



Environment Canada

1997-98
Estimates

A Report on Plans and Priorities
Pilot Document

The Estimates Documents

The Estimates of the Government of Canada are structured in three Parts. Beginning with an overview of total government spending in Part I, the documents become increasingly more specific. Part II outlines spending according to departments, agencies and programs and contains the proposed wording of the conditions governing spending which Parliament will be asked to approve. The Part III documents provide additional detail on each department and its programs primarily in terms of the results expected for the money spent.

Instructions for obtaining each volume can be found on the order form enclosed with Part II.

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Approved

Minister of the Environment

Foreward

The Improved Reporting to Parliament Project (IRPP) was established within the Treasury Board Secretariat to improve the Expenditure Management information provided to Parliament, and to update the processes used to prepare this information. This is part of a broader initiative to increase the results orientation and increase the transparency of information provided to Parliament known as “Getting Government Right”.

During the period from August 1995 to December 1996, extensive consultations were held with members of Parliament and other key stakeholders to examine options to improve the information provided to Parliament. A clear requirement was identified to improve performance information and to provide planning information that is results oriented, longer term and more strategic in focus, and clearly communicated.

The IRPP has unfolded in three phases. In March, 1996, six departments tabled revised Part III of the Main Estimates documents. These documents responded to requirements to provide a better focus on planning and performance information.

In June 1996, the House of Commons gave its concurrence to expand the pilot project and to test the tabling of separate planning and performance documents. In October, 1996, sixteen departments tabled performance reports as phase two of the IRPP. These performance reports have been evaluated and found to provide relevant and timely information, with broad support for providing separate performance reports on an ongoing basis.

The Report on Plans and Priorities is being tabled by the same sixteen pilot departments as phase three of the IRPP. These documents, and the separation of planning and performance information will be assessed, and if Parliament agrees, all departments and agencies will move to a spring Report on Plans and Priorities, and a fall Performance Report, with the first complete package of separate performance reports beginning in the fall of 1997.

These documents are available electronically from the Treasury Board Secretariat Internet site:
<http://www.tbs-sct.gc.ca/tb/key.html>

Comments or questions about this document, or the Improved Reporting to Parliament Project, can be directed to the TBS Internet site, or to:

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Environment Canada

**Report on Plans
and Priorities
for
the Period 1997/98
to 1999/2000**

Preface



This *Report on Plans and Priorities* (RPP) is the fourth in a series of planning and reporting documents that Environment Canada (EC) has produced since last summer. It builds on the three items that preceded it—the *Action Plan* and *Business Plan*, both issued in June 1996, and the *Report on Performance*, issued in October 1996. The purpose of all of these documents is to explain – to Parliament, to EC’s partners in the government and in the private sector, and to individual Canadians – what the department *has* achieved and *will* achieve with the resources available.

Behind these documents is a comprehensive framework of accountability that sets out the 41 long-term results toward which all of the department’s efforts are directed. EC’s *Report on Performance* described its achievements over 25 years against each of these 41 results. Each year, EC reviews its performance and revises its four-year commitments against each result. These are published in the *Minister’s Action Plan* and provide a comprehensive picture of the department’s activities and accountabilities.

By contrast, EC’s *Report on Plans and Priorities* is not intended to be comprehensive. It is the first of a new generation of documents focusing instead on the shifts and strategies shaping all of EC’s activities. While the department’s work on all its results is ongoing, the *Report on Plans and Priorities* describes those priorities which the Minister wishes to highlight and which show the direction the department is going in. And it highlights results on which the department intends to make particular progress in the next three years. This approach is intended to improve the quality of Parliamentary reporting by putting the emphasis where it should be, on the direction and results of the Environment Program rather than on the details of its delivery.

By and large, this report is about staying the course. The directions and priorities set out in last year’s *Business Plan* and *Action Plan* are still at the core of EC’s agenda. Two issues, however, while not new, have acquired added significance this year: the requirement to make EC’s strategy for sustainable development clear to Parliament; and the government-wide attention being paid to partnerships and interdependencies. EC’s *Report on Plans and Priorities* explains how EC is responding to these two imperatives while continuing to deliver on its commitments.

February 1997

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Section I: Minister's Message



Environment Canada has a strong record of performance. Many aspects of Canada's environment are measurably better now than they were 25 years ago, and this department has played a key role in that improvement. But much remains to be done: Canada faces growing environmental challenges that are both complex and long-term. These challenges must be met — our quality of life in Canada depends on it. To protect our economic future and Canadians' health, we must protect and sustain our environment. There is no other option.

The *Report on Plans and Priorities* explains how Environment Canada intends to do this. It sets out three broad themes, or business lines, that guide the department's work: a healthy environment; safety from environmental hazards; and a greener society.

These themes help to guide Environment Canada in setting its priorities.

We know, for instance, that, given the opportunity, most Canadians will choose to make environmentally responsible decisions; giving them the tools to do so is a primary goal for Environment Canada.

We also know there is a widening gap between the earth's carrying capacity and the rate at which we are developing solutions. To narrow that gap, Environment Canada aims to promote innovation—in technology, in information-sharing, in exploring new roles for government as catalysts and partners.

We are already moving forward with a legislative agenda that includes the *Canada Endangered Species Protection Act*, the new *Canadian Environmental Protection Act* and the act to ban the interprovincial trade of the fuel additive, MMT.

Addressing the issue of climate change is another priority for Environment Canada. We will continue to implement the Federal Action Program on Climate Change and to support the implementation of the National Action Plan on Climate Change. We will also work with others to protect the Arctic.

Environment Canada has shown leadership in greening its operations. Our Sustainable Development Strategy will build on this success and on our progress to date in incorporating sustainable development principles into our policies and programs. Environment Canada's Sustainable Development Strategy will provide an important benchmark for other federal departments and agencies.

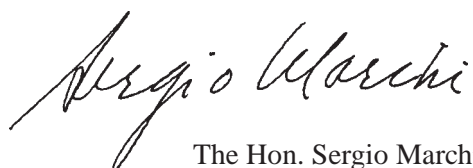
We will continue to show international leadership on global environmental issues, and build on our international reputation as a leader in helping meet challenges such as acid rain and ozone depletion.

Partnership is an equally important priority for Environment Canada. Effective environmental action in Canada requires partnerships between governments, with industry, with communities, and with individual Canadians, particularly youth. We will build on the Canada-wide Accord and strengthen our partnership with the provinces to achieve the highest standards of environmental quality. We will continue to foster our relationship with business through programs such as the Canadian Environmental Industry Strategy and the Technology Partnerships Canada program. As well, the department will promote active environmental citizenship through its Action 21 program.

The *Report on Plans and Priorities* highlights key strategies under each business line to advance these departmental priorities. To help achieve a healthy environment we will use science to identify the most critical areas for intervention. Innovative technology will help ensure Canadians' safety from environmental hazards and enable them to protect their lives and minimize damage to property and income. And while EC's focus is on the science and technology necessary to achieve a healthy environment and safety from environmental hazards, a commitment to a greener society has to come from all of society's members. We are committed to reaching out to Canadians in a wide range of ways to engage them in protecting our shared environment.

Creating a flexible and adaptable department—one that can adjust its ways of doing business in response to ongoing environmental, economic, social and technological changes—is itself an ongoing process. It is also a process that will benefit from the input of Environment Canada's partners. In keeping with the department's commitment to openness and transparency in its operations, the present report is available, along with our *Action Plan* and *Business Plan* and *Report on Performance*, on Environment Canada's Green Lane at <http://www.ec.gc.ca>. All Canadians are strongly encouraged to read these documents and provide comments.

The *Report on Plans and Priorities* is forward-looking. It commits Environment Canada to building public understanding and action on the environment; it commits Environment Canada to providing leadership to make sustainable development real; and it commits Environment Canada to delivering measurable results, results that will give us a healthy environment, increased protection from environmental hazards, and a greener society. Sustaining our environment is an investment in Canada's future. It is an investment we are making for the benefit of all Canadians.



The Hon. Sergio Marchi

SUMMARY OF KEY PLANS AND PRIORITIES

Faced with evolving environmental challenges, with the increasingly clear interconnections between environmental, social and economic issues, with the changing capacities and shifting responsibilities among citizens, their governments and the international community, and with some new fiscal realities, EC has set four directions:

- ❑ Maintain its momentum in meeting key commitments
- ❑ Enhance EC's contribution to sustainable development
- ❑ Better manage its interdependencies and partnerships
- ❑ Continue to build a flexible and adaptable EC

These directions are implemented through the department's three business lines.

In its *Healthy Environment* business line, the commitments on which EC will continue to make progress are: the renewed *Canadian Environmental Protection Act (CEPA)* and new *Canada Endangered Species Protection Act (CESPA)*; issues related to Environment and Health; and Climate Change. To enhance its contribution to sustainable development, the department will: work with the energy sector; strengthen EC's use of socio-economic analysis and market-based approaches; and partner in the sustainable development of the North. To enhance its partnerships, EC will work with the private sector to promote pollution prevention and compliance with regulations.

In its *Safety from Environmental Hazards* business line, EC's priority commitments are: continuing to modernize its weather services and environmental monitoring network; and emphasizing the prevention of pollution emergencies. To enhance its contribution to sustainable development, EC will: provide services to assist Canadian businesses to adapt to changing climate conditions; warn Canadians of risks to their health from atmospheric conditions; and predict a wider variety of environmental parameters on various time scales. To enhance its partnerships, EC will clarify responsibilities for emergencies response among federal departments and provinces; and address new emergencies provisions of CEPA with the private sector.

In the department's *Greener Society* business line, its priority commitments include: continuing to foster job creation related to pollution prevention; and engaging youth in environmental policy making and exploring the growing environmental industries sector. To enhance its contribution to sustainable development, EC will: develop sustainable development indicators; increase its efforts at environmental education and communication; and lead in Greening Government Operations. To enhance its partnerships, EC will develop joint policy agendas with other government departments; build on the Canada-wide Accord on Environmental Harmonization, which is based on providing the highest standards of environmental quality across Canada, to strengthen EC's partnerships with the provinces; strengthen relations with First Nations; and focus its international efforts on areas affecting domestic interests.

EC's initiatives to enhance the affordability, accountability and effectiveness of the department are to: invest in its human resources; develop a framework for the management of science and technologies; identify alternative service delivery mechanisms; refine both its capacity and framework for measuring results; and modernize and strategically apply its information technologies.

From EC's comprehensive Results Framework (Appendix 6), the following are selected long term results and near term measures of performance for the plans and priorities highlighted in this report.

Environment Canada	
<i>provides Canadians with:</i>	<i>as demonstrated by:</i>
<i>A HEALTHY ENVIRONMENT</i>	
Greenhouse gas emissions reduced and stabilized in Canada and international actions to reduce global concentrations promoted	<ul style="list-style-type: none"> In implementing the National Action Program on Climate Change, publish Canada-wide country study to evaluate the social, economic and biological impacts of climate variability and change on the whole of Canada: initial evaluation in 1997 and the resulting research program in 1997/98-2001/02. In accordance with the Federal Action Program on Climate Change, the federal government's operations will surpass the national goal to stabilize greenhouse gas emissions at 1990 levels by the year 2000 and reduce them at least 20% by the year 2000 relative to 1999.
Canadian levels of smog and inhalable particles reduced	<ul style="list-style-type: none"> Continue to implement EC's Clean Air program, specifically in 1997, promulgate Diesel Fuel Regulation (low sulphur diesel). In 1997, negotiation of UN ECE Heavy Metals Protocol and Persistent Organic Pollutants Protocol.
Consideration of sustainability is increased in all Canadian energy decisions	<ul style="list-style-type: none"> On an on-going basis, issue policy statements developed with other government departments on the greening of energy.
Sources and quantities of toxic substances, emissions and wastes requiring management identified, based on sound scientific research and assessment, to Canadians in a timely and effective manner	<ul style="list-style-type: none"> In 1997, a comprehensive strategy to fully implement CEPA. By 2001, complete assessments for 25 substances from the 2nd list of priority substances. Assess all new chemicals and polymers, at an estimated rate of 300 per year. By 1998, develop 50 Canadian environmental quality guidelines for soil, water, sediment or biota for toxic substances of national concern. In 1997, release the 1995 report of the National Pollution Release Inventory.
Management actions are implemented toward virtual elimination of persistent, bioaccumulative toxics (PBTs) resulting from human activity	<ul style="list-style-type: none"> During 1997, announce regulations enabled by CEPA. By 1999, develop and implement plans for the virtual elimination of specific PBTs.
Management actions are implemented to prevent, reduce or eliminate the risks posed by toxics that do not meet all the Toxic Substances Management Policy Track 1 criteria, and other substances of concern	<ul style="list-style-type: none"> All new substances suspected of being toxic are prohibited or subjected to controls prior to manufacture or import. During 1997, with OGDs and other stakeholders, market-based approaches and other policy tools for the management of toxic substances. Broaden the participation in the Accelerated Reduction and Elimination of Toxics (ARET) program. Update the regulatory process and develop strategies for "smart" regulations.
Compliance with laws and regulations is effective in protecting and improving the environment	<ul style="list-style-type: none"> During 1997, promote compliance and perform enforcement monitoring, take targeted and focused enforcement action against chronic offenders, and recognize performance leaders in the private sector, etc.
Positive recovery trends achieved for threatened or endangered species	<ul style="list-style-type: none"> Fully implement CESA. By 1997/98, implement 11 endangered species recovery plans and 8 recovery plans.
Vulnerable ecosystems of priority identified and conserved through the development of ecosystem, regional, sectoral and other strategies/initiatives	<ul style="list-style-type: none"> In 1997 and on-going, provide expertise in support of the Arctic Council and the Arctic Environmental Protection Strategy. Develop, with other federal agencies and DIAND, a federal strategy for northern science and technology.
<i>SAFETY FROM ENVIRONMENTAL HAZARDS</i>	
Canadians receive timely and accurate weather and environmental predictions	<ul style="list-style-type: none"> 1997 to 2000, modernize of the national Weather Warning System (radar and lightning detection networks, TV All Channel Alert). Starting in 1997, revitalize infrastructure, including the workforce by adopting new recruitment and training strategies.
Canadians make effective decisions related to the social and economic impacts of changing weather and climate	<ul style="list-style-type: none"> In 1997, pilot project initiated for forecasts of water levels and quantity. From 1997 to 1999, advances in National Weather Program to provide local scale atmospheric drivers for environmental predictions.
Canada has scientific capability to assess potential impact of decisions on future states of environment	<ul style="list-style-type: none"> Climate research on finer temporal and spatial resolution to understand local impacts of global changes: 2000/01, regional climate model to contribute to Canadian Impact Adaptation Studies and to the next IPCC assessment. 1997/98, Great Lakes-St. Lawrence Basin report, and Toronto-Niagara Region Study commencing.

<i>SAFETY FROM ENVIRONMENTAL HAZARDS continued</i>	
The frequency and severity of accidental releases is reduced	<ul style="list-style-type: none"> • Agreement with MIACC and CSA on development of standards, guidelines and codes for major industrial accidents and implementation of standards through regional MIACC. • In 1998/99, Canada leads completion of OECD guidance document on risk and assessment and communications for chemical accidents. • Workshops on pollution prevention, including risk assessment techniques presented to OGDs, industry and municipalities. • In 1998/99, audit all federal facilities for compliance with requirements regarding environmental emergencies.
The preparations, technologies and agreements for handling releases are in place across the federal government	<ul style="list-style-type: none"> • Participation in the Canada-US marine spills exercises for the Great Lakes, Atlantic, Quebec and the Pacific regions (1996/99). • Computerized sensitivity mapping databases enhanced (1997/98).
Response advice and specialized scientific support will be available to lead responders	<ul style="list-style-type: none"> • In 1997/98, spill notification and reporting capabilities enhanced. • Provision of advice to Canadian Coast Guard in developing marine chemical emergency response capability.
<i>A GREENER SOCIETY</i>	
Canadians receive products and services from EC that meet their needs	<ul style="list-style-type: none"> • By 1998, national service standards implemented for weather services. • Increased cost-recovery revenues reflecting the demand for information products and services.
Products and services are developed that help Canadians make environmentally sound decisions	<ul style="list-style-type: none"> • By 2000, a series of 12 state-of-the-environment assessments reports completed (e.g., acid rain, chemical contaminants in Canadian aquatic ecosystems, forest health assessment, the St. Lawrence).
Canadians are equipped to address environmental priorities	<ul style="list-style-type: none"> • By 1997, Environmental Valuation Reference Inventory functional. • By 1999, expansion of information products available on the Green Lane and access to Canadian youth and educators via SchoolNet. • Economic indicators and indicators of sustainable development that include natural capital values developed.
Green technologies, know-how and expertise transferred to the public Increasing emphasis is placed on pollution prevention domestically and internationally	<ul style="list-style-type: none"> • In 1997/98, shift delivery of Technology Verification Program to the private sector. • Support to the Canadian Environmental Technology Advancement Centers to increase investments in the environmental sector. • During 1997, create the National Pollution Prevention Clearinghouse. In future years, expansion of its scope and capacity. • By April 1, 1997 involve young Canadians in environmental programs with a target of 50 young people in year 1 and 130 in year 2
Visible federal leadership and action in integrating sustainable development into government policies and operations	<ul style="list-style-type: none"> • By December 1997, table EC's Sustainable Development Strategy. • In April 1997, implement the Environmental Management System in all Regions and Services. • By 1998, 80% diversion of office waste from landfill. • By 1998, 75% reduction of energy and water use, and conversion of vehicles to alternate fuels.
Partnerships established to promote, develop and rationalize environmental policies and practices	<ul style="list-style-type: none"> • By 1998, 40 bilateral and multilateral agreements with provinces and territories to rationalize environmental management functions for specific environmental results. • Seek to incorporate environmental management considerations in all land claims and Aboriginal self-government agreements • Subagreements to the Canada-wide Accord negotiated with the provinces on standards, inspections, other areas as appropriate
Canada's strong international voice promotes and protects domestic environmental security and economic interests and fosters resolution of global commons and trade issues	<ul style="list-style-type: none"> • By 1998, over 25 cooperative initiatives to strengthen national environmental institutions in Latin America. • Where possible, environmental accountability built into all international trade and economic cooperation agreements on an on-going basis.



MANDATE, ROLES AND ORGANIZATION OF THE ENVIRONMENT PROGRAM

Environment Canada is a science-based department with a mandate to preserve and enhance the quality of the natural environment and its renewable resources (including migratory birds and other non-domestic flora and fauna), conserve and protect our water resources, carry out meteorology; enforce the rules of the Canada-U.S. International Joint Commission; and coordinate federal environmental policies and programs.

EC's long-standing and complementary roles are to:

- provide leadership nationally and internationally on matters pertaining to the sustainability of the environment;
- act on behalf of all Canadians to address environmental issues of national concern and administer federal environmental laws and regulations;
- advocate, promote and encourage practices that lead to environmental sustainability, and cooperate with others having similar objectives; and
- build capacity and deliver services to Canadians to enable them in their daily lives to sustain and adapt to the environment.

Science is the foundation of EC's leadership, practices, services and regulations, and is essential to achieving results in all these roles.

Sustainable development is the context within which EC carries out its environmental mandate. As a national goal and policy of the Government of Canada, it shapes environmental management in this country. While EC contributes daily to achieving sustainable development, there is more it could do. The department is uniquely positioned to provide leadership in building an agenda and in mobilizing Canadians to make sustainable development a reality. Enhancing EC's contribution and the effectiveness of its leadership are themes that run through this report.

VISION

At Environment Canada, we want to see a Canada:

- where people make responsible decisions about the environment; and
- where the environment is thereby sustained for the benefit of present and future generations.

MISSION

To make sustainable development a reality in Canada.

In order to help present and future generations of Canadians live and prosper in an environment that needs to be protected, respected and conserved, EC undertakes and promotes programs to:

- sustain the environment and reduce environmental risks to human health;
- provide weather forecasts and warnings and emergency preparedness services; and
- give Canadians the tools to build a greener society.

Business Lines

- Healthy Environment
- Safety from Hazards
- Greener Society

EC plans and reports on its performance through three results-focused business lines: *A Healthy Environment*, *Safety from Environmental Hazards* and *A Greener Society*. Administration provides corporate leadership, integrated systems and common services that support these lines.

A Healthy Environment: Canadians are concerned about risks to the environment from human activities, and the danger that these risks pose to human health and the sustainability of the environment. They expect these risks to be understood, monitored and prevented or controlled. In this business line, EC responds to these risks by: providing scientific knowledge and expertise; developing national strategies and standards with its partners; and establishing federal environmental laws and regulations and ensuring they are vigorously enforced.

Safety from Environmental Hazards: The lives and property of Canadians are threatened by naturally occurring and human-induced environmental hazards ranging from severe weather to oil spills and tire fires. Through this business line, EC enables Canadians to minimize their risk and protect themselves from hazards by providing timely weather and environmental warnings, predictions of probable future environmental states, and services aimed at reducing the frequency and severity of environmental emergencies.

A Greener Society: Through its third business line, the department seeks to reconcile environmental and economic interests, remove barriers to environmentally responsible action, and foster the capacity of all sectors of society to act on their environmental values and responsibilities. The department provides Canadians with useful and accessible information, readily applicable technologies and tools, and policies that integrate social, economic and environmental considerations.

EC's science, monitoring and reporting on the environment underpin each of its business lines. Research and monitoring programs and the development of indicators are essential to understanding issues, designing and evaluating control and management options, and delivering results.

Accountability Matrix

- by Business Lines
- by organization
- focused on results

Externally, Environment Canada's accountability is by business lines; internally, management of resources and delivery of results is by responsibility centre within existing organizational structures. These structures crosscut departmental business lines in a matrix management approach that ensures the Environment Program: is defined in a national context and delivered in a client-centred manner respecting regional differences; makes results the focus of departmental planning and reporting; and provides a shared strategic context for department-wide expenditure management.

EC's seven headquarters organizations are:

- | | |
|--|--|
| <input type="checkbox"/> Offices of the Minister and Deputy Minister | <input type="checkbox"/> Corporate Services |
| <input type="checkbox"/> Atmospheric Environment Service | <input type="checkbox"/> Policy and Communications |
| <input type="checkbox"/> Environmental Conservation Service | <input type="checkbox"/> Human Resources Directorate |
| <input type="checkbox"/> Environmental Protection Service | |

The department's five integrated regions are Atlantic, Quebec, Ontario, Prairie and Northern, and Pacific and Yukon.

CONTEXT (CHALLENGES, IMPLICATIONS AND FISCAL REALITIES)

While EC's mandate has not changed since it was founded in 1971, the challenges it faces have evolved considerably.

Environmental challenges: Over the past 25 years, the quality of Canada's environment has improved in a number of respects. Yet some issues—like toxics, climate change, species loss and resource depletion—seem intractable and are likely to get worse before they get better. More and more pollution originates beyond Canada's borders. As pressures on the environment mount, many environmental issues are becoming global in scale. Consumerism in the developed world, rapid industrialization and urbanization in the developing world, and global population growth are beginning to test the limits of the earth's capacity to provide food, water and energy and absorb wastes, toxics and other pollutants. The rate at which demand is growing is also testing our own ability to adapt to naturally occurring and human-induced hazards and changing environmental conditions.

Our scientific understanding of many environmental issues is not yet sufficient to provide a complete picture of their complexity and interconnectedness. Some problems are persistent even when the cause has been removed, as in the case of DDT in the Great Lakes. Some are hard to detect, such as toxic substances that may accumulate below scientific detection levels for decades before their effects become evident. We do not yet fully comprehend the interactions of various environmental stressors and their effects on ecosystems and the global environment. There is growing potential for surprises as issues interact in unforeseen ways.

While we have long known about the risks that certain toxics and environmental hazards pose to human health and well-being, evidence suggests that these risks are becoming more serious and probable. We are beginning to understand the health effects of endocrine-disrupting substances, the cognitive effects of prolonged exposure to low levels of heavy metals, and the reproductive effects of organochlorines. It appears, however, that the greatest health effects are likely to arise from such global phenomena as ozone depletion and biodiversity loss and their interaction.

Context

- environmental challenges
- social, economic environmental, links
- governance
- fiscal realities

Pressures of Human Activity

Population growth

- 88 million people born in 1995, greatest single-year increase ever;
- global population to grow by 800 million over next decade.

Food

- FAO forecasts world food production will have to double over next 30 years;
- 80% of world's fisheries are under significant pressure from overfishing.

Water

- Many countries will experience significant water shortages within ten years;
- Water use, driven by agricultural and industrial demand is increasing by 10-20 % per decade, according to FAO.

Energy

- Energy efficiency improvements throughout the OECD have averaged 2% per year; however...
- by 2010, fossil fuel use is forecast to increase by 35% (International Energy Agency) and carbon dioxide emissions are forecast to increase by 30-40%.

Environment and Health

Research has shown a link between ambient air pollution and death rates. A study of Toronto-area death records over a 20-year period found that exposure to ambient air pollution was associated with one extra death each day in the Toronto area.

It has been estimated that the costs of treatment and lost productivity in connection with asthma amount to \$500 million annually in Canada. A variety of studies have demonstrated that air pollution contributes to asthma. Research has not been able to identify a safe concentration of ground-level ozone that does not involve health risks.

In 1996, skin cancer affected more than 65,000 Canadians, and the number is rising. An estimated 90% of all skin cancer is caused by exposure to ultraviolet radiation in sunlight. Depletion of the ozone layer is resulting in higher levels of ultraviolet radiation reaching the earth; scientists estimate that for each 1% decrease in ozone, skin cancer incidence worldwide will increase by 1.6%.

Some researchers have reported a decline in sperm concentrations in men worldwide over the past 50 years; they attribute it to exposure to chemicals found in the environment.

At the same time, evidence is mounting of increasing atmospheric variability, which will change the frequency and intensity of naturally occurring hazards such as floods, tornadoes and drought.

The rate at which environmental issues can be solved is also slowing. In contrast to environmental improvements achieved over the past two decades through regulation and reduction of point-source emissions, non-point-source pollution and the long-range transport of toxics are not as easily remedied by conventional command-and-control approaches. We are reaching the limit of incremental, piecemeal approaches. Solutions reside in pollution prevention and increased understanding and respect for thresholds of ecosystem sustainability and sustained resource use. Such solutions cannot be achieved in the short term.

Environment/ Economy/ Society

- blurring of distinctions
- demands versus earth's carrying capacity
- requires innovation

The interconnectedness of environmental, social and economic issues: Traditional distinctions between economic, social and environmental issues have blurred. Increasingly, sound environmental practices lead to competitive advantage; environmental stewardship is factored into trade negotiations; values, quality of life and cultural identity equate with environmental sustainability; and health and well-being are a function of environmental quality. The merging of social, economic and environmental issues challenges traditional structures of governance.

There is a growing gap between social, cultural and economic demands on the earth's carrying capacity and the rate at which we are developing innovative solutions and finding ways to adapt. Productivity improvements in how we use energy, food, and water are being overwhelmed by demand. The deeply rooted social and economic causes of this gap are largely beyond the reach of governments and traditional approaches. Bridging the gap will require innovation and adaptation on a scale that cannot be commanded. At every level of society and across all jurisdictions, environmental, economic and social considerations need to be integrated in ways that stimulate sustainable employment and preserve the quality of life. To achieve this, we must overcome the myth that environmental considerations limit competitiveness in the global market and find innovative ways to combine human, social, financial and natural capital.

Changing capacities and shifting focus of responsibilities: All over the world, we are seeing shifts “upward” toward international institutions and “downward” toward communities in the setting of policy direction. In response to the globalization of environmental issues, for example, environmental policy is being internationalized. Global environmental institutions are increasingly prominent, and bilateral and multilateral transboundary agreements are being developed in an increasingly broad range of areas. International pressure for fiscal reform and the greater use of economic instruments to achieve sustainable development goals are increasing pressure on legislators to eliminate environmental barriers and disincentives.

Governance

- internationalization of policy directions
- shifting responsibilities
- increasing capacity of citizens

At the same time, forces are combining to effect a shift in capacity and responsibility away from governments toward communities and citizens. These forces include changing demographics, information technologies and the fiscal realities faced by all governments. One negative manifestation of this shift is apparent social fragmentation—between regions, between the young and the old, between the rich and the poor, between the educated and the uneducated, and in diverging opinions about the common good. A positive manifestation of this shift is the growing willingness and capability of increasingly informed people to act on their values and to contribute in innovative ways to achieving shared goals. The challenge for governments is to facilitate consensus on values so that Canadians pull together on important issues at the local, regional and national levels.

Implications for Environment Canada: To address the complexity of environmental issues and their protracted solutions, EC must continue to: develop much-needed knowledge in a timely fashion; maintain and enhance the credibility of its science among stakeholders; and put globally available information to the best possible use. The department needs to build consensus for action among partners based on both the precautionary principle and best available information. It needs to develop ways to build the public awareness and long-term commitment required to implement most solutions. And it needs to maintain its credibility and sense of purpose by delivering on its commitments.

Implications

- timely, credible science
- broader consensus on targets, actions
- public awareness, commitment
- international agenda
- social capital

In response to shifting responsibilities and changing capacities, EC will establish priorities and agendas for working effectively at both the international and community levels. Internationally, the development of conventions and protocols, the harmonization of standards and the growing international use of economic instruments offer Canada opportunities to influence environmental outcomes on a global scale. To date, Canada’s influence in the international environmental community has far outweighed its economic stature. Its protocols, conventions and agreements with the United States, for example, have been central to real progress in the areas of reduced emissions and improvements in air and water quality. This influence is largely due to the credibility Canada has gained from its progress on key commitments and from the strength of EC’s science. The department’s effectiveness at the international level must be sustained and enhanced.

Domestically, EC’s environmental goals need to be based on a broader consensus with other departments, other governments, First Nations groups, communities, businesses and professional organizations. The department must build community support for action by making environmental challenges real to people; polls show that while the environment is not foremost on the minds of most Canadians, it remains a core value.

EC has had considerable success leveraging its agenda through community leaders, and needs to multiply these successes by building social capital (that is, leadership, networks and skills) at the community level. It has a unique role to play in aligning and linking community action with international environmental imperatives.

Management

- set priorities
- client focus, quality service
- innovative delivery
- adaptive workforce

Fiscal Realities: Fiscal constraints at all levels of government are making organizations rethink their roles and the way they do business. The reality is that EC's financial resources will continue to shrink to the end of the century. The department's effectiveness in meeting the challenges outlined in the previous pages will depend on its ability to set and follow through on priorities. At the same time Canadians are demanding greater accountability for the expenditure of public funds and for the results and quality of services delivered. In order to survive and thrive within this management context, EC must continue to find economical and cost-effective ways to: protect human health and the environment; measure and report on its results; deliver quality service in innovative ways; and sustain a dedicated and professional workforce appropriate to the challenges of the next century.

NORTH AMERICAN WATERFOWL MANAGEMENT PLAN

The 15-year North American Waterfowl Management Plan (NAWMP) was signed by Canada and the United States in 1986. The goal of the Plan is to restore waterfowl populations in North America to 1970s levels by securing, enhancing and managing key wetland habitat across the continent. In 1994, the Plan was updated and Mexico joined as co-signatory; the plan will be updated again in 1998.

An estimated 4.5 million hectares (11.1 million acres) of wetland in Canada and the United States will be affected by NAWMP activities over the first 15 years of the updated program. In Canada alone, the goal is to protect a minimum of 2.1 million hectares (5.2 million acres).

The NAWMP is implemented and financed through joint venture partnerships involving the federal governments of Canada, the United States and Mexico, provinces, states, and major national and international private-sector firms, non-governmental organizations and landowners. The key to the success of the program is the recognition that to save waterfowl, people's behaviour has to change, particularly in the way they steward wetlands. The program has become a model to EC for delivering results in innovative ways, partnering, working internationally and measuring performance.

DIRECTIONS AND PRIORITIES

The Minister's concerns and the department's evolution and performance to date suggest four broad directions for Environment Canada:

Four Directions

- momentum on commitments
- sustainable development
- partnerships
- management

1. Momentum in meeting key commitments: In order to build public support for the environment and keep the environment on the public agenda, and in order to ensure Canada's leadership and credibility internationally and domestically, EC must maintain its momentum toward meeting key commitments. In the Environment Canada Action Plan for 1996-2000, EC committed:

in its *Healthy Environment Business Line*, to:

- ❑ introduce a modernized *Canadian Environmental Protection Act (CEPA)*, and the *Canada Endangered Species Protection Act*. Both have been introduced and are now undergoing Parliamentary review. Once they are passed, EC's challenge will be to adjust its priorities and ways of working to implement the acts with no new resources.
- ❑ take national action on atmospheric change. In particular, EC plans to implement the *Federal Action Program on Climate Change* and support the continued implementation of the *National Action Plan on Climate Change*. Canada has acknowledged it is not likely to meet its goal for greenhouse gas emissions; this only heightens the importance of implementing the two action plans. In this planning horizon, EC's challenge will be to make the issue of climate change and its consequences real to Canadians and engage them in effective action.

in its *Safety from Environmental Hazards Business Line*, to:

- ❑ ensure Canadians continue to receive timely and accurate weather warnings and forecasts upon which to base their social and economic decisions. This work continues but in its planning horizon EC will investigate a range of alternative delivery options for its weather services.

in its *Greener Society Business Line*, to:

- ❑ implement the *Canadian Environmental Industry Strategy* and *Technology Partnerships Canada* with the provinces and private sector to better position Canada to capitalize on job creation and international markets. These are currently operating; in the planning horizon, EC will renew its participation in these programs, forge closer links with the private sector, and use regional trade fora to continue to promote the close connections between job creation and environment.
- ❑ build greater public support for the environment through the development and promotion of environmental citizenship. Action 21 and the Green Lane are functioning effectively; the challenges now are to engage youth and communicate EC's knowledge of issues such as climate change in a manner that makes the issues real and influences communities to take concerted action;
- ❑ work with the provinces to arrive at the highest standards of environmental quality for dealing with issues critical to Canada. An accord has been approved in principle by all provinces and the federal government and a series of sub-agreements are close to completion. Within the planning horizon, implementing the sub-agreements is expected to have a profound effect on the department's agenda, science and regional delivery.

2. Enhance EC's contribution to sustainable development: Virtually everything EC does contributes in some measure to making sustainable development a reality in Canada. In setting out its strategy for sustainable development, the department has identified a number of ways in which it can enhance its contribution. EC's strategy has four parts:

- ❑ **Extend the range of its leadership and enhance the effectiveness of its influence** among key decision makers, particularly in the social and economic sectors. EC will establish innovative, efficient and effective partnerships to achieve environmental sustainability and sustainable development.

1. Maintain Momentum

- CEPA
- CESP
- climate change
- health & environment
- weather services
- environment & jobs
- citizenship
- fed-prov partnerships

2. Enhance Contribution to Sustainable Development

- leadership
- capacity
- service
- greening

- ❑ **Strengthen its internal capacity to influence the actions of a broader range of interests.** EC will improve the way it applies and communicates its science, more systematically integrate socio-economic analysis into its policies and programs, and give increased attention to socio-economic tools and strategies to accomplish its objectives.
- ❑ **Enable Canadians to adapt their economic and social decisions to changing environmental conditions** by extending the reach and application of its weather and environmental information services and the impact of its pollution prevention strategy.
- ❑ **Provide leadership and set an example in the greening of government operations** by continuing to green the department's own operations and advocating greener operations across governments, both domestic and international.

3. Partnerships

- OGDs
- provinces/territories
- international
- private sector
- communities

3. Better manage EC's interdependencies and partnerships: In an era of globalization, information technology, changing capacities and shifting responsibilities, governments must improve their ability to manage interdependence—with other governments, the private sector and with citizens. They need to strengthen existing relationships and forge new ones based not upon jurisdiction but upon shared concerns and mutual responsibilities—harmonization in the broadest sense. In the environmental context, relationships based on interdependence should ensure the highest level of environmental quality for all Canadians, promote sustainable development, and achieve greater efficiency and accountability across jurisdictions and sectors. EC will:

- ❑ **strengthen existing relationships and forge new ones: with other government departments** focusing on joint agendas and shared objectives; with its **provincial/territorial partners** focusing on the achievement of the highest standards to deal with issues critical to Canada; and **with the international community** focusing on opportunities where EC's scientific and policy leadership will be most effective.
- ❑ **strengthen existing relationships and forge new ones with the private sector** based on consultations and cooperative approaches to making environmental policy, and on the strategic use of covenants, agreements and other less costly and more inclusive ways of achieving compliance with environmental regulations and standards; and **with communities** focusing on developing capacity to put environmental information to work to tackle and solve environmental issues.

4. Continue to build a flexible and adaptable EC: In the context of fiscal restraint and the government's commitments to sustainable development and harmonization, EC's management objectives are to build a department that is effective in its leadership, accountable for results and has the skills and tools to deliver on its mandate in creative and cost-efficient ways—that is, to “get Environment Canada right.”

EC will:

- ❑ **Invest in its human resources.** It will develop its future management cadre; build its workforce of knowledge workers; create opportunities for young scientists; and develop skills in the areas of ecosystems science and new technologies.
- ❑ **Develop a framework for the management of science and technology** in order to coordinate and integrate policy frameworks bearing on S&T management issues, federal and national S&T partnerships, management of the federal S&T workforce, improvements to the quality, effectiveness and relevance (especially the linkages to environmental policy) of S&T, and communicating S&T. The Department's S&T management system will refine the framework and use it to set priorities.
- ❑ **Identify and explore potential alternative service delivery opportunities** including the delivery of national weather services and analytic laboratory services.
- ❑ **Continue to improve EC's results management and performance measurement.** In the context of the department's longer-term framework of accountability, its priority will be to develop measures of its reach and influence based on shorter-term outputs.
- ❑ **Renew and enhance EC's information technologies.**

4. Flexible, Adaptable EC

- human resources
- science and technology
- alternate service delivery
- results management
- information technologies

Part III of this Report details by business line EC's actions to implement the first three directions. The fourth direction related to management is discussed in Part IV: Getting Environment Canada Right.

Environment Canada

Overview

(millions of dollars)	Planned Expenditures 1996-97*	Planned Expenditures 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
Gross Planned Expenditure	638.7	575.4	552.2	553.1
Less Revenue to the Vote	(61.0)	(67.9)	(77.8)	(77.4)
Net Planned Expenditure	577.7	507.5	474.4	475.7
Less Revenue credited to the Consolidated Revenue Fund	(5.7)	(7.0)	(5.3)	(5.2)
Plus Cost of Services Provided by other Departments	49.3	50.3	50.3	50.3
Net Cost of Department	621.3	550.8	519.4	520.8

* Reflects changes included in the In-Year Update

Gross Planned Expenditures by Business Line for the Planning Period

(millions of dollars) Business Lines	Planned Expenditures 1996-97*	Planned Expenditures 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
A Healthy Environment	249.0	227.9	209.2	209.6
Safety from Environmental Hazards	173.2	168.5	164.4	164.3
A Greener Society	146.4	116.8	118.2	118.5
Administration	70.1	62.2	60.4	60.7
Gross Planned Expenditures	638.7	575.4	552.2	553.1

* Reflects changes included in the In-Year Update

Planned Expenditure Detail by Business Line for 1997-98

(millions of dollars)

Business Lines	FTE (Full-Time Equivalent)	Operating	Capital	Grants and Contributions	Gross Planned Expenditures	Less: Revenue Credited to the Vote	Net Planned Expenditures
A Healthy Environment	1,618	198.3	6.2	23.4	227.9	7.3	220.6
Safety from Environmental Hazards	1,313	153.8	12.0	2.7	168.5	38.0	130.5
A Greener Society	668	102.5	6.7	7.6	116.8	22.6	94.2
Administration	750	60.9	1.3	0.0	62.2	0.0	62.2
Total Planned Expenditures	4,349	515.5	26.2	33.7	575.4	67.9	507.5



BUSINESS LINE 1: A HEALTHY ENVIRONMENT

Objective and Goals

The *Healthy Environment* business line addresses issues related to the air we breathe, the impact on human health and ecosystems of toxic substances released into the environment, the state and variability of the global atmosphere, and the diversity of life on earth. EC's goals under this business line are to: reduce negative impacts of toxics on the atmosphere and help Canadians better understand and adapt to these impacts; eliminate the threat posed by toxics; conserve and enhance Canadian and global biodiversity; conserve and restore ecosystems; and enforce and promote compliance with environmental laws and regulations in a fair and effective manner.

Healthy Environment

- atmospheric change
- toxics
- enforcement
- biodiversity
- ecosystems

Operating Context and Shifts

In its early years, the department was mainly concerned with cleaning up past environmental mistakes, regulating chemicals that were most obviously harmful to human health and the environment, and protecting and restoring certain species of wildlife and habitat that were under federal jurisdiction. A variety of regulatory instruments and remedial and conservation programs were used to control domestic point sources of pollution and the habitat and harvesting of particular migratory birds.

As environmental issues have shifted in scale from local to national and global, as they have been recognized to be complex and interacting in unforeseen ways, as some issues (like species loss and climate change) have come to seem intractable and the risks increasingly probable, EC has shifted over time the way it delivers results in this business line. The balance among its activities is shifting in favour of anticipating the environmental effects of human activity over responding to them, in favour of prevention over remediation, and in favour of shared responsibility and partnership over control and confrontation. Its range of policy levers has widened to include performance-based, voluntary and economic instruments, and its regulations are being streamlined to reduce the burden on industry.

EC's approach has also shifted, from an issue-specific to an ecosystem approach. An ecosystem approach combines information gained from the multi-disciplinary exploration of physical and biological components, the recognition of the interconnectedness of issues, and an appreciation of the social and economic factors that are often at the core of environmental problems. The most effective way to tackle issues in this context is to engage other government departments, other jurisdictions, organizations and communities in developing common agendas and processes to resolve them. EC has employed an ecosystems approach with considerable success in its regions and in studying the interaction of diverse environmental issues such as ozone depletion and species loss.

Changing Ways of Doing Business

- anticipate and prevent
- shared responsibility
- partnerships
- voluntary/ economic instruments
- streamlined regulation
- ecosystem approach

Key Initiatives

Implementation of the shifts in this business line is continuing. Demands on the department's resources continue to mount, however. Last year's *Business Plan* stated that the department's strategy for managing demands would be to target its efforts at the sources of greatest risk to the health of Canadians and the environment, and on the leverage points at which federal leadership will be most effective. This is still the department's strategy and the Minister's priorities reflect it. Within the planning horizon of this report, the department will consolidate the shifts in this business line. The department is also looking at applying systematically to a wider array of issues an approach it used very successfully in the cases of acid rain and ozone depletion. It will try to make this approach the norm.

Issues Management

- identify problem
- internal communication
- build awareness
- openness, partnerships
- goals, results
- policy options, instruments
- monitor, feedback

Issues Management: The first step in taking such an approach is to determine what is known of the problem. Building from its own science, the department integrates and synthesizes the work of others, from Canada and abroad, and from the natural as well as social sciences. This information is then communicated internally and to other agencies, governments and the public in a manner that makes the issue and its possible impacts very real. The next step is to engage stakeholders and opinion leaders in setting targets, choosing the best combination of tools and apportioning responsibilities. Then, with its partners EC campaigns for public support and action. In the case of acid rain, campaigning meant persuading the American as well as the Canadian public of the seriousness of the issue. In the case of ozone depletion the challenge was to convince foreign governments and the international scientific community of the need for concerted action. The effectiveness of this approach very much depends on the strength and credibility of EC's science. Generalizing the approach is likely to mean investing in the department's skills at synthesizing, communicating and brokering environmental science. The Minister's priorities will determine the issues to which the approach will first be applied.

Plans and Priorities

In this business line, the department assigned priority to the following plans:

To maintain momentum in delivering on key Ministerial commitments:

Implement the new *Canadian Environmental Protection Act (CEPA)*. CEPA is one of the most powerful tools available to the Minister to protect the environment and, by extension, the health of Canadians. CEPA, as it will be revised, will be a key tool for implementing the government's *Toxic Substances Management Policy (TSMP)*. The TSMP, together with *Pollution Prevention: A Federal Strategy*, effected a shift in federal policy from managing waste and pollutants to anticipating and preventing a variety of environmental problems by avoiding the creation of pollutants that result from human activity.

The proposed new CEPA will result in a more efficient process for categorizing toxic substances, assessing highest-priority substances, and virtually eliminating those substances that pose the greatest threats to environmental and human health. It will put pollution prevention at the core of environmental protection, strengthen enforcement of

federal pollution laws, and increase public information and participation in enforcement. Under the proposed Act, pollution prevention in its broadest sense addresses such issues as international air and water pollution, fuels, motor vehicles, gathering information about releases of pollutants and monitoring and ecosystem science. To implement CEPA, EC plans to:

CONTRIBUTING TO THE RESULT: Sources and quantities of toxic substances, effluents, emissions and wastes requiring management are identified through sound scientific research and assessments, and information is provided to Canadians in a timely and effective manner.

- ❑ undertake scientific consultation on proposed measures for substances assessed under the new provisions of CEPA; develop 50 Canadian environmental quality guidelines for soil, water, sediment or biota for toxic substances of national concern;

CONTRIBUTING TO THE RESULT: Management actions are implemented toward the virtual elimination of persistent, bioaccumulative toxics (PBTs) resulting from human activity.

- for 25 CEPA toxics; implement plans for the virtual elimination of persistent bioaccumulative toxics;
- ❑ develop regulations to define persistence and bioaccumulation criteria; develop regulations regarding the exercise of the Minister's powers to require toxicological testing by industry; and using new enforcement tools, target enforcement at areas where compliance is important to protect and conserve the environment; and
- ❑ promote compliance and perform enforcement monitoring.

- ❑ review the science on substances prohibited or severely restricted by other jurisdictions to determine their relevance to Canada and, consistent with the precautionary principle, take action on those considered to be toxic by the CEPA definition;

- complete risk assessments for 25 more priority substances by 2001;

- ❑ promote the principle of pollution prevention and fully implement the TSMP;

- ❑ develop management options

CONTRIBUTING TO THE RESULT: Positive recovery trends for designated threatened or endangered species are achieved.

comprehensive protection to species at risk. It is the federal cornerstone of a national accord that commits federal, provincial and territorial governments to giving endangered species across Canada the protection they need. It was conceived, developed and will be implemented in an open and transparent process based on partnerships with provinces, territories, non-governmental organizations, private citizens, etc. The legislation allows the federal government to protect species designated as federal responsibility, species on federal lands, and certain international cross-border species. Implementing CESPAs will involve:

- ❑ granting the Committee on the Status of Endangered Wildlife in Canada (COSEWIC- a committee of wildlife experts, independent of government) legal status to identify and assess and designate species at risk based on science and traditional knowledge;
- ❑ developing recovery plans for all listed, threatened and endangered species found on federal lands, and management plans for all vulnerable species occurring on these lands;

Implement the Canada Endangered Species Protection Act (CESPA).

This proposed Act is the first-ever federal legislation giving

Implement CEPA

- implement TSMP
- options for 25 substances
- review other countries' prohibitions
- PBT regulations
- 25 new assessments

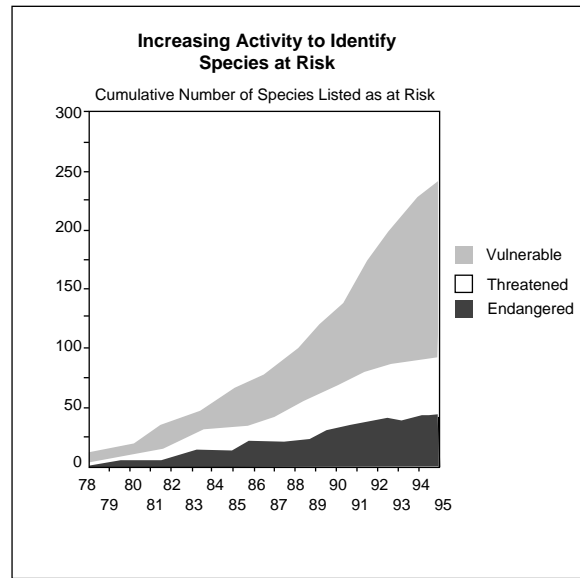
Implement CESPAs

- COSEWIC
- cooperative arrangements
- recovery plans
- habitat protection

- ❑ developing recovery and management plans for threatened, endangered and vulnerable species of migratory birds wherever they occur in Canada.
- ❑ establishing cooperative arrangements with the private sector, universities, communities and non-governmental organizations that contribute to the implementation of endangered species conservation;

In addition, EC will work with the provinces, to coordinate recovery planning for species that cross provincial borders, and will lead in the development of recovery plans

for those that cross international boundaries. Habitat protection will be established which includes identifying critical habitat for species listed and measures in recovery plans and emergency orders for the protection of this habitat. Provisions will be made for tough penalties, automatic prohibitions immediately upon listing, and the rights of citizens to make representations to the Minister or, in certain circumstances, to take civil action.



Environment and Health

- Clean Air program
- POPs, NOx, VOCs agreements
- standards
- regional air quality assistance

Action to address environment and health issues:

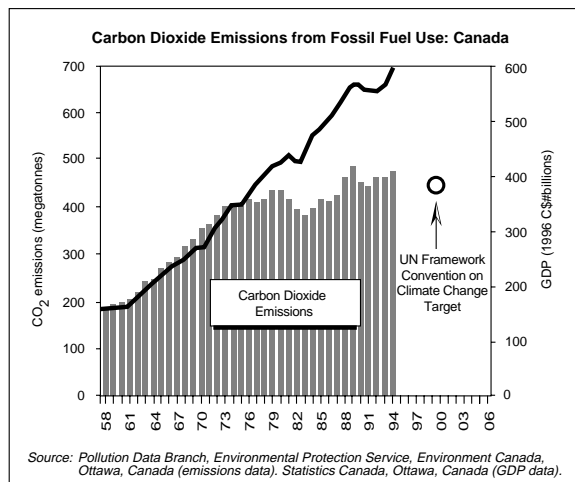
Due to their complexity, domestic and international solutions and improvements on these issues have taken, and continue to take, time to implement.

Pollutants resulting from human activity are leading to increased health risks to Canadians and our natural legacy in all regions of the country. Research has shown that air pollution results in increased incidence of respiratory symptoms, decreased lung function, increased hospitalizations and other health care visits for cardiopulmonary disease and asthma. Children are particularly vulnerable to the effects of these emissions. Environment Canada is responding by implementing keystone legislation and working toward national and international agreements. More specifically, EC will work with partners to:

- ❑ implement its Clean Air program to coordinate the wide range of air-related initiatives, such as smog and climate change, across the department and to raise public awareness about air issues;
- ❑ pursue agreements on POPs, NOx and VOCs with provinces and internationally;
- ❑ develop Canada-wide standards and programs for sources of air pollutants such as motor vehicles, fuels and consumer products;
- ❑ reduce emissions from sources that contribute the most to the flow of pollutants into Canada; and
- ❑ assist provinces in establishing strong regional air quality management regimes.

CONTRIBUTING TO THE RESULTS: Canadian levels of smog and inhalable particulates are reduced. The environmental stress caused by transportation is reduced.

CONTRIBUTING TO THE RESULT: Greenhouse gas emissions are reduced and stabilized in Canada and international actions to reduce global concentrations are promoted.



achieve its goal of stabilizing emissions at 1990 levels by the year 2000, without further mitigative action. The federal government will continue to pursue this target in partnership with other stakeholders through research and measures that focus on strengthening voluntary actions, involving all Canadians, and by promoting energy efficiency and renewable energy. Specifically, the department plans to:

- implement the Federal Action Program on Climate Change and continue to support the implementation of the National Action Program on Climate Change;
- make the issue real to Canadians, in part by publishing a Canada-wide study to improve the understanding of climate effects; and
- continue its research into the nature of climate change, its likely impacts on Canada, and how Canadian business might adapt to a changing climate to take advantage of opportunities and minimize risks.

To enhance EC's contributions to sustainable development

Enhance EC's influence with the energy sector: EC will work with other government departments and natural resource industries to develop clear policy statements related to the greening of energy. It

will continue to assess the economic and environmental benefits of renewable energy and conservation, and to communicate the findings broadly to promote the competitiveness of renewable/green energy.

CONTRIBUTING TO THE RESULT: Ecosystem science undertaken, scientific tools created and information transferred in support of ecosystem management initiatives.

Address the issue of climate change: Climate change is one of the most pressing global environmental issues. Although climate change occurs naturally, the magnitude of this change is being influenced by increasing concentrations of greenhouse gases in the earth's atmosphere. Global warming is a reality and there is strong evidence that we will experience more variability and a wider range of extremes in our daily weather. Climate change is likely to have major repercussions on economic and ecological systems worldwide. Despite energy-efficiency improvements in many sectors of the economy, Canada is unlikely to

HEALTHY ENVIRONMENT
SAFETY FROM ENVIRONMENTAL HAZARDS
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Climate Change

- Federal Action Program
- National Action Program
- Canada-wide study
- research
- communication

Energy Sector

- with OGDs, green energy policy
- promote economic benefits
- competitiveness

Build partnerships in the North: Canada's North is important to all Canadians because of its unique environmental, economic, social, cultural and health dimensions.

Sustainable Development in Canada's North

Canada's North represents 40 per cent of the country's land mass. Surrounded by two thirds of Canada's marine coastline, it contains some of the largest river systems, extensive forested areas, open tundra and unspoiled wilderness. It is home to Aboriginal peoples who, for generations, have depended on the North for their culture and have sought food, clothing and income from its resources.

Canada's North is experiencing a time of complex social, political, economic and environmental change. From a social and political point of view, preparations are under way for devolution in the Yukon, and the Northwest Territories, and the creation of Nunavut Territory in 1999; Aboriginal self-government negotiations are also under way. The pursuit of a traditional Aboriginal lifestyle is changing with the trend to a more cash-based economy. Environmentally, the North is increasingly challenged by local development and by pollution from the long-range transport of contaminants from the industrialized and agricultural regions around the world. This phenomenon, and the potential impact from atmospheric change are increasingly considered the greatest threats to the North.

The North

- management strategies
- Arctic Council
- Protection Strategy
- Aboriginal governments and CEPA
- Northern S&T

The department recognizes the significance of the North and plans to:

- review its management strategies for the North, including science and technology, the consideration of socio-economic factors in the implementation of programs, and its advisory role with respect to development proposals;
- provide expertise in support of the Arctic Council and the Arctic Environmental Protection Strategy;
- provide leadership internationally through its support for the Arctic Council and the Arctic Environmental Protection Strategy;
- broaden the application of CEPA administrative agreements and equivalency agreements to include Aboriginal governments; and
- work with other federal agencies and the Department of Indian Affairs and Northern Development in the development of a Federal Strategy for Northern Science and Technology.

Market-based Approaches

- socio-economic analysis
- economic instruments
- guidelines

In the implementation of CEPA, enhance EC's capacity to employ socio-economic analysis and market-based approaches:

Implementing the renewed CEPA will require EC to strengthen its capacity

to consider socio-economic factors in controlling toxic substances and promoting pollution prevention. EC will:

- develop, together with other government departments and other stakeholders, market-based approaches and other policy tools to prevent and contain environmental degradation and promote sustainable use of resources; and
- develop guidelines, programs and other measures for the implementation of these instruments and approaches.

CONTRIBUTING TO THE RESULT: Management actions are implemented to prevent, reduce or eliminate the risks posed by toxics that do not meet all the TSMP Track 1 criteria, and by other substances of concern.

To better manage EC's interdependencies and partnerships

Partnerships with private sector: EC will develop partnerships with the private sector to create flexibility in applying a broad range of tools to resolve environmental problems and to contribute to the competitiveness of Canadian industry. EC will work with the private sector to:

streamline the regulatory burden to ensure more effective and cost-efficient regulations that can stimulate innovations and make Canadian businesses more competitive; develop voluntary approaches that will give industry more flexibility to find the most cost-effective and innovative ways of achieving environmental goals; and help industry comply with environmental regulations. In order to strengthen its partnership with industry, EC will:

- ❑ update the regulatory process to make it more responsive to present and future challenges;
- ❑ develop strategies for “smart” regulations that are based on science, consider the potential economic impact and are strictly enforced but not inflexible;
- ❑ broaden and strengthen participation in voluntary arrangements, such as the Accelerated Reduction/Elimination of Toxics (ARET) program—a multi-national, multi-stakeholder initiative promoting voluntary action by emitters of toxic substances; and
- ❑ work with the private sector to encourage compliance with environmental laws and regulations.

HEALTHY ENVIRONMENT
SAFETY FROM
ENVIRONMENTAL HAZARDS
GREENER SOCIETY

Private Sector

- regulatory reform
- “smart” regulations
- voluntary
- compliance

A Healthy Environment

Gross Planned Expenditures within Business Line

Business Line Components	Planned Expenditures	Planned Expenditures	Planned Expenditures	Planned Expenditures
(millions of dollars)	1996-97*	1997-98	1998-99	1999-2000
Atmospheric Change	49.6	45.2	44.0	44.1
Toxics	48.2	40.6	40.6	40.7
Compliance and Enforcement	16.6	17.0	17.4	17.4
Biodiversity/Wildlife	43.9	42.3	37.5	37.6
Conserving Canada’s Ecosystems	90.7	82.8	69.7	69.8
Total A Healthy Environment	249.0	227.9	209.2	209.6

* Reflects changes included in the In-Year Update

HEALTHY ENVIRONMENT
SAFETY FROM
ENVIRONMENTAL HAZARDS
GREENER SOCIETY

BUSINESS LINE 2: SAFETY FROM ENVIRONMENTAL HAZARDS

Objective and Goals

The *Safety from Environmental Hazards* business line deals with naturally occurring and human-induced hazards which may threaten the lives, property and environment of Canadians. Its activities relate to the prevention of emergencies where possible, preparation for emergencies, warning of natural hazards that could lead to emergencies, and assistance in the response when emergencies do occur. It also includes the routine forecasting of weather and predictions of probable future states of the environment. EC’s goals in this business line are to provide Canadians with timely and accurate weather and environmental forecasts plus warnings and predictions, and to prevent or reduce the frequency, severity and environmental consequences of emergencies which affect Canada.

Safety from Environmental Hazards

- weather, environmental prediction
- emergencies prevention, preparedness

Operating Context and Shifts

Over the past 25 years, the department has been continuously improving its preparations for emergencies and the efficiency of its responses. New monitoring technologies, advances in atmospheric science, improvements in numerical weather prediction and a range of new communications technologies have enabled the department to steadily improve the accuracy and timeliness of its forecasts and warnings and maintain the quality of its services despite significant reductions in its resources for weather services.

All Canada's costliest natural disasters in recent years have been weather-related.

<input type="checkbox"/> Saguenay floods, 1996	Not available.
<input type="checkbox"/> Calgary hailstorm, 1991	\$360M
<input type="checkbox"/> Winnipeg floods, 1993	\$160M
<input type="checkbox"/> Edmonton tornado, 1987	\$149M
<input type="checkbox"/> Calgary hailstorm, 1996	\$140M
<input type="checkbox"/> Winnipeg hailstorm, 1996	\$120M
<input type="checkbox"/> Saskatchewan hailstorm, 1994	\$100M
<input type="checkbox"/> Barrie tornado, 1985	\$85M

Source: *Environment Canada, 1996*

As property losses from meteorological hazards climb, evidence mounts of greater atmospheric variability, and Canada's vulnerability to domestic and international environmental accidents increases, EC is changing the way it warns of and prepares for naturally occurring and human-induced environmental risks. Last year's *Business Plan* stated that EC's strategy to address the changing nature of risks from environmental hazards was to widen the margin of

safety from hazards and to lengthen the time frame within which environmental risks can be managed by Canadians. EC is accomplishing this in two ways.

First, the department is extending its expertise in meteorological forecasting to longer time frames and a wider array of environmental parameters. While short-term forecasts and warnings, particularly of severe weather, remain a departmental priority, EC's scientific understanding of the environment is increasing its capacity for environmental prediction. The department is working with partners to not only give Canadians more time to prepare for extreme weather, but also increase their awareness of its potential effects. That means not only issuing warnings of extreme rainfall but predicting its likely effect on reservoirs and dams; not just forecasting wind direction but indicating the level of airborne pollutants it will bring. EC is also improving its ability to model future states of the environment and create scenarios in which Canadians will have confidence to take action to protect themselves, their property and their environment.

Second, EC is shifting its emphasis from providing response advice to preventing the accidental release of hazardous substances into the environment, developing national standards and transferring emergency preparedness skills to other stakeholders. This does not lessen the need to prepare for emergencies or provide response advice after spills have occurred, but prevention is the most efficient way to deal with accidental releases and the most effective channel for the department's limited resources. This shift is also appropriate because dealing effectively with increasing risks requires the cooperation and involvement of many stakeholders, and because the lead role in emergency response usually rests with other jurisdictions or federal departments.

Changing Ways of Doing Business

- improving preparations, response
- improving accuracy, timeliness
- extending parameters
- prevention, preparedness

Key Initiatives

The implementation of the shifts in this business line continues and EC's strategy is still to target opportunities that widen the margin of safety from environmental hazards.

Demands on the department's resources continue to mount, however. In order to maintain the timeliness, accuracy and accessibility of the department's weather warnings and forecasts, the department will examine and **identify potential alternative service delivery opportunities** for the delivery of weather services. EC will provide aviation weather services to NAVCAN, ice services to the Canadian Coast Guard and military weather services to the Canadian Forces under cost recovery agreements, and will seek to extend this practice in other areas.

Plans and Priorities

In the *Safety from Environmental Hazards* business line, the department has determined the following priorities:

To maintain momentum in delivering on key Ministerial commitments

Continue to modernize EC's weather services and environmental monitoring network: Monitoring the state of the environment is fundamental to everything EC does. Whether it is to detect short-term dangers like tornadoes and snow squalls or identify long-term changes

in our climate or protective ozone layer, EC uses the information from its network to inform and warn Canadians of imminent and long-term natural hazards.

CONTRIBUTING TO THE RESULT: Timely and accurate weather forecasts and warnings

Within the planning horizon, EC will:

Channel Alert for weather warnings, a service offered by EC in cooperation with the cable television companies and with the blessing of the CRTC. Later in the period, EC will take advantage of new services offered in the market, such as digital radio and personal communications services.

introduce the television *All*

optimize its monitoring networks to provide the right level of information at an acceptable cost. EC will invest approximately \$35 million to modernize its weather radar network; and \$10 million in the lightning detection network to track thunderstorms. In so doing, EC will harmonize the network with the provinces and recover its costs from those deriving special benefit from the information. The climate station network will be streamlined to avoid over \$1 million in annual operating costs.

Weather Services

- All Channel Alert
- weather radar network
- lightning detection network
- streamline climate station network

CONTRIBUTING TO THE RESULT: Accidental releases prevented

Enhance the prevention of pollution in emergency preparedness and response. With other governments and sectors of Canadian society, EC will:

- create awareness of potential problems, set safety standards and promote prevention;
- transfer skills and tools to others so that they can prepare for emergencies as well as probable environmental occurrences;
- develop/promote international standards and codes of practice in the event of mishaps and;
- develop new technologies and test contingency plans to prepare for and respond to environmental emergencies.

Emergency Prevention

- promote prevention
- standards
- skills, tools

*To enhance
EC's
contributions
to sustainable
development*

**Contribute
to the
competitiveness**

***CONTRIBUTING TO THE RESULT: Effective decisions by
adapting to changing weather and climate***

of Canadian businesses in the global market: Transportation, recreation, construction, agriculture, fisheries, and energy and water use can all be more efficient or competitive, and therefore more sustainable, when decisions are made with the knowledge of expected weather conditions. Within the planning horizon, EC will:

- ❑ develop targeted products and services that enable clients in the economic sector to understand and consider environmental matters in their decisions, adapt their economic and social decisions to changing environmental conditions, and find economic opportunities and reduce the risk in dealing with changing environmental conditions; and
- ❑ work with the insurance sector to better understand liabilities so that they can make informed choices and decisions in light of future climate change (e.g., liabilities related to severe storms, floods or a rise in sea level).

Adaptation

- improve competitive position
- cooperation with health warnings

Warn Canadians of environmental risks to their health and safety: Severe and extreme weather (snowstorms, tornadoes, heat waves, downpours), smog and UV radiation threaten the health and safety of Canadians. Canadians' personal decisions directly affect their quality of life and can reduce the strain on our social structures, including the health care system, and contribute to their long-term sustainability. EC will introduce forecasts of air quality in partnership with other governments. An *Air Quality Index* will give Canadians information about expected air quality in the coming days, allowing them to make choices to minimize their health risks.

Prediction

- integrated capacity
- modelling future states
- water levels prediction

Predict a wider variety of environmental parameters on various time scales: As our climate changes naturally, and under the

influence of new and increased levels of atmospheric chemicals, we will be subjected to a new range of weather variability. Predictions and scenarios of the probable future states of the environment give citizens, industry and governments the tools to plan their activities, infrastructures and policies in a cost-effective, sustainable manner. EC will:

- ❑ Build upon its existing physical modelling capacity to develop an integrated environmental prediction capability by utilizing a multi-disciplinary approach and conducting scientific research to extend its ability to forecast possible future states. It will use its short-and long-term forecasts of the atmospheric environment over Canada as the basis for environmental predictions with improved understanding of ecosystem processes and sensitivities.
- ❑ Build on its warning/response expertise and infrastructure to enhance predictive capacity for modelling future states of the environment, identify areas of risks and transfer necessary skills to enable Canadians to integrate environmental considerations into their decision making. Such predictive capacity is based on our monitoring network and will require extensive partnerships with provinces, communities, industries, universities and other countries.
- ❑ Combine meteorological and hydrological expertise to provide predictions for water levels in basins to minimize flood danger while maximizing the economic potential of water reservoirs.

***CONTRIBUTING TO THE RESULT: Scientific capacity
to assess the impacts of social and economic
decisions on future states of environment***

To better manage EC's interdependencies and partnerships

provinces: EC will develop a nationally consistent framework for provision of its services relating to emergencies to clarify Environment Canada's role within the government and with stakeholders. Through the Federal Committee on Environmental Emergencies, chaired by Environment Canada and the Canadian

HEALTHY ENVIRONMENT
SAFETY FROM ENVIRONMENTAL HAZARDS
GREENER SOCIETY

CONTRIBUTING TO THE RESULT: Advice and specialized support to lead responders

Coast Guard, all federal government stakeholders meet to ensure that the environment will be protected in the event of an emergency. The

department will examine the possibility of developing, through the Canadian Council for Ministers of the Environment (CCME) harmonization initiative, an Environmental Emergencies Response Agreement with the provinces.

Emergencies Roles

- services framework
- partnership with provinces

Review EC's international activities related to weather and emergencies: EC has provided leadership in such international fora as the Organization for Economic Cooperation and Development (OECD), United Nations Environment Program (UNEP), United Nations Economic Commission for Europe (UNECE), the World Meteorological Organization (WMO), the International Maritime Organization (IMO) and the Environmental Protection Strategy for Arctic countries. EC will review its activities to ensure their links to Canada's domestic interests.

With the private sector, address new emergencies provisions of CEPA: A renewed CEPA provides regulatory and non-regulatory approaches for dealing with the

CONTRIBUTING TO THE RESULT: Preparations made for handling of accidental releases

environmental aspects of emergencies. One of its features is that it establishes civil liability for those responsible for environmental

damage resulting from an emergency. EC will work through the Major Industrial Accidents Council of Canada (MIACC) to develop voluntary, multi-stakeholder approaches to reducing the frequency and severity of industrial accidents.

Private Sector

- CEPA liability provisions
- MIACC cooperation

Safety from Environmental Hazards

Gross Planned Expenditures within Business Line

Business Line Components	Planned Expenditures	Planned Expenditures	Planned Expenditures	Planned Expenditures
(millions of dollars)	1996-97*	1997-98	1998-99	1999-2000
Weather and Environmental Predictions	163.2	159.4	154.6	154.5
Emergency Prevention and Preparedness	10.0	9.1	9.8	9.8
Total Safety from Environmental Hazards	173.2	168.5	164.4	164.3

* Reflects changes included in the In-Year Update

BUSINESS LINE 3: A GREENER SOCIETY

Business Line Objective

Greener Society

- information products, services
- technologies, jobs, capacity building
- sustainable development partnerships

Through its *Greener Society* business line, EC tries to bring about behavioral change. Its activities are intended to help Canadians understand their environmental responsibilities and act on their environmental values. Its goals are to: promote responsible environmental citizenship by helping Canadians use environmental information to make environmentally sound decisions; equip Canadians with the tools and technologies to prevent pollution; help Canadians include environmental costs in their social and economic decisions; and promote and protect domestic environmental security and economic interests through its international leadership.

Operating Context and Shifts

Measurable improvements in Canada's environment since EC was created 25 years ago are due, in no small measure, to the manner in which the department has exercised its governance function. EC has moved decisively to address issues that are within its jurisdiction and amenable to federal control. Given the scale of issues we face today, however, environmental sustainability is clearly a shared responsibility. Issues are simultaneously local, national and global in scope, and are linked inextricably to economic and social issues. Pollution has no respect for political boundaries. The quality of Canada's environment is a reflection of values rather than jurisdictions. In order to sustain the environment and our own well-being, we need to clarify these values and act on them. This reality has prompted EC to change the way it exercises its governance function.

Canadians need clear and practical information in order to make informed decisions about their health, safety and well-being. EC has therefore given increased attention to the development and communication of environmental information.

EC has also shifted the way it develops its policies. Instead of basing them solely on its own scientific expertise and consultations with technical experts, the Department is placing increased emphasis on consultations and consensus building among stakeholders, as well as on social, economic and environmental considerations. The array of policy tools and levers it uses has also widened.

Technologies and know-how remain essential to addressing environmental issues. However, EC is shifting its activities from developing technologies that control pollution to developing technologies with partners to prevent pollution and to transfer new skills and products to Canada's environmental industries.

Canada's economic security and the vulnerability of its environment to global conditions have given EC an extensive international agenda. Although EC has achieved considerable influence and credibility in its international activities, changing domestic and international conditions mean that Canada's influence and capacity to exploit emerging opportunities cannot be taken for granted. EC is focusing its effort on areas affecting domestic interests and is developing a more coherent approach to all its international files.

Changing Ways of Doing Business

- communication
- consultations
- levers, tools
- technology partnerships
- international agenda

Key Initiatives

EC's *Business Plan* last year stated that the department's strategy for managing demands in this business line would be to target its efforts toward opinion leaders, communities and especially youth so that they will in turn engage all Canadians to act on their environmental values. This is still the department's strategy but EC is also examining another approach.

Encourage innovation for environmental solutions: To narrow the gap between the earth's carrying capacity and the rate at which we can develop solutions, we need to innovate in a number of different areas: new environmental technologies; new ways of sharing and disseminating information and strategies; lifestyle changes; new roles for governments as catalysts and partners. EC will explore its opportunities to use its policy and program levers to influence and encourage these different kinds of innovation and the potential synergy between them.

Plans and Priorities

In this business line, the department assigned priority to the following plans. EC will:

To maintain momentum in delivering on key Ministerial commitments

Continue to foster job creation related to pollution prevention:

EC will continue to encourage private-sector investment and advance the commercialization of a broad range of environmental technologies for both the domestic and international markets through

CONTRIBUTING TO THE RESULTS: Increased emphasis is placed on pollution prevention domestically and internationally. Green technologies, know-how and expertise are transferred to the public.

the Technology Partnerships Canada Program. It will help position Canadian companies to take advantage of opportunities in both the domestic and global environmental markets through the Canadian Environmental Industry

Strategy. It will continue to foster capacity building through the Environmental Assessment program. Specifically, EC will:

- ❑ work with Canadian industry and others to prevent pollution while creating jobs by helping industries identify the economic benefits of pollution prevention;
- ❑ help industry address environmental and human health protection issues through improved science and technology, and improve its capacity to solve problems at home and to enter foreign markets;
- ❑ shift delivery of the Technology Verification Program to the private sector in 1997/98;
- ❑ create a national pollution prevention clearing house to give Canadians access to the information and the tools necessary to implement pollution prevention;
- ❑ accelerate the commercialization of Canadian environmental technologies and processes by supporting the Canadian Environmental Technology Advancement Centres, which deliver comprehensive technology transfer services to Canadian small and medium sized environmental enterprises.

HEALTHY ENVIRONMENT
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GREENER SOCIETY

Encouraging Innovation in areas of:

- technologies
- information
- lifestyles
- governance

Job Creation and Pollution Prevention

- industry partnerships
- Technology Verification Program
- clearing house
- commercialization

GREEN CORPS

Many developing nations are trying to strengthen their environmental programs. They recognize the value of others' experience and expertise in finding solutions to environmental problems and a number are looking to Canada for assistance in acquiring the necessary expertise and knowledge.

Canadian environmental industries have developed a range of products, services and expertise for these international clients; and the Canadian government has experience in developing and managing policy, regulatory and technical environmental programs. However, taking full advantage of the business potential requires a concerted and strategic effort to promote the opportunities for Canada.

Environment Canada has created the Green Corps to respond to requests for departmental expertise from Canadian environmental industry, international organizations and foreign governments. The Green Corps will also support Canada's role as knowledge broker for sustainable development

The Republic of Trinidad and Tobago for example is one of EC's newest partners looking to share in Canada's expertise in environmental management, particularly air and water pollution and waste management. The Republic is also drawing on Canadian experts from the academic and private sectors and other levels of government.

*To enhance
EC's
contributions
to sustainable
development*

Engage youth:

EC will
implement a
multi-track

CONTRIBUTING TO THE RESULT: Canadians are equipped to address environmental priorities.

Engage Youth

- Action 21
- participation in major meetings
- opportunities in environmental industry

approach to make young Canadians promoters of sustainable development. This will engage youth in environmental action and policy development and involve them in the growing international environmental sector. EC will make youth a priority by providing new opportunities for young Canadians to be heard on environmental issues and to be active participants in environmental protection. EC will:

- through its Action 21 program, encourage more projects at the community level for and by youth;
- pursue new opportunities to help youth make the transition from school to work in the fast-growing environmental industry; and
- invite youth to participate in major national and international meetings.

Indicators

- sustainability indicators incorporate natural capital values
- Environmental Valuation Inventory

Develop Sustainable Development

Indicators: The absence of effective, widely shared indicators of sustainable development undermines efforts to engage the public, define policy measures and evaluate progress. EC will:

- work with other departments and governments to develop indicators of sustainable development and to incorporate natural capital values into indicators of sustainability;
- provide tools such as the Environmental Valuation Reference Inventory to assist in determining the value of non-marketed goods by using cost-benefit and other appropriate types of analysis.

CONTRIBUTING TO THE RESULT: Products and services are developed that help Canadians make environmentally responsible decisions.

Increase its efforts at environmental education and communication: Building on EC's very successful effort to engage Canadians on key environmental issues through its ecosystem initiatives and Action 21, EC will work to raise public awareness and understanding of issues such as climate change. It will synthesize, popularize and communicate scientific information, and it will provide information products and services that help Canadians understand the environment and factor the environment into their decision making. It will also use its expertise to offer a mix of products and services for the public good and, on a cost-recovered basis, for clients with special needs. It will:

- ❑ ensure that departmental products are based on an understanding of clients' capacity to receive and use information, as well as on EC's ability to deliver quality services in a timely fashion;
- ❑ issue in partnership with academic institutions, other government departments and other jurisdictions, a new generation of state-of-the-environment assessments that are more focused, timely and cost-effective; and increase cost recovery revenues that reflect the demand for information products and services, through the provision of environmental information to clients with special needs; and
- ❑ use communications technologies to help share environmental information, including expanding the information products made available on the Green Lane and using the SchoolNet.

CONTRIBUTING TO THE RESULT: Visible federal leadership and action in integrating sustainable development into government policies and operations.

greening of government operations. EC is dedicated to adopting the pollution prevention approach in the greening of its operations and to making this approach the basis for environmental decision making in federal departments. EC will continue to:

- ❑ implement an Environmental Management System (EMS). Among other things, EC is working to achieve targets for diverting office waste from landfill (80 %), reducing energy and water use, and converting vehicles to alternative fuels (75 %);
- ❑ advocate the greening of operations across government by bringing the federal community together to develop best practices and collective frameworks for common issues and to share information through the Environmental Accountability Partnership and the Federal Committee on Environmental Management Systems.

HEALTHY ENVIRONMENT
SAFETY FROM
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GREENER SOCIETY

Environmental Education

- synthesize, communicate science
- client focus
- SOE assessments
- Green Lane, SchoolNet

Greening Government

- Environmental Management System
- best practices

Joint Policy Agendas with OGDs

- common positions
- sustainable development

To better manage EC's interdependencies and partnerships

addressing horizontal issues such as climate change, heavy metals, UVb and others has led to an expansion of interests and endeavours. In the coming years, the four departments will cooperate in joint ventures to promote and enhance the sharing and development of management practices, the coordination of human resource and communication activities, and the investigation of new and emerging issues such as endocrine disrupters and the impacts of climate change. Other partners will be encouraged to participate from time to time in new initiatives where feasible and appropriate.

In addition EC will develop joint agendas, integrate its policy development and deliver services in an increasingly horizontal manner, with other government departments such as Natural Resources, Indian Affairs and Northern Development, Health, Agriculture, Human Resources Development and Industry. It will work with other government departments to establish federal positions for negotiating environment-related matters with the provinces/territories and other countries to ensure that government policies and operations reflect the principle of sustainable development.

CONTRIBUTING TO THE RESULT: Visible federal leadership and action in integrating sustainable development into government policies and operations.

Fed-Prov Partnerships

- build on accord
- sub-agreements

Build on the Canada-wide Accord on Environmental Harmonization to strengthen EC's partnerships with the provinces:

The fact that there are 13 different jurisdictions, each with its own environmental regulations and practices, makes it difficult to deal adequately with environmental problems (e.g., ground-level ozone, climate change) and creates differing environmental standards between governments. Through the harmonization initiative, federal and provincial governments are working in partnership to achieve the highest standards of environmental quality across the country. A Canada-wide Accord has been approved in principle to enhance environmental protection, promote sustainable development and achieve greater effectiveness and accountability by governments charged with environmental management. Building on the momentum, EC will conclude sub-agreements on:

- setting Canada-wide standards, objectives and guidelines in areas such as air, water and soil quality; and
- inspection activities by environment departments.

CONTRIBUTING TO THE RESULT: Partnerships established to promote, develop and rationalize environmental policies and practices.

Strengthen relations with First Nations: EC recognizes the unique and significant role of Aboriginal peoples in environment stewardship and will forge alliances to meet their needs in setting environmental quality standards. EC promotes integration of environmental considerations in land claims and Aboriginal self-government agreements.

CONTRIBUTING TO THE RESULT: Canada's strong international voice promotes and protects domestic environmental security and economic interests, and fosters resolution of global commons and trade issues.

Focus international efforts on areas affecting domestic interests:

EC will focus its international agenda to more effectively position the department to influence and exploit emerging opportunities and

to advance Canada's interests in different fora and with different international partners. It will:

- ❑ promote Canada's interests in environmentally responsible hemispheric trade liberalization through cooperative initiatives to help strengthen national environmental institutions in Latin America;
- ❑ promote the Commission for Environmental Cooperation as the forum of choice for resolution of North American regional environmental issues, and promote broader application of the approach used in the North American Free Trade Agreement and the North American Agreement on Environmental Cooperation as a model for integrating trade and environment interests;
- ❑ promote and protect domestic environmental security and economic interests by building environmental advocacy and accountability into international trade and agreements on economic cooperation;
- ❑ strengthen partnerships that involve scientific and commercial exchange, cooperation on environmental management and development assistance (e.g., Chile, Chinese, Taipei and Korea);
- ❑ enhance its role as provider of knowledge on the "how to" of sustainable development, provide Canadian solutions and help communicate practical solutions from other nations.

International Agenda

- North American cooperation
- environment and trade
- scientific partnerships
- brokering knowledge

Sydney Tar Ponds Clean-up: Community-based Approach

A unique community-based initiative is being developed to clean up Canada's largest contaminated site – the tar ponds located in the middle of a residential area of Sydney, N.S. An ecosystem approach was used to draw the community and various levels of government to look at ways to safeguard public health, improve environmental health and increase the economic well-being of the residents of Sydney and the surrounding Muggah Creek area.

The tar ponds—actually a tidal estuary—contain waste produced by the Sydney Steel mill coke ovens after almost a century of operation. The tar ponds sediment, roughly equivalent to a football field 60 stories deep, contains heavy metals, polychlorinated biphenyls (PCBs) and other persistent chemicals. The adjacent coke ovens site and a municipal landfill may also contribute to more widespread contamination.

Previous government clean-up efforts have been unsuccessful due in part to a lack of buy-in by affected citizens. In August, the federal ministers of environment and health and the three Nova Scotia ministers of health, public works and economic renewal met with community leaders to discuss options. Under a community-based approach, governments and the community together will work out a solution that addresses environmental and health concerns. A Joint Action Group has been established. EC and its partners are providing expertise and resources to resolve this long-standing issue.

A Greener Society

Gross Planned Expenditures within Business Line

Business Line Components	Planned Expenditures	Planned Expenditures	Planned Expenditures	Planned Expenditures
(millions of dollars)	1996-97*	1997-98	1998-99	1999-2000
Information Products and Services	55.1	43.6	43.8	44.1
Technologies, Jobs and Capacity Building	65.7	50.6	50.0	50.2
Partnerships for Sustainable Development	25.6	22.6	24.4	24.2
Total A Greener Society	146.4	116.8	118.2	118.5

* Reflects changes included in the In-Year Update



Management Challenges

The introduction to the *Report on Plans and Priorities* outlines the complex environment in which governments are operating today. Driven by globalization, new technologies, fiscal pressures and the changing fabric and expectations of society, the role of government is continually evolving. The federal government is responding to this situation by continuing to rethink and reshape itself to become more effective in meeting the evolving needs of Canadians. For EC, this means the department must be flexible in its leadership and develop the skills and tools to deliver on its mandate in creative and cost-efficient ways. The challenge for management will be to “get Environment Canada right.”

EC is pursuing five strategies to respond to these challenges:

- invest in the Department’s human resources;**
- develop a framework for the management of science and technology;**
- identify potential alternative service delivery mechanisms** to improve the delivery of EC’s services and achieve the objectives of the department;
- refine both EC’s capacity to, and its framework for, measuring progress** toward the department’s long-term objectives and those of the government as a whole; and
- modernize and strategically apply its information technologies.**

Human Resources

The skills and capabilities required to function effectively in today’s federal public service are considerably different from a decade ago. Qualities such as adaptability, client focus, willingness to take risks, and a facility for communication, leadership and teamwork are essential in the employees that EC recruits and retains. As EC develops as a continuous learning organization, Human Resources (HR) will assist management in recruiting or rejuvenating the workforce and in motivating and leading employees into the next millennium.

Key to EC’s ability to function in the future is *La Relève*, a wide range of initiatives at the individual, departmental and corporate levels aimed at investing in people and motivating them to contribute to building a modern and vibrant public service. In addition to contributing to this government-wide project, EC will also initiate some specific projects to ensure that the skill sets of its employees are identified and nurtured. For renewal to be effective, it must encompass all areas of the department—from regions to headquarters, services to programs, scientists to administrators, technicians to support staff. In addition EC will be participating in the government-wide initiative and will follow up on ways to contribute further to *La Relève*.

Management Agenda

- human resources
- S&T
- alternative service delivery
- results management
- information technologies

Human Resources

- management cadre
- knowledge workforce
- scientific staff

The 1996/97 HR Business Plan sets out a number of renewal initiatives—currently at various stages of completion—to build a diverse, appropriate, capable and motivated workforce. The context for the Business Plan is La Rèleve, the Science and Technology review, the Universal Classification System, the return to collective bargaining, and the examination of alternative service delivery possibilities within EC. Priority will be given to:

- developing a future management cadre with the diversity of experience and the competencies necessary to learn, teach and lead others in thinking and working creatively;
- building a force of knowledge workers skilled in cooperating with others and in developing consensus, and open to opportunities to deliver services through alternative delivery vehicles wherever effectiveness and efficiency can be enhanced by so doing; and
- developing a clear understanding of the capacity required to be responsive to, and proactively address, possible future environmental states by developing profiles of the necessary scientific skills sets and by actively recruiting new scientists.

These initiatives will be undertaken through partnerships between management and staff, both nationally and in each region and service. Department-wide human resource initiatives will be complemented by others that are specific to a given region or service.

Science and Technology

- EC's leadership
- management committees
- management framework

Framework for the Management of Environment Canada's Science and Technology

Science and technology (S&T) is a vital resource in fulfilling EC's mandate. It is the foundation of environmental policies, programs and regulations, and the basis for determining environmental priorities. Over 80 % of the department's expenditures are on S&T activities and more than two thirds of its employees are classified in S&T occupational groups. S&T management issues are horizontal, cutting across the whole department and extending throughout the federal government.

EC shows leadership in shaping Canadian environmental S&T by:

- maintaining and strengthening its own core scientific capabilities, and employing them effectively;
- continuing to align its science, and that of other Canadian sources, to the goal of sustainable development;
- transferring and, where appropriate, commercializing environmental technologies;
- maintaining and, in some cases, strengthening Canadian involvement in international science programs related to sustainable development objectives;
- ensuring that sound S&T informs the policy-making process.

EC has a system of committees in place to deal with S&T management issues. The lead is an Assistant Deputy Ministers' S&T Executive Committee, which ensures that a coherent approach is taken to the management of S&T. The committee is supported by other committees of senior S&T managers. In response to the Federal S&T Strategy, the department has established a Research and Development Advisory Board to provide strategic advice to the Deputy Minister on the department's research activities.

EC will develop a framework for managing science and technology; this will help the department improve, coordinate and integrate policy frameworks that bear on S&T management issues. The purpose of the framework is to maximize the return on S&T investment and ensure that the investment addresses government priorities.

The quality and relevance of EC's S&T is affected by several clusters of policies and practices:

- federal and national S&T policies;
- management of the federal S&T workforce;
- improvements to the quality, effectiveness and relevance (especially to policy making) of S&T;
- partnerships; and
- communicating S&T.

Under the framework for management of S&T, EC will develop departmental goals for each of these groups of policies. The framework will ensure that the policies are mutually supportive and conducive to building departmental environmental S&T capacity—thereby helping fulfil the department's environmental mission. The framework will assist S&T managers in setting priorities for management activities. These will most likely include extending the scope of work under the four natural resource departments' MOU, cooperation with other federal departments and with the provinces in science for sustainable development, establishing the departmental Research and Development Advisory Board, utilizing EC's partnerships with academic institutions effectively, and implementing the recommendations of the Treasury Board S&T Human Resources Framework.

Alternative Service Delivery (ASD)

The government is committed to providing services to Canadians through the most cost-effective and appropriate delivery mechanisms possible. EC has a history of innovative service delivery and partnering arrangements. Alternative service delivery, along with cost recovery and revenue generation, is an important aspect of commercialization.

Examples of current alternate delivery are:

- pioneering locally shared support services among federal departments in an office complex in the NCR;
- agreement on a government-owned and contractor-operated arrangement for the Wastewater Technology Centre;
- contracting with Terrachoice Environmental Services for the management and delivery of the *Ecologo*TM;
- investing in increasing automation of weather forecasts, weather warnings; and
- consolidation of the production and delivery of weather services in a network of 17 Weather Service Offices across Canada.

Alternate Service Delivery

- weather services
- new substances assessment
- waste disposal • laboratory services

EC will continue to explore and identify opportunities for alternative service delivery options for Environment Canada's services in order to achieve the objectives of the department. Priority will be given to:

- increasing the client sensitivity of Atmospheric Environment products and expanding the client base for disseminating these products;
- seeking opportunities to increase the range of ASD options through the CCME-led harmonization initiative and through sale and licensing of technology;
- training staff in commercial practices particularly focused on market planning and customer services;
- exploring further ASD options for delivering EC's weather services;
- seeking cost-recovery opportunities in new substances assessment, ocean dumping and the import and export of hazardous waste; and
- examining options for improved efficiencies in delivering laboratory and analytical science through alternative delivery mechanisms.

Results Management

- results framework
- performance measures
- government-wide initiative

Improving Results Measurement and Reporting

EC has a strong record of performance in delivering environmental results. The department's scientific excellence has enabled it to define problems, analyse causes and identify best solutions, and it has provided a solid basis for the policies, regulations and programs to anticipate, control and eliminate problems. The results of the department's efforts are well documented in EC's *Report on Performance*, released in the fall of 1996. That said, EC needs to improve the quality of results measurement and reporting in order to improve its accountability so that it can better inform citizens of the difference that government programs and services make to Canadians.

To improve its performance measurement, EC will give priority to:

- refining its performance measurement framework to more accurately reflect progress, and developing more targeted data against which to measure the department's contribution to sustainable development; and
- contributing the department's experience and expertise to the Treasury-Board-led government-wide initiative to improve results measurement, accountability and reporting to Parliament.

Information Technology

- client-centred
- modernized infrastructure
- stewardship, strategic resource use

Information Technology

Information technology is a key factor in how the department reaches its clients with the information they need to make balanced decisions, and also part of how the department can work and is working more efficiently and effectively. During the 1996/97 planning period, a new information technology (IT) infrastructure was put in place to improve information exchange and access across the department as well as to provide improved cost accounting and reporting support to managers. Other accomplishments included the technology component of the Green Lane. The department will continue to refine and improve the infrastructure. Priority will be given to:

- extending the reach of the department's influence through further refinements in its information technology, including tailoring information and delivery to client-focused needs;
- development and deployment of applications using the modernized infrastructure to increase the availability of information critical for decision making; and
- promoting the wise stewardship and strategic use of the IT resources.

Administration

Gross Planned Expenditures within Business Line

Business Line Components	Planned Expenditures	Planned Expenditures	Planned Expenditures	Planned Expenditures
(millions of dollars)	1996-97*	1997-98	1998-99	1999-2000
Administration	70.1	62.2	60.4	60.7

* Reflects changes included in the In-Year Update

Section V: Supplementary Information



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Appendix 1 — Departmental Spending Authorities

1.1 Authorities for 1997/98 - Part II of the Main Estimates Financial Requirements by Authority

Vote ¹	(thousands of dollars)	1997-98 Estimates	1996-97 Estimates
Environment Program			
1	Operating expenditures	407,212	439,594
5	Capital expenditures	26,175	29,741
10	Grants and contributions	33,688	40,085
(S)	Minister of the Environment —		
	Salary and motor car allowance	49	49
(S)	Contributions to employee benefit plans	40,387	36,887
Total Program		507,511	546,356

Explanation of Change:

The \$38.9 million net decrease in 1997-98 over 1996-97 Main Estimates is due mainly to:

Increases:

- \$5.8 million due to the increase from 14.5% to 17% for Contributions to the Employee Benefit Plans;
- \$2.8 million for payments to municipalities in lieu of taxes (PILT). Funds for these payments were transferred to the department from Public Works and Government Services Canada; and
- \$2.8 million for the payment of the Grant to Wildlife Habitat Canada Foundation for the implementation of its habitat conservation initiatives across Canada. Funding is provided by the revenue generated from the sale of the Wildlife Habitat Conservation Stamps.

Decreases:

- \$40.6 million in savings identified through Program Review;
- \$5.4 million due to the transfer to Natural Resources Canada of funds for the Program on Energy Research and Development; and
- \$4.3 million in savings identified in pre-Program Review budgetary reduction exercises, as well as reduced requirements in various programs such as the St. Lawrence Action Plan and the Environmental Choice Program.

¹The vote wording is defined in Part II of the Main Estimates.

Appendix 2 — Organization

2.1 1997/98 Gross Resource Requirements by Branch and Business Line

	REG DIR GEN Pacific and Yukon	REG DIR GEN Prairie and Northern	REG DIR GEN Ontario	REG DIR GEN Quebec	REG DIR GEN Atlantic	DIR GEN Human Resources Directorate
A Healthy Environment	28.3	17.0	23.4	21.8	10.7	
Safety from Environmental Hazards	15.2	29.6	15.5	14.2	11.8	
A Greener Society	7.7	13.7	8.6	7.1	6.7	
Administration	2.5	5.9	7.7	3.9	4.6	6.8
Total – \$Millions	53.7	66.2	55.2	47.0	33.8	6.8

	ADM Policy and Communications	Corporate Offices	ADM Corporate Services	ADM Atmospheric Environment Service	ADM Environmental Protection Service	ADM Environmental Conservation Service	Total \$ Millions
				28.3	37.5	60.9	227.9
			77.9	3.6	0.7		168.5
	13.2	0.1	0.4	18.4	36.9	4.0	116.8
	0.3	6.7	21.5	0.6	1.2	0.5	62.2
	13.5	6.8	21.9	125.2	79.2	66.1	575.4

Appendix 3 - Capital Projects

3.1 Major Capital Expenditures by Business Line

(millions of dollars) Business Lines	Planned Expenditures 1996-97*	Planned Expenditures 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
A Healthy Environment	8.3	6.2	5.6	5.6
Safety from Environmental Hazards	10.3	12.0	12.0	12.0
A Greener Society	8.4	6.7	6.7	6.7
Administration	1.9	1.3	1.3	1.3
Total	29.4	26.2	25.6	25.6

* Reflects changes included in the In-Year Update

Appendix 3 - Capital Projects

3.2 List of Major Capital Projects by Business Line

(millions of dollars) Business Lines	Current Estimated Total Cost	Forecast Expenditures to March 31, 1997	Planned Expenditures 1997-98	Future Years Requirements
A Healthy Environment				
1. Ozone Layer Depletion Arctic Zone Observation	6.3	6.3	—	—
2. Global Warming	6.5	6.5	—	—
	12.8	12.8	—	—
Safety from Environmental Hazards				
1. Doppler Upgrade - Radar Network Modernization	26.7	4.8	2.0	19.9
2. Weather Station Construction Eureka, N.W.T.	3.9	1.5	0.4	2.0
3. Weather Warning Delivery System	3.8	1.6	0.5	1.7
4. Scientific Leadership - Atmospheric Research Aircraft Facility	2.6	2.6	—	—
5. Surface Automation (READAC Phase III)	5.9	5.9	—	—
6. New Satellite Data Access Systems	2.7	—	—	2.7
	45.6	16.4	2.9	26.3
A Greener Society				
1. Ice Integration and Analysis System	6.0	4.7	0.6	0.7
2. Data Processing Upgrades for Radarsat	2.7	2.5	0.2	—
3. Mercury Manometer Replacement Program	3.8	1.1	1.3	1.4
4. Replacement of temporary and leased space at the Environmental Technology Centre	2.6	2.6	—	—
	15.1	10.9	2.1	2.1
Other				
Controlled capital projects between \$1 million and \$2.5 million	26.0	11.6	6.0	8.4
Projects under \$1 million	—	—	15.2	—
Total Capital Expenditures	99.5	51.7	26.2	36.8

Appendix 4 - Additional Financial Information

4.1 Gross and Net Departmental Expenditures by Business Line

(millions of dollars) Business Lines	Planned Expenditures* 1996-97	Planned Expenditures 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
Gross Expenditures by Business Lines				
A Healthy Environment	249.0	227.9	209.2	209.6
Safety from Environmental Hazards	173.2	168.5	164.4	164.3
A Greener Society	146.4	116.8	118.2	118.5
Administration	70.1	62.2	60.4	60.7
Total Gross Expenditures	638.7	575.4	552.2	553.1
Less:				
Revenue Credited to the Vote				
A Healthy Environment	6.3	7.3	12.9	12.9
Safety from Environmental Hazards	31.2	38.0	41.4	40.9
A Greener Society	23.5	22.6	23.5	23.6
Total Revenue credited to the Vote	61.0	67.9	77.8	77.4
Revenue Credited to the Consolidated Revenue Fund				
A Healthy Environment	4.8	4.8	3.2	3.2
Safety from Environmental Hazards	0.1	1.5	1.5	1.4
A Greener Society	0.8	0.7	0.6	0.6
Total Consolidated Revenue Fund	5.7	7.0	5.3	5.2
Total Revenue credited to the Vote and to the Consolidated Revenue Fund	66.7	74.9	83.1	82.6
Net Expenditures by Business Lines				
A Healthy Environment	237.9	215.8	193.1	193.5
Safety from Environmental Hazards	141.9	129.0	121.5	122.0
A Greener Society	122.1	93.5	94.1	94.3
Administration	70.1	62.2	60.4	60.7
Total Net Expenditures by Business Line	572.0	500.5	469.1	470.5
Cost of services provided by other departments	49.3	50.3	50.3	50.3
Total Net Cost	621.3	550.8	519.4	520.8

* Reflects changes included in the In-Year Update

Appendix 4 - Additional Financial Information

4.1.1 Details of Revenues by Business Line

Business Lines (millions of dollars)	Planned Expenditures* 1996-97	Planned Expenditures 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
Revenue credited to the Vote by Business Lines				
A Healthy Environment				
Information Products	0.2	0.2	0.2	0.2
Realty Services	0.3	0.4	0.6	0.6
Scientific and Professional	5.1	6.0	9.9	9.9
Regulatory Services	0.6	0.6	2.1	2.1
Miscellaneous	0.1	0.1	0.1	0.1
	6.3	7.3	12.9	12.9
Safety from Environmental Hazards				
Information Products	0.6	0.7	0.9	0.9
Sale of Sponsorships/Advertising	0.2	0.2	0.2	0.3
Realty Services	0.3	0.3	0.3	0.3
Scientific and Professional	29.7	36.2	39.4	38.7
Miscellaneous	0.4	0.6	0.6	0.7
	31.2	38.0	41.4	40.9
Consolidated Revenue Fund				
Information Products	1.9	1.9	1.8	2.0
Realty Services	0.4	0.4	0.5	0.5
Scientific and Professional	21.0	20.2	21.0	21.0
Miscellaneous	0.2	0.1	0.2	0.1
	23.5	22.6	23.5	23.6
Total Revenue credited to the Vote	61.0	67.9	77.8	77.4
Revenue credited to the Consolidated Revenue Fund (CRF)				
A Healthy Environment				
Realty Services	0.5	0.5	0.5	0.5
Scientific and Professional	0.4	0.4	0.4	0.4
Regulatory Services	3.8	3.9	2.2	2.2
Miscellaneous	0.1	—	0.1	0.1
	4.8	4.8	3.2	3.2
Safety from Environmental Hazards				
Scientific and Professional	—	1.4	1.4	1.3
Miscellaneous	0.1	0.1	0.1	0.1
	0.1	1.5	1.5	1.4
A Greener Society				
Scientific and Professional	0.8	0.6	0.6	0.6
Miscellaneous	—	0.1	—	—
	0.8	0.7	0.6	0.6
Total credited to the CRF	5.7	7.0	5.3	5.2
Total Program Revenues	66.7	74.9	83.1	82.6

* Reflects changes included in the In-Year Update

Appendix 4 - Additional Financial Information

4.2 Transfer Payments by Business Line

(millions of dollars) Business Lines	Planned Expenditures 1996-97*	Planned Expenditures ¹ 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
Grants by Business Lines				
A Healthy Environment	8.6	5.1	0.8	0.5
Safety from Environmental Hazards	0.9	0.9	0.9	0.9
A Greener Society Administration	2.2	0.2	0.2	0.2
Total Grants	11.7	6.2	1.9	1.6
Contributions by Business Lines				
A Healthy Environment	19.9	18.3	10.7	7.6
Safety from Environmental Hazards	1.9	1.8	1.8	1.8
A Greener Society Administration	11.6	7.4	7.4	7.2
Total Contributions	33.4	27.5	19.9	16.6
Total Grants and Contributions	45.1	33.7	21.8	18.2

* Reflects changes included in the In-Year Update

¹ Additional details on transfer payments by Business Line can be found in Part II of the Main Estimates

Appendix 4 - Additional Financial Information

4.3 Presentation by Standard Object

(millions of dollars)	Planned Expenditures 1996-97*	Planned Expenditures 1997-98	Planned Expenditures 1998-99	Planned Expenditures 1999-2000
Personnel				
Salaries and wages	254.5	237.6	235.1	236.3
Contributions to employee benefit plans	36.9	40.4	40.0	40.2
	291.4	278.0	275.1	276.5
Goods and Services				
Transportation and communications	44.9	40.9	39.9	40.0
Information	9.1	7.0	6.6	6.6
Professional and special services	133.8	105.9	102.4	105.4
Rentals	17.2	18.9	18.2	18.1
Purchased repair and maintenance	14.3	13.0	12.5	12.5
Utilities, materials and supplies	36.6	30.5	29.3	29.4
Other subsidies and payments	1.2	5.6	5.6	5.6
Minor Capital	15.7	15.7	15.2	15.2
	272.8	237.5	229.7	232.8
Capital				
Professional and special services	2.8	2.4	2.4	2.4
Purchased repair and maintenance	4.7	4.5	4.6	4.6
Construction and aquisition of land, buildings and works	2.9	2.2	2.1	2.3
Construction and aquisition of machinery and equipment	17.7	15.9	15.4	15.2
Other	1.3	1.2	1.1	1.1
	29.4	26.2	25.6	25.6
Transfer Payments				
Grants	11.7	6.2	1.9	1.6
Contributions	33.4	27.5	19.9	16.6
	45.1	33.7	21.8	18.2
Gross Expenditures	638.7	575.4	552.2	553.1
Less Revenues credited to the Vote	61.0	67.9	77.8	77.4
Net budgetary expenditures (surplus)	577.7	507.5	474.4	475.7

* Reflects changes included in the In-Year Update

Appendix 5 - Statutes Administered by the Portfolio and other Annual Reports

Environment Canada is responsible for administering the 14 following acts:

The Canada Water Act (Part III is repealed)
The Canada Wildlife Act
The Canadian Environmental Assessment Act
The Canadian Environmental Protection Act
The Canadian Environment Week Act
The Department of the Environment Act
The Game Export Act
The International River Improvements Act
The Lac Seul Conservation Act
The Lake of the Woods Control Board Act
The Migratory Birds Convention Act
The National Wildlife Week Act
The Weather Modification Information Act
The Wild Animal and Plant Protection and Regulations of International and Interprovincial Trade Act

In addition, the department is responsible for administering parts of acts or providing specific advice and information under certain sections and provisions of the acts that follow:

The Access to Information Act
The Aeronautics Act
The Agricultural and Rural Development Act
The Arctic Waters Pollution Prevention Act
The Auditor General Act
The Canada Shipping Act
The Energy Supplies Emergency Act
The Export and Import Permits Act
The Federal Real Property Act
The Financial Administration Act
The Fisheries Act
The Forestry Act
The Hazardous Products Act
The Health of Animals Act
The International Boundary Waters Treaty Act
The James Bay and Northern Quebec Native Claims Settlement Act
The Motor Vehicle Safety Act
The National Energy Board Act
The National Housing Act
The National Round Table on the Environment and the Economy Act
The Navigable Waters Act
The Northern Inland Waters Act
The Pest Control Products Act
The Privacy Act
The Resources and Technical Surveys Act
The Territorial Lands Act
The Transportation of Dangerous Goods Act

Appendix 6 - Departmental Results Commitments

Environment Canada has a budget of \$507.5 million in order to	
<i>provide Canadians with:</i>	<i>to be demonstrated by:</i>
A Healthy Environment	
A reduction of the negative impacts on the atmosphere and to help Canadians better understand and adapt to these consequences	<ul style="list-style-type: none"> Greenhouse gas emissions reduced and stabilized in Canada and international actions to reduce global concentrations promoted Consumption of ozone-depleting substances stabilized, reduced or eliminated and the beginning of ozone layer recovery Canadian levels of smog and inhalable particulates reduced Negative impacts from acid rain minimized Consideration of sustainability increased in all Canadian energy decisions The environmental stress caused by transportation is reduced Knowledge of atmospheric processes improved to anticipate and cope with future atmospheric changes
Elimination of the threat posed by toxics	<ul style="list-style-type: none"> Sources and quantities of toxic substances, effluents, emissions and wastes requiring management identified, based on sound scientific research and assessment, to Canadians in a timely and effective manner Management actions implemented toward virtual elimination of persistent, bioaccumulative toxics resulting from human activity Management actions implemented to prevent, reduce or eliminate the risks posed by toxics that do not meet all the Toxic Substances Management Policy Track 1 criteria, and by other substances of concern
Fairly and effectively enforced environmental laws and regulations	<ul style="list-style-type: none"> A high level of compliance with laws and regulations Improved enforcement capacity Canadians understand the law, know what is expected of them and believe the law to be effectively enforced Federal government departments and agencies understand the law, know what is expected of them and act accordingly
Conservation and enhancement of Canadian and global biodiversity	<ul style="list-style-type: none"> Positive recovery trends achieved for threatened or endangered species Targeted wildlife populations, under federal jurisdiction, sustained at or increased to healthy levels Significant wildlife habitat and ecosystems protected and enhanced Canada's leadership and expertise advances the international biodiversity agenda National framework in place to guide the effective conservation of Canadian biodiversity
Conservation and restoration of ecosystems	<ul style="list-style-type: none"> Ecosystem science undertaken, scientific tools created and information transferred in support of ecosystems management initiatives A modern affordable management capacity and infrastructure to ensure the effective delivery of quality ecosystem science programming Vulnerable or priority ecosystems identified and conserved through the development of ecosystem, regional, sectoral and other strategies/initiatives Canadians responding to challenges to clean up and prevent pollution and to conserve Canada's water resources Ecosystem initiatives of national priority implemented to improve the health and sustainability of targeted ecosystems across Canada


Environment Canada's Mandate is to	
<i>provide Canadians with:</i>	<i>to be demonstrated by:</i>
Safety from Environmental Hazards	
Weather and environmental predictions as well as timely and accurate warnings of severe weather events to Canadians	<ul style="list-style-type: none"> • Timely and accurate weather forecasts and warning • Effective decisions by adapting to changing weather and climate • Scientific capacity to assess the impacts of social and economic decisions on future states of environment
Prevention or reduction in the frequency, severity and environmental consequences of emergencies which affect Canada	<ul style="list-style-type: none"> • Accidental releases prevented • Preparations made for handling of accidental releases • Advice and specialized support provided to lead responders
A Greener Society	
Promotion of responsible environmental citizenship by helping Canadians to effectively use timely environmental information and advice	<ul style="list-style-type: none"> • Canadians receive products and services from Environment Canada that meet their needs • Products and services developed that help Canadians to make environmentally responsible decisions • Broad public support for the services provided by Environment Canada
Tools to prevent pollution and develop green technologies and capacity that create social, economic, and environmental benefits	<ul style="list-style-type: none"> • Increasing emphasis on pollution prevention domestically (e.g., governments, public, industry) and internationally • Green technologies, know-how and expertise transferred to the public • Industrial sectors become more "eco-efficient" by adopting green technologies and services, international obligations are met, and economic growth and jobs are fostered at the same time • Environment Canada in compliance with the <i>Canadian Environmental Assessment Act</i> and Cabinet Directives regarding environmental assessment of policies and programs the department's agenda for environmental assessment and other environmental issues advanced • Public and other stakeholders mobilized and have access to departmental activities, environmental information and other tools for understanding issues, making decisions and advancing Canada's environmental agenda
Mobilization of effective partnerships nationally and a strong international voice to build a sustainable development agenda	<ul style="list-style-type: none"> • Visible Federal leadership and action in integrating sustainable development into government policies and operations • Partnerships established to promote, develop and rationalize environmental policies and practices • International agreements and fora promote and protect Canada's interests and foster the resolution of globally common issues.

7. Sources of Departmental Information

Hard-copy departmental publications can be obtained from the:

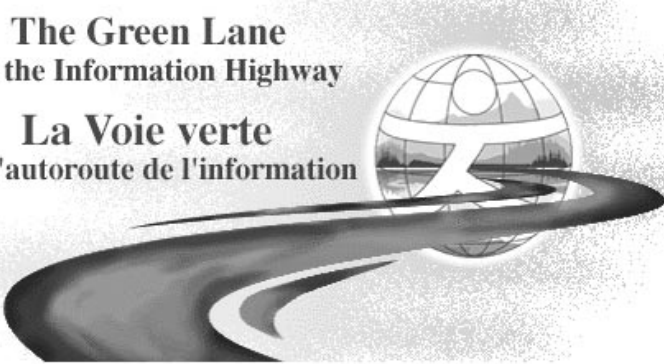
Enquiries Centre
Environment Canada
Ottawa, Ontario
K1A 0H3
tel. 1-800-668-6767, 1-819-997-2800


The Environment Canada Green Lane address on the World Wide Web is:
<http://www.ec.gc.ca/envhome.html>









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The Green Lane Team, Communications and Consultants
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