 2004-2006 Framework and Commitments

The transition to sustainability requires innovative and creative approaches by all sectors of Canadian society. Environment Canada's *Sustainable Development Strategy 2004-2006* continues to promote three key approaches to enhancing the capacity for integrated decision making – Information for Decision Making, Innovative Instruments and Partnerships for Sustainable Development – as well as working to increase the sustainability of the operational aspects of the department.

These approaches derive from a recognition of the complexity of environmental and sustainable development issues, the fundamental need to shift attitudes and behaviours, and the shared nature of responsibilities and accountabilities at local, national and global scales. They are:

Information for Decision Making: Relevant and timely information, sound science and meaningful environmental and sustainable development indicators provide the foundation for informed public debate and sound decision making. They are a driving force behind attitudinal change and are fundamental in shaping innovative actions that will better ensure the sustainable management of Canada's natural capital.

Innovative Instruments: In order to better manage the interaction between the environment and the economy and to encourage significant behavioural shifts at the individual, corporate, governmental and community levels, we need to broaden our mix of policy tools and ensure their optimal application.

Partnerships for Sustainable Development: The environment is a shared responsibility and requires partnerships at all levels - with provinces, territories, Aboriginal peoples, non-governmental organizations, industry, communities, municipalities, and civil society. Achieving results through innovative partnership arrangements is both a requirement and a critical opportunity in the transition to sustainable development.

Managing for Sustainable Development: Environment Canada has a responsibility to show leadership across the federal government on sustainable development. This theme highlights our operational commitments to the reduction of the department's ecological footprint.

These four themes provide a framework through which to build on our understanding of, and capacity to address, environmental and sustainable development challenges in ways that also take into account economic and social considerations. Each of the four themes is supported by long-term outcomes, intermediate-term outcomes and commitments. The long-term outcomes represent the longer-term goals that the department is working towards over a ten year timeframe. Intermediate-term outcomes reflect those goals that the department will be addressing within a five to eight year timeframe. The commitments represent the activities that we will undertake over the three-year period of this Strategy in support of the outcomes.

Table A

Sustainable Development Strategy 2004-2006

Environment Canada's mission is to make sustainable development a reality in Canada by helping Canadians live and prosper in an environment that needs to be respected, protected and conserved.

Themes

Theme I	Theme II	Theme III	Theme IV
Information for Decision Making	Innovative Instruments	Partnerships for Sustainable Development	Managing for Sustainable Development

Long-term Outcomes

Outcome I	Outcome II	Outcome III	Outcome IV
Canadian institutions and individuals make decisions that support sustainable development.	An optimal mix of instruments is used to achieve environmental and sustainable development goals.	Environment Canada's partnerships effectively support the implementation of sustainable development.	Federal operations are managed sustainably and transparently and Environment Canada is a model for others inside and outside government.

Intermediate-term Outcomes

1.1 Environment Canada contributes to a strong, integrated environmental science system in Canada that supports sustainable development.	**2.1** Innovative economic instruments are developed and applied to support sustainable development.	**3.1** Effective partnerships promote the sustainable development of Canadian communities.	**4.1** Environment Canada employees and managers understand sustainable development and incorporate its principles into their day-to-day decisions. These are further reinforced through the integration of the environmental management system into Environment Canada's operations and management framework.
1.2 Environment Canada effectively integrates socio-economic, natural capital and environmental information and indicators and disseminates this information to influence decision makers.	**2.2** Innovative agreements are negotiated with industry to further sustainable development goals.	**3.2** Environment Canada's partnerships with the corporate sector enhance productivity and the environmental performance of Canadian industry.	
1.3 Strengthened predictive capacity and information sharing reduce the impact of environmental threats on the health and safety of Canadians.		**3.3** Environment Canada's partnerships with other government departments and other levels of government support implementation of the department's environmental agenda and build toward a coordinated sustainable development agenda for Canada.	**4.2** Environmental performance in federal operations has demonstrably improved.

Theme I: Information for Decision Making

If we are to become better custodians of our natural environment, we must ensure that the environment is an integral part of decision making by all levels of government, by businesses and industries, and by individuals. Environment Canada's goal is truly effective integrated decision making in which environmental factors are given consideration along with economic and social factors. This commitment reflects the department's growing appreciation of the centrality of information to our approach, and our important service role in supporting effective decision making.

In many instances, however, Canada's current environmental information base is inadequate and does not provide a comprehensive picture of Canada's environmental conditions or environmental management performance.

A credible and accessible information base is critical in helping to strengthen our understanding of the environmental impacts of our activities and to adapt to weather and climate-related events. It also provides a solid foundation for informed public debate and decision making and, supports the development and implementation of environmental and sustainable development indicators that track the state of the environment and measure our progress towards sustainability.

Environmental Learning and Sustainability in Canada

At the World Summit on Sustainable Development (2002), Environment Canada released *Canada's Framework on Environmental Learning and Sustainability* which sets out a vision for environmental education in Canada. Based on extensive consultations with thousands of Canadians, the *Framework* provides values and principles to guide a life-long learning process for ecological literacy and sustainable living. Communities, organizations, schools, the private sector and governments are all encouraged to contribute to environmental learning by developing and carrying out their own Action Plans, each developed according to participants' means and mandates – over 230 Action Plans have been completed to date.

www.ec.gc.ca/education

As well, the environmental information that we do have needs to be effectively communicated to all Canadians in all sectors if we are to encourage the development of an environmentally literate and responsible society. Canadians need to better understand issues regarding the environment and sustainability, and understand the importance of making informed choices and taking meaningful actions in their own lives.

Long-Term Outcome 1

Canadian institutions and individuals make decisions that support sustainable development.

Intermediate-Term Outcome 1.1

Environment Canada contributes to a strong, integrated environmental science system in Canada that supports sustainable development.

If we are to make sustainable development a reality in Canada, we must find better ways to create, apply and disseminate scientific knowledge to ensure that decisions are based on sound science. We need to ensure that science, wherever it is performed, is transferred to decision makers and other users so that they have the information and tools they need to find the most effective and efficient solutions to environmental challenges.

Environment Canada, the largest institutional performer of environmental research in Canada, is already well connected to the broader Canadian science and technology system. We need to use that position to draw together and mobilize our national science and technology resources in order to address the barriers to sustainable development and ensure that the investments made in research across the Canadian and international science and technology system will deliver the knowledge needed to make informed decisions.

In addition to strengthening our science networks, the department will continue to address science gaps, and, in this Strategy, will focus in the areas of climate change impacts, high-impact weather and the integrated analysis of water science addressing sustainable water management issues.

Adapting Urban Areas to Atmospheric Change

This research project, conducted in partnership with academia, stakeholders and external partners, is examining ways that increased vegetation will help urban areas to adapt to atmospheric change as well as strategies for increasing vegetation in urban areas. Climate change may bring more extremes of temperature and precipitation events for Canadian cities, which means more heatwaves and stormwater runoff. Increasing vegetation levels in urban areas may help to reduce summer temperatures, increase air quality, decrease stormwater runoff, and make communities more pleasant places to live over the long-term.

www.msc-smc.ec.gc.ca/airg/research_projects/index_view_e.cfm?IdKey=2

Commitments:

- Enhance water science and understanding through new collaborative approaches with stakeholders to develop tools for integrated analysis and implementation of water quality, quantity and sustainable use issues and strategies.
- Refine and use climate models to inform climate change scenarios and policy discussions.
- Advance science and modeling related to particulate matter for inclusion in National Air Quality Forecasting Program.
- Develop a national Research and Development approach to help address the science needs associated with high-impact weather and climate events.
- Develop closer collaboration between environmental science and technology performers (universities, governments, industry) through the establishment and promotion of science and technology networks, including the federal Assistant Deputy Minister Science and Technology Integration Board, the Canadian Environmental Sciences Network, and regional and issue-specific networks.

Intermediate-Term Outcome 1.2

Environment Canada effectively integrates socio-economic, natural capital and environmental information and indicators and disseminates this information to influence decision makers.

Environment Canada is committed to working with partners to develop the Canadian Information System for the Environment (CISE), a comprehensive portal to integrated environmental information, including raw data, interpreted information, indicators, reports and standards. CISE would enable timely access to, and effective application of, relevant, credible, integrated environmental data and information in support of decision making, through a co-ordinated, co-operative network of government agencies, the private sector, academia, non-governmental organizations, Aboriginal peoples and others.

State of the Environment Infobase

The State of the Environment Infobase provides one-window Internet access to federal State of Environment Reports and other environmental information tools and products. The Infobase is a key mechanism by which Environment Canada conveys scientific information on the environment in an understandable way and in a form that can be useful to the public, policy makers, researchers, educators and students.

www.ec.gc.ca/soer-ree

CISE would provide the national data sets to support the Environment and Sustainable Development Indicators developed by the National Round Table on the Environment and the Economy (NRTEE) intended to track the impact of current economic practices on Canada's natural and human capital. Efforts will focus on indicators for four priorities identified by the NRTEE: air quality, freshwater quality, greenhouse gas emissions and extent of wetlands. Statistics Canada will report on the NRTEE Indicators in an expanded System of National Accounts.

CISE would also support the implementation of Environment Canada's Indicators and Reporting Strategy, providing Canadians with credible information on the state of the environment. Environment Canada is further committed to developing and reporting on a key set of indicators on children's health and the environment in North America as well as developing a suite of national agri-environmental standards related to water quality, water conservation, pesticides, air quality and biodiversity.

Commitments:

- Continue to work towards the implementation of the Canadian Information System for the Environment.
- Develop the national data sets needed to support select Environment and Sustainable Development Indicators recommended by the NRTEE.
- Finalize and begin implementation of the Environment Canada Indicators and Reporting Strategy.
- Develop and report on a key set of indicators of children's health and the environment in North America.
- Develop national agri-environmental standards related to water quality, water conservation, pesticides, air quality and biodiversity.
- Improve coordination of strategies and systems for observations of the Earth, with a view to moving toward a comprehensive, coordinated, and sustained Earth observation information system or systems.

Intermediate-Term Outcome 1.3

Strengthened predictive capacity and information sharing reduce the impact of environmental threats on the health and safety of Canadians.

Environment Canada works to reduce risks to Canadians from weather-related and environmental hazards by providing warnings of hazardous and severe weather and by supporting other government departments and agencies in their decision making. The department's work also helps weather-sensitive industries, such as transportation, energy, fisheries, forestry and tourism, to improve productivity and competitiveness, as well as assisting them in increasing the environmental sustainability of their operations. The department also provides the federal government with essential scientific information to support the development of effective policies on key issues such as clean air, clean water and water management, and climate change.

Strengthening the predictive capacity and the dissemination of information on environmental threats such as high-impact weather, changes in long-term climate and environmental conditions, is vital for the health and safety of Canadians and for informed policy development by all sectors of society and all levels of government.

Wind Energy Simulation Toolkit (WEST)

Meteorological Service of Canada has developed WEST, a high resolution Canadian wind mapping system, which can generate a wind atlas for any location in Canada and forecast wind power up to three days in advance. Such information is invaluable, for example, to turbine-equipped wind farms as they become a more common source of emissions-free energy. Sophisticated software like WEST will help Canada to achieve an environmentally responsible and cost effective approach to electricity generation and a reduction in the use of fossil fuels.

Commitments:

- Develop a Canada-wide health-risk based Air Quality Index that will be disseminated within a daily air quality forecasting program across the country, in partnership with the medical community, non-governmental organizations and provinces/territories.
- Improve flood-related forecasting and provide provincial stakeholders with the water quantity science information required to better warn Canadians of floods.
- Improve Canadian's accessibility to, and understanding of, high impact weather warnings.

Theme II: Innovative Instruments

Our environment is our natural capital. Ecosystem resources and services are critical to our quality of life, our economy and the livelihood of all Canadians, including hundreds of rural, remote and Aboriginal communities. Sustainable management of our environment and natural resources requires that we more fully value our natural capital to understand the benefits and costs of our actions.

One of the critical challenges of sustainable development is ensuring that market signals support our environmental and sustainable development goals. Prices should better reflect environmental costs and benefits thus encouraging individuals, communities and firms to make sound environmental choices. By getting prices right, markets can be made to work for, rather than against, sustainable development.

Enviroclub

Enviroclub, a partnership between Environment Canada, Export Development Canada, the National Research Council of Canada and the Climate Change Action Fund, helps small and medium-sized companies improve profitability and competitiveness through environmental performance. It has two components: in-plant pollution prevention projects and raising awareness of eco-efficiency. Environmental results include the annual reduction of the following: 24,000 tonnes of greenhouse gases; 508 tonnes of hazardous wastes; 1,000 cubic metres of wood; 1,300 litres of petroleum products; and, 33,000 cubic metres of natural gas. In addition to the environmental benefits to society, the participating companies, in total, are expected to benefit economically in the amount of $1.5 million a year.

www.enviroclub.ca

To encourage significant behavioural shifts at the individual, firm, government and community levels, we need to broaden our mix of policy tools and ensure their optimal application. The number of approaches available for implementing environmental policy has expanded considerably from the earlier focus on command-and-control measures to include more flexible, performance based regulatory approaches, voluntary and non-regulatory measures, information and education, and economic incentives and instruments.

Economic incentives and instruments offer a potentially powerful approach because they provide price and market signals to decision makers about the environmental implications of their policy choices. When properly designed, they can often achieve a specified level of environmental protection at lower cost than traditional regulation alone. In some cases, they allow for faster achievement of environmental goals, or for more ambitious environmental goals to be set, than would regulation or other instruments, alone.

Economic instruments can also provide a continuing incentive for firms to reduce pollution, thereby stimulating innovation in the development and application of new business strategies, technologies and processes.

Environment Canada has a strong commitment to "smart regulation" – that is, to meet its environmental objectives in the most efficient and effective manner. The department has a number of regulatory and non-regulatory tools and it is continually exploring the flexibilities of these tools to deliver results in the most effective way. This includes exploring how these instruments can be designed to dovetail with provincial regulations and with the business and investment cycles of industry.

In managing these complex issues, the department recognizes the need for horizontal collaboration and effective coordination.

We will continue to support and advance the use of innovative instruments for sustainable development through our involvement in a number of interdepartmental processes such as the Smart Regulations Initiative. We will also continue to work with the Department of Finance, other federal departments and the NRTEE to further explore and encourage the opportunities for advancing the use of innovative tools and instruments.

Long-Term Outcome 2

An optimal mix of instruments is used to achieve environmental and sustainable development goals.

Intermediate-Term Outcome 2.1

Innovative economic instruments are developed and applied to support sustainable development.

This SDS provides an important opportunity to advance the use of economic instruments within the department as a substitute for, or complement to, other regulatory and non-regulatory instruments. Economic instruments better align environmental and economic signals in the marketplace, providing a more accurate reflection of environmental costs in the price of goods and services.

Over the period of this Strategy, Environment Canada will build on the success of current initiatives such as the Ecological Gifts Program (see box inset), examine the feasibility of Canada-United States cross-border cap and trade emissions trading of NO_x and SO_2, and develop and implement the Offset System put forward under the *Climate Change Plan for Canada*, supporting the Large Final Emitters system.

At the same time, Environment Canada will broaden understanding and awareness of the role of economic instruments as a tool for furthering sustainability with stakeholders and other relevant government departments. We will work to ensure that economic instruments emerge as a key element of the framework for Smart Regulations being developed by the External Committee on Smart Regulation. This Committee is developing a proposed regulatory strategy for Canada for the 21st century that will protect the health and safety of Canadians and of the environment, while contributing to innovation and competitiveness.

Fiscal policy is another key lever in encouraging better environmental performance. The department will promote the "greening" of the federal fiscal and tax systems and will continue to support the efforts of the NRTEE in examining the role of ecological fiscal reform as a strategic tool to achieve both environmental and economic objectives.

Ecological Gifts Program

Since 1995, Environment Canada's Ecological Gifts Program has enabled individual and corporate landowners to protect pieces of nature forever by donating ecologically-sensitive land to an environmental charity or government body. The Program has attracted a total of 325 ecological gifts so far, securing and conserving more than 24,000 hectares of ecologically sensitive lands valued at $67.3 million. As a direct result of the Program, the federal Income Tax Act was amended to strengthen the ability of Canadians to contribute personally to conserving biodiversity.

www.cws-scf.ec.gc.ca/ecogifts

Commitments:

- Increase the use of economic instruments within Environment Canada as a substitute for, or complement to, other regulatory and non-regulatory instruments.
- Expand understanding and awareness outside Environment Canada of the role of economic instruments as a tool for achieving sustainable development.
- Promote the greening of the federal fiscal and tax system.
- Develop and implement the Offset System as put forward under the *Climate Change Plan for Canada* supporting the Large Final Emitters system.
- Continue to implement and expand the Ecological Gifts Program.
- Conduct a study on Emissions Trading that will assess the feasibility of cross-border cap and trade emissions trading of NO_x and SO_2 emissions.

Intermediate-Term Outcome 2.2

Innovative agreements are negotiated with industry to further sustainable development goals.

This SDS offers an opportunity to explore innovative sector strategies to manage industrial air pollution in the most effective and efficient way. Industrial sectors must meet federal and provincial requirements associated with various pollutants and environmental issues. Industry is increasingly looking for more predictability and clarity with respect to these multi-pollutant requirements in order to plan their environmental investments and link them more effectively with general business investment cycles.

Where the federal government has a mandate and obligation to act to reduce industrial pollution, Environment Canada has a strong interest in ensuring that the approach taken is the most effective and efficient. There are opportunities to work collaboratively with industry, provincial governments and other partners to examine the suite of instruments available to reduce industrial pollution and design sector strategies that can meet the objectives and obligations of governments, industry and society.

Commitment:

- Work with specific industry sectors to examine innovative sector strategies to achieve reductions in pollutant emissions under the federal government's Smart Regulations Initiative.

Theme III: Partnerships for Sustainable Development

The environment is an area of shared responsibility. Sustainable management of Canada's environment, therefore, demands partnerships with all sectors of society – provinces and territories, Aboriginal peoples, municipalities, industry, communities, academia, environmental and other non-governmental organizations, as well as citizens.

Environment Canada continues to work to build effective relationships and partnerships with a range of sectors and stakeholders. The department works regularly with provinces and territories through the Canadian Council of Ministers of the Environment, and works with industry sectors in a variety of different fora and arrangements. Aboriginal peoples have a critical role to play given their increasing responsibilities for managing their lands, the importance of the environment to their traditional way of life and the fact that some Aboriginal communities, particularly those in the North, are often the first to experience the impacts of environmental change.

Environmental, public health and community-based groups continue to play an important role in promoting longer-term policy and behavioural shifts and enabling communities to better adapt to changing environmental realities. As well, municipal governments have become, and must continue to evolve as, significant partners in delivering environmental solutions.

Habitat Stewardship Program

The Habitat Stewardship Program helps Canadians protect species at risk and their habitats. The program fosters land and resource use practices that maintain the habitat necessary for the survival and recovery of species at risk – enhancing existing conservation activities and encouraging new ones. Partnerships are key to making this voluntary stewardship program a successful conservation tool – since it began in 2000, the program has established partnerships with Aboriginal organizations, landowners, resource users, nature trusts, provinces, the natural resource sector, community-based wildlife societies, educational institutions, and conservation organizations.

www.cws-scf.ec.gc.ca/hsp-pih

Long-Term Outcome 3

Environment Canada's partnerships effectively support the implementation of sustainable development.

Intermediate-Term Outcome 3.1

Effective partnerships promote the sustainable development of Canadian communities.

Canada's continued prosperity and global competitiveness relies on fostering sustainability in our communities – communities that can retain and attract investment and skilled workers, and enjoy a prosperous economy, a vibrant society and a healthy environment. Environment Canada recognizes that sustainability issues cut across a range of Canadian communities and, while the department is involved with all types of communities, in the context of this Strategy, we are focusing primarily on urban communities and the communities in the department's Ecosystem Initiatives.

Canada is among the world's most urbanized nations, with approximately 80 percent of our population living in cities. Pressures related to

urban population growth and urban sprawl are placing increasing stress on the quality of life in Canadian cities. Many large urban regions share common issues, such as infrastructure needs, smog, traffic gridlock, and loss of prime agricultural land and green spaces. Furthermore, cities and municipalities are realizing increased responsibilities with limited access to new resources.

Canadian Community Monitoring Network (CCMN)

The CCMN was a pilot project, in partnership with the Canadian Nature Federation, to develop a standardized approach to community-based monitoring in Canada. Thirty-one communities contributed to the development of the CCMN model, which involves four key interrelated phases: Community Mapping, Participation Assessment, Capacity Building, and Information Gathering and Delivery. Many of the participating communities now generate monitoring information to better understand their impacts on the environment and to provide local decision makers with the information and tools they need to make informed choices and develop responsive management plans. The CCMN has helped to build local partnerships and networks to deal with complex issues and choices related to sustainability.

www.ccmn.ca

The costs of unsustainable urban growth are becoming increasingly evident – to human and ecosystem health, and to our economic competitiveness. Community sustainability, now and for future generations, demands an integrated and balanced approach to ensure quality of life in Canada's urban centres.

One mechanism by which the department is responding to some of these challenges is through Environment Canada's Ecosystem Initiatives. These have achieved considerable success in implementing models of integrated decision making and governance frameworks using a "place-based" approach. Though initially focused on complex environmental issues affecting targeted areas and communities, Environment Canada's Ecosystem Initiatives have been evolving into frameworks that provide a broader sustainability context.

Ecosystem Initiatives bring together key decision makers to develop long-term, effective solutions to ecosystem stresses such as increased population, industrial activity and unsustainable land use. They enable Environment Canada to address priority areas and issues of concern and enable Canadians to achieve environmental and sustainable development results through partnerships, pooling resources, focusing science and building the capacity of all participants to make better decisions and effect change.

Commitments:

- Promote better integration of environmental considerations and priorities in local government decision making through a series of urban pilot projects.
- Develop an Environment Canada strategy to support community sustainability, with a focus on urban areas, in consultation with key stakeholders.
- Improve the understanding of the inter-related dynamics of the ecological, economic and social systems in ecosystem environments through a number of Ecosystem Initiatives across Canada including the Georgia Basin Action Plan, Great Lakes Basin Ecosystem Initiative, Northern Ecosystem Initiative, Western Boreal Conservation Initiative, St. Lawrence Action Plan, and the Atlantic Coastal Action Program.
- Implement a climate change social marketing campaign with messages linked to the Clean Air Agenda.

Intermediate-Term Outcome 3.2

Environment Canada's partnerships with the corporate sector enhance productivity and the environmental performance of Canadian industry.

Canadian industry is the largest driver of economic development in the Canadian economy and a powerful partner for sustainable development.

We know that unsustainable practices in the past have had significant impacts on environmental quality. This is evidenced, for example, by the legacy of toxic pollution in Canada's contaminated sites, air pollution in our cities and declining fish stocks on our east and west coasts.

Fortunately, the actions that led to these crises are changing. Industry is increasingly realizing benefits from sustainable behaviour, both in terms of direct cost savings and avoidance of costs through indirect business value, such as enhanced customer and employee loyalty and improved community and stakeholder relations. Over the last decade, corporations have increased their awareness of the potential for "triple bottom line" (i.e. economic, social and environmental) performance to enhance their profitability and long-term success.

Canadian industry is well positioned to be a stronger partner in sustainable development: sustainable development technologies are widely available, over 900 Canadian corporations have certified environmental management systems in place that allow them to identify and to manage environmental impacts, and, some Canadian companies are beginning to report to stakeholders on targets and accomplishments.

Building partnerships and integrated strategies with key industrial sectors and with small and medium-sized enterprises remains an important area of focus for Environment Canada.

Sustainability Reporting Toolkit

The Sustainability Reporting Toolkit is an important web-based tool developed to meet Canadian industry demands for simple guidance and information on how to demonstrate transparency and corporate responsibility through corporate sustainability reporting. Corporate sustainability reports are one means that companies are using to respond to increasing demands from shareholders, communities, customers, employees and regulators for information on companies' economic, environmental and social management and performance. Corporate sustainability reports help these audiences make informed decisions about their involvement with individual companies.

www.sustainabilityreporting.ca

Commitments:

- Accelerate sustainability innovation and improved environmental performance in the corporate sector through the department's Corporate Environmental Innovation initiative.
- Assist small and medium-sized enterprises to develop, demonstrate and deploy innovative environmental technologies through Environment Canada programs such as the Canadian Environmental Technology Centres, and to adopt pollution prevention planning and improve eco-efficiency and environmental performance.
- Provide new, integrated services to key weather-sensitive economic sectors (including road transportation, agriculture, forest and marine) to reduce their vulnerability to, and capitalize on opportunities which can be derived from knowledge of daily weather conditions, changes in climate and severe weather events.
- Catalyze deployment of new technological innovations to reduce pollutants and emissions impacting air, water and climate change, through the Network for Environmental Technology Innovation, the technology node of the Canadian Environment Sciences Network.
- Develop and implement the Compliance and Analysis Planning (CAP) Database to provide information on compliance with regulations and other enforceable instruments, such as pollution prevention plans and environmental emergency plans.
- Work with industry and provinces to develop a national stewardship program for end-of-life electronics waste.
- Influence land-use decisions and practices around migratory bird habitats by engaging representatives from industry through the North American Bird Conservation Initiative.

Intermediate-Term Outcome 3.3

Environment Canada's partnerships with other government departments and other levels of government support implementation of the department's environmental agenda and build toward a coordinated sustainable development agenda for Canada.

While there is a need to continue to broaden and to improve our partnerships with stakeholders outside government, there remains a core challenge in building effective partnerships with other government departments and with other levels of government to deliver on our environmental and sustainable development commitments.

Environment Canada recognizes the need to enhance the co-ordination of policies across federal government departments, and to better institutionalize this horizontal co-ordination. We will continue to provide leadership in the development of a government-wide sustainable development agenda.

Georgia Basin Action Plan

The Georgia Basin Action Plan brings together parties concerned with the well being of the Georgia Basin ecosystem, including local governments, First Nations, community groups and industry associations. These partners work to address the Georgia Basin's environmental needs by identifying the key goals of achieving sustainable communities, clean air and clean water, and protection of habitat and species. These include developing tools for decision makers to assist in sustainable planning, studying air quality in the Fraser Valley, supporting the acquisition of important habitats and instituting best management practices for urban storm water use and shellfish harvesting areas.

www.pyr.ec.gc.ca/georgiabasin

Equally important are the innovative governance structures that must be put in place to enhance co-ordination and cooperation between different levels of government including provincial, territorial, municipal and Aboriginal.

The challenge to build effective intra- and inter-governmental partnerships is an ongoing one. Environment Canada needs to build on our existing successes and continue to promote innovative and pragmatic approaches to working effectively together. Some of the most significant priorities over the next three years include partnerships in support of climate change, water, and implementation of the Canadian Biodiversity Strategy.

Commitments:

- Lead in the development of a government-wide sustainable development agenda.
- Develop and implement, with provinces, territories and other federal departments, a collaborative agenda for implementing the Canadian Biodiversity Strategy on invasives, access-benefit sharing regarding genetic resources, biological information and stewardship.
- Develop recovery strategies for species at risk, in collaboration with the provinces, territories, other federal government departments, Aboriginal peoples, wildlife management boards, industry and non-governmental organizations, for inclusion in the public registry under the *Species at Risk Act*.
- Develop materials and provide expertise in support of the delivery of the First Nations Water Management Strategy in partnership with Indian and Northern Affairs Canada and Health Canada.
- Support the development of a domestic mandatory greenhouse gas (GHG) reporting system in cooperation with federal, provincial, territorial and other partners to meet domestic reporting needs in a comprehensive manner.
- Jointly design and implement, with Natural Resources Canada, an Opportunities Envelope to assist the provinces and territories in reducing GHG emissions.
- Work in partnership with federal and provincial governments, academia and the private sector to make regional scale climate change scenario tools available for decision making.
- Develop an innovative approach to achieve reduction in pollutant emissions from petroleum refineries, under the Canadian Council of Ministers of the Environment.

Theme IV: Managing for Sustainable Development

Environment Canada has a responsibility to show leadership across the federal government on sustainable development. Reducing the department's ecological footprint is a fundamental means of demonstrating our leadership and commitment to sustainable development. Success will require the participation of every employee, and this provides the department with a key opportunity to engage and encourage Environment Canada staff, both as employees and as Canadians, to make decisions that support the environment and sustainable development.

Long-Term Outcome 4

Federal operations are managed sustainably and transparently and Environment Canada is a model for others inside and outside government.

Intermediate-Term Outcome 4.1

Environment Canada employees and managers understand sustainable development and incorporate its principles into their day-to-day decisions. These are further reinforced through the integration of the environmental management system into Environment Canada's operations and management framework.

Environment Canada employees are critical to the success of departmental efforts to improve the environmental performance of our daily operations, for example, in the purchases they make, the practices they adopt, and the standards they demand in the contracts in which they engage. In order to improve performance, we need to ensure that employees are provided with the information, training, capacity building and management support they need to make sustainable choices.

Environment Canada is working to reduce its GHG emissions, and a comprehensive plan of action to further reduce our carbon footprint is underway. Environment Canada will develop the tools, model the practices/mechanisms, and provide leadership to others through actions to reduce GHG emissions – including GHG emissions for which the department is directly accountable and those for which we are not directly accountable – under the Sustainable Federal House in Order initiative. This will include GHG emissions reductions in, for example, employee business travel and commuting, and energy use in leased buildings.

Environmentally responsible procurement practices encourage the acquisition of goods and services that minimize the use of natural resources, the use and production of toxic materials, and emissions of greenhouse gas and other air pollutants over a product's lifecycle.

Sustainable Federal House in Order

Environment Canada co-leads Sustainable Federal House in Order, an interdepartmental initiative designed to identify and coordinate opportunities to advance the federal commitment to be a leader in sustainable development. Sustainable Federal House in Order oversees the Sustainable Development in Government Operations (SDGO) and Federal House in Order (FHIO) initiatives. Environment Canada is working together with other Sustainable Federal House in Order departments and agencies to adopt common measurement and reporting methods.

www.fhio.gc.ca
www.greeninggovernment.gc.ca

By influencing the selection and procurement of environmentally responsible products and services, Environment Canada can reduce its waste production, conserve water, reduce its energy consumption and resultant greenhouse gas emissions and support businesses that put environmental considerations at the forefront.

Environment Canada is further dedicated to reducing the environmental impacts of its operations by adopting a strategic approach to environmental management. By integrating Environment Canada's Environmental Management System (EMS), modeled on the ISO 14004 guidelines, into the department's operations and management framework, the department will ensure environmental considerations are fully taken into account in decision making.

Commitments:

- Use common performance measures developed under the Sustainable Federal House in Order initiative to report on departmental performance.
- Initiate the development and implementation of shared Environmental Management Systems in leased facilities.
- Implement an environmentally responsible fleet management policy.
- Implement a GHG emissions reduction action plan, including a "carbon footprint", that would exceed departmental targets, and provide leadership to others on reducing GHG emissions.
- Implement departmental procurement practices that support sustainable development objectives.

Intermediate-Term Outcome 4.2

Environmental performance in federal operations has demonstrably improved.

The 2003 report, *Greening the Federal House*, is the first aggregate report ever produced on the status of six areas of federal operations. This report was a first attempt at reporting horizontally across government on these key operational areas and it has brought to light gaps in information and other hurdles in providing a comprehensive picture. Over the coming years, a number of issues will be addressed, including data collection, reporting indicators, and governance structures.

Environment Canada has also taken an important role in coordinating the newly-formed Assistant Deputy Minister-level body to oversee Sustainable Federal House in Order (SFHIO) initiatives. The SFHIO initiatives are intended to increase strategic direction-setting and guidance, to improve coordination, to identify and address barriers to progress, and to improve performance as well as its measurement and reporting.

Commitments:

- Coordinate the Assistant Deputy Minister Sustainable Federal House in Order Steering Committee.
- Promote the Leadership Challenge, an initiative that encourages voluntary action to reduce GHG emissions, to increase our reach to federal employees in other departments, agencies and Crown Corporations.

Chapter 3

Working Across Government to Advance Sustainable Development

Support for the environment and sustainable development must be built across governments and throughout Canada if our environmental heritage is to be sustained for the benefit of present and future generations. The federal government has made significant progress in building its capacity to manage for sustainable development since the legislative action in 1995 to establish the SDS process and to create the Office of the Commissioner of the Environment and Sustainable Development.

One of the first concerted attempts at coordinating federal government activities in support of sustainable development was the landmark Leaders Forum on Sustainable Development (2000). This forum brought together senior federal government officials and senior representatives from various sectors of Canadian society to discuss the Government of Canada's approach to sustainable development and on larger issues surrounding sustainability in Canada. Eight theme areas for federal collaboration on sustainable development were developed based on discussions at the Leaders Forum and these continue to be relevant to the federal government's sustainable development agenda.

Recent federal initiatives such as Canada's Oceans Strategy (2002) and the Agricultural Policy Framework (2002) further build upon this foundation of collaborative government action in support of sustainable development, and demonstrate the increasing integration of environmental, social and economic considerations into policy and planning processes. These initiatives seek to further the use of coordinated and collaborative management techniques through partnerships and enhanced stakeholder engagement to ensure the sustainable, responsible and integrated management practices of Canada's natural resources.

Environment Canada is also a strong advocate for the integration of environmental issues into other federal departmental agendas. The department has developed an Environmental Management Framework for use across the federal government to guide the development and implementation of the government's environmental agenda. It provides internal policy guidance to departments at both a strategic level and a priority setting level and is designed to shift the focus of environmental management towards prevention and stewardship.

The Road Ahead

While progress has been made towards better federal collaboration in support of sustainable development, challenges still remain. Sustainability issues are typically cross-cutting – several departments can be responsible for different aspects of a single issue, but none is usually responsible for its entirety. Policy design, decision making and implementation processes therefore need to be integrated both vertically and horizontally.

As well, the federal government needs to improve its capacity to assess and integrate longer-term impacts into analyses and decision making. The tendency to address current priorities over future needs and the inherent difficulties in assessing future trends can mitigate against the systematic consideration of the consequences of our actions on future generations.

Policy and decision making processes need to be better informed by a life cycle management approach that considers the environmental, social and economic impacts over the full life cycle of processes and products. In the context of its investments in buildings, for example, the Government of Canada should work to ensure that opportunities for longer term operational cost savings (e.g. through energy efficiency measures) are factored into initial capital investment decisions.

Environment Canada recognizes the great potential to advance sustainability that is offered by working with others and is committed to promoting interdepartmental collaboration across the federal government. The department is the co-lead of the Environment and Sustainable Development Coordinating Committee (ESDCC), a Deputy Minister-level committee that provides strategic direction on the federal government's environmental and sustainable development priorities. Environment Canada also co-leads supporting committees to the ESDCC, at the Assistant Deputy Minister and Director levels, and the Interdepartmental Network for Sustainable Development Strategies.

Through these committees, the federal government is working to build a government-wide agenda for sustainable development and coordinating action on selected priority issues. A key result of these efforts was the tabling of a discussion paper entitled *Progress Towards a Sustainable Development Strategy for the Government of Canada* at the World Summit on Sustainable Development (WSSD) in Johannesburg in August - September 2002.

Environment Canada will continue to work interdepartmentally to identify areas where increased federal focus and collaboration will have a significant impact in Canada and abroad and will provide leadership in the development of a government-wide sustainable development agenda that would articulate a vision for sustainable development in Canada, and priority areas of action to achieve that vision.

Current Government-Wide Initiatives

Several departments are initiating work in a number of common areas that provide an opportunity to make progress towards long-term sustainability, including:

The Federal Role on Water

The federal government is responsible for international water issues, fish habitat protection, the prevention of aquatic pollution, protection of biodiversity, and the provision of water in federal facilities and in partnership with First Nations communities.

Environment Canada provides a significant portion of the research and monitoring, and makes an important contribution to the modeling that underpins water management in Canada, and works closely with other jurisdictions and other fora to develop guidelines for water quality and strategies for sustainable water use.

This broad array of issues and activities engages the mandates of at least 19 federal departments. These departments are collaborating in the development of a strategic and integrated approach to ensure clean, safe and secure water resources in Canada, focusing on the protection of human health, ecosystem health, the sustainable and productive use of our water resources, and the prevention and mitigation of impacts from extreme weather events. Departments are also collaborating to ensure that we promote Canadian approaches and capacities abroad. A federal government-wide management framework is being established to ensure that all of this work is coordinated and focused on achieving our objectives efficiently.

Environment Canada plays a lead role in coordinating federal input into international water policy issues, in close collaboration with other federal departments and other stakeholders. We are committed to strengthening water research and monitoring, improving governance of water issues both nationally and within the federal government, and laying the groundwork for sustainable water use in Canada including the development of economic instruments. We are also committed to ensuring that Canada makes a strategic contribution to global water priorities, including the Millennium Development Goal and World Summit on Sustainable Development commitments on water and sanitation.

Sustainable Federal House in Order

The Government of Canada is committed to becoming a model of sustainable development in its operations by promoting the adoption of pollution prevention and environmentally responsible approaches and practices in each of its departments and agencies.

The federal government is the largest employer in Canada. It has an on-road vehicle fleet of some 23,000 vehicles and occupies over 25 million square metres of floor space in more than 50,000 buildings. Making government operations more sustainable means encouraging federal employees to integrate sustainable development into decision making. All federal employees have a part to play in working to reduce the ecological footprint of federal operations. Environment Canada is helping to achieve this commitment through our leadership on a number of government-wide initiatives, as well as our in-house actions.

Environment Canada will continue to play a leadership role on the Sustainable Federal House in Order initiative which includes 29 federal departments. To date, we have made substantial reductions in GHG emissions: by reducing energy use in buildings and in vehicles; by purchasing green power; by carrying out a Transit Pass Pilot Project with three other departments in the National Capital Region; and, by participating in carbon neutral conferencing initiatives. The department will continue the development and promotion of emission reduction tools and will provide information on sustainable government operations to departments. Environment Canada is also committed to taking an active role in promoting government-wide initiatives in areas such as green procurement and EMS implementation.

Corporate Social Responsibility

Corporate Social Responsibility (CSR), frequently seen as industry's contribution to sustainable development, is one way that companies integrate economic, environmental and social objectives while at the same time encouraging innovation, addressing stakeholder expectations and engagement, and sustaining or enhancing shareholder value. CSR commitments and activities typically address aspects of a firm's behaviour with respect to such key elements as environmental protection, health and safety, human rights, corporate governance, community development and others.

The Government of Canada is working to develop a federal approach to long-term CSR outcomes and strategic objectives. For example, Environment Canada and other federal departments are working with businesses and other stakeholders to accelerate innovation and improved environmental performance in Canada's corporate sector by encouraging and supporting corporate sustainability leadership. By broadening and deepening the integration of economic, social and environmental considerations into their business strategies and practices, Canadian companies can become more competitive through recognition at home and abroad as leaders in innovation and sustainability.

Key strategic themes and priorities for federal departments include:

- Ascertaining where the business case for environmental and social performance is strong and seizing opportunities to advance CSR when they arise;
- Encouraging, advancing and recognizing CSR best practices;
- Developing and disseminating useful CSR tools, reporting approaches, and domestic and international voluntary standards; and,
- Supporting the development of human capital and human resource skills to strengthen CSR expertise.

Environment Canada is committed to supporting and advancing CSR principles and tools, in partnership with other federal departments, business and other stakeholders, to help Canadian industry to become leaders in sustainability, innovation and performance.

Chapter 4

Environment Canada's Commitment to Global Stewardship

In an era of globalization, in a world that is rapidly becoming interdependent, the international agenda for the environment and sustainable development is assuming increasing importance. It has been nearly two decades since the United Nations World Commission on Environment and Development, "the Brundtland Commission", drew linkages among the global challenges of environmental degradation, poverty and development and advocated sustainability as a new approach to development.

The subsequent UN "Earth Summit" held in Rio de Janeiro, Brazil, in 1992, identified the fundamental principles and set out a programme of action for achieving sustainable development at global, national and regional levels. The results of the Summit included the Rio Declaration on Environment and Development, the Statement of Forest Principles, the UN Framework Convention on Climate Change, the Convention on Biological Diversity and Agenda 21, a blueprint for action in support of sustainable development for the 21st century.

Environment Canada continues to build on these and other international environmental and sustainable development commitments and to focus its international efforts on those areas where the department can make a positive contribution to sustainability including the environment and human health agenda, international environmental governance, and trade and environment linkages.

Addressing the interaction between human health and environmental degradation is at the core of achieving sustainable development. Environmental degradation is recognized as a contributor to many of the leading causes of illness, hospitalization and death worldwide. Environment Canada has contributed to making human health and the environment a priority in Canada as well as regionally in the Americas and globally. For example, Environment Canada, along with Health Canada, co-chairs the Health and Environment Ministers of the Americas Task Force to make health and environment a priority in the Americas. These departments also co-lead the Health and Environment Linkages Initiative, a global initiative for better public policies linking human health and the environment.

Good governance at the national and international levels is essential for sustainable development. Canada has been at the forefront of global dialogue on international environmental governance issues with the Honourable David Anderson, Minister of the Environment, sitting as President of the Governing Council of the United Nations Environment Program (UNEP) from 2001 to 2003. Furthermore, Environment Canada is committed to being a champion in the federal government for the full implementation of the recommendations agreed to by the Intergovernmental Group of Ministers on International Environmental Governance to strengthen the framework for cooperative environmental action.

International trade and investment flows and the rules that govern them have become one of the strongest influences on economic, environmental and social development in recent decades. The links between trade and the environment are complex and multiple. Environment Canada works in partnership with other federal government departments to promote the mutual supportiveness of trade and the environment in international trade agreements such as the North American Free Trade Agreement, and organizations such as the World Trade Organization. The department also participates in the environmental assessment of trade negotiations, an important federal initiative led by the Department of Foreign Affairs and International Trade.

While Canada and the international community have made progress on many sustainable development issues, significant challenges remain if we are to be able to meet the needs of the world's human population within our ecological limits. One of the biggest challenges is to address poverty alleviation, a key principle of sustainable development and a primary goal of recent international agreements including the United Nations Millennium Development Goals and the *Johannesburg Plan of Implementation* from the 2002 World Summit on Sustainable Development.

World Summit on Sustainable Development

The World Summit on Sustainable Development (WSSD) took place in Johannesburg, South Africa, from August 26 to September 4, 2002. It brought together Heads of State and governments, United Nations agencies, multilateral financial institutions, non-governmental organizations, businesses and major groups in an important opportunity to review progress in the ten years since the Earth Summit and to focus on the implementation of existing agreements and commitments. It yielded three key outcomes: a Political Declaration; a variety of Implementation Partnerships; and, the *Johannesburg Plan of Implementation*.

Following the Summit, the Government of Canada, under the auspices of the Canadian Earth Summit Secretariat, completed foundation work on a plan for follow-up to the WSSD. This work focuses on issues and commitments from the *Johannesburg Plan of Implementation* that require action by federal government departments. This work is currently serving as an important resource for federal departments, including Environment Canada, as a first step towards implementation. Work will continue interdepartmentally to strengthen the process and plans to ensure a continued emphasis on implementation of WSSD commitments.

Table B, on page 30, represents a number of WSSD commitments that Environment Canada will focus on over the coming years, through work within the department and in partnership with other federal government departments and other sectors of society.

Canada has also been focusing on a number of key priority areas since the conclusion of the Summit. At Environment Canada, these include the Health and Environment Linkages Initiative, an initiative that is jointly led by Environment Canada and Health Canada, and supporting a revitalized Global Environmental Monitoring System for Water under the United Nations Environment Program. Other priority areas include the expansion of the Sustainable Cities Initiative, led by Industry Canada, and the Canadian-based Secretariat of the International Model Forests Network, led by the Department of Foreign Affairs and International Trade.

Table B

WSSD Commitments (paraphrased text)

Changing Unsustainable Patterns of Consumption and Production	Encourage and promote the development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production. (See the *Johannesburg Plan of Implementation* (JPOI) commitment number 15a-d, f)
	Enhance corporate environmental and social responsibility and accountability. (See JPOI 18)
	Encourage relevant authorities at all levels to take sustainable development considerations into account in decision making, including on national and local development planning, investment in infrastructure, business development and public procurement. (See JPOI 19a)
	Prevent and minimize waste and maximize reuse, recycling and use of environmentally friendly alternative materials, with the participation of government authorities and all stakeholders. (See JPOI 22a)
	Renew the commitment, as advanced in Agenda 21, to sound management of chemicals throughout their life cycle and of hazardous wastes for sustainable development as well as for the protection of human health and the environment, using transparent science-based risk assessment procedures and science-based risk management procedures, taking into account the precautionary approach, as set out in principle 15 of the Rio Declaration on Environment and Development. (See JPOI 23b-g)
Protecting and Managing the Natural Resource Base of Economic and Social Development	Halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water, as outlined in the Millennium Declaration, and the proportion of people without access to basic sanitation. (See JPOI 25)
	Develop integrated water resources management and water efficiency plans by 2005. (See JPOI 26a-g)
	Improve water resource management and scientific understanding of the water cycle through cooperation in joint observation and research, and for this purpose encourage and promote knowledge-sharing and provide capacity-building and the transfer of technology. (See JPOI 28)
	Encourage the application by 2010 of the ecosystem approach, noting the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem and decision V/6 of the Conference of Parties to the Convention on Biological Diversity. (See JPOI 30d)
	Advance implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and the Montreal Declaration on the Protection of the Marine Environment from Land-based Activities. (See JPOI 33a-d)
	Enhance cooperation at the international, regional and national levels to reduce air pollution, including transboundary air pollution, acid deposition and ozone depletion. (See JPOI 39)
	Negotiate within the framework of the Convention on Biological Diversity, bearing in mind the Bonn Guidelines, an international regime to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources. (See JPOI 44o)

Table B (continued)

WSSD Commitments (paraphrased text)	
Health and Sustainable Development	Launch international capacity-building initiatives, as appropriate, that assess health and environment linkages and use the knowledge gained to create more effective national and regional policy responses to environmental threats to human health. (See JPOI 54k)
	Reduce respiratory diseases and other health impacts resulting from air pollution, with particular attention to women and children by strengthening and supporting efforts for the reduction of emissions through the use of cleaner fuels and modern pollution control techniques. (See JPOI 56c)
Means of Implementation	Support the use of education to promote sustainable development. (See JPOI 124a-d)
Institutional Framework for Sustainable Development	Implement the outcomes of the decision on international environmental governance adopted by the Governing Council of the United Nations Environment Programme at its seventh special session and invite the General Assembly at its fifty-seventh session to consider the important but complex issue of establishing universal membership for the Governing Council/Global Ministerial Environment Forum. (See JPOI 140d)
	Continue to promote coherent and coordinated approaches to institutional frameworks for sustainable development at all national levels, including through, as appropriate, the establishment or strengthening of existing authorities and mechanisms necessary for policy-making, coordination and implementation and enforcement of laws. (See JPOI 162a)
	Make progress in the formulation and elaboration of a national strategy for sustainable development. (See JPOI 162b)

Performance Reporting

Measuring performance is a key element of modern public management and is critical to the department's ability to report on progress in achieving our sustainable development objectives. Environment Canada continues to move toward more results-based performance measurement and reporting in its *Sustainable Development Strategy 2004-2006*.

In managing the implementation of this Strategy, we have established improved performance expectations and accountabilities and will focus our reporting on meaningful outcomes.

In *SDS 2004-2006*, performance measures have been established at the commitment level and will be reported on annually in the Departmental Performance Report, as in our previous Strategy. Performance evaluation at the intermediate-term outcome level will be conducted at the mid-point and at the end of the three-year period of *SDS 2004-2006* with the intent of providing a cumulative, comprehensive assessment of the impact of the Strategy's commitments. Performance measures at this level will be supplemented with qualitative assessments.

In developing performance measures, particularly at the commitment level, efforts have been taken to develop measures that contain a clear deliverable, are understandable and time-bound.

As well, departmental accountabilities have been established at both the commitment level and the intermediate-term outcome level, for the purposes of implementation, performance measurement and reporting.

It is anticipated that this enhanced level of performance measurement and reporting should provide a clearer and more meaningful picture of departmental progress towards sustainable development.

Glossary

Carbon neutral conferencing – Carbon neutral conferencing is based on the Kyoto principles of emissions trading, and allows for the GHG emissions associated with conference activities to be offset through the purchase of carbon credits. The determination of conference-generated GHG emissions is based on each participant's long-distance travel, local travel and accommodation details.

Climate change – A warming of the Earth's atmosphere caused by increases in the atmosphere of certain gases that absorb the radiation emitted by the Earth, thereby retarding the loss of energy from the system to space.

Eco-efficiency – Eco-efficient practices include: reducing the material intensity of goods and services; reducing the energy intensity of goods and services; reducing the dispersion of toxic materials; enhancing the recyclability of materials; maximizing the use of renewable resources; extending the durability of products; and, increasing the service intensity of goods and services.

Ecological footprint – The amount of productive land and water a given population requires to produce all the resources they consume, and take in all the waste they produce, using prevailing technology.

Ecosystem – An integrated and stable association of living and non-living resources functioning within a defined physical location.

Ecosystem approach – The design of policies, programs, and operations in consideration of the unique and fundamental characteristics of individual ecosystems and in recognition of the interdependence of social, economic and environmental systems.

Environmental Management System (EMS) – A systematic approach for organizations to bring environmental considerations into decision making and day-to-day operations. It also establishes a framework for tracking, evaluating and communicating environmental performance. An EMS helps ensure that major environmental risks and liabilities are identified, minimized and managed.

Greenhouse gases (GHGs) – Gases in the atmosphere that trap the sun's energy and thereby contribute to rising surface temperatures. The main greenhouse gas that contributes to climate change is carbon dioxide, a by-product of burning fossil fuels.

Indicator – A selected key statistic or parameter that, tracked over time, can represent or summarize trends in social, economic and environmental conditions.

Integrated decision making – An approach to planning and decision making that ensures progress on each and all of the dimensions – social, economic and environmental – of sustainable development.

ISO 14004 – The ISO 14000 series is a family of environmental management standards developed by the International Organization for Standardization (ISO). The ISO 14004 standards are designed to provide an internationally recognized framework for environmental management, measurement, evaluation and auditing.

Natural Capital – Refers to the Earth's natural resources and the ecological systems that provide vital life-support services to society and all living things. The term is an extension of the economic notion of capital to environmental 'goods and services'. It refers to a stock (e.g., a forest) which produces a flow of goods (e.g., new trees) and services (e.g., carbon sequestration, erosion control, habitat).

Pollution prevention – The use of processes, practices, materials, products, or energy that avoids or minimizes the creation of pollutants or wastes and reduces overall risk to human health or the environment.

Triple Bottom Line – A business principle that measures corporate performance along three lines: economic concerns, environmental sustainability, and social responsibility.

Departmental Profile

Environment Canada was created in 1971 with a mandate to: preserve and enhance the quality of the natural environment, including water, air and soil quality; conserve Canada's renewable resources, including migratory birds and other non-domestic flora and fauna; conserve and protect Canada's water resources; carry out meteorology; enforce the rules made by the Canada-United States International Joint Commission relating to boundary waters; and, coordinate environmental policies and programs for the federal government.

Today, Environment Canada interprets its mandate in terms of three broad priority areas: reducing the health and safety impacts of environmental threats; sustaining our natural environment; and, moving forward on climate change. Environment Canada uses a business line structure to fulfill its mandate to Canadians. The four business lines, which provide the framework for internal accountability and management as well as external reporting, are each guided by a long-term strategic outcome:

Clean Environment: To protect Canadians and their environment from domestic and global sources of pollution;

Nature: To conserve biodiversity in healthy ecosystems;

Weather and Environmental Predictions: To help Canadians adapt to their environment in ways that safeguard their health and safety, optimize economic activity and enhance environmental quality; and,

Management, Administration and Policy: To provide strategic policy and effective departmental management to achieve environmental results.

Organizationally, Environment Canada is divided into five Services, led by Assistant Deputy Ministers, and five Regions, led by Regional Directors General. The organizational leads are accountable for the delivery of results as set out in business line plans and for management of their organizations. Departmental organizational structures crosscut business lines in a matrix management approach, which allows coordinated, consistent programming and direction, as well as client-centered delivery in a manner that respects regional differences.

Program delivery at Environment Canada is achieved by drawing on scientific and technical knowledge across the department combined with a strong regional understanding of the social, cultural and economic factors that shape attitudes, perceptions and behaviour. Environment Canada's regional offices deliver the national vision for the environment at the local level. They work in partnership with provinces, territories, communities and others across the country, providing science-based information and tools for action, and helping to build the capacity of all involved to effect changes that will improve quality of life.

Applying Environment Canada's SDS Framework to Departmental Priorities

In *SDS 2004-2006* we have taken steps to demonstrate the influence of the Strategy on the delivery of Environment Canada's policy and programming priorities: moving forward on climate change; sustaining our natural resources; and, reducing the health and safety impacts of environmental threats. Annex B describes related significant sustainable development challenges under each of the three priorities, and the SDS commitments that will address these challenges. This section is intended to provide a clearer picture of the role and fit of the Strategy within the department.

Moving Forward on Climate Change

Scientific research shows that an increase in GHGs from human activities (mostly from burning fossil fuels), combined with deforestation, is changing the natural greenhouse effect and causing the average temperature on Earth to warm. Globally, this will have an impact on the quality of life of many people and may have devastating impacts on many countries including northern countries such as Canada. In Canada, climate change will affect resource sectors such as fishing, farming and forestry, coastal and northern communities as well as our lakes and rivers.

Climate change can be considered the ultimate sustainable development issue. Canada must chart a path where our economy can continue to flourish while at the same time reducing its GHG intensity; that is, producing each unit of Gross Domestic Product (GDP) with fewer GHG emissions. We will also have to adapt to the impacts of climate change, many of which are unavoidable even with significant GHG reductions. Climate change is a challenge but also presents opportunities in areas such as innovation, energy efficiency, transportation, agriculture and forestry. Meeting our climate change commitments will contribute to a better quality of life for Canadians.

Environment Canada shares the lead (with Natural Resources Canada) on a number of policy, program and scientific initiatives related to climate change. This includes implementation of the *Climate Change Plan for Canada*. The department is the federal lead on climate change science and undertakes and supports a broad range of activities in climate monitoring, modeling, process research and impacts and adaptation assessment.

Meeting our international climate change obligations opens up new opportunities – to become a more innovative economy, to establish Canada as a leader in the field of environmental technology, to develop a competitive advantage in the knowledge economy and to contribute to meeting Canada's sustainable development challenges. Making a smooth transition to a more energy-efficient and less emissions-intensive society is a challenge that every country in the world

will have to face in the coming decades. The *Climate Change Plan for Canada* is anchored in a vision of a responsible, innovative, energy-efficient society with a long experience as a leading producer of energy.

Information for Decision Making

In order to inform climate change measures, policy discussions and the development of adaptation strategies, a better understanding of the inter-related physical, ecological and social impacts of climate change on Canadian communities is required. Through the Meteorological Service of Canada's research program, Environment Canada will continue to track the climate through its monitoring networks, and to refine and use climate models to provide reliable scenarios of climate extremes and variability in a changed climate.

Innovative Instruments

Environment Canada's response to climate change provides an opportunity to put market mechanisms to work to help achieve climate change and other environmental goals. In the international negotiations on the Kyoto Mechanisms, Canada fought hard for the types of rules that would allow the market to flourish. Domestically, emissions trading and other market-based solutions are cornerstones of our *Plan*.

Another significant advancement is the development of the Offset System, supporting the Large Final Emitters system, which will be developed with Natural Resources Canada, and will also include targets, emissions trading and domestic, mandatory GHG reporting requirements.

Partnerships for Sustainable Development

The *Climate Change Plan for Canada* identifies action in five broad areas: transportation, housing and commercial/institutional buildings, large final emitters, small and medium-sized enterprises, and the international market. In order to meet the targets in each area, Environment Canada will work with other federal departments, interested provinces and territories to identify and establish areas of co-operation on climate change initiatives. One mechanism for this will be the Opportunities Envelope, jointly designed and implemented with Natural Resources Canada.

As part of our Kyoto commitment, by 2005 Canada must report to the United Nations Framework Convention on Climate Change on 'demonstrable progress'. Further improvements to Canada's National Inventory and the development of a National Registry will be required.

The department will continue to be involved in international negotiations, which are now shifting to post-Kyoto topics including future commitments. There are significant opportunities to advance sustainable development practices internationally through climate change negotiations. These negotiations will be informed by the most up-to-date climate change science.

While the majority of Canadians are aware of the climate change issue, and many acknowledge that there is something they can do personally to address this issue, GHG emissions continued to rise during the late 1990s. The every-day actions of Canadians produce more than one quarter of Canada's total GHG emissions. A climate change social marketing campaign will call on every Canadian to reduce his or her personal emissions by one tonne per year, or about 20 percent. To achieve this goal, Environment Canada will work with the provinces, territories and at the community level to provide the information and tools to encourage the reduction of GHG emissions at home, at work and on the road.

Sustaining Our Natural Environment

Ecosystems are under continuous threat from a number of stressors, such as increased population, industrial activity and unsustainable land use. These activities are leading to increased air and water pollution and the disappearance of habitat required to maintain the natural balance of living things and their environment. Human-induced pressures on biodiversity, including urbanization, agricultural intensification, and resource extraction lead to habitat loss and fragmentation, and continue to result in significant shifts in populations of species of animals and plants, ranging from declines to overabundance.

Environment Canada acts to conserve the biodiversity and the health of ecosystems by building shared sustainability strategies for Canada's wildlife and ecosystems, contributing to the scientific understanding of ecosystems and developing partnerships to improve the health of nationally significant ecosystems. Environment Canada discharges federal responsibilities for managing migratory birds, species at risk, freshwater and wetland resources and also develops the Science and Technology policies and practices used throughout the department.

Sustaining our natural environment presents significant opportunities to further sustainable development at the ecosystem, community and regional levels. The key sustainable development challenges are related to new knowledge and indicators for decision making and partnerships, especially those with other levels of government.

Information for Decision Making

The ability to secure a clean and healthy environment for Canadians is dependent upon our capacity to understand how human-induced stressors affect our ecosystems and to transfer that knowledge to Canadians and the global community so that it can be incorporated into decision making.

In the next three years, Environment Canada will focus on developing the models and tools for integrated analysis of water quality and quantity and using this information to address sustainable water management issues. The department will also develop national agri-environmental standards related to water quality, water conservation, pesticides, air quality and biodiversity.

Innovative Instruments

One of the department's most significant instruments to influence individual landowner behaviour is the Ecological Gifts Program. This program will be evaluated and expanded in the next three years.

Partnerships for Sustainable Development

To better meet our sustainable development objectives, improved governance is required for the implementation of a number of strategies and Acts, including Ecosystems Initiatives, the *Species at Risk Act* (SARA) and the Canadian Biodiversity Strategy.

Implementation of SARA and related provincial and territorial activity under the Accord for the Protection of Species at Risk presents Canadians with a significant opportunity to renew our approach to wildlife conservation, protect and conserve habitat, and secure new resources for conservation programming. SARA implementation presents a good opportunity to develop new models of partnership with communities, Aboriginal peoples, provinces, territories, other government departments, wildlife management boards, industry, non-governmental organizations, etc.

As well, under the North American Bird Conservation Initiative, Environment Canada will work with industry to influence land-use decisions and practices related to migratory bird habitats.

Reducing the Health and Safety Impacts of Environmental Threats

The department focuses on four issues under this priority:

Clean air: Air quality is a local and regional issue that is affected by human activities, weather and topography. Air quality affects our health – cleaner air means fewer respiratory diseases, fewer asthma attacks, fewer hospital admissions and fewer premature deaths – and Canada's wildlife habitat, agricultural yields and forests. Environment Canada continues to focus on the implementation of the government's 10-year Clean Air Agenda. As part of this Agenda, the government is implementing regulations and promoting actions that reduce air pollutant emissions; providing services and information that allows people to reduce their personal health risk; and, advancing science and monitoring that improves our understanding of the origin and transport of air pollutants.

Safe and secure water: Jurisdiction for this complex issue is shared across the federal, provincial and territorial governments. Partnerships are key to addressing this issue. The department is working with its provincial, territorial and health counterparts to address water quality, water quantity and water use.

Management of toxic substances in our environment: Environment Canada's primary vehicle for reducing the level of contaminants in the environment is the *Canadian Environmental Protection Act* (CEPA 1999). The renewed CEPA adopts a proactive approach to prevent harm to the environment and human health caused by toxic substances and mandates the research and evaluation of potentially toxic substances.

Vulnerability to high impact weather and related hazards: The risks to health, safety, property and the economy from naturally occurring environmental hazards, such as ice storms, floods, droughts and wind are increasing. It is estimated that $150 billion of Canada's economy is weather-sensitive, with some sectors (e.g. transportation, agriculture, forestry, health) relying extensively on accurate forecasts and warnings to mitigate risks posed by weather events. Other environmental hazards, such as poor air and water quality, may be produced or intensified by human activity. Property and economic losses due to environmental hazards have increased dramatically in recent years.

Reducing the health and safety impacts of environmental threats requires that Canadians receive timely and accurate information and take the appropriate steps to both mitigate against the risk and protect themselves. Our key sustainable development challenges are related to addressing research gaps, enhancing information dissemination and strengthening partnerships with industry.

Information for Decision Making

A long-term goal of the Meteorological Service of Canada (MSC) is to improve Canadians' capacity to anticipate, mitigate, withstand, and recover from high-impact events and related hazards. Over the next three years the MSC will, as part of its transformation activities, improve the Canadian environmental threats forecasting and warning systems through: science to strengthen our prediction capability and monitoring technology to increase lead-times as the basis for improved weather warning services to Canadians; and, enhanced outreach strategies for public alerts, new National Service Offices and new service partnerships/strategies with first responders and emergency organizations (e.g. Health Canada, Emergency Preparedness, provincial and municipal emergency measures and response agencies).

A significant sustainable development challenge for the department is to strengthen our understanding and increase awareness of the link between the environment and health. At the World Summit on Sustainable Development, Canada announced $3 million to support the initiative *Strengthening Health and Environment Linkages: From Knowledge to Action*. The Initiative will bring together scientific, technical and socio-economic information on environment and health linkages, and transfer that knowledge to inform decision making at the local, regional and national levels.

Over one-half of all Canadians live in areas where ground-level ozone may reach high levels during the summer months and every urban centre has levels of airborne particles that are high enough to cause health impacts. Providing accurate, comprehensive and timely information to all Canadians will allow them to take appropriate action to reduce their personal health risk and contributions to air pollution.

Research characterizing sources and processes determining air quality in airsheds (some of which are shared with the United States) provides information that can guide decision makers to maintaining and enhancing sustainability.

Innovative Instruments

The Speech from the Throne (2003) called for an External Advisory Committee on Smart Regulations to be established to provide an external perspective and expert advice on regulatory issues spanning economic and social policy objectives. Environment Canada will continue to support this Committee and look for opportunities to develop innovative, market-based economic instruments to reduce environmental threats.

Partnerships for Sustainable Development

Environment Canada will develop innovative partnership strategies with the corporate sector to support industry, especially small and medium-sized enterprises, to: catalyze the deployment of new technologies; increase the quantity and quality of corporate social responsibility and sustainability reporting; and, identify the financial and other business benefits, as well as challenges, associated with corporate environmental and sustainability performance. The department will also work with other government departments and other partners to enhance productivity and environmental performance and provide sustainable development tools and best practices to the corporate sector.

For Further Information

Environment Canada

Environment Canada's Greenlane
www.ec.gc.ca

Ecosystem Initiatives
www.ec.gc.ca/ecosyst/backgrounder.html

Government of Canada

Sustainable Development Information System (SD Info)
www.sdinfo.gc.ca

Sustaining the Environment and Resources for Canadians
www.environmentandresources.gc.ca

National Round Table on the Environment and the Economy
www.nrtee-trnee.gc.ca

Sustainable Development: A Canadian Perspective
www.wssd.gc.ca/canada_at_wssd/national_report_e.cfm

Commissioner for the Environment and Sustainable Development
www.oag-bvg.gc.ca/domino/oag-bvg.nsf/html/environment.html

Government of Canada's Climate Change website
www.climatechange.gc.ca/

International

United Nations Commission for Sustainable Development
www.un.org/esa/sustdev/csd/about_csd.htm

International Institute on Sustainable Development
www.iisd.org

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