

# Goal 1

To provide Canadians with information to make balanced decisions regarding natural resources

## OBJECTIVES

- 1.1 Accessible, integrated knowledge
- 1.2 Cooperation and consensus
- 1.3 Policy instruments

Sustainable development is about making better-informed choices: finding ways to integrate economic, environmental and social dimensions into decisions about the development of natural resources. Governments at all levels require appropriate data and knowledge on which to base policies and programs. Organizations large and small require information that is specialized to their needs. Individual Canadians need objective information to choose, purchase, use and dispose of goods and services. In all cases, Canadians must have access to scientific and community-based knowledge, in an easily accessible format.

NRCan advances the sustainable development of Canada's natural resources by providing comprehensive information and the latest scientific knowledge, by fostering consensus on key issues and actions, and by developing innovative policies that actively promote sustainable development. NRCan has expertise in surveying, mapping, remote sensing, geographic information systems and geoscience research. The Department is increasing Canadians' ability to assess sustainable development progress through the development of analytical techniques, criteria and indicators to identify key environmental, economic and social elements of sustainable development. There are encouraging signs of progress on multiple fronts.

The challenge for this goal is to enable *all* Canadians to access leading-edge, high-quality and relevant data, knowledge and information, and to facilitate and promote its use.

### 1.1 Accessible, integrated knowledge

Accurate, objective information is critical for smart resource decisions by individuals, communities, local decision-making agencies such as municipalities and conservation authorities, private industry and government departments and agencies. NRCan's information assets and clients vary broadly, supporting sustainable development at the local, regional and national levels. Under this objective, NRCan, in consultation with stakeholders, has identified four priority areas: provide targeted knowledge and tools; develop new national strategies in priority areas; develop new tools to advance sustainable development; and provide targeted education and outreach.



**Action: Provide targeted knowledge and tools to inform decision-makers**

Issue	Approach	Target
<p>The Government of Canada is committed to better connecting to its citizens. As its contribution to this objective, NRCan has a responsibility to improve and increase the electronic dissemination of its natural resources data, information and knowledge to help Canadians make better sustainable development decisions.</p>	<p>NRCan will enhance its ability to create and disseminate knowledge about Canada's natural resources by: adapting information and computer technologies to the methods of science; facilitating innovation by diffusing knowledge products to Canada's resource industries; enabling wise stewardship by integrating data, information and knowledge from many domains to address complex natural resource issues; supporting community sustainability by providing regional lenses, analysis tools and scientific models to support natural resource decision-making.</p>	<p>By 2003, provide up to 14 on-line services on the natural resources sector, as part of Government On-Line, including a Canadian Natural Resources Knowledge Gateway.</p>

**Anticipated outcome**

*The source for informed decision-making in the sustainable development of Canada's natural resources.*

**Government On-Line**

The world is undergoing a fundamental socio-economic change from an industrial society to an information society and a global knowledge-based economy. Societies and organizations that do not adapt to these changes will become increasingly marginalized. Conversely, those that adapt successfully will be in an excellent position to create wealth and enhance the well-being of their citizens and clients.

The Government of Canada has clearly recognized the need to adapt to the new order. The Government On-Line (GOL) Initiative has been established to accomplish this goal.

The objective of GOL is to enhance electronic delivery of information and knowledge about government services and programs provided to Canadians. GOL aims at rethinking how the government conducts its business and integrates an e-business perspective into day-to-day decisions. The key areas addressed are: service transformation, human resource, technology, communications, and risk management.

In this context, NRCan will adapt information and computer technologies to promote and enhance the generation and dissemination of knowledge to support sound decision making on the sustainable development of Canada's natural resources for the social, economic, and environmental well-being of Canadians.

Issue	Approach	Target
<p>Information on the seabed, plant and animal life of Canada's underwater lands is essential to those whose socio-economic conditions are governed by the ocean – in particular offshore resource companies, fishing industries and policy makers (under the Oceans Act), and, the Department of National Defence for sovereignty issues.</p>	<p>Provide state-of-the-art imagery that will serve as the information base for the sustainable development of seabed resources through strong partnerships between federal departments, universities and the private sector.</p>	<p>By 2002, deliver a successful demonstration project to prepare a suite of hard-copy and digital maps, and design a set of national production standards to be used as templates for future projects.</p> <p>By 2003, launch the delivery of data, analysis, and maps for priority areas of the Canadian offshore.</p>
<p>Policy makers and the general public require sustainable development information that can be cross-theme related and that reveals geographical diversities. Efficient access to this information requires a geospatial information infrastructure that links science, policy and society. Informed sustainable development decision making also requires integrated assessment tools that allow the possibilities for sustainability to be explored, given different societal choices.</p> <p>The 6th edition of the National Atlas of Canada is a valuable Web-based geographic information source with over 30,000 user sessions per week. The Atlas has the potential to become a policy support tool that is capable of meeting requirements of policy and decision-makers at all levels, as well as an outreach tool for Canadians.</p>	<p>Extend the integrated geospatial information and knowledge base of the Atlas to address major sustainable development issues.</p> <p>Develop the Atlas as the national, integrated geographical lane for the communication of sustainable development data, information and knowledge, and policy programs.</p> <p>Develop the Atlas as a national, integrated infrastructure for the access and dissemination of geographical data, information and knowledge on sustainable development.</p> <p>Develop a national, integrated scenario-building tool that allows for the exploration of plausible futures related to sustainable development, given different societal choices.</p> <p>Other government departments will be extended opportunities for partnership. This initiative links to efforts to develop sustainable development indicators</p>	<p>By 2003, create a series of maps to address sustainable development issues in an integrative manner and in a geographical context.</p> <p>By 2003, make the Atlas available as an integrated geographical lane for the dissemination of sustainable development indicators.</p> <p>By 2003, develop a prototype of a distributed architecture that enables sustainable development-related information to be visualized in an integrated Atlas context.</p> <p>By 2003, undertake public consultation on the development of an assessment tool that allows for the exploration of future sustainability scenarios of Canada.</p>

## Anticipated outcome

*Contribute to sound environmental management and decision making by increasing the visibility and knowledge of renewable and non-renewable resources in their natural ecosystem and facilitating broad-stake holder engagement in decision making.*

*Enhance sustainable development by improving stock assessment and ecosystem management.*

## Anticipated outcome

*An on-line, national integrated geographical information service and communication tool that is capable of supporting policy processes to advance sustainable development.*

Issue	Approach	Target
<p>Indicators can support sound decision making which integrates environmental, social and economic considerations.</p> <p>Policy makers and stakeholders need indicators to provide a measure of our progress towards sustainable development.</p>	<p>With stakeholders, develop indicators to measure the contribution of energy, minerals and metals to sustainable development.</p> <p>With stakeholders, review the Canadian Council of Forest Ministers Criteria &amp; Indicators Framework to ensure that it still reflects current values and new knowledge. Discuss the merits of establishing targets or benchmarks for the indicators.</p> <p>Partners include social and environmental NGOs, other government departments, Aboriginal groups, academia, and industry.</p> <p>Links to other efforts include the federal Policy Research Initiative, the work of the National Roundtable on the Environment and the Economy, Environment Canada, Statistics Canada, provincial governments and international organizations.</p>	<p>By 2001, publish sustainable development indicators for energy.</p> <p>By 2003, publish sustainable development indicators for minerals and metals.</p> <p>By 2002, report to the Canadian Council of Forest Ministers on the review of the 1995 Criteria &amp; Indicators Framework.</p>
<p>New and innovative technologies are required in the future to alter the relationship between economic growth and environmental concerns. Developing insights into what the future may hold, helps in developing policies and programs for NRCan.</p>	<p>Development that is truly sustainable for future generations can be achieved most readily if Canadians share a vision of the future. NRCan will develop a vision for a sustainable future to be used in departmental science and technology strategic planning.</p>	<p>By 2001, identify key technologies and undertake a series of workshops with stakeholders, to develop a vision of Canada's energy system to 2020.</p>

### Anticipated outcome

*A system that identifies emerging trends and issues for attention of policy makers, and enables decision-makers to judge their progress in contributing to the sustainable development of natural resources.*

*Widely accepted indicators for all dimensions of sustainable development – social, economic and environmental.*

### Anticipated outcome

*Advise Departmental research and development investments which will drive Canada's long term sustainable development objectives and reduce green house gas emissions.*



**Action: Develop new national strategies for priority areas**

Issue	Approach	Target
<p>A healthy environment depends on a safe and reliable water supply. Geological science information is key to quantify groundwater resources, in order to assess stress levels and limits of the natural replenishment of aquifers. Government agencies at all levels, policy makers, and the groundwater users of Canada rely on this information in support of sound groundwater management.</p>	<p>Launch a process to accelerate existing federal scientific studies on groundwater mapping, groundwater dynamics and monitoring networks. This will lead to an initial national synthesis of the main groundwater reservoirs in Canada. The first step into pursuing this goal is to prepare a national groundwater strategy.</p> <p>Building national partnerships is essential to the preparation of this national strategy.</p> <p>Partners include provincial and federal agencies such as: Environment Canada, Agriculture and Agri-Food Canada, and provincial ministries of the Environment.</p>	<p>By 2002, produce a National Groundwater Strategy outlining federal, provincial and territorial actions, including written agreements with departments and provinces.</p> <p>By 2003, generate a unique national groundwater database that will be used to prepare the national synthesis of the main groundwater reservoirs in Canada.</p>
<p>As Canadians, we need the means to improve our ability to assess the current state of our forests and progress in meeting our national and international commitments towards sustainability. Objective and accurate information on the state of Canada's forests is critical to advancing sustainable development of these resources.</p>	<p>A National Forest Information System will acquire, integrate, process and disseminate data and information to support analysis of, and reporting on, forest issues. A Steering Committee will examine opportunities for cooperation and coordination with other government departments and agencies and non-government organizations.</p>	<p>By 2001, propose a governance model for and the infrastructure of a National Forest Information System to the Canadian Council of Forest Ministers.</p>

**Anticipated outcome**

*Provide a national reference document that will be used by federal departments, provinces and territories to address emerging groundwater issues in a national, coordinated and strategic way.*

**Anticipated outcome**

*A National Forest Information System with the ability to measure and report in a timely and authoritative matter on the sustainability of Canada's natural resources.*



## Vignette: SeaMap

SeaMap is a new initiative to map Canada's offshore lands and the Great Lakes. This cross-departmental initiative (NRCan, DFO) will provide a seamless snapshot of Canada's onshore and offshore territories through high resolution images that display the shape of the sea-floor, sediment cover and benthic habitat (the flora and fauna at the bottom of an ocean, sea or lake). This knowledge is essential to apply the ecosystem-based precautionary approach to sustainable development of offshore resources.

Collaborative efforts between DND, DFO, and NRCan in seabed mapping were poignantly demonstrated in the results achieved during the Swiss Air 111 incident, when the best available tools were brought into play to meet the demands of the search and recovery operation. The mapping done was key to the efficient and timely completion of the search operation.

Detailed mapping of the seabed can provide the necessary framework to understand the evolution of the seabed. This knowledge is fundamental to providing sound advice on the effects of human activities such as pipelines and cable routing, the impacts of offshore dumping, the mapping of offshore hazards including landslides, and minimizing environmental impacts of resource extraction.

Detailed information on bathymetry (the measurement of depth in oceans, seas and lakes) and sediment, when correlated with information on benthic communities and catch statistics, will allow fishers to harvest species from small areas where the environmental conditions cause specific species to be concentrated. Data and interpreted maps from a demonstration project on Browns Banks, south of Nova Scotia, have been transferred to electronic charts and proven extremely beneficial to both sustainable management of the scallop fishery and the efficiency of the fishing industry. The benefits

of targeted and strategic fishing include a 75% reduction in effort to catch set quota and a parallel reduction in habitat disturbance and preservation of environmental quality.

The Figure illustrates the core elements of the SeaMap program:

- **data acquisition from hydrographic, geological and biological surveys**
- **data processing to produce interpretive map products**
- **archiving and accessing of data on line through a central data warehouse**

**The products from SeaMap provide key information for sustainable development of ocean resources.**

# SEAMAP: Integrated Seafloor Data for Ocean Management in Canada



Natural Resources Canada  
Ressources naturelles Canada



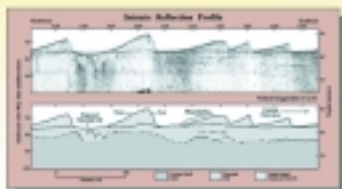
National Defence  
Défense nationale



Fisheries and Oceans Canada  
Pêches et Océans Canada

## INPUT

Multibeam Bathymetry and Backscatter



Geophysical Surveys

Geological Sampling



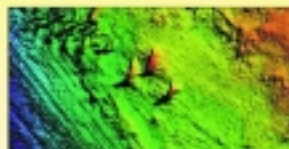
Biological Assessment

Fisheries

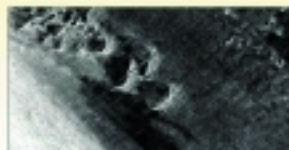


## PRODUCT

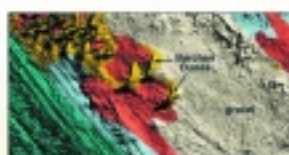
Seafloor Digital Terrain Model



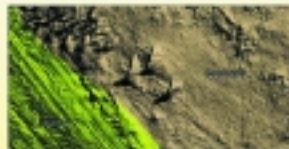
Backscatter Map



Sediment Type and Distribution



Habitat Map



Fishery Planning Map



## FORMAT

GIS Database

Electronic Charts

Interpretive Reports

Scientific Publications

## APPLICATION

- Navigation
- National Defence and Sovereignty
- Fisheries management
  - stock assessment
  - setting quotas
  - commercial fishery
- Environmental Impact
- Engineering
  - pipelines and cables
  - structures
  - seafloor hazards
- Regional Advisory Process
  - Marine Protected Areas
  - National Parks
  - Marine Archaeology
- Offshore Mining
- Dredging and Disposal



**Action: Develop new tools to advance sustainable development**

Issue	Approach	Target
<p>The growing demand for certified forest products in the marketplace is of concern to Canada's forest sector as it could have potentially serious trade implications.</p> <p>Canada has an opportunity to lead the world as a model of sustainable development. To do so, we must be recognized at home and abroad as smart, environmentally-friendly, innovative and effective resource managers.</p>	<p>Consult with interested parties – including industry, environmental non-government organizations, aboriginals and labour – on options for the development of appropriate and effective standards and an equivalency framework for Canadian certification systems.</p>	<p>By 2001, report to the Canadian Council of Forest Ministers on the consultations to advance the implementation of certification in Canada's forestry.</p>
<p>The pursuit of sustainable forest management is a dynamic and evolving process: the capacities of information systems have increased, the approaches to forest inventories have changed, and the availability of data has improved. Advances in science have increased Canada's understanding of systems, and presented opportunities for new ways to gather information.</p>	<p>Establish Earth Observation for Sustainable Development of Forests, a multi-year project to create, with advanced space technologies, a monitoring system to meet Canada's national and international commitments towards global sustainability.</p>	<p>By 2003, develop methodologies and testing systems to establish the Earth Observation for Sustainable Development of Forests.</p>
<p>Decision-makers currently have a good understanding of the environmental and economic dimensions of sustainable development, but require more complete knowledge of the social dimensions in order to measure it and integrate it with the other two components.</p> <p>Better understanding of the social component of sustainable development is required in order to advance sustainable development. Industry, government and non-government organizations will benefit from the development of a knowledge base to share leading practices.</p>	<p>Undertake consultations on social issues related to minerals and metals development, and establish an inventory of leading initiatives by industry, which promote the social aspects of sustainable development.</p>	<p>By 2001, prepare and distribute discussion paper on social issues of minerals and metals to NRCan's multi-stakeholder client base for consultation.</p> <p>By 2002, launch inventory of social practices by mining industries and post inventory on the Web.</p>

**Anticipated outcome**

*A national certification system that respects regional diversity of Canadian forestry circumstances and the various certifications systems currently under development.*

**Anticipated outcome**

*Timely and accurate information for the sustainable management of Canada's forests.*

**Anticipated outcome**

*Use of leading social, environmental and economic practices in the the natural resources sector.*





**Action: Provide targeted education and outreach**

Issue	Approach	Target
<p>Providing information to Canada's future decision-makers is necessary to encourage a behavioural shift towards a culture of sustainable development.</p>	<p>Enhance the awareness and understanding of Canada's natural resources sector by reaching out to children and youth.</p>	<p>By 2002, develop and produce, in partnership with the Canadian Forestry Association and the Model Forest Program, educational material for inclusion in their annual teacher kit and distribute 65 000 copies of the Model Forest sustainable forest management posters to young people.</p> <p>By 2002, develop a series of natural resources outreach packages for age groups 5-9, 10-13 and 14-18.</p> <p>By 2002, develop a natural resources sustainable development Web site for children and youth.</p> <p>By 2002, make Energy in Canada 2000 available to students via SchoolNet.</p>
<p>Climate change is not well-understood by Canadians, yet measures to reduce greenhouse gas emissions require public awareness of contributing factors and risks.</p>	<p>Produce and disseminate a series of regional climate change impact posters.</p>	<p>By 2002, launch targeted regional climate change posters for the Prairies, Ontario, Quebec, the Atlantic region and Nunavut, and a Web site on regional climate change.</p>
<p>The resource and land needs of a rapidly growing population demand well-informed decisions as to where and how we can accommodate growth.</p> <p>Local decision-makers have a direct role in the development of urban and rural communities.</p> <p>Educators, the public and municipal officials are key audiences to educate, encourage and promote positive behavioural and lifestyle changes.</p>	<p>Increase public awareness of the relationship and importance of geology and geological processes on the formation and evolution of local landscapes and environmental processes, building on the success of the pilot <i>Geoscape Vancouver</i>.</p> <p>Partners of this action include Canada-Nunavut Geoscience Office, federal departments, educators, regional and provincial/territorial agencies and interest groups.</p>	<p>By 2003, produce and distribute <i>Geoscape</i> posters for seven Canadian regions (Quebec City, Montreal, Ottawa, southern Saskatchewan, Calgary, Victoria and Whitehorse) and a <i>Geoscape</i> map for Canada.</p>

**Anticipated outcome**

*A shift in values that supports sustainable development, based on early awareness of natural resource issues and the trade-offs involved.*

**Anticipated outcome**

*Increased awareness of the regional impacts of climate change.*

**Anticipated outcome**

*Improved land use decisions at the local and provincial level.*



## 1.2 Cooperation and consensus

Canada is recognized as a world leader in the production of natural resources and in those technologies, supplies and services that support natural resources development domestically and internationally. Through the application of science, technology and innovation to our natural capital, we have become first in the world in the production of potash, uranium and newsprint, second in nickel, zinc, wood pulp and softwood lumber, and third in natural gas.

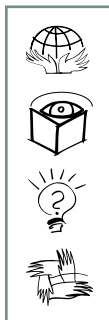
The international marketplace plays a crucial role in this success. It provides a market for our natural resource products, a source of capital investment, an inspiration for technology development and exchange, and a catalyst for competitiveness and productivity. The integration of the principles of sustainable development in the mandate of Natural Resources Canada positions the Department in a leadership role in Canada as well as internationally in our sectors of expertise.

Natural resource development (exploration, extraction, production and distribution, and partnerships between the Department and the private sector), has spawned vibrant, innovative and internationally successful industries developing and exporting technologies and services in all of the sectors. For example, the Canadian geomatics industry has captured nearly 20 percent of the growing global geomatics market.

However, natural resource-related exports face a host of challenges including: increasing competition in both traditional and emerging markets brought about through the globalization of the world economy; the rapid development of new technologies; concerns about environment, health and social issues and possible repercussions for natural resource industries; the emergence of new trade barriers; and competition for investment capital.

Domestically, NRCan collaborates closely with provincial, territorial and municipal governments to achieve a common commitment to action. Internationally, NRCan contributes to fora with the Department of Foreign Affairs and International Trade by providing expert opinion on the natural resources sector. NRCan also works to share its expertise to advance sustainable development in other countries.

Two priorities have been identified under this objective: to promote sustainable development practices internationally; and, to develop national consensus on forest issues within a complex arena of multiple parties, values, jurisdictions and responsibilities.



**Action: Promote Canadian sustainable development practices internationally**

Issue	Approach	Target
<p>NRCan has implemented its world-unique Fire Monitoring, Mapping and Modeling System (Fire M3) throughout Canada. This technology monitors forest fires and provides fire managers and community leaders with the right information to make million-dollar decisions that save lives and ensure Canadians are safe and secure, and that ensure our forests are well-managed for generations to come.</p>	<p>Canada will contribute to the safety of other communities in the world by providing a variant of Fire M3 to be implemented in Indonesia. There are also discussions on the opportunity to implement in Guatemala, Mexico and possibly other Latin American and Southeast Asian countries.</p>	<p>By 2001, initiate first implementation of Fire M3 in Indonesia.</p>
<p>An important aspect of NRCan's role in the sustainable development of minerals and metals is showcasing our environmental technologies and fostering the adoption of Canadian standards internationally.</p>	<p>NRCan will work with the Canadian International Development Agency (CIDA) and with experts from other government departments, academia and the private sector to transfer technology and provide input to policy and regulatory development related to the sustainable development of minerals and metals in less-developed countries.</p> <p>This builds on the success of the work completed for the first SDS, and contributes to Canada's international mandate</p>	<p>By 2001, complete a project in partnership with CIDA to build expertise in mine rehabilitation in Brazil.</p> <p>By 2002, complete a project in partnership with CIDA to build expertise in environmental regulation for the gold mining sector in Guyana.</p> <p>By 2003, complete a project in partnership with CIDA to assist with the development of improved environmental capacity within the mining sector in Zambia.</p>

**Anticipated outcome**

*Canada demonstrates leadership in resource safety globally by transferring state-of-the-art knowledge and technology.*

**Anticipated outcome**

*Increased capacity in environmental management practices related to the development of mineral resources in selected countries.*



Issue	Approach	Target
Industry needs to demonstrate to society that it is part of the sustainable development solution in the energy and transportation sector. The United Nations Commission on Sustainable Development will hold its 9th session (CSD 9) April 16 to 27, 2001 in New York, with one of the main themes of this session being sustainable energy and transport technologies.	NRCan is leading a Canadian initiative for an energy and technical exhibit on Energy and Transport for the Future to accompany CSD9 in cooperation with other federal departments, the private sector and members of civil society. The Exhibit is designed to highlight the successful implementation of programs and policies involving energy and transport technologies for sustainable development and draw practical and results oriented examples more closely to the intergovernmental discussions. Canadian firms and their technologies will form part of the international exhibit.	By 2001, in partnership with other government departments, host a technical exhibit at CSD 9 on Energy and Transport for the Future.

#### Anticipated outcome

*Enable an informed international debate on energy and transport issues.*

*Demonstrate existing technologies and the opportunities for their deployment, especially in developing countries.*

#### Action: Develop a national consensus on forest issues

Issue	Approach	Target
Canada recognizes the importance of multiple values in the management of its forests. Consensus-building is seen as the basis for decision-making in a sustainable society.  Complex jurisdictional responsibilities and roles, and the needs of communities and individuals must be respected.	A new National Forest Strategy (2003-2008) will be prepared, following consultations across Canada, with the participation of the National Forest Coalition. It will build on the success of <i>National Forest Strategy (1998-2003) Sustainable Forests: A Canadian Commitment</i> .	By 2003, develop the new National Forest Strategy.  By 2003, sign new Canada Forest Accord in time for the World Forestry Congress in Québec City.
The world demand for timber products is growing. Canada also enjoys primary forests for other non timber benefits. To ensure a sustainable future, there is a need to protect more primary forests by: modifying harvesting techniques and increasing the level of representative forest protected areas; growing more wood in second growth forests; increasing strategic silvicultural and regeneration actions; and, by creating a new forest fibre.	Initiate a dialogue, Forests 2020, to involve Canadians in an innovative Canada-wide approach to increase the stewardship of forests while ensuring the continued growth of the forest industry.	In 2001, NRCan, in partnership with provincial/territorial governments, will conduct a round of consultations with Canadians to seek their views on the proposal to further Canada's comprehensive sustainable forest management.

#### Anticipated outcome

*A cooperative approach that will make sustainable forest management a reality in Canada. Canada will continue to be recognized for its forest stewardship and leadership in the area of sustainable forest management.*

*Bring together leadership, community stability, economic development and advances in science and technology to enhance and sustain the contribution of the natural resources sector to Canadians' quality of life.*

*Attract investment into potential new forestry initiatives such as high yield, fast-growing plantations.*



### 1.3 Policy instruments

NRCan is committed to developing and promoting a mix of economic, regulatory and voluntary approaches that further encourage the sustainable development of natural resources. For example, the Department works with other departments to assess and develop practical options for domestic emission trading in greenhouse gas emissions. NRCan is also working to integrate issues surrounding sustainable development decision-making and the choice of optimal policy instruments. The Department is promoting discussion on a more rigorous decision-making process including policy instrument choice and risk management.

NRCan will continue to work with other Departments to ensure that policy instruments are developed which will promote sustainable development. Indeed, policy instruments permeate a number of actions put forward in this Strategy (e.g., resource recovery in Objective 2.1). The priority for *SDS – Now and for the Future* is to analyze options for domestic emission trading, as a crucial part of Canada’s approach to the Kyoto challenge.



#### **Action: Analyze options for domestic emission trading**

Issue	Approach	Target
<p>The development of a national emission trading program, combined with regulatory caps on greenhouse gas (GHG) emissions, has been identified as a potential vehicle to reduce the domestic economic costs of meeting Canada’s Kyoto target.</p> <p>There remains a great deal of uncertainty on how such a program could best be designed, its impact on the Canadian economy, and its contribution to sustainable development. A National Implementation Strategy has been developed in response to the Kyoto targets.</p>	<p>In partnership with other departments, assess and develop practical options for a domestic GHG emission trading program.</p> <p>This builds on the work completed for the first SDS, and will further assess how these options would affect the economic and social adjustment costs of achieving Canada’s Kyoto target.</p>	<p>By 2002, deliver analysis and recommendations in support of the National Implementation Strategy.</p>

#### **Anticipated outcome**

*The recommendations resulting from this analysis will address the environmental, social and economic challenges related to a GHG emission trading program and identify options that reduce the economic costs of meeting Canada’s Kyoto commitments while complying with the Kyoto Protocol.*