

Introduction

Natural Resources Canada (NRCan)'s mandate to responsibly develop and use Canada's resources by integrating economic, environmental and social factors into resource development decision making presents a real challenge. It is also an opportunity to enrich the quality of life of Canadians today and for future generations.

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."

Natural Resources Canada has articulated a vision of a sustainable future that reflects this mandate – a vision well on its way to realization as we make measurable progress in advancing the Department's sustainable development goals, first articulated in 1997 in *Sustainable Development Strategy: Safeguarding our Assets, Securing our Future*.

The commitments in *Sustainable Development Strategy (SDS) – Now and for the Future* continue to move this agenda towards a future in which the wise use of our natural resources enables us to protect the health of Canadians, the environment and landmass, while continuing to efficiently meet human needs for energy, forest and mineral-based products, both now and for the future.

SDS – Now and for the Future is the result of extensive consultations with Departmental staff, senior managers and stakeholders who were asked to review and respond to *The Path Forward to Sustainable Development Strategy 2000*, a discussion paper that identified the areas where NRCan can make a

meaningful difference. The paper reflected the latest thinking on sustainable development priorities as well as the lessons learned since the initial strategy's launch in the late 1990s.

The discussion paper itself was the product of four public input processes – a progress report and questionnaire; Northern Sustainable Development Strategy consultations; meetings with representative stakeholder groups; as well as a Leaders' Forum on Sustainable Development.

Canadians' ideas and suggestions for improvement have been incorporated into the current strategy, which has been strengthened by their enthusiasm and support.

SDS – Now and for the Future underscores that *all* Canadians have a role to play in sustainable development. Ultimately, sustainable development will result from our individual and collective efforts to find solutions to resource development challenges that are good for our communities, good for the economy and good for the environment.

Putting Sustainable Development Into Context

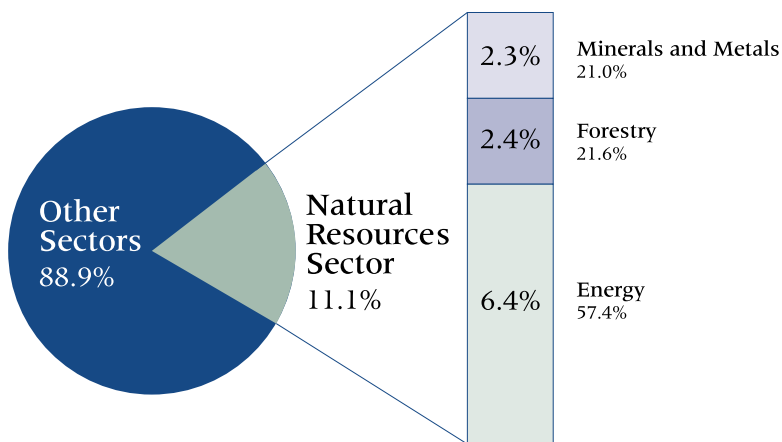
Canada's natural resources provide our society with a high standard of living and an enviable quality of life. This natural resource endowment generates economic opportunities and societal benefits that enrich the lives of all Canadians.

Along with this wealth of opportunity comes the responsibility to use these resources productively and efficiently, and to adopt environmentally-friendly

Natural Resource Sector and Canada's GDP in 1999

Total Economy
\$809.9 Billion

Natural Resources Sector
\$89.8 Billion



Resource development is crucial to our economy, accounting for 11% of GDP and \$100 billion per year in exports. Canada's natural resources also underwrite extensive social benefits. More than 3.6 million Canadians in over 650 communities, many of which are rural, northern and remote, rely on the energy, forest and minerals and metals industries. Direct employment in the sector accounts for almost 750,000 jobs. Wealth created from these jobs supports a high standard of living and the necessary financial resources to invest in social infrastructure such as health and education.

Sustainable Development Challenges for the Natural Resources Sector

- To manage forests to sustain a broad range of different values and products
- To provide a safe, efficient, reliable and increasingly environmentally clean mix of energy options
- To recycle and reuse minerals and metals resources to maximize the social, economic and environmental benefits to Canadians
- To generate, analyze and disseminate data, information and knowledge to balance pressures on land use and assist in policy development

methods and technologies in a manner that is socially responsible. Canada has a lead role to play in setting and maintaining international standards of environmental protection.

The principles of sustainable development enable Canada to build on its social, economic and environmental achievements to protect our natural heritage for the benefit of Canadians and our global neighbours, while maintaining the natural resources sector's extraordinary economic performance and continuing to enhance Canadians' quality of life.

Countless more communities, in countries around the world, depend on a steady supply of Canada's resources for their own economic growth and social development.

Natural resources are equally critical environmental assets. Canada has almost 10% of the world's freshwater, 10% of the world's forests and an estimated 300,000 species of wildlife. As stewards of these precious and indispensable resources, we have a duty to ensure they are used wisely, and to establish policies and programs to conserve and protect these assets.





We increasingly face trade-offs as we try to reconcile the sometimes competing expectations and pressures that arise when integrating economic, environmental and social factors into decision-making.

For example, it is difficult to rationalize the apparent dichotomy when consumers demand action on global warming yet continue to put more cars on the road. At the same time there is a demand for more reliable products and the economic spin-offs associated with their development, there are also calls to protect wilderness areas for recreation and wildlife related activities. Even potential solutions to environmental challenges, such as emerging biotechnology breakthroughs, often raise complex social or ethical issues that defy easy answers.

Striking the right balance sometimes seems elusive. However, there is no option but to find solutions if we are to continue to meet consumers' needs for resource-based products while creating jobs, increasing productivity, expanding export markets, and advancing both our domestic and international environmental stewardship goals and obligations.

Fortunately, in the span of a few short years, sustainable development has moved out of the periphery and towards the mainstream. Organizations, both public and private, are actively seeking ways to operationalize the concept. The challenge of sustainable development demands action at all levels. NRCan, along with most other jurisdictions, applies the Brundtland definition of sustainable development to its work: *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."*

Based on this definition, NRCan demonstrates that by integrating social, economic and environmental considerations into decision-making we can respect the needs, values and property interests of *all* users of the land and its resources. While taking an integrated approach sometimes poses challenges, it also opens up opportunities to improve our standard of living and enrich our quality of life, both now and for the future.

Moving Forward: NRCan's Contribution to Sustainable Development

At NRCan, sustainable development is not a passing trend – it is the way we do business.

We have committed to productive partnerships with industry, all levels of government, and non-government organizations, educational institutions, Aboriginal organizations and Canadian communities to build on our science and policy capacity to advance sustainable development. An ongoing dialogue with this broad stakeholder base has enabled an in-depth understanding of the most important issues to Canadians in all regions of the country.

NRCan contributes to sustainable development by undertaking scientific research and technology development; by providing information to Canadians; through policy research and development; by forming partnerships both within Canada's borders and abroad; and, by leading by example.

NRCan's vision for the 21st century is grounded in the recognition that knowledge provides a wide range of sustainable development solutions.

Research and development lead to technological innovations that are essential to the growth of knowledge-intensive, value-added industries such as geomatics, cleaner technologies, next-generation recyclables, energy efficient products and services, lightweight materials for vehicles, alternative and renewable energy sources, as well as sustainable forestry practices.

NRCan works in partnership with industry to innovate and to generate growth in the resource sector. The Department also collaborates with the provinces, universities and the private sector to develop advanced technologies that reduce pressures on the environment, create highly-skilled jobs and contribute to sustainable development.



21st Century Challenges

Canada's natural resources sector faces three critical public policy challenges: ensuring that resource development and use are sustainable; remaining internationally competitive in the increasingly knowledge-based and globalized economy; and maintaining an infrastructure and business climate that attracts investment in the natural resources sector. These three challenges exist within the context of the greater domestic and international challenge of meeting the Kyoto targets established in 1997. Policies, programs, legislation, regulations, taxes and spending, as well as consumer awareness, establish the context in which Canadians make sustainable development decisions. These policies need to represent and address the needs and interests of a broad range of Canadians.

NRCan develops regulations in areas such as energy efficiency and explosives, and works with other federal departments to develop focused environmental and health regulations and appropriate fiscal and tax

policies affecting resources and resource policies. The Department also works with stakeholders and industry to develop voluntary approaches to sustainable development.

From industry's perspective, policies need to reflect and be responsive to competitive realities in the global marketplace and strengthen the private sector's ability to create jobs while it improves its environmental performance.

Resource management demands knowledge of the many inter-related factors that go into integrated decision-making – including information on soils, bedrock, wildlife, water, air, and climate. Resource managers need to be able to consolidate that knowledge to make informed decisions, including the socio-economic dimensions of resource development.

NRCan provides basic knowledge, information and technologies to address the social, economic and environmental aspects of development. Information programs encourage producers and consumers alike to consider the social, economic and environmental impacts during each phase of resource development and use. NRCan assists decision makers by providing conventional mapping and reports.

Operating Principles

For the first SDS, NRCan adopted a set of operating principles to guide its work in promoting the sustainable development of natural resources. Since then, NRCan has also worked with other government departments to develop a common set of principles for departments to respect in promoting sustainable development.

The following principles (described in more detail in Appendix B) will guide the Department's work for this SDS:

- Accountability and transparency
- Partnerships and consultation
- Integrated decision-making
- Science and knowledge
- Precaution
- Anticipation and prevention
- Ecosystem integrity
- Efficient use of resources
- Continuous improvement and innovation
- Intergenerational equity
- Shared responsibility
- Setting an example





Increasingly, decision makers rely on the Internet to transfer high-quality scientific data to and from users. Partners and clients regularly access NRCan's geoscientific databases this way, as well as from dedicated information centres in provincial facilities.

Canadian consumers also need access to this information to make appropriate judgments about their personal health and safety, the well-being of the environment and economic opportunities.

Many environmental issues transcend political boundaries. This reality, coupled with expanding global trade, is resulting in a greater emphasis on international cooperation. Canada works with other countries and international agencies to address global development issues and to ensure access to markets for Canadian natural resource products, technologies and services.

NRCan's science and technology (S&T) activities support the development of universally accepted standards which help ensure Canadian natural resource products remain competitive. NRCan works

with the Department of Foreign Affairs and International Trade, international agencies, provinces/territories, the private sector and other countries to address issues that affect the way Canada develops its natural resources.

Government has a key role to play in pursuit of a concept of progress that is based on the development of balanced social, environmental and economic well being. Corporate social responsibility (CSR) is an approach that places value in being a responsible and accountable member of a larger community, and is grounded in meaningful dialogue with the organization's stakeholders and civil society. In a sense, CSR is fundamental in an organization's pursuit of sustainable development.

NRCan works to set a high standard in its own operations, demonstrating that sustainable development is not only viable, but that it is advantageous. The Department seeks to continually improve the quality of working life and environment for its employees by conducting its business in a fiscally, environmentally and socially responsible manner.

NRCan's Evolving Strategy: The First Three Years

NRCan was one of 28 federal departments and agencies that tabled Sustainable Development Strategies for the first time in Parliament in 1997. The initial Strategy was recognized as a key tool to address sustainable development challenges at all levels: policy, science and technology programs, legislation/regulations and departmental operations.

Highlights of NRCan's first Sustainable Development Strategy

NRCan and its partners in the public, private and non-profit sectors implemented a number of successful initiatives that have made measurable progress towards sustainable development, including:

- Delivered pilot *Sustainable Communities Initiative* to rural, aboriginal and remote communities to enable communities to participate in land use and sustainable development decision-making
- Advanced earth science expertise and technologies in Latin America, positioning Canada as a world leader in geomatics
- Promoted increased value-added processing of Canada's minerals and metals
- Shared Canadian expertise in sustainable production, use and recycling of minerals and metals
- Provided forest fire managers and community leaders with information to save lives through the Fire Monitoring, Mapping and Modeling System
- Brought together aboriginal and community values to sustainably manage Canada's forests
- Encouraged use of renewable energy through the launch of the Renewable Energy Deployment Initiative
- Updated Departmental Environmental Policy to improve the environmental management system

The implementation of the first SDS has led to a number of key accomplishments that have advanced sustainable development. Lessons learned through the first SDS were instrumental in determining the direction for *Sustainable Development Strategy – Now and for the Future*, which will guide NRCan activities through to the end of 2003.

The Department's strong foundation for its SDS was critical to the success of its first strategy. This foundation – which will continue to support *SDS – Now and for the Future* – is composed of three pillars: 1) stakeholder engagement; 2) performance measurement; and, 3) an effective management system.

Stakeholder Engagement

Since the first round of consultations held for the first SDS, NRCan has maintained an ongoing dialogue with stakeholders through progress reports, questionnaires to provide input and comments, a Web site with links to key documents and related work, and face-to-face multi-stakeholder meetings. Public engagement is a key component of the Department's ongoing approach to sustainable development and we are appreciative of the enduring level of interest and support demonstrated by stakeholders.

NRCan will continue to seek the counsel of Canadians as the commitments made under *SDS – Now and for the Future* are implemented. The Department will further strengthen its partnerships with individual Canadians, environmental groups, industry associations, professional associations, academic institutions, private companies, other levels of government and other federal government departments.

Performance Measurement

From the outset, NRCan recognized that a consistent system to measure its performance would be critical to the implementation of the Department's 1997 Strategy. Consequently, the Department realigned its policy goals to match those in the Strategy and developed a single set of performance indicators to meet various reporting needs. The performance indicators, developed in consultation with stakeholders, enable NRCan to measure its performance against the objectives of its SDS. NRCan is now well positioned to report on this established performance measurement framework. These indicators form a vital component of our progress towards the Department's vision of a sustainable future. The performance measurement framework is described in Appendix A.

Effective Management

NRCan uses leading-edge environmental management tools and practices to advance sustainable development through its own operations. It has strong support from senior management and its Sustainable Development Working Group. The Department employs a team approach to the development, implementation and monitoring of the SDS. Reviews of this management system are conducted to ensure accountability and results.



Accountability for Sustainable Development at NRCan

NRCan is committed to implementing its SDS and to holding itself accountable to Canadians for its actions.

The Deputy Minister of NRCan has appointed an Assistant Deputy Minister to act as a champion of the SDS. The Director General of the Strategic Planning and Coordination Branch and the Senior Director of the Sustainable Development and Environment Division are responsible for strategy development, implementation and reporting.

The Senior Director of the Sustainable Development and Environment Division chairs the Sustainable Development Working Group, which is comprised of directors and senior analysts from all sectors and corporate branches.

The Department will seek input from its independent advisory panel, made up of a cross section of interested stakeholders, regarding progress toward SDS implementation and priorities for the future.

The Department will develop and use performance indicators to measure and report on results (see "Measuring the Vision" and Appendix A).

An annual report will be prepared detailing the implementation of this strategy. This report will be reviewed by the Department's Management Committee and published on NRCan's Web site. A summary will be part of the Department's annual report on performance submitted to Parliament.

NRCan will continue to integrate sustainable development accountability into the performance accords of senior departmental managers.



NRCan's Framework for Action

NRCan has developed a series of goals, objectives and actions to advance sustainable development, both in the programs and policies we provide to Canadians, and in our own operations. NRCan's goals and objectives direct every aspect of the Department's activities. These goals, objectives and actions are informed by the ten public issues identified through our consultation process. We have also identified six key themes for *SDS – Now and for the Future* to advance change in the areas that our stakeholders believe we can best make a difference. The following two pages summarize the commitments we are making for *SDS – Now and for the Future*.

Photo courtesy of Alcan Aluminum Limited

