

ENVIRONMENT CANADA'S SUSTAINABLE DEVELOPMENT STRATEGY ³/₄ IMPLEMENTATION PROGRESS HIGHLIGHTS

Objectives	Indicators	Targets - RPP 2000-2001	Progress to Date
GOAL A: STRENGTHEN EC'S ABILITY TO MEET SUSTAINABLE DEVELOPMENT GOALS			
Acquire techniques and tools for socio-economic analysis in the design of EC's policies	Economic assessment of management options for toxics program.	By end of 2000, contribute economic knowledge / tools to the development of management options for toxics programs.	A guidance document was developed to qualitatively screen a range of management instruments. CEPA has at its disposal a wide range of risk management tools for toxic substances, and this guidance document will ensure that socio-economic aspects are given due consideration
Enhance EC's capacity to employ science, socio-economic analysis and market-based approaches, particularly in the implementation of legislation	An operative departmental economists network is established.	By end of 2000, improve departmental consistency / capacity for economic support.	An Occupational Training Programme (OTP) was developed to accelerate the development of junior economists through a structured training programme by supporting the development of their skills, competencies and knowledge and to provide them with a predictable, fair and transparent process for advancement. The Environment Canada Economics Network (ECEN) and the ECEN-List-serv were established to facilitate greater dialogue amongst the Departmental economics community.
Develop Sustainable Development Indicators	Measures of the impact of science in policies, programs and on clients.	By 2002, contribute scientific knowledge and tools to the development of management actions to reduce human impacts of the health of ecosystems.	Develop options for establishing a status and trends reporting system (2001) EC released the report "Tracking Key Environmental Issues", which provides an overview of the status and trends of some key environmental issues of concern to Canadians. The report is based on information on selected environmental indicators which are tracked over time to tell us the overall state or health of our ecosystems. Develop new ecosystem health indicators (2002) New ecosystem health indicators have been developed, including: fish reproduction and lipid bioassays; and implementation of biological sediment guidelines to define and assess zones of contamination requiring remediation in the Great Lakes.
GOAL B: BE A MORE EFFECTIVE ADVOCATE OF SUSTAINABLE DEVELOPMENT			
Strengthen relationships and build partnerships with Aboriginal people and their structures of governance	Strengthened support of federal environmental policy priorities, and active engagement in implementation of these priorities, by key partners. As measured by: <ul style="list-style-type: none">• nature of partnership arrangements in place between EC and Aboriginal	By end of 2000, the perspectives and knowledge of Aboriginal Peoples are consistently considered in EC decision making and their capacity to participate in SD projects and initiatives is enhanced.	An Aboriginal Steering Committee and Working Group has been established within the department to ensure a coordinated approach to integrating Aboriginal issues onto the broad horizontal agenda of the department. The Steering Committee has identified partnerships, capacity building and traditional knowledge as the overarching priorities. EC has signed an MOU on Environmental Capacity Development Initiative (ECDI) with Indian and Northern Affairs Canada to support First Nation, Innu and Inuit to build capacity in environmental stewardship.

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	<p>organizations</p> <ul style="list-style-type: none"> • extent to which Aboriginal organizations feel they are being adequately engaged in EC decision making 		
<p>Develop partnerships with the private sector and NGOs</p> <p>Improve partnerships and interdependencies within government</p>	<p>Strengthened support of federal environmental policy priorities, and active engagement in implementation of these priorities, by key partners.</p> <p>As measured by:</p> <ul style="list-style-type: none"> • number of mutually beneficial partnership arrangements in place with major sectors • number of communities benefiting from Millennium Eco-Communities and other community tools and initiatives • enhanced awareness of, and commitment to, EC's priorities and actions at the level of individual Canadians 	<p>Coordinated sustainable development agendas with key sectors (e.g. health) by end of 2000.</p> <p>Develop a government-wide policy-research agenda on SD by providing leadership on the Policy Research Initiative's Sustainability Project by March 2001.</p> <p>100 communities benefit from information sharing and networking activities under the Millennium Eco-Communities initiative (MEC) by end of 2000.</p>	<p>The department has worked closely with Canadian environment and health NGOs in the development of policies and programs on Clean Air and Children's Environmental Health (eg. Clean Air Day, Smog Summit in Toronto, 5NR Workshop on Children's Environmental Health, Canada Wide Standards, Notice of Intent of Vehicles and Fuels, Sustainable Development Strategies).</p> <p>In March of 2001, EC renewed its contribution agreement with the Canadian Environmental Network(CEN). The CEN provides a unique umbrella framework for environmental NGOs across Canada to share information and, through issue-related national caucuses, facilitates ENGO contribution to policy development.</p> <p>With funding from the Voluntary Sector Initiative, the department has launched a process to improve governance in the environmental community and strengthen capacity to work with government on the environmental agenda. The process is expected to be completed by March, 2002.</p> <p>EC has been responsible for a multi-departmental undertaking with Social Sciences and Humanities Research Council of Canada, and leaders in the academic community to initiate a sustainable development policy research program. An MOU amongst the five departments has been developed. EC is also working with the Policy Research Initiative in shaping the Sustainable Development project and participating actively in other horizontal programs.</p> <p>A total of 86 communities were engaged as a result of the MEC initiative; in 2000-01, the focus of the initiative shifted from a registry to a web-based resource for communities to find information, resources, tools and ideas on taking environmental action. It was renamed "What You Can Do".</p>

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Engage Youth	<ul style="list-style-type: none"> number of youth working collaboratively with EC 	<p>Increase the number of EC program areas with youth involvement in activities; and in providing strategic advice on key issues by December 2000.</p> <p>Develop a strategy for youth participation in international fora by the end of 2000.</p>	<p>EC funded, supported and promoted youth projects, events and groups such as: the Youth Science Foundation of Canada awards, the Natural Step conference youth delegation and the Canadian Climate Change Youth Group led by Environnement Jeunesse. This involvement created opportunities for Canadian youth to engage in environmental activities associated with the department.</p> <p>EC organized three Youth Round Table on the Environment (YRTE) meetings, increasing youth involvement in EC program and policy development processes and allowing the YRTE to act as an internal advisory committee to the Minister and the department to voice recommendations on a variety of issues.</p> <p>EC has initiated a two year Voluntary Sector Initiative project to improve the capacity of the Youth Sector across Canada to network and to become more engaged in the policy debate on environmental issues. Work has begun to develop a national framework for Youth Environmental Organizations, offer training, and connect mentors in the private and academic sectors to youth.</p> <p>The Biosphere's <i>Adopt a River</i> project (Quebec Region) involves students from 12 schools in Quebec. Throughout the year, the students collect data on the quality of the water in their adopted river.</p> <p>The Biosphere Ecowatch Network brings together a hundred groups that spend more than 300,000 hours each year ecowatching. The Network contributes to making young people and people of all ages aware of water issues and helps them make positive changes to their behaviour. It is a first-rate teaching tool.</p> <p>EC supported Canadian youth participation at 9th Commission on SD.</p> <p>EC established a stronger infrastructure for youth participation in international fora, such as the CoP 6 delegation in The Hague, Netherlands, thereby increasing youth capacity to influence policy and to provide strategic advice on key issues at the international level.</p>
GOAL C: GIVE CANADIANS TOOLS TO MAKE SOUND DECISIONS IN A CHANGING ENVIRONMENT			
<p>Warn Canadians of environmental risks to their health and safety.</p> <p>Provide Services and expertise to contribute to the competitiveness of Canadian business in the global market</p>	<p>Studies of quality and utility of products and services.</p> <p>As measured by:</p> <ul style="list-style-type: none"> surveys, client feedback mechanisms, client interviews 	<p>Maintain service standards in the Public Weather Charter by 2001-2002.</p>	<p>Develop and implement service standards for warnings by end 2001.</p> <p>A public charter is under development which would provide standards for use in annual reporting of performance. Preparatory work for the collection and calculation of summer severe weather forecast lead time has been completed, for implementation in summer 2001.</p>

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<p>Predict a wider variety of environmental parameters using various time scales</p>	<p>Public and government satisfaction with products and services (includes accuracy, utility, accessibility)</p>	<p>Public and government satisfaction with products and services increased 10% in 2001-2002 over 1997-1998 baseline.</p> <p>Service standards for products and services met 80% of the time by 2000-2001.</p>	<p>Better understand the causes of severe weather and how best to observe its formation by the end of 2002.</p> <p>EC signed a letter of intent to form a cooperative research institute in the Montreal area involving Quebec universities, the provincial government, and Hydro Quebec. This "Laboratoire universitaire en temps extrême" will focus on research and development (R&D) to reduce the impacts from severe weather</p> <p>Install 5 Doppler Radars in 2000-2001</p> <p>Dopplers installed at Franktown, King, and Montreal River in Ontario, Spirit River, AB, and Victoria, BC</p> <p>Modernize sea ice remote sensing capability (2001-02).</p> <p>A plan for a new airborne ice mapping radar and for ground reception and processing of alternate satellite data was developed as a contingency in the event of RADARSAT-1 failure. With NRCan and IC/CSA, a ground facility for the European ENVISAT satellite will be in place for Autumn 2001.</p> <p>Modernize and automate water quantity network (2003-04).</p> <p>The 5-year replacement program for mercury manometers has been completed, and the focus has shifted to modernizing the non-manometer sites with digital measuring and telemetry equipment. Equipment to make water measurements safer for staff is under investigation, development, or testing. Software is under development to reduce the manual intervention in the production of water level and flow data information.</p> <p>Increase the number of Road Weather Systems (RWIS) to 75 from the present 45 by end of 2000, in cooperation with provinces and territories.</p> <p>The pace of activity in 2000/01 was slowed as EC and TC are collaborating with the provinces and territories on a Proposal for a Road Weather System for Canada (RWSC). It proposes a jointly funded integrated network of road weather information systems (RWIS) along the National Highway System (the Trans-Canada as well as other major Canadian highways).</p> <p>Develop and implement a heat balance model to more efficiently and effectively salt roads by end of 2000.</p> <p>A heat balance model was developed by EC scientists and is now being used in operations.</p> <p>Develop and implement 4-D data assimilation techniques into numerical models by end of 2001.</p> <p>Significant improvements made to the ingestion of a wide variety of observations from satellites, aircraft, and surface sites to initialize the Global Environmental Multiscale weather prediction model (GEM). This will lead to improvement in the use of remote sensing data and the model performance, while reducing the need for costly manned observations over the oceans</p>

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			<p>and the Arctic.</p> <p>Improve predictions from climate and weather models as a result of better representations of clouds and aerosols by end of 2000.</p> <p>Changes in ozone concentration with altitude, as well as temperature and aerosols, were measured to the upper stratosphere at Eureka, NWT. The variation of aerosols with altitude, including those present in polar stratospheric clouds, and other atmospheric gases that play major roles in determining the concentration of Arctic stratospheric ozone, were measured.</p> <p>Increase understanding of physical/chemical processes in the life cycle of atmospheric constituents (2002).</p> <p>A measurements program for atmospheric chemistry (mercury, etc.) in air and precipitation, was successfully implemented across Canada. This included field measurements of mercury and other hazardous air pollutants in utility and smelter plumes, in potential source areas, such as Russia; and in the natural environment.</p> <p>Measurements of the emission and transport of pesticides to Canada are continuing by creating global emission/usage maps of pesticides, making measurements in potential source regions such as the USA, Russia and Mexico; chemically fingerprinting pesticides to identify their origin; and measuring physico-chemical properties which determine a chemicals' persistence, a key criterion in determining the management approach.</p> <p>EC participated in the particulate matter (PM) precursor assessment, and contributed to sections on current understanding of PM formation mechanisms from precursors, source-receptor relationships based on data analysis, and the importance of primary emission sources vs secondary formation of PM in the atmosphere.</p> <p>Improve seasonal and multi-seasonal climate predictions (2001-02).</p> <p>Progress is being made:</p> <p>Work is underway leading to the production of probabilistic seasonal forecasts (given the risk of above normal seasonal temperatures, for example).</p> <p>New climate and weather forecasting models for eventual operational use are being developed in collaboration with McGill University.</p> <p>Completion of the project and deployment of the models is expected to take 1½ -2 years.</p> <p>Expand Smog forecast to up to four locally-sensitive areas by end of 2000.</p> <p>The Daily Smog Forecast and Warning Program was expanded to include all of the provinces of New Brunswick, Prince Edward Island, and Nova Scotia. (also included in the Clean Environment section)</p> <p>"Info Smog" a daily summer smog forecast for the Greater Montreal area was begun and trials</p>

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			<p>conducted for southwestern Quebec.</p> <p>In December 2000, a pilot project on daily winter air pollution forecasts began for Greater Montreal.</p>
<p>Increase efforts aimed at environmental education and communication</p>	<p>The number and characterization of Green Lane users</p> <p>User satisfaction: degree to which Canadian users are satisfied with EC's information, products and services for sustainable development (to support sound decision-making, individual and collective action) on the Internet.</p>	<p>A 10 % increase over baseline year 2000 in the number of EC's Green Lane site visits; and improve access by Canadians to EC's information holdings by 2001.</p>	<p>Deliver media and public education tools on climate change and air issues by end of 2000.</p> <p>Every Canadian public school and high school received posters and pamphlets communicating the health concerns related to stratospheric ozone depletion and increased exposure to ultraviolet radiation.</p> <p>A Skywatchers pilot was implemented in fall 2000 in Québec. The project was sponsored by Global TV which provide visibility for 26 schools in Québec and for EC.</p> <p>The Skywatchers program has been expanded to all of the Atlantic Provinces.</p> <p>WEP co-organized the first International Conference on Climate Change Communication in Waterloo, Ontario, from June 22-24, 2000, sponsored by the Climate Change Action Fund, EC, and the University of Waterloo. Over 250 International experts and practitioners from 100 different organizations and 4 continents discussed how to improve knowledge in the field of climate change communication and the effectiveness of communication programs. This symposium contributed to Canada's commitment under the United Nations Framework Convention on Climate Change (UNFCCC).</p> <p>A one-day workshop on "Climate Change and Water Management in the Okanagan Basin" was held on March 13 in Kelowna, B.C. Approximately 60 stakeholders discussed response options for potential changes in the water supply as a result of climate change over the next century.</p> <p>Implement a management and policy structure to facilitate the development and maintenance of a cohesive and integrated departmental Green Lane presence.</p> <p>With its partners (Natural Resources, Fisheries, Agriculture and Health), EC has taken the lead in developing a Sustainable Development Cluster on the Government of Canada site and has been successful in securing Government Online funding for this initiative. The target audience in Year 1 of development of this 4 year project is the general population; the focus is on three themes: clean water, clean air and weather (EGS)</p> <p>The Green Lane server exceeded the 10% target as site visits increased by 72% from the previous fiscal year. A new navigation system and subject scheme have been implemented, and have improved access to information holdings across the Green Lane. The Green Lane Management Committee was established, and it is overseeing the development of a cohesive and integrated Internet presence, and the application of Web policies.</p>
GOAL D: SET A GOOD EXAMPLE IN THE GREENING OF GOVERNMENT OPERATIONS			
<p>Play an advocacy role and lead by example in implementing</p>	<p>The extent to which departmental environmental policy is applied and integrated</p>	<p>Measurable progress by May 2000 to reduce environmental risks and liabilities identified</p>	<p>Clean-up 25% of existing known contaminated federal monitoring sites by 2002-03.</p> <p>121 contaminated hydrometric sites were assessed and re-mediated this year across our Prairie</p>

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sustainable development	into internal operations.	in May 1999 Environmental Management Programs	<p>and Northern region, with over 200 sites completed across Canada. Two warehouses (in Yellowknife and Winnipeg) were similarly assessed and re-mediated.</p> <p>Integrated Environmental Management Programs</p> <p>We are continuing to integrate the Environmental Management System into our operations. Five of nine regions have current Environmental Management Programs (EMPs). Some regional and service EMPs include plans to address the environmental risks and liabilities. A draft Departmental EMP has been prepared for review.</p> <p>The Quebec Region's Environmental Management Program (EMP) was implemented effectively in 2000-01 thanks to regional coordination activities that ensured consistent action on the part of the various branches. Also, the update of the Regional Program began in 2001-02 and will end this year.</p> <p>Pacific and Yukon Region is developing a number of strategies to increase employee awareness.</p>