



Natural Resources
Canada

Ressources naturelles
Canada



SUSTAINABLE DEVELOPMENT STRATEGY 2007 - 2009

Achieving Results



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Canada

Sustainable Development 2007-2009: Achieving Results

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Minister's Message



As Canada's Natural Resources Minister, my goal is to ensure the responsible use of our country's natural resources, allowing all Canadians to benefit from the potential that they offer. After all, our country's abundant natural resources create many economic and social benefits, including good jobs, training, business opportunities and investment. In many ways, our natural resources secure our future.

In partnership with our stakeholders, Natural Resources Canada (NRCan) plays a critical role in mapping out our country's path towards sustainability. NRCan will continue to strengthen collaboration across Canada, through our relationships with industry, researchers and communities, including provincial and territorial governments. And, we will promote the responsible and sustainable use of natural resources around the globe, supporting a culture of innovation that allows our country's cutting-edge expertise to be shared internationally.

Our natural resources also put us on the international stage in our economic capacity, representing one of the strongest engines of Canada's economy, and making a significant contribution to our trade surplus year after year. We need to continue to use our ingenuity and diligence to discover new resources, while developing existing resources in an efficient and environmentally sound manner to meet world demand. NRCan has a role in maintaining an attractive investment market, helping to strengthen Canada's competitiveness through improved productivity.

But with our country's substantial natural resource wealth comes great responsibility. Resource development has many challenges, which are not only environmental, but also infrastructure - and labour-based. We must promote efficiency and conservation when determining how we will use and regulate the use of our natural resources. We need to make certain that we proceed in a socially and environmentally acceptable manner, while providing economic returns that ensure Canada's prosperity. Canada's New Government is taking action in this regard, by pursuing an integrated approach to tackle air pollution and greenhouse gas emissions.

Achieving Results illustrates NRCan's commitment to ensuring that the development of our country's natural resources continues to become more sustainable. As in the past, we are relying on the Department's core areas of expertise to advance sustainability within the natural resource sectors. The emphasis on continuous improvement also applies to the responsible operation of the Department, and to our Sustainable Development Strategy. *Achieving Results* is the outcome of a concerted effort to focus on the key areas where we can achieve concrete results, demonstrating real progress on the path to sustainability.

A handwritten signature in black ink that reads "Gary Lunn". The signature is written in a cursive, flowing style.

Gary Lunn
Minister, Natural Resources Canada



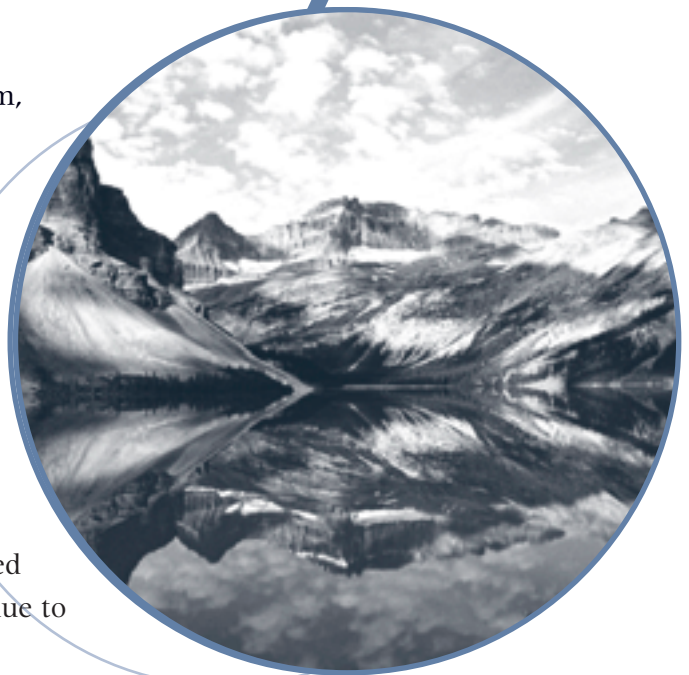
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I. Introduction

Sustainable development is central to the mandate of Natural Resources Canada (NRCan). In some respects sustainable development is a challenge, but it also brings opportunities for Canadians—helping us to maintain the benefits of resource development, fuelling innovation to create new benefits, and ensuring that future generations will also be able to enjoy a high quality of life, supported in part by our great wealth of natural resources. Increasingly, firms who operate in an environmentally and socially responsible manner are also positioning themselves to be more efficient and thus more competitive.

Canada’s natural resources, and efforts to develop them, have greatly influenced the history of our country. The natural resource sectors and allied industries have been an engine of economic growth and job creation for generations. Today, millions of Canadians, in over 650 Canadian communities from coast-to-coast-to-coast—many in northern, rural or remote areas—depend on the natural resource sectors for their livelihoods. Together with related equipment, supply and service industries, Canada’s forestry, minerals and metals and energy sectors are vital components of our overall economy and society. Our natural resource-based industries are dynamic and innovative, and will continue to be a force in building Canada’s future.



The Government of Canada applies the Brundtland definition of sustainable development:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

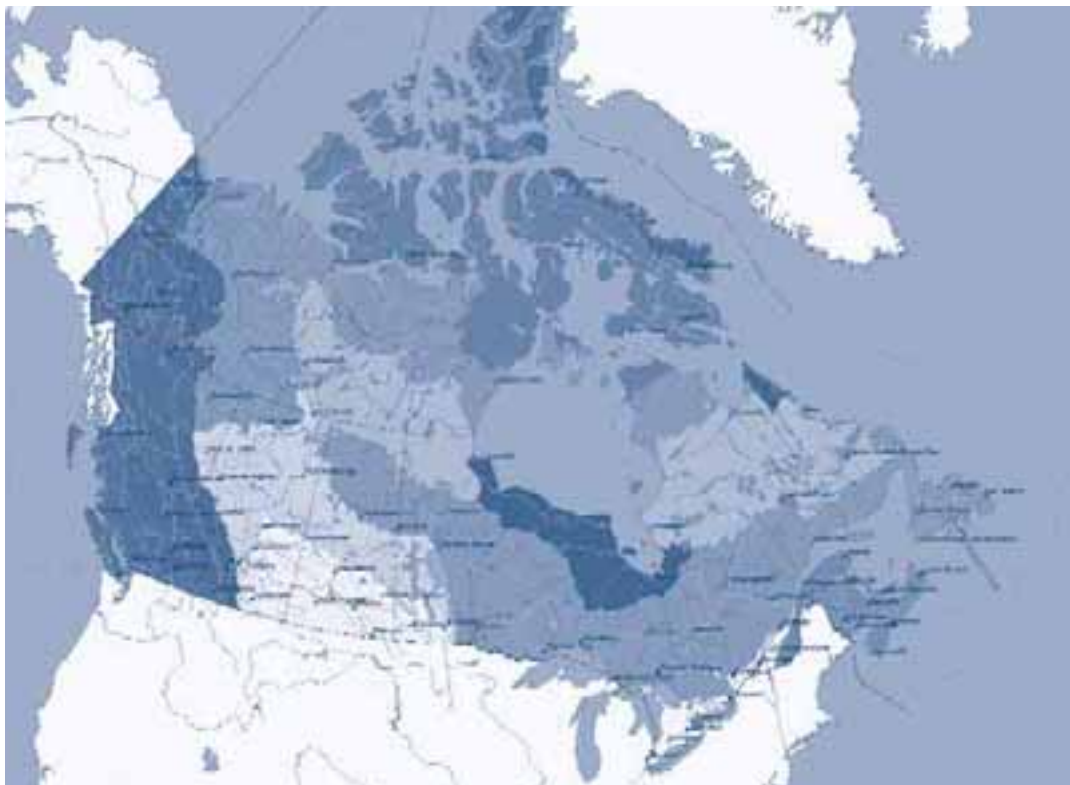
"Our Common Future"
World Commission on Environment
and Development, 1987

The magnitude and diversity of Canada's natural resources are truly astonishing. Not only does our landscape supply us with the raw resources that are the foundation of a significant portion of our economic activity, it also provides essential ecological services—such as clean air and water—which are essential to our economy, environment and quality of life. The vast expanse of the land itself is valued by many as an important aspect of being Canadian. This remains true even as Canada's population becomes increasingly urban.

Canada is the world's second largest country in land mass and possesses a significant diversity of physiology, geology, vegetation and climatic regions. Canada can be looked at in terms of its 15 distinctive terrestrial ecozones (there are also 5 marine ecozones), each with its own mosaic of unique features, and communities that demonstrate Canada's cultural diversity. The map of Canada's ecozones indicates the rich ecological diversity of the country. Natural resource-based activities figure prominently in Canada's economy, across ecozones.

Forest covers almost half of the Canadian landscape, representing over 10 percent of the world's forest cover, 30 percent of the world's boreal forest and 20 percent of the world's temperate rainforest. Our forest contributes an estimated \$37 billion per year to our nation's GDP and provides over 300,000 direct jobs to Canadians. Nearly 94 percent of Canada's forest is public land. Given this unique inheritance, Canada has both local and global responsibilities to sustainably manage its forest.

Ecozones of Canada



Every day people use products that are derived from the mineral richness of the Earth. Canada produces more than 60 minerals and metals, making it a world leader in production and export. Canada ranks first in the world for the production of potash and uranium, and ranks in the top five for more than a dozen other minerals and metals. Canada is number one in the world in terms of exploration expenditures and continues to open up new opportunities, as evidenced by Canada's emergence as a major force in world diamond production.

The abundance and diversity of Canada's energy resources provide Canadians with secure and reliable sources of energy. As a net exporter of all forms of energy, Canada makes a significant contribution to global energy security and diversity. Canada is the world's largest producer of hydroelectricity, the third largest producer of natural gas, and our Western Sedimentary Basin has oil sands reserves exceeding 174 billion barrels. Our nuclear power industry operates reactors in Canada, fuelled by domestic uranium, and exports its technology around the world. Canada recognizes the importance of energy efficiency, and research and development of renewable and alternative energy sources for a sustainable future.

The importance of natural resources to Canada's society and economy makes them crucial to the sustainable development debate. Many organizations in Canada have taken up the challenge of demonstrating how a commitment to stewardship, innovation, and capacity building makes it possible to increase efficiency and competitiveness by operating in a socially responsible manner, proving that it is possible to build world-leading industries and vibrant communities while minimizing adverse environmental impacts from resource development and use.

At this time, Canada as a 'resource' nation has a competitive advantage in the ingenuity of

Canadians, a world-class innovation system and modern governance. Canada has new opportunities in global markets: world leading companies and a highly skilled labour force with expanding global linkages, strengths in science, technology and know-how. We are well-positioned to respond to markets for higher value-added products and a growing demand for a secure and stable supply of vital resources.

The Canadian resource sectors include firms that demonstrate global leadership on sustainable development within the private sector. This strong corporate leadership is helping to spread the commitment to sustainable development within the resource and allied industries. Canadian government and industry will continue to work together to ensure the growth of globally competitive industries that are socially and ecologically responsible, contribute to our nation's prosperity and maintain Canada's status as a world leader both in the evolution of our natural resources industries and in advancing sustainable development. In particular, from a natural resource perspective, science and technology is essential to pursuing sustainable development. Breakthrough technologies will assist Canada to pursue natural resource development without compromising environmental goals.

Canada's natural resources contribute to the well-being of countless users in many countries around the world through a wide variety of applications. As a respected steward of these indispensable resources, Canada recognizes that it has a responsibility to ensure their sustainable development, for the benefit of all citizens, both now and in the future. The decisions that are made today about how we produce, consume and trade our forest, mineral, and energy resources, will affect our economy and communities and demonstrate our responsibility to the environment and future generations.

NRCan's contribution to sustainable development

NRCan is charged with the federal responsibility for ensuring the sustainable development of Canada's energy resources, minerals and metals, and forests, and for providing the geographical and geological information base that supports decisions about Canada's land-based and offshore resources. The federal role in natural resources complements the work of the provinces, which own and control much of Canada's land and resources.

The *Department of Natural Resources Act* states that "in exercising the powers and performing the duties and functions assigned to the Minister ... the Minister shall have regard to the sustainable development of Canada's natural resources and the integrated management thereof."

Fundamental to sustainable development is a common understanding that development is essential to satisfying human needs and improving quality of life, but that it must be based on the efficient and responsible use of natural, human and economic resources.

In advancing the mandate of the Department, NRCan contributes to sustainable development by:

- conducting scientific research and developing leading-edge technologies to maximize social and economic benefits for Canadians and our global neighbours while minimizing environmental risks and impacts;
- building national knowledge infrastructure about Canada's geography and geology, including data on its natural resources on and below the land and beneath the sea floor;
- providing ideas and information to support wise and efficient management and use of natural resources, reduce costs and create innovative products and services for the international marketplace;
- working to enhance the contribution of natural resources to Canada's economy and encouraging coordination among regulators, as NRCan and other federal regulators find better ways to regulate while protecting the health and safety of Canadians and the environment;

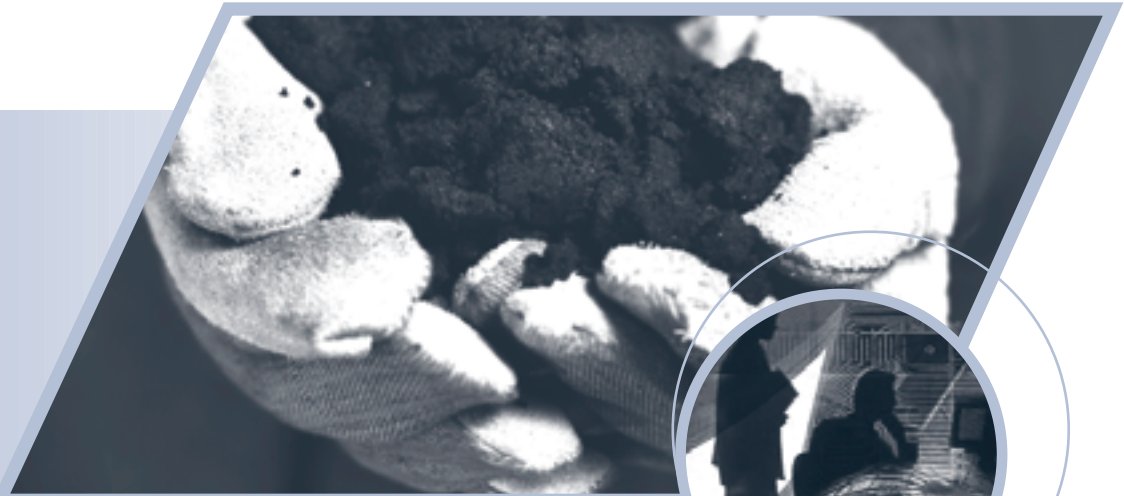


Photo credit: Suncor Energy Inc.

- encouraging and facilitating how the natural resource sectors incorporate environmental, economic and social considerations into decision making through environmental and life-cycle assessments; and,
- promoting Canada’s interests in areas affecting natural resources, through cooperation with international agencies and other nations, to meet our global commitments and to maintain access to world markets for Canadian products, technologies and services.

Through this work, NRCan is helping to build Canada’s reputation for sustainable development, and as a quality producer of innovative resource-related products, technologies, services and research. NRCan enables innovation in these areas by providing the coordination, knowledge, expertise and leadership required to accelerate progress on sustainable development—both at home and abroad.

Canada’s wealth of experience and expertise—including our ability to use and develop natural

resources responsibly, to mitigate potential impacts from resource development, and to develop technologies that increase economic and environmental performance—can benefit resource managers worldwide. NRCan demonstrates its leadership internationally by sharing its state-of-the-art knowledge, best practices, and transferring technology to its global neighbours.

The natural resource sectors and the related disciplines NRCan works with to fulfil its mandate include energy, forestry, geography, geology, geomatics, minerals and metals, and the network of allied industries (such as ocean technology and geological consulting). NRCan also works with other federal departments and agencies, other levels of government, academic institutions, and non-government organizations and agencies, including Aboriginal, environmental and community organizations. Please refer to Appendix 1 for more information about the Department’s mandate and organization.



Roles and responsibilities for natural resources in Canada

| Federal | Aboriginal | Provincial/Territorial* | Municipal |
|---|---|--|---|
| <ul style="list-style-type: none"> • Resource ownership on federal lands and in offshore areas managed by the federal government • National economic policies and taxation • International and inter-provincial and territorial relations and agreements • Trade (international and inter-provincial) • Northern Canada, federal lands, sea coast and inland fisheries • Aboriginal land claims and settlements • Wildlife (species at risk, migratory birds, fisheries habitat and oceans) • National statistics • Science and technology (in the national interest) and related science activities such as research, monitoring and guideline development. • Resource assessments • Technical surveys • Environmental impact assessments • Reporting and informing (outreach and communications) • Environmental protection (international and inter-provincial) • Nuclear energy policy, research and regulation • National parks • Building national consensus • National knowledge infrastructure • Support disaster mitigation and emergency response activities | <ul style="list-style-type: none"> • Land stewardship • Exercising land claims and resource rights • Traditional knowledge (in the national interest) • Input and collaboration to affect decision-making | <ul style="list-style-type: none"> • Economic policies and taxation • Land-use planning and allocation • Resource ownership and royalties • Resource management (regulation and licensing, allocation and conservation, protection) • Aboriginal land claims • Fish and wildlife • Parks • Environmental protection • Science and technology • Developing and enforcing standards • Statistics and resource inventories <p style="font-size: small; margin-top: 10px;">* Differences between Provincial and Territorial roles are influenced by differing legislative powers.</p> | <ul style="list-style-type: none"> • Infrastructure, land use planning and standard-setting • Pollution prevention and waste management • Consultation and collaboration with the community • Drinking water supply and quality • Management of wastewater |
| | Non-Profit | Private Sector | General Public |
| | <ul style="list-style-type: none"> • Advocacy and raising awareness • Ensuring government accountability • Coordination and collaboration • Mobilizing the public—community engagement | <ul style="list-style-type: none"> • Investment • Payment of taxes and royalties • Operational resource management and planning • Resource exploration, extraction and harvesting • Resource processing and manufacturing • Pollution prevention and waste management • Product development and marketing • Research and development • Private land stewardship | <ul style="list-style-type: none"> • Social values • Input into decision-making • Consumer choices and purchasing • Political choices and advocacy • Investment • Recreation • Private land stewardship |



and individuals from across the country.

The SDS is intended to serve as a challenge piece for the Department, given the nature of sustainable development as a process of change. It serves as a companion document to policies and strategies within NRCan's operational sectors, such as the National Forest Strategy and sector business plans. It provides a three-year planning horizon that incorporates a longer-term vision for the development and use of natural resources

NRCan's Sustainable Development Strategy: Mapping a sustainable future

NRCan was the first federal department to enshrine sustainable development in its mandate and legislation, and was one of the first departments to have an environmental policy to guide its internal operations and procurement. Critical departmental documents promoting sustainable development, such as the National Forest Strategy and the Minerals and Metals Policy of the Government of Canada, pre-date the preparation of departmental sustainable development strategies. Given the Department's mandate, it can be said that everything that NRCan does contributes to sustainable development in some way.

NRCan's Sustainable Development Strategy (SDS) is a key tool for addressing the challenges and taking advantage of the opportunities related to sustainable development through the Department's policies, programs, science and technology, legislation, regulation and operations. It is informed by a process of stakeholder engagement undertaken with interested groups

The SDS articulates an organizational commitment to sustainable development, focusing on key intermediate outcomes that are considered to be the most significant and essential to the natural resource sectors for the three-year period.

The three-year cycle of sustainable development strategies enables ongoing review and monitoring—it is a cycle of continuous improvement. As NRCan has progressed through this exercise, many important lessons have been learned, each enabling the Department to re-evaluate the role and fit of the strategy as a tool to promote change towards sustainable development. Throughout its evolution, the SDS has played an important role in this regard. Appendix 2 provides additional information.

A carbon-neutral SDS

As part of NRCan's commitment to sustainable development, the Department obtained renewable energy certificates to offset emissions resulting from the SDS consultation process.

Government-wide coordination on SD Strategies

For this fourth round of sustainable development strategies, Environment Canada led the interdepartmental community in the development of common sustainable development goals. These goals have been outlined in the guidance document, "Coordinating the Fourth Round of Departmental Sustainable Development Strategies," and are intended to build coherence on federal issues across departmental sustainable development strategies.

The Government of Canada sustainable development goals focus on both **environmental quality** (Clean Air, Clean Water, and Reduce Greenhouse Gas Emissions) and **sustainable development management** (Sustainable Communities, Sustainable Development and Use of Natural Resources, and Governance for Sustainable Development).

The three priority areas (Building Energy, Vehicle Fleet and Green Procurement) outlined in the guidance document for the operational component of the strategies, "Greening Government Operations - Guidance for Organizations Developing Sustainable Development Strategies (2007-2009)", have been captured within the broader Government of Canada sustainable development goals. The operational guidance also points to a number of other areas of opportunity.

In Section II of this document, commitments that contribute to the federal goals outlined in the main guidance document, or that relate to the broader thrust of the operational guidance, have been identified by way of a column marked "FG."

What you will find in this document: the SDS action plan

As the Department's action plan for sustainable development, this document responds to the issues raised in stakeholder consultations, and sets out a series of time-bound, measurable actions to address them. The issue scan on the following pages provides an update of relevant sustainable development issues for the natural resource sectors. Section II of this document then sets out three long-term goals in response to these issues, the associated long-term objectives, intermediate outcomes and the targets that will be undertaken over the lifespan of this SDS. Section III describes our approach to performance measurement and also defines terminology used in the document. The appendices provide additional information on the departmental mandate and organization, the evolution of NRCan's SDS, and the stakeholder engagement process.



Issue Scan

Natural resources are at the centre of the sustainable development debate. They play a significant role in the strength of the Canadian economy and to the social well-being of Canadians in all regions of the country. At the same time, the resource sectors face difficult challenges in taking advantage of natural resource wealth while operating in a manner that is consistent with environmental objectives, is manageable with labour supply and aligns with social objectives.

After revisiting the challenges outlined in NRCan's third SDS, considering the results of a broader environmental scan undertaken by the Department in September 2005, and listening to the advice provided by consultation participants, the following challenges were identified as the most strategically important for the Department to address over the next three years.

There is a need to establish and support a market for Canadian sustainable development innovation and technology advancements in natural resource sectors

There are significant opportunities for industry, governments and universities to work more closely together to increase knowledge performance and the commercialization, transfer and adoption of its results. There is a need to eliminate obstacles that stand in the way of greater commercialization of Canadian innovations in the resource sectors and allied industries.

Markets are increasingly demanding environmentally friendly products and processing, and social criteria such as labour practices and business ethics are increasingly considered as guides to investment and purchasing decisions. There is strong corporate leadership championing sustainable development approaches for Canada's resource sectors. However, there is also an identified need to encourage a commitment to sustainable development among all businesses operating in the resource and allied industries.

There is increasing recognition that one of the keys to advancing sustainable development lies

in the development of "breakthrough" technologies that will transform the ways in which we manage and use natural resources. Moving towards smarter and more efficient use of resources, enabled by advanced technology, will assist our longer-term transition to a more sustainable society. Also related to technological innovation, Canada must seek new opportunities to manufacture and process our resources to create additional value and benefits for Canadians.

Governments, working in cooperation with their counterparts at other levels and in close consultation with industry and interest groups, need to accelerate their efforts to renew regulatory approaches to natural resource development and use. In the context of SD, regulation should efficiently and effectively balance the immediate and long-term benefits provided by economic growth, social development and environmental protection.

Aboriginal and resource-based communities are particularly vulnerable to unsustainable resource development; capacity building is needed in these areas.

Canada has many small communities in rural or remote areas where the challenges to sustainable development are formidable, such as lack of a

knowledge base and leadership capacity for decision making, high levels of unemployment and workforce migration away from these communities. Aboriginal communities face challenges similar to these, while also dealing with issues of natural resource access, management and land tenure on traditional lands, and acceptance of Aboriginal traditions, governance structures, language and culture.

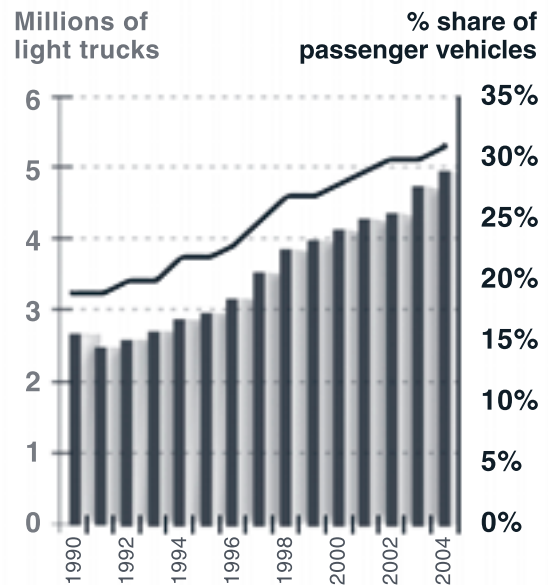
Where resource development opportunities exist, many rural, remote and Aboriginal communities will need support in order to effectively participate as partners in the development process. With leadership capacity, training, community-building, and a focus on long-term economic development, natural resource-based projects have the potential to be a driving force in the development of many strong and sustainable small communities.

A disconnect exists between individual daily consumption practices and their subsequent global impact.

Opinion research demonstrates that Canadians highly value environmental quality and understand the concept of sustainable development. However, trends in transportation and housing choices, and patterns of energy use, show that consumers are making choices that are not in line with emerging sustainable development goals.

The development and deployment of new technologies offer promising prospects for improving the sustainability of personal transportation and housing for Canadians. By building efficiencies into industrial practices and products, changing consumer behaviour remains an important goal but becomes less critical. Widespread update of products and services based on technologies that improve performance and reduce waste has the potential to significantly reduce the impacts of consumption practices, even without changing the behaviour

Stock of Passenger Light Trucks in Canada, 1990 - 2004



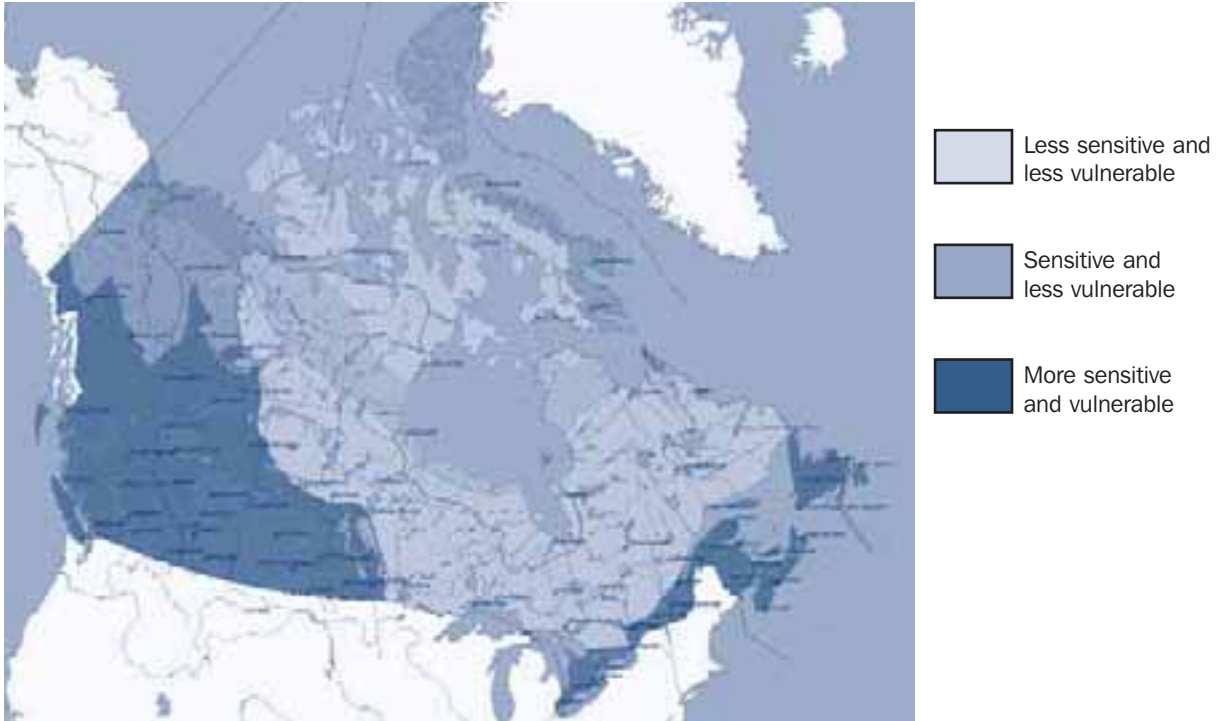
Adapted from the Energy Use Data Handbook 2004

of end-users. Improving the availability of alternative technologies and consumer access to them can provide positive options for consumers who are motivated to make more sustainable choices.

In some regions of Canada, water may soon become a limiting factor for resource extraction and development in key sectors such as forestry, mining and energy.

A reliable supply of water is critical for natural resource development. Variations in supply and increased demand are the result of a complex combination of factors. In some areas where resource development is a major economic force, particularly in Alberta, growing demand has come up against the limits of the natural water supply. It is likely that problems related to water shortfalls and competing demands for water use will become increasingly common and more high-profile in the future, and may be exacerbated by climate change. Canada needs to take concerted action to deepen our knowledge of surface and groundwater supply and use trends to ensure that this precious resource is properly protected and managed.

Sensitivity of River Regions to Climate Change



Source: Natural Resources Canada (Atlas of Canada)

The linkages between energy, the environment and sustainability are critical, as a considerable portion of greenhouse gas emissions come from energy production and consumption.

Energy supply presents particularly lucrative opportunities for Canadians. Energy is now our leading resource export sector with its share of exports more than doubling from 8 percent in 1998 to 20 percent in 2005.

At the same time, energy production and use results in a large proportion of emissions that affect the quality of the air and, by extension, human health (cardio-pulmonary disease and respiratory ailments such as asthma and bronchitis) and the environment. Transportation, fossil fuel-fired electric power and upstream oil and gas activities produce over 80 percent of domestic emissions of nitrogen oxides, key to the formation of ground-level ozone and particulate matter (the main components of urban smog). These same sources also account for 40 percent of Canada's emissions of sulphur

oxide, an important precursor to acid rain. Coal-fired electric power alone is responsible for 34 percent of domestic mercury emissions.

Energy production and use also accounts for over 80 percent of greenhouse gas emissions, which cause climate change. Rising concentrations of carbon dioxide in the atmosphere are blamed for melting polar ice, retreating alpine glaciers, drying rivers and increasingly frequent extreme weather. Clearly, if we want the benefits of sustainability, Canada must find ways to develop, produce and use energy in a manner that minimizes its environmental footprint.

A range of actions can be taken domestically that serve both air quality and other broad energy objectives. In particular, energy efficiency and clean/alternative fuels offer significant air quality benefits while addressing climate change and providing new economic opportunities. In addition to the environmental benefits associated with reduced energy consumption, such as reduced emissions,

energy efficiency contributes to sustainability through cost savings to Canadians, health benefits and increased competitiveness of Canadian industry. Looking forward, Canada will need to continue supporting the development, demonstration and deployment of energy efficiency and alternative energy technologies while funding research into options to clean up more traditional fuels such as coal. Canada must also provide its citizens with the knowledge and tools to make informed and responsible energy choices.

While reducing emissions is essential to slowing down the anticipated impacts of climate change and may reduce their severity, Canadians will also need to adapt to changing climate conditions. While concentrated efforts have greatly increased our understanding of the anticipated impacts, the process of building capacity in the relatively new, cross-cutting field of adaptation has just begun.

Many issues impacting sustainable development cannot be addressed by one country acting alone.

Canada is linked to the other countries of the world economically, socially, and environmentally. Our prosperity is defined in the context of global economic conditions and events. Climate change poses significant threats to ecosystems and the health and safety of human populations worldwide, while air pollutants affecting ambient air may have traveled hundreds, even thousands of kilometers with no regard to international borders. Canada's success in dealing with its domestic air quality and climate change challenges, therefore, will depend on international engagement and action.

There are existing barriers to the international trade of natural resources that negatively impact Canada's economy.

Canada exports approximately \$150 billion worth of energy, minerals and forest products every year, accounting for almost 40 percent of our exports. Trade barriers that deny Canadian products access to international markets are a serious issue for Canada. These barriers remove opportunities for Canadian exporters, preventing Canada from optimizing social and economic benefits that could be derived from the international trade of natural resource products. Denying industry sectors access to revenues from foreign trade can also result in slowing progress on innovation. Canadian business and governments will continue their efforts to promote international markets that work well, with transparent regulations based on sound science.

Canada has a global responsibility to ensure the sustainable development of its natural resources, and to share our knowledge with other countries.

Natural resource development can have global impacts. The development and use of natural resources in other countries can have detrimental effects on Canada's environment and economy, by adding to global environmental problems or affecting commodities markets in which Canada competes. In some cases there may also be security implications affecting



markets and increasing costs to Canadian businesses.

Canada is a comparatively wealthy nation and a large per-capita resource user. We are also a major resource producer. It is in our best interest to adopt and implement sustainable development at home and promote it abroad. The rise of emerging economies such as China, India, Brazil and Russia, coupled with the continued demand for commodities from the United States, is increasing demand for Canada's resources.

Canada advocates the effective engagement of developing countries in international fora where trade, environment and the advancement of sustainable development issues are negotiated and fostered. Participating in international dialogue provides the opportunity to export Canadian experience internationally, share our successes, promote our commitment to sustainable development and ensure commitment from other countries. It also enables Canada to support sustainable development in other countries, particularly those with significant economic activity in their natural resource sectors. SD is a common platform to approach global issues, and find solutions.

Before NRCan can expect external organizations and the broader public to adopt sustainability, the Department needs to provide measurable examples of sustainability actions implemented internally.

NRCan has a mandate to promote the sustainable development and responsible use of our nation's natural resources. In order to effectively carry out its statutory responsibilities and successfully promote its vision for the future, the Department must be able to lead with authority and credibility. Government must work to improve the performance, on a broad

scale, of its day-to-day activities, to lead by example. Meeting this challenge requires that federal departments, including NRCan, continue to build internal capacity related to sustainable development. There is a need to improve the penetration of knowledge about sustainable development principles and practices throughout the federal workforce. Increased understanding will enable public servants to better apply SD tools and practices, and to integrate sustainability into daily decision-making. Awareness of and access to verified and useful information to inform decision-making is a crucial factor.

Government must work to improve the performance of its operations as well, with clear measurable results. Challenges for NRCan and other federal departments include building energy, the federal vehicle fleet, and implementing the new federal Policy on Green Procurement.

Environmental liabilities are one of the largest risks to any organization. The legal, reputation, and financial consequences of poor environmental management practices have made headlines several times in recent years. Poor environmental practices can lead to contaminating real property, dangerous chemical spills, and serious long term damage to the environment. As in any risk, good controls ensure that the intended outcomes are met. ISO 14001 - Environmental Management Systems (EMS) is internationally recognized as the standard that provides a framework for positive environmental outcomes. NRCan has partially met the ISO 14001 requirements over the last 10 years; however a need for a more integrated approach to environmental management was recognized in 2004. Since 2004, the Department has been working to develop and implement that approach.

Stakeholder Engagement and NRCan's SDS

Each and every Canadian has a role to play in sustainable development. Our individual and collective efforts will enable us to find solutions to resource development challenges that are good for our communities, good for the economy, and good for the environment.

A diverse cross-section of individuals, public and private organizations, and interest groups have been asked to participate in the Department's Sustainable Development Strategy dialogue. The Department has reached out to other relevant federal and provincial departments and agencies, municipalities, private industry, non-government and Aboriginal organizations, and industry associations to ensure the development of a credible strategy.

As a result of relying on a variety of engagement tools, a rich exchange of information occurred and stakeholders reconfirmed that they are supportive of the Department's efforts. Stakeholders have provided useful input to the issue scan and helped the Department to select a few priorities to focus on. Please refer to Appendix 3 for more information.

Raising the bar and capitalizing on our previous success is important for each strategy. Throughout the period of developing this SDS, it was made clear that NRCan's stakeholders place a considerable amount of importance on the transparency of the consultation/engagement process. In response, a concerted effort in this area is planned with the intent of establishing a consultation policy for the Department.

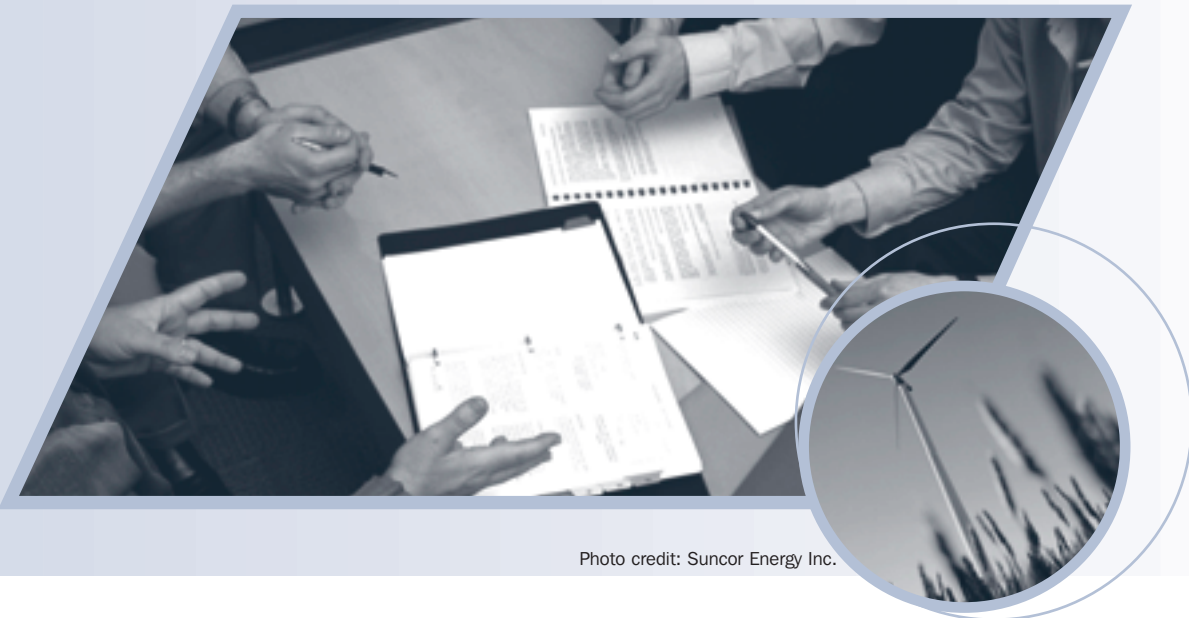


Photo credit: Suncor Energy Inc.

Vision:

Canada's natural resource sectors are a key contributor to the knowledge-based economy and enable high levels of economic, social and environmental performance, through capitalizing on human talent and innovative science and technology.



Summary Chart:

Goal

(Long-term goal)

- 1) To enable Canada's natural resource sectors to contribute to a competitive economy and advance positive social and environmental outcomes.**
- 2) To advance Canada's position as a world leader in sustainable resource development and use.**
- 3) To integrate economic, environmental and social considerations into departmental decision-making and to continuously improve operations.**

NRCan Goals, Objectives and Intermediate Outcomes

| | Objective (Long-term outcome desired) | Intermediate Outcome (3 year time frame) |
|--|--|---|
| | 1.1 Communities are engaged in sustainable resource development and use. | 1.1.1 Knowledge and tools for continued economic prosperity and social sustainability are developed. |
| | 1.2 Risks to environmental health, economic competitiveness and social well-being are addressed. | 1.2.1 Threats to resources are mitigated to protect and enhance economic and social values. |
| | | 1.2.2 Productivity and competitiveness of mining and mineral processing industries are improved. |
| | | 1.2.3 Access to improved digital tools for sustainability, risk assessment and planning is provided. |
| | | 1.2.4 Knowledge of water resources is increased. |
| | | 1.2.5 Climate change risks are understood and vulnerability is reduced. |
| | 1.3 Emissions and waste are reduced. | 1.3.1 Tools and practices to increase resource efficiency are disseminated. |
| | | 1.3.2 Transportation vehicles are more fuel efficient and as a result, emit fewer greenhouse gases and toxic pollutants. |
| | 1.4 Breakthrough technologies are developed and deployed. | 1.4.1 Support for clean technologies is provided. |
| | 1.5 Regulatory approaches are effective and efficient. | 1.5.1 Increased efficiency and effectiveness of regulatory system to protect people and the environment. |
| | 2.1 Canada is a competitive and responsible steward of natural resources. | 2.1.1 Best practices for sustainable development are shared with other countries. |
| | | 2.1.2 Strategic opportunities for international innovation and cooperation are enhanced. |
| | | 2.1.3 New strategic partnerships enhance sustainable development internationally. |
| | | 2.1.4 Market opportunities are enhanced. |
| | | 2.1.5 Opportunities for international economic policy that supports sustainable development are optimized. |
| | 3.1 There is a strong departmental capacity for sustainable development decision-making. | 3.1.1 NRCan managers and staff are better able to integrate sustainable development considerations into their daily responsibilities. |
| | | 3.1.2 NRCan managers and staff have access to information for decision-making that is reliable, accurate and timely. |
| | | 3.1.3 NRCan staff apply sustainable development principles to stakeholder engagement and consultations. |
| | 3.2 Better environmental performance in NRCan operations enhances departmental efficiency. | 3.2.1 The environmental aspects of NRCan's operations are managed within a fully implemented Environmental Management System. |
| | | 3.2.2 Reduction of greenhouse gas and other air emissions from buildings occupied by NRCan. |
| | | 3.2.3 Improvement of the environmental performance of NRCan's vehicle fleet and promotion of sustainable transportation. |
| | | 3.2.4 Advanced use of procurement to protect the environment and support sustainable development. |

II. Commitments

Goal 1: To enable Canada’s natural resource sectors to contribute to a competitive economy and advance positive social and environmental outcomes.

Natural resources are a cornerstone of the Canadian economy, sustaining urban and rural communities from coast-to-coast-to-coast by providing high paying skilled jobs and vital ecological services such as clean air and clean water. Natural resources are also essential to our cultural identity and heritage. Sustainable development in Canada’s natural resource sectors is about possibilities—derived from our wealth of resources—while continually innovating to find new and better ways to use and develop them, in a manner that respects a diverse range of values and allows for participation from all segments of society.

NRCan is responsible for federal policies and science and technology that support the sustainable development and competitiveness of Canada’s natural resource sectors. This goal is about advancing a diverse range of actions to this effect: to better position Canadian communities to advance sustainable development; to address threats to natural resources; to reduce the environmental impacts of emissions and



waste; to work to find longer-term technologies that will protect our environment for future generations; and to ensure regulatory regimes are effective and efficient.

Community involvement is essential to sustainable development. In order to facilitate continued economic prosperity and social sustainability of all Canadian communities, NRCan will continue working at the community level to build capacity to contribute to sustainable development by developing a Forest Community Program and by working with Aboriginal communities.

Science and technology are critical components in any competitive economy. Improved technologies and scientific understanding of natural resources can help advance positive social and environmental outcomes. NRCan will continue research and action to better understand our natural resources and respond to natural hazards—including assessing aquifers, understanding risks and impacts of a changing climate, and addressing threats posed by forest pests and wildland fire.

By developing tools to increase resource efficiency and supporting the development and adoption of clean technologies, NRCan will help to position Canada's natural resource sectors to become more competitive while advancing positive environmental outcomes. A key commitment in this area is the doubling of renewable energy technology systems' (RETS) electrical capacity in Canada. A second commitment is to work to understand the potential for gas hydrates, a major yet unproven resource of natural gas, worldwide. Canada has been a leader in documenting gas hydrates and led an international project to test gas production in the Mackenzie Delta in 2002. Realizing commercial production of relatively clean natural gas as a contribution to the Canadian energy supply mix will require development of new and untested technologies.

Enabling the contributions of Canada's natural resource sectors to a competitive economy, and advancement of positive social and environmental outcomes includes a host of activities throughout the Department, related to all of Canada's natural resource sectors, and addressed to diverse audiences including communities, governments, and the private sector.



Photo credit:
Dalhousie University

Objective 1.1 Communities are engaged in sustainable resource development and use.

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|--|---|
| 1.1.1 Knowledge and tools for continued economic prosperity and social sustainability are developed. | ● | By 2007, develop a Forest Community Program, to provide knowledge, tools and best practices on landscape-level decision-making and other means to build adaptable and self-sufficient rural communities. | Number of new community-based partnerships and initiatives launched. |
| | ● | By 2008, develop and initiate implementation with the provincial and territorial governments, the Canadian Wildland Fire Strategy, a strategy to enhance the safety of Canadian communities from wildfire. | Increase in preparedness and response capability through enhancements to the Canadian Interagency Forest Fire Centre. Expansion of the development and use of the Canadian Wildland Fire Information System as a publicly accessible fire warning and monitoring system. Development of a wildland fire plan in support of the Canadian Wildland Fire Strategy. |
| | ● | By 2008, increase Aboriginal understanding of and participation in mining. | Number of information sessions delivered. Number of information products distributed. |



Objective 1.2 Risks to environmental health, economic competitiveness and social well-being are addressed.

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|--|---|
| 1.2.1 Threats to resources are mitigated to protect and enhance economic and social values. | ● | By 2008, develop with the provincial and territorial governments, a National Forest Pest Strategy that establishes a national decision-making framework based on a risk-based eco-system approach, to ensure an integrated response to address the increasing threats posed by native and alien invasive pests to rural and urban forests. | Increase in capacity for monitoring and prediction. Improvement in response to forest pests based on integrated, risk-based approach. Identification of key S&T gaps and development of plan to address gaps. |
| | ● | By 2008, develop policy alternatives to arrest the decline in Canada's base-metal reserves and promote adoption by mines ministers and other decision-makers. | Completion of policy alternatives. Adoption of alternatives by mines ministers and other decision-makers. |
| 1.2.2 Productivity and competitiveness of mining and mineral processing industries are improved. | ● | By 2008, develop and implement an information system on mining research across Canada. | Development and implementation of information system. |
| | ● | By 2008, develop and deploy an innovative process to enhance the recovery of gold and silver. | Development and deployment of process. |
| 1.2.3 Access to improved digital tools for sustainability, risk assessment and planning is provided. | ● | By 2007, provide online access to all National Topographic Series (NTS) maps in digital format via NTS On-line. | Percentage of sample files available in test-ready in PDF and Tiff formats. |
| | ● | By 2007, provide online access to 1 million aerial photos from the National Air Photo Library's (NAPL) asset via NAPL On-line. | Number of aerial photos available on NAPL On-line Web tool. |
| | ● | By 2009, complete at 97.5 percent the 1:250K and 1:50K NTS map coverage for all of Canada. | Percentage of maps completed at 1:50K and 1:250K scales for all Canada. |
| 1.2.4 Knowledge of water resources is increased. | ● | By 2009, detailed groundwater assessments completed for three key national aquifers: the Okanagan basin (British Columbia) the Paskapoo (Alberta) and the Sandilands (Manitoba) aquifers. | Population of the national groundwater inventory of the results of the detailed assessments and availability on the internet. Increase in number of water supply, aquifer protection and land use decisions informed by the assessments. |
| | ● | By 2008, analyze the current state of water use in natural resource sectors based on available data. | Completion of synthesis document. |

Objective 1.2 Risks to environmental health, economic competitiveness and social well-being are addressed (continued).

| Intermediate Outcome | FG | Targets | Performance Measures |
|--|----|---|--|
| 1.2.5 Climate change risks are understood and vulnerability is reduced. | ● | By 2007, develop an integrated portfolio of research activities to improve understanding of national large-scale disturbance patterns and the impacts of climate change on forest function and productivity to assess the capacity of forests and the forest sector to adapt to climate change. | Design and implementation of a forest research agenda on climate change impacts and adaptation. |
| | ● | By 2007, a national assessment of the risks and benefits posed by a changing climate to the Canadian economy, environment and society has been completed. | Interest in national assessment and related information products, measured by number of downloads of electronic versions and number of requests for hard copies. |
| | ● | By 2008, engagement and capacity building activities within targeted groups such as professional, sectoral or regional organizations have been completed. | Targeted groups understand adaptation and are prepared to incorporate climate considerations into practices, as demonstrated by annual surveys. |



SD Success Story

Benefits of Geoscience to Canadians

Geological and topographic surveys provide information which helps to reduce exploration risk by identifying areas with the greatest resource potential. The delivery of geoscience products attracts new companies to stake claims for resource development which in turn leads to the discovery and development of oil and gas and mineral resources, resulting in economic growth. Geoscience knowledge also applies to the planning and responsible environmental management of the operation and eventual decommissioning of any mineral or energy-related development that may result from exploration activity.

One example is the recent geoscience of Committee Bay region of central Nunavut. With funding from the Targeted Geoscience Initiative (Phase I, 2000-2003), the Geological Survey of Canada in partnership with the Canada-Nunavut Geoscience Office, carried out an integrated mapping project in a large, poorly-known area several hundred kilometres north-west of Baker Lake. This area was essentially undeveloped from an exploration point of view, with only 11 claims in good standing prior to the initiation of the mapping project. The new geoscience results indicated an elevated potential for nickel, copper and gold mineralization; the public release of the initial results in March 2002 led to an immediate 10 fold increase in claim staking and, in 2003, the announcement by a junior company of a gold discovery. The government investment of \$3.7 million in the project had resulted in about \$30 million in private sector exploration to the end of 2004.

The geoscience work and subsequent industry development has led to numerous benefits to the community through increased purchases from local businesses (supplies, logistical support), and training and employment opportunities for local residents. Preliminary studies show that approximately 20 percent of early-stage exploration expenditures remain within the community.



Objective 1.3 Emissions and waste are reduced.

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|---|---|
| 1.3.1 Tools and practices to increase resource efficiency and economic competitiveness are disseminated. | ● | By 2010, develop an international best practice manual for the implementation of practical, safe and reliable enhanced oil recovery-based CO ₂ geological storage projects at prospective sites in Canada. | Completion of best practice manual. Progress towards characterisation of reservoirs and CO ₂ storage potential is measured, by analysis of written reports. |
| | ● | By 2009, create and demonstrate biomass and carbon accounting tools that encourage policy makers and practitioners to consider forest management strategies that enhance forest carbon sinks and increase the supply of biomass available for bio-energy. | Completion of the National Forest Carbon Monitoring, Accounting and Reporting System. Increase in the level of funding (public and private) in support of research, development, demonstration and commercialization of forest biomass as an alternative energy source. |
| 1.3.2 Transportation vehicles are more fuel efficient and as a result, emit fewer greenhouse gases and toxic pollutants. | ● | By 2008, develop improved materials and processes to achieve more energy-efficient, lower-emission vehicles. | Development of a new high-temperature aluminum-copper alloy and a metal-matrix composite for application in automobiles. Granting of the patent application and completion of foundry trials. Improvement in energy efficiency and reduction in manufacturing costs through the application of hydroforming using ultra-high-strength steels. |

Objective 1.4 Breakthrough technologies are developed and deployed.

| Intermediate Outcome | FG | Targets | Performance Measures |
|--|----|--|--|
| 1.4.1 Support for clean technologies is provided. | ● | By 2010, enable an overall doubling of renewable energy technology systems' (RETS) electrical capacity in Canada. This includes increasing the capacity of renewable technologies such as wind, small hydro, photovoltaics and biomass sources but excludes large hydro. | Incremental increase in installed RETS capacity from the baseline of 2004 installations. |
| | ● | By 2007, development of a National gas hydrate Science and Technology Strategy. | Utilization of the strategy to develop an integrated science and technology action plan to realize natural gas production from hydrates. |

Objective 1.5 Regulatory approaches are efficient and effective.

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|---|---|
| 1.5.1 Increased efficiency and effectiveness of regulatory system to protect people and the environment. | ● | By 2008, work with the Canadian Environmental Assessment Agency and other government departments to develop innovative approaches to improve regulatory efficiency in the natural resource sectors. | Number of innovative approaches developed. Number of pilot projects. |

SD Success Story

Renewable energy for remote or isolated communities

Hybrid systems combine two sources of power generation. For example, such systems can combine the advantages of local renewable energy sources along with conventional fossil fuel-based systems. These systems provide flexibility, efficiency, and reliability while promoting the use of our renewable energy resources.

NRCan has supported wind-diesel development for more than 20 years. Thanks to these early R&D efforts a number of wind energy technologies have been developed or adapted to Canada's harsh climate. However, wind systems have only recently been integrated into a limited number of isolated diesel powered grids, due in part to concerns by electric utilities about the reliability and performance of such systems.

In 2004, Canada's first wind-diesel demonstration project was completed in the isolated community of Ramea, Newfoundland. The project was led by Frontier Power Systems Inc. with funding from the Technology and Early Action Measures program and support from NRCan. Located just off the south coast of Newfoundland, Ramea Island is a small fishing village with a local population of 700. Before the construction of the wind farm, the community was powered by three 925 kW diesel generator operated by Newfoundland and Labrador Hydro. Six 65 kW wind turbines were added to make up the wind-diesel hybrid system. The project demonstrates the use of a controller, developed by NRCan and the Wind Energy Institute of Canada, to reliably integrate wind energy into the diesel plant. The wind system produces approximately 1,000 MWh/annually while avoiding 700 tonnes/yr of CO₂ emissions from diesel fuel reductions.

In addition to the energy efficiencies and environmental benefits, there has been very positive reaction by several Canadian utilities. The successful demonstration of the reliability of this hybrid system in remote or isolated locations has strengthened the credibility of wind power as a sustainable option for northern, remote, or isolated communities in Canada.



Goal 2: To advance Canada’s position as a world leader in sustainable resource development and use.

The sustainable development of natural resources cannot be achieved by one country acting alone—global understanding and international solutions are necessary. With a resource-intensive economy, the stakes are high for Canada. NRCan has been playing an increasingly active role at the international level. Promoting the sustainable development of natural resources is in the interest of Canadians and all global citizens. NRCan champions Canadian expertise in the sustainable development of natural resources, regionally and globally, to strategically position Canada in the emerging world community.

Canada’s wealth of experience and expertise—including our ability to use and develop natural resources responsibly, to mitigate potential impacts from resource development, and to develop technologies that increase economic and environmental performance—can benefit resource managers worldwide. NRCan demonstrates its leadership internationally by sharing its state-of-the-art knowledge and transferring technology to its global neighbours. NRCan’s commitment to the sustainable development of Canada’s natural resources includes optimizing social and economic benefits for Canadians. Therefore, NRCan is dedicated to improving international market access for the products of Canada’s natural resource sectors.



Canada advocates the effective engagement of other countries in international trade and environmental agreements, and building social and environmental considerations into trade discussions and agreements. NRCan contributes to this policy direction through its work on international policy development governing trade of natural resource products.

The priority objective for this strategy is to enhance Canada’s role as a competitive and responsible steward of natural resources. NRCan will be continuing work with international partners, including the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development. Enhancement of market opportunities for Canada’s natural resource sectors will be facilitated by expanding the Canada Wood and Value to Wood programs.

Objective 2.1 Canada is a competitive and responsible steward of natural resources.

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|--|---|
| 2.1.1 Best practices for sustainable development are shared with other countries. | | By 2009, four new strategic alliances struck with key regional organizations in developing countries with the goal of applying geomatics/geoscience tools to address sustainable development and/or governance issues. | New alliances struck in key developing areas of the world (i.e. Africa, Latin America, China, and/or India) resulting in four new agreements. |
| | | By 2009, share expertise with other forest nations and address global forest issues, such as illegal logging. | Implementation of the program of technical collaboration with Russia on forest resource management issues important to both countries, in areas such as the boreal forest, forest certification, wildland fire, model forests and carbon-sequestration. Championing of the need to combat illegal logging in international policy fora, such as by collaborating with G8 countries, and continuing support of the Europe and North Asia-Forest Law Enforcement Governance Ministerial process. |
| | | By 2008, a minimum of five new members join the intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, and the Forum adopts a clear set of priorities. | Number of new members. Adoption of priorities by the Forum. |
| 2.1.2 Strategic opportunities for international innovation and cooperation are enhanced. | | By 2008, enhance leadership on international science and technology related to natural resources, and joint knowledge development with partner countries. | Strategic approach for development of joint knowledge and understanding of sustainable development of natural resources. Three new regional monographs developed to promote international cooperation and compliance with natural resources commitments. |
| | | By 2008, establish a pilot quarterly information platform for Canadian Trade Commissioners on Canadian efforts to ensure sustainable natural resource development and use. | New partnerships to provide information and data on NRCan best practices and innovations. The posting of information on the Foreign Affairs and International Trade Canada's Horizon Intranet website. |

Objective 2.1 Canada is a competitive and responsible steward of natural resources (continued).

| Intermediate Outcome | FG | Targets | Performance Measures |
|--|----|---|--|
| 2.1.3 New strategic partnerships enhance sustainable development internationally. | | By 2008, contribute to the development of the Arctic Energy Summit, in partnership with the United States, as part of the International Polar Year. | Development of a vision and direction for energy and energy technology in the circumpolar north to be adopted by the Arctic Council. Participation in the Arctic Energy Summit Conference and Exposition to advance NRCan science, technology and policy expertise. |
| | | By 2010, develop a Canadian approach to the United Nations Decade on Education for Sustainable Development. | Tabling of the Government of Canada's approach to the Decade at the United Nations Education, Science and Culture Organizations general conference. |
| 2.1.4 Market opportunities are enhanced. | | By 2009, strengthen the potential for Canada's trade and investment policies to promote sustainable development of natural resources. | Active engagement in trade policy review of 38 countries, in trade and investment negotiations for 8 new treaties, and in strategic development of world and regional trade and investment law. |
| | | By 2009, deliver and expand programs to address the long-term competitiveness of the forest sector. | Expansion of Canada Wood, a program aimed at offshore market development. Enhancement of Value to Wood, a technology development and transfer program aimed at enhancing the competitiveness of value-added wood manufacturers. Creation of a program to promote higher utilisation in non-residential applications in North America. Increase in investment through innovative public collaboration, in R&D and S&T to strengthen Canada's international forestry competitive edge (i.e. Expansion of the Canadian Wood Fibre Centre, consolidation of three national forest research institutes.) |
| | | By 2008, minimize or eliminate unnecessary restrictions on market access and investment in the area of metals. | Completion of a roadmap on the flow of metals through their life cycle, for the International Council on Mining and Metals. Completion of a report on metals' depletion related to life-cycle assessment, for the United Nations Environment Programme/Society for Environmental Toxicology and Chemistry. |

SD Success Story

A New Global Forum on Mining

Canada and South Africa are playing a leading role in the sustainable development of natural resources by advancing a new international mechanism on mining and metals. In a joint initiative, the two countries are promoting the creation of the **Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development**. The Forum evolved from a dialogue launched at the 2002 Johannesburg World Summit on Sustainable Development. The purpose of the Forum is to address a wide variety of issues facing the mining, minerals and metals sector, including the equitable distribution of the economic and social benefits from mining and environmental protection during mine closures and rehabilitation.

The Forum is hosted by the United Nations Conference on Trade and Development (UNCTAD). Support is also being provided by the United Nations Department of Economic and Social Affairs (UNDESA), the World Bank, and the United Kingdom's Department for International Development. Canada, as represented by NRCan, provides the Forum's secretariat. To date, 36 countries have joined the Forum.¹

At the Forum's inaugural meeting held in Geneva, Switzerland, in November 2005, the Assistant Deputy Minister, Minerals and Metals Sector, NRCan, was elected chair of the Forum. The Forum was opened by a personal message from Kofi Annan, Secretary-General of the United Nations, and ended with the adoption of an action plan. The Secretary General said that "the establishment of the Forum is a significant step towards maximizing the contribution of the minerals sector to sustainable development." He concluded that the Forum can "help governments develop their capability to improve governance and address the economic, social and environmental issues raised by mining in an open and innovative framework."

The Forum held its second meeting in Geneva in October 2006. Among other matters, members discussed the elements and procedures of environmental impact assessments and reviewed a template on the requirements related to exploration and mining regulations, as well as factors determining country risks as viewed from a corporate perspective. Members identified the need for a substantial increase in international support for: geological mapping and environmental impact assessment in developing countries; policies that more effectively integrate mining into the economic and social objectives of countries; and greater vigilance in order to react to unjustified barriers to market access for mineral and metals. Members also acknowledged the critical role played by exploration companies in identifying mining opportunities. A committee was established to prepare for the meetings of the United Nations Commission on Sustainable Development in 2010-11 that will review progress on addressing mining- and metal-related priorities identified at the 2002 Johannesburg World Summit on Sustainable Development. The Forum agreed that the leading themes for its next meeting will be optimizing the benefits from mining, developing good governance critical to investment decisions, and resolving issues surrounding community benefits and development. The Forum's next meeting will be held in Moscow in 2007.

¹ The 36 members of the Forum are Argentina, Bolivia, Brazil, Burkina Faso, Burundi, Canada, Dominican Republic, Ethiopia, Gabon, Ghana, Kazakhstan, Jamaica, Kenya, Kyrgyz Republic, Madagascar, Malawi, Mali, Mauritania, Mexico, Mongolia, Morocco, Niger, Nigeria, Philippines, Republic of Guinea, Romania, Russian Federation, Senegal, South Africa, Suriname, Swaziland, Tanzania, Uganda, United Kingdom, Uruguay, and Zambia.

Objective 2.1 Canada is a competitive and responsible steward of natural resources (continued).

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|---|--|
| 2.1.5 Opportunities for international economic policy that supports sustainable development are optimized. | | By 2009, enhance knowledge of key priorities for natural resources in trade and investment instruments (i.e. Free Trade Agreements and Foreign Investment Protection and Promotion Agreements). | <p>A new partnership with Canadian and international academia to develop and pilot-test a strategic analytical framework that assesses the potential contributions to sustainable development of natural resources aspects from new and existing trade and investment instruments.</p> <p>An online resource which highlights key priorities for sustainable development of natural resources in trade and investment treaties and institutions.</p> |
| | | By 2008, build strategic analysis of linkages between trade and investment, competitiveness and corporate social responsibility (CSR). | Completion of a series of short working papers/briefings on key techniques and issues, and lessons learned, linking economic performance, competitiveness and CSR. |



SD Success Story

The Canadian Wood Fibre Centre

Launched in March 2006, the **Canadian Wood Fibre Centre** (CWFC) represents the beginning of an innovative initiative in forest research. The CWFC responds in a clear and tangible way to the ever-growing need to increase forest sector competitiveness in Canada. By focussing on the needs of our clients, in this case industry, NRCan has put in place the foundation for positive, demand-driven results.

The CWFC will develop a research program that is focussed on improving forest productivity, enhancing fibre quality, and either increasing product revenue or reducing production cost at the forest level. The CWFC is national in scope but with a strong regional component to address the differences in forest ecology and types of government-industry partnerships across the country. The CWFC will be one component of a new national institute that will result from the imminent amalgamation of three of Canada's most prominent Canadian forest research institutes: the Forest Engineering Research Institute of Canada (FERIC), Forintek, and Paprican.

The CWFC has been the result of forest sector leaders in both government and industry working together to develop a cohesive and focussed forest sector innovation strategy at the national level. Each of the forest research institutes has also contributed to the partnership. The new national institute aims to become the single largest forest research organization in the world, with the intent for the CWFC to provide upstream, or forest-level, research to complement the work of the research institutes. The CWFC will also provide focussed application of research results.



Goal 3: To integrate economic, environmental and social considerations into departmental decision-making and to continuously improve operations.

As a federal government organization, NRCan has a responsibility to provide Canadians with a department that is efficiently and effectively managed in all respects. As a champion of the sustainable development of Canada's natural resources, the Department must demonstrate its commitment to the principles of sustainable development in its own operations.

Critical to building a 'culture of sustainability' is the enhancement of capacity to incorporate sustainable development into departmental decision-making. This will be achieved through training of management and staff, as well as through opportunities to promote sustainable development through informal engagement and awareness activities.

Implementing sustainable development principles in how we manage our operations is also key. These efforts fall within the context of the Greening Government Operations (GGO) initiative led by Public Works and Government Services Canada (PWGSC). This initiative focuses on three priority areas—Energy/Buildings, Vehicle Fleet and Green Procurement—while promoting progress in others such as contaminated sites management, land use and facilities management, regulatory compliance, and green stewardship.

NRCan plays a lead role in the Energy/Buildings and Vehicle Fleet areas. NRCan also plays a key policy and implementation role in the third GGO priority area, Green Procurement, as one of the three co-sponsoring departments (with Public Works and Government Services Canada and Environment Canada) of the new Policy on



Green Procurement, effective April 1, 2006. NRCan has provided expertise in the development of tools and workshops for implementation, the updating of training materials, and continues to provide expertise for the commodity management work led by PWGSC.

A primary focus for the Department continues to be the implementation of its comprehensive environmental management system (EMS). NRCan's EMS facilitates management of the departments assets responsibly while minimizing environmental impacts and facilitates monitoring of our progress. The aspects managed by way of the EMS are: chemical and toxics management; land use management; atmospheric emissions; resource use; environmental emergency preparedness and response. The three GGO priorities are captured within NRCan's resource use aspect. Detailed action planing and performance target-setting comprise part of the management of each EMS

aspect. The operational targets within this SDS reflect the GGO priority areas as well as highlight new initiatives.

Over the past decade, NRCan has undertaken a significant program of energy use improvements in most major facilities across Canada under the mandate of the Federal Buildings Initiative program. As a result, operating efficiency at a portfolio level is very good considering the existing age, condition and intensive use of the portfolio by science programs. However, the bulk of the department's real property assets are poor candidates for additional energy technology-based investments. It has been determined that building replacement strategies are significantly more effective over the long term in addressing the Government's commitment to the environment than further investments in long payback improvements. NRCan is currently working with PWGSC to build a business case to Central Agencies for the replacement of a number its aging assets in the Booth Street Complex. Until such time as aging assets can be replaced and/or significantly renovated, the GHG reduction target for facilities (detailed under Objective 3.2) will be achieved through: a continued commitment to green purchasing when undertaking cyclical investment in facilities; the implementation, where the investment horizon of an asset permits, of recommendations outlined in building audits to be conducted; and the implementation of green stewardship-type activities.

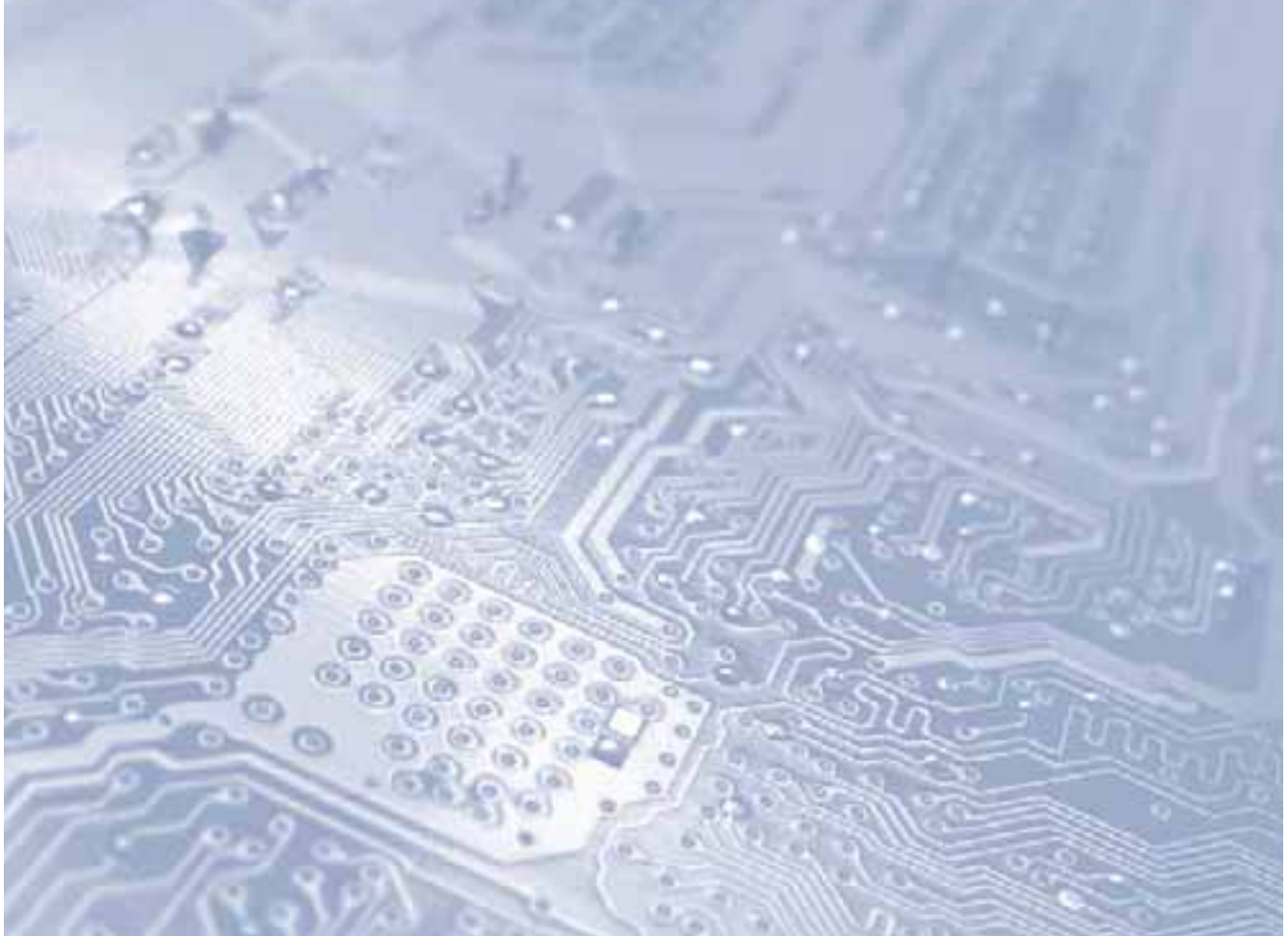


Objective 3.1 Strong departmental capacity for sustainable development decision-making.

| Intermediate Outcome | FG | Targets | Performance Measures |
|--|----|--|--|
| 3.1.1 NRCan managers and staff are better able to integrate sustainable development considerations into their daily responsibilities. | | By 2008, work with other government departments and the Canada School of Public Service to design and deliver new Government of Canada Sustainable Development training material. | Completion of training material and commencement of implementation of training. |
| | | By 2009, offer expanded NRCan SD capacity course to one hundred staff. | Percentage of staff and managers that have taken the course. Percentage of staff and managers that indicate a better understanding of SD issues, as measured by survey. |
| | ● | By 2009, develop a proposal to integrate sustainable development considerations into key NRCan senior managers' performance accords. | Integration of sustainable development into select performance accords. Development of process for broader integration. |
| | ● | By 2009, increase senior management understanding of departmental obligations under the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals by providing briefings to senior management, and by offering related training to NRCan policy staff. | Number of briefings. Percentage of targeted staff that have received training. |
| | ● | By 2009, increase senior management understanding of departmental obligations under the Canadian Environmental Assessment Act by providing briefings to senior management and by developing and offering updated Environmental Assessment (EA) training to NRCan staff with EA responsibilities. | Number of briefings Percentage of targeted staff that have received training. |
| | ● | By 2007, provide Environmental Management System training to staff with environmental management responsibilities at key NRCan facilities. | Percentage of of targeted individuals that have received training. |
| | ● | By 2010, 100 percent of materiel managers and procurement personnel take green procurement training - either the TBS Professional Development and Certification Program for Procurement, Materiel Management and Real Property Communities, or other federal green procurement courses. | Percentage of materiel managers and procurement employees trained. |

Objective 3.1 Strong departmental capacity for sustainable development decision-making (continued).

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|--|---|
| 3.1.2 NRCan managers and staff have access to information for decision-making that is reliable, accurate and timely. | | By 2008, department vision and strategies for Information Management (IM) and Information Technology (IT). | <p>Development of departmental perspective of all IM and IT activities and where IM and IT dollars are spent.</p> <p>Development of investment plans.</p> <p>Updating of governance structure with increased business input/representation and strategic focus.</p> |
| 3.1.3 Departmental staff apply sustainable development principles to stakeholder engagement and consultations. | ● | By 2009, develop a departmental consultation policy. | <p>Completion of research report on past and on-going external consultations taking place in the department.</p> <p>Completion of an external consultation policy statement.</p> <p>Publication of a policy toolkit for NRCan staff.</p> |



Objective 3.2 Better environmental performance in NRCan operations enhances departmental efficiency.

| Intermediate Outcome | FG | Targets | Performance Measures |
|--|----|--|--|
| 3.2.1 The environmental aspects of NRCan's operations are managed within a fully implemented Environmental Management System (EMS). | ● | By 2007, ensure senior management commitment to the EMS. | Establishment of mechanism for regular review of environmental performance and compliance. |
| | ● | By 2009, building upon completion of the consolidated database, develop an online integrated and interactive application of facility environmental information. | Completion of application. |
| | ● | By 2009, in order to evaluate the effectiveness of the updated EMS in improving environmental performance, complete a full three-year cycle of Environmental Compliance Audits of selected facilities. | Completion of cycle of audits. Reduction in number of significant findings from previous audit cycle. |
| | ● | By 2009, implement a Green Stewardship communication strategy in all NRCan facilities, across all sectors. | Development and implementation of a communication plan. Number of communications products issued to promote and raise awareness of green stewardship. |
| 3.2.2 Reduction of greenhouse gas (GHG) and other air emissions from NRCan buildings. | ● | By 2011, reduce net departmental greenhouse gas emissions and energy consumption by 5 percent from 2004/2005 baseline. | Annual, percentage reduction in energy consumption. Annual, percentage reduction in GHG emissions across NRCan's building inventory. |
| | ● | By 2009, perform energy audits for all high energy-use custodial facilities. | Number and percentage of buildings having completed, or currently undergoing, an energy audit. |

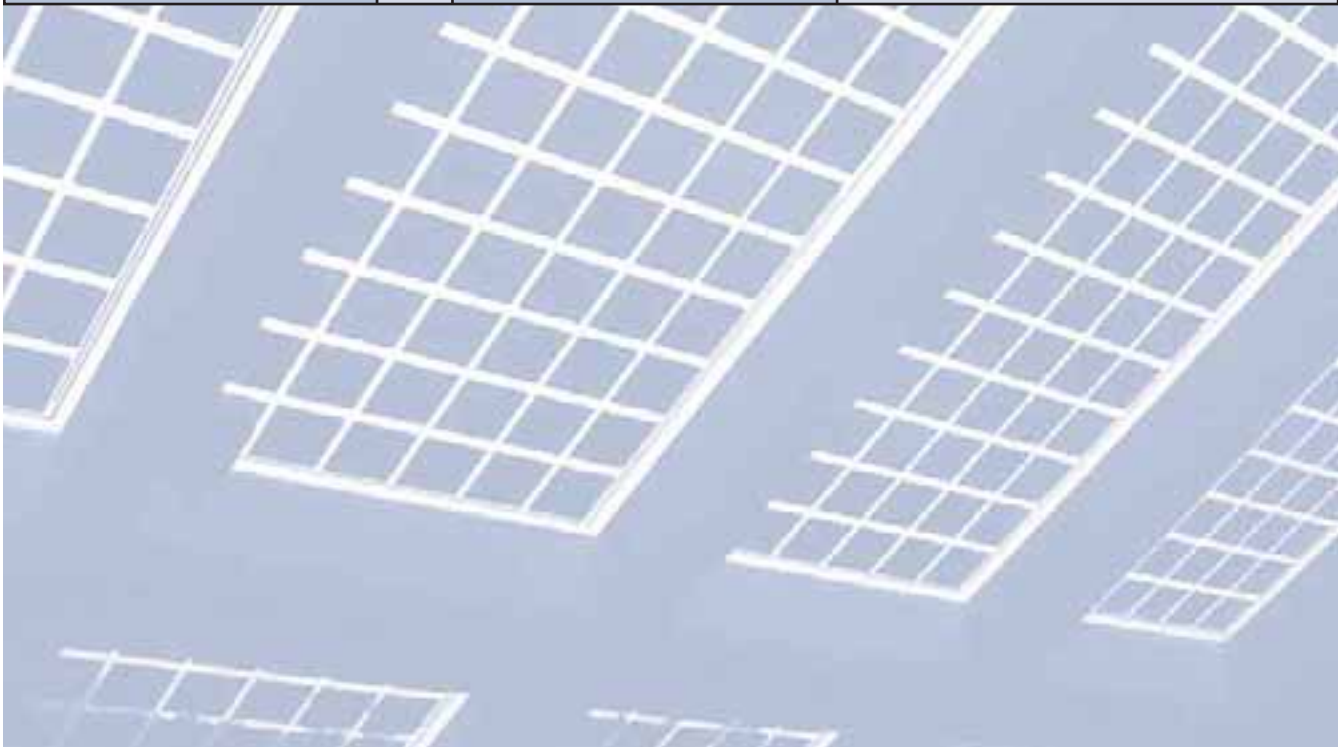


Photo credit: Canadian Solar Industries Association

Objective 3.2 Better environmental performance in NRCan operations enhances departmental efficiency (continued).

| Intermediate Outcome | FG | Targets | Performance Measures |
|---|----|--|--|
| 3.2.3 Improvement of the environmental performance of NRCan's vehicle fleet and promotion of sustainable transportation. | ● | By 2010, reduce by 15 percent, from 2002-2003 levels, GHG emissions per vehicle kilometre from the departmental fleet. | Annual, average GHG emissions per vehicle kilometre. |
| | ● | By 2007, all gasoline purchased for NRCan road vehicles will be ethanol blended, where available. | Annual, percentage of gasoline purchased for NRCan road vehicles that is ethanol blended. |
| | ● | By 2009, implement a sustainable transportation strategy for NRCan. | Completion of document. Implementation of coordinated, sustained communications to staff of available transportation options. |
| 3.2.4 Advanced use of procurement to protect the environment and support sustainable development. | ● | By 2007, complete and commence implementation of the draft NRCan Green Procurement Implementation Plan. | Completion of document. |
| | ● | By 2007, develop commodity specific performance targets, to be implemented during the remainder of this SDS time frame. | Completion of performance targets. Annual, dollar value spent or quantity purchased, and number of contracts issued against the procurement target established Identification of environmental outcomes. |
| | ● | By 2007, develop in conjunction with other key federal departments, an industry managed extended producer responsibility implementation plan for end-of-life, government wide, federal IT equipment. | Completion of implementation plan. |



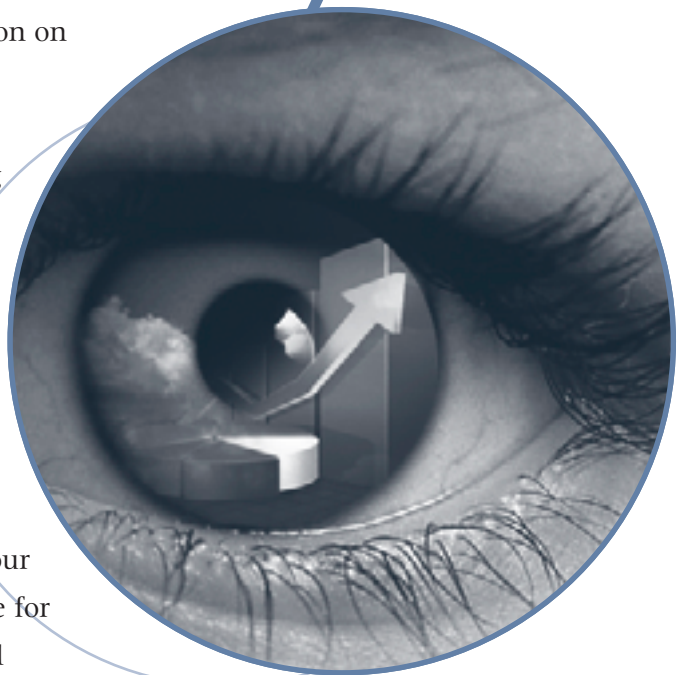
Photo credit: Urban Transportation Showcase Program Image Bank

III. Measuring Performance

Like all public organizations accountable to the government and responsible for the management of public goods, resources and facilities in the interest of Canadians, NRCan is expected to be transparent in its programs and initiatives.

The SDS establishes a vision for sustainable development, and identifies key priorities for the Department to take action on over the three-year period of the strategy. The ability to measure progress towards established goals is a key aspect of good governance and essential to the gauging of success and ability to make adjustments mid-stream as necessary. As sustainable development is a process of change, evaluating progress along the way is critical.

The performance measurements are intended to quantify and qualify achievements. NRCan has benefited from the experience gained by reporting on our activities through the departmental framework in place for previous strategies, by way of the annual Departmental Performance Reports and supplementary on-line Progress Reports.



Performance Measurement Glossary

Goal - A long-term and enduring benefit to Canadians that stems from NRCan’s mandate, vision and efforts. It establishes an overall sense of direction and sets the parameters for action.

Objective - The overall aim arising under each goal. Specifically, this will be the accumulation of successful actions, confirmed by the completion of stated targets and performance measures.

Outcome - An external consequence attributed, in part, to a policy, program or initiative resulting from the completion of associated targets. Outcomes are not within the control of a single organisation, policy, program or initiative, but are within the area of NRCan’s influence. Outcomes in this strategy have been qualified over a period of three years.

Target - A measurable performance or success level that the Department plans to achieve within a specified time period. Targets can be either quantitative or qualitative and are appropriate for both outputs and outcomes.

Performance measure - An indicator used to provide a sense of the incremental progress, which is required to achieve the stated target.

Output - Direct products or services stemming from the activities of the Department, or its policies, programs or initiatives.

This experience has provided a sound foundation to enable reporting on the departmental commitments in this fourth Strategy, which contributes to the broader Government of Canada sustainable development goals.

Assessing progress towards the departmental and federal goals

Achieving Results presents commitments in the form of SMART targets—that is, targets which are Specific, Measurable, Achievable, Realistic, and Time-bound. NRCan’s performance in meeting the targets will be evaluated by clear performance measures. The targets are arrayed around the three key goals, and their associated long-term objectives, that have been selected as the departmental priorities for sustainable development, providing the focus for the specific tasks to be achieved within the timeframe of this Strategy. These commitments also represent NRCan’s part in moving federal efforts towards the long-term objective of a harmonized approach to sustainable development.

In the context of our action on sustainable development on a broad level—as a key contributor to federal and international progress towards sustainability—the challenge is to ensure that the performance measures employed adequately reflect the intended outputs and outcomes. In order to address the gap between what is measurable and what is meaningful, the Department has taken a balanced approach by focusing on the intermediate steps towards achieving the intended goals.

Following advice offered in the guidance document “Coordinating the Fourth Round of Departmental Sustainable Development Strategies”, the Department has identified a basket of key macro-level objectives to illustrate progress towards achieving the three key goals. These goals and



objectives are intended to contribute to the six government-wide outcomes identified in the coordination document: Clean Air, Clean Water, Reduction of Greenhouse Gas Emissions, Sustainable Development and Use of Natural Resources, Sustainable Communities, and Governance for Sustainable Development. The three Greening Government Operations priorities (building energy, vehicle fleet and procurement) are integrated within this suite of desired outcomes. Commitments undertaken by NRCan may contribute to more than one of the Department's macro-level objectives, and may also reflect several stated federal goals. In Section II of this document, the targets that support progress toward achieving the federal sustainable development goals, as they relate to NRCan's mandate, have been identified by way of a column marked "FG."

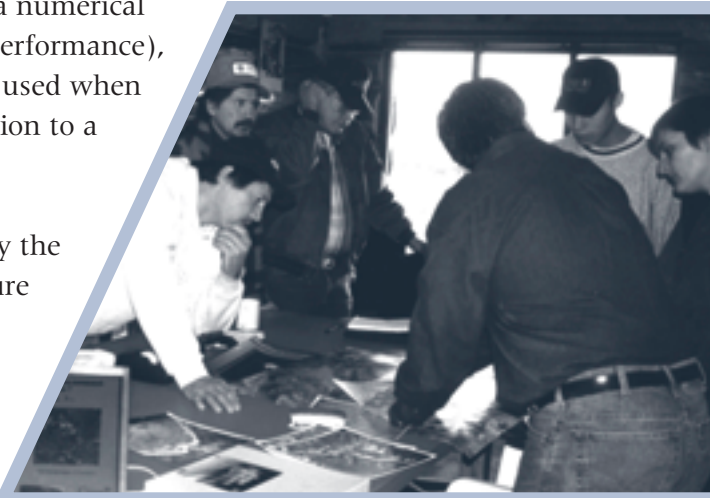
Progress in achieving the Department's objectives will be verified at two levels first, by tracking progress towards each of the individual targets. Progress on targets is reported semi-annually through the Department's online tracking system, the Sustainable Development Action Items Management System (SD-AIMS

see <http://sd-aims.nrcan.gc.ca>). Quite simply, this process verifies whether our micro actions are aligned to our broader indicators. We ask ourselves the question: "Did we achieve what we said we would achieve?" If necessary, we position ourselves to make adjustments to our actions in support of our longer-term vision. The year of completion for a target refers to fiscal year end. For example, a target scheduled for completion by 2008 will be met by March 31, 2009.

Performance measures are used as a second level of verification to ensure the targets have been completed—moving the general concept of sustainable development to concrete actions that have perceptible impact. They provide an early indication of challenges, and permit opportunities to enact corrective measures at the program level in a timely manner. Performance measurements are used to assess how the SDS actions are contributing to achieving the three goals set by the Department, and how we are performing within the context of the Government-wide priorities. We believe "what gets measured, gets managed, and what gets managed, gets improved." Therefore, each

indicator is an objectively assessable measure: either a numerical target, a directional target (i.e. maintain or improve performance), or a finding based on trend analysis and monitoring (used when it is difficult to determine the Department's contribution to a 'macro' indicator of high importance to NRCan).

These two levels of reporting will be complemented by the Department's work on its Program Activity Architecture (PAA), the foundation for the Department's planning and reporting efforts. The PAA articulates a set of Department-wide strategic outcomes, and is one of the primary instruments of accountability to Parliament and Canadians; it provides a transparent set of measures against which NRCan's progress and direction can be charted. This process is linked to the Departmental Performance Report, which employs a single outcome, which is based on a definition that incorporates sustainable development.



Appendix 1:

Departmental Mandate and Organization

Natural Resources Canada is an economic, science-based department with a mandate to: promote the sustainable development and responsible use of Canada's mineral, energy, and forest resources; develop an understanding of Canada's landmass; and, collect and disseminate knowledge on sustainable resource development. The Department conducts research and technical surveys to assess Canada's resources, including the geological structure and legal boundaries. NRCan is also authorized to: provide the national framework of reference for spatial positioning; prepare and publish maps; conduct scientific and economic research related to energy, forestry, mining and metallurgical industries; and establish and operate scientific laboratories for these purposes.

Departmental Mandate

NRC is responsible for federal resource policies, and science and technology that support the sustainable development and competitiveness of the energy, forest, minerals and metals sectors, and their allied industries. The Department enables the Government of Canada to address resource issues in a comprehensive manner, from a national perspective.



By legislation, the Minister of Natural Resources is responsible for:

- Coordinating, promoting, recommending and implementing policies, programs and practices pertaining to the mandate of NRCan;
- Fostering the integrated management and sustainable development of Canada's natural resources;
- Helping in the development and promotion of Canadian scientific and technological capabilities;
- Gathering, compiling, analyzing coordinating and disseminating information respecting scientific, technological, economic, industrial, managerial, marketing, and related activities and developments affecting Canada's natural resources;
- Improving remote-sensing technology and promoting the development of the Canadian remote-sensing industry;
- Encouraging the responsible development and use of Canada's natural resources, and the competitiveness of Canada's natural resource products;
- Working to widen and promote markets for Canada's natural resource products and geomatics industries, both at home and abroad; and,
- Working in partnership with provincial/territorial governments and non-governmental organizations in Canada, and promoting cooperation among nations and international organizations.

Other Entities

NRCan maintains a special relationship with nine entities which report to Parliament through the Minister of Natural Resources. These entities include: two Crown corporations (Atomic Energy of Canada Limited and the Cape Breton Development Corporation); four regulatory tribunals (the Canadian Nuclear Safety Commission, the National Energy Board, the Canada-Newfoundland Offshore Petroleum Board and the Canada-Nova Scotia Offshore Petroleum Board); two departmental agencies (the Northern Pipeline Agency and the Energy Supplies Allocation Board); and one foundation (Sustainable Development Technology Canada).

These entities are not included in the Sustainable Development Strategy of the Department.

Organization

NRCan is organized into seven sectors and three branches, and also includes the Shared Services Office and the Office of the Chief Scientist.

The **Strategic Policy Sector** is NRCan's centre for strategic policy leadership, expertise and advice for departmental and portfolio priorities, horizontal policy issues and initiatives, and sustainable development in Canada and internationally. It leads the development and implementation of the Sustainable Development Strategy.

The **Earth Sciences Sector** is the Government of Canada's principal agency for earth science knowledge and information. Geomatics Canada provides a reliable system of surveys, remotely sensed data as well as geographically referenced information describing the Canadian landmass.

The Geological Survey of Canada is a principal contributor to Canada's comprehensive geoscience knowledge base. The Polar Continental Shelf project contributes to scientific research in our Arctic regions by providing comprehensive logistics support.

The **Canadian Forest Service** promotes the sustainable development of Canada's forests and the competitiveness of the Canadian forest sector for the well-being of present and future generations of Canadians. As the premier forestry S&T research and national policy coordination agency in Canada, the Canadian Forest Service plays a pivotal role in building consensus on key forest issues, in shaping the national and international forest agendas, and in generating and transferring knowledge through its Canada-wide world-class forestry research centres.

The **Minerals and Metals Sector** promotes the sustainable development of Canada's minerals and metals resources industry by integrating economic, social and environmental objectives. It provides policy advice, S&T, as well as commodity and statistical information in support of decisionmaking. It is also the federal government's primary source of expertise on explosives regulations and technology.

The **Energy Policy Sector (EPS)** is comprised of the Electricity Resources Branch, the Petroleum Resources Branch, the Office of Energy Research and Development, and the Domestic and International Policy Branches. EPS is responsible for the development of policies related to energy issues in areas of federal jurisdiction, working closely with provincial and territorial

governments, industry and other stakeholders. EPS is also responsible for: enhancing and advancing the government's energy interests and concerns, both domestically and internationally; and providing corporate leadership for developing broad strategic directions for the federal government's objectives with regard to climate change and air quality.

The **Energy Technologies Programs Sector (ETPS)** is comprised of the Office of Energy Efficiency and the CANMET Energy Technology Centre. ETPS provides Canada's leadership in developing and implementing energy S&T and energy efficiency policy and programs for NRCan. ETPS focusses on clean energy supply, clean air, energy security and energy efficiency through: energy S&T, technology demonstrations, market transformation, outreach, and stimulating engagement. An integrated set of information programs, regulations and S&T activities plays a key role in meeting policy objectives for the sustainable production and use of Canada's energy resources.

The **Corporate Management Sector** provides NRCan with a systematic, directional and guiding approach to achieve its strategic and operational objectives through leadership in the areas of finance, human resources, health and safety and emergency management, information management, information technology, access to information and privacy, and real property.

The **Communications Branch, the Audit and Evaluation Branch** and the **Legal Services Branch** contribute to improved accountability as

well as an increased understanding of NRCan's mandate and programs among Canadians, clients and employees.

The **Shared Services Office (SSO)** provides timely, reliable and efficient administrative services to support clients in achieving NRCan's objectives. SSO provides services to the Department in a range of operational areas: finance, procurement and contracting, records and forms management, information technology, human resources, mail and messenger, fleet management and parking operations, accommodation management, and telecommunications.

The **Office of the Chief Scientist** is responsible for positioning Natural Resources Canada as a leader in the performance of science and technology. The Office works closely with the departmental science sectors as well as other science-based departments and agencies, both nationally and internationally, to ensure the excellence and relevance of our laboratories and science programs. The Office of the Chief Scientist also oversees the NRCan On-Line secretariat, which enables NRCan to deliver its programs and services to Canadians through the Internet.

Appendix 2:

Evolution of NRCan's Sustainable Development Strategy

NRCan's SDS is a management tool to guide our efforts towards sustainable development, as well as a strategic planning document that has enabled us to integrate SD into the way we think, plan and carry out the business of the department. Just as the concept of sustainable development is a journey, NRCan's SDS has taken a path of continuous improvement. The process has been just as important as the document itself as we have worked to integrate sustainable development into our daily business. While there is still much work to do, the department has made measurable progress.

Since the 1995 amendments to the *Auditor General Act*, NRCan has been among some thirty federal departments that have prepared three strategies: in 1997, 2001 and 2004. The department's first strategy, *Safeguarding our Assets, Securing our Future*, focused on aligning the goals of the strategy with the goals of the department, and developing a common performance measurement framework. With this framework in place, the second strategy, *Now and for the Future*, focused on developing time-bound, measurable targets, linking outcomes to actions. These two strategies thus formed an important foundation for future efforts, which also influenced departmental planning and reporting efforts, and helped to 'mainstream' sustainable development within NRCan.



Having made progress to mainstream sustainable development, the department was advised by external stakeholders and reviewers of the document to move forward and build on the foundation of the two previous strategies for its third document, *Moving Forward*. *Moving Forward* articulated a vision for SD, identified barriers to this vision, and developed key results and actions to address these barriers. The department sought to develop a focused framework for action based on these key results. The department is on track to meet the commitments made in *Moving Forward* (progress reports are available on the Department's SD Web site: www.nrcan-rncan.gc.ca/sd-dd), and a final report will be published in the fall of 2007. The success of *Moving Forward* will be measured following the completion of implementation on March 31, 2007.

Changes between SDS 2004 and SDS 2006

Preparations for SDS 2006, *Achieving Results* indicated that both internal and external stakeholders wished to see a document even more focused. With a broad strategy, and even with our efforts to focus 2004, it was difficult to see clear priorities—particularly as the business of the department is sustainable development. Discussions among senior management indicated that the role of the strategy is to articulate a few key priorities—this is what we have sought to do. SDS 2006 has enabled us to get closer to this goal.

Between tabling SDS 2004 and *Achieving Results*, we gained a better understanding of logic models, and we worked with our

interdepartmental colleagues on a common logic model for the federal SD goals to increase collaboration and accountability government-wide. NRCan's SDS contributes to these federal goals, as noted in Section III, Measuring Performance. This work helped us to develop a more focused framework that is the basis for *Achieving Results*. We also worked to identify stronger and more relevant performance measures.

In our internal review of *Moving Forward*, the SD strategy team was challenged by the departmental management committee to be innovative with the SDS. The major difference between the third and fourth strategies is that there are fewer goals, and wording of the goals has been modified to focus on results that clearly show NRCan's role.

The Department is currently working to develop a Natural Resources Policy Framework for Canada that will guide the Department's work going forward. The need to develop an SDS that was focused was thus imperative this time as the intent of this three year strategy is not to be exhaustive but to address key SD issues of concern and make meaningful progress over the three year period.

Appendix 3:

Summary of Consultations

NRCan recognizes that the credibility of the department's strategy depends on a meaningful dialogue with stakeholders. Experience has demonstrated that by undertaking such dialogue, it enables the department to develop a common understanding of the issues, and a shared ownership of the strategy. With each strategy, an attempt is made to improve the way the department engages with stakeholders.

The Department released the discussion paper, *Natural Resources Canada Sustainable Development Strategy 2006: Discussion Paper for Consultation*, in April 2006. This paper served as the basis for the 2006 consultations. The discussion paper set out the current thinking around sustainable development, reviewed achievements to date of NRCan's previous strategies, and discussed possible directions for the next strategy. The paper was intended to stimulate dialogue and to provoke the exchange of ideas, as well as allow the department to verify with stakeholders that the direction and focus of this strategy was both meaningful and relevant.



The Department was guided throughout the SDS process by an external advisory panel comprising representatives from industry, Aboriginal organizations, non-governmental organizations, academia and other government departments. The advisory panel served as a 'sounding board' at each stage in the process, providing consistent and insightful guidance. For consistency between the strategies and to enable the Department to push beyond previous accomplishments, a number of 2003 advisory panel members were asked to return and participate in the 2006 process.

External regional multi-stakeholder meetings were held in Vancouver, Calgary, Ottawa and Halifax. As well, NRCan participated with Industry Canada, Environment Canada, and Public Works and Government Services in coordinated sessions in Atlantic Canada that were organized by the Atlantic Canada Opportunities Agency. The discussion paper was distributed to the interested stakeholders by mail and was available on the Department's website, along with a brief questionnaire.

To capitalize on the vast expertise and experience of departmental employees, internal focus groups were held during the month of June 2006. Additional employee input was solicited during Environment Week activities in the National Capital Region as well as sought from the Departments' 'sustainable development ambassadors'—a network of employees who have completed NRCan's internal policy capacity course for sustainable development.

The consultation process helped the department to refine its area of focus and streamline its approach to the development of the SDS. Meaningful feedback was received on the key issues and potential actions that should be pursued for the forth SDS. The key issues discussed with stakeholders were confirmed with staff and the Department's senior managers, and are reflected in the Issue Scan of this document (pages 12-17).

The results of the SDS consultations have been summarized in the report *What You Said 2006*, and will be distributed to all consultation participants and available on the Natural Resources Canada Sustainable Development Web site, www.nrcan.gc.ca/sd-dd.



www.nrcan-rncan.gc.ca/sd-dd