

A Framework for Action









Issues	Goals	Objectives
<p>Promoting Canada as a model of sustainable development</p> <p>Adjusting to changing economic and political circumstances</p> <p>Promoting technology and resource use for sustainable development</p> <p>Creating jobs and building sustainable communities</p> <p>Providing information to Canadians</p> <p>Engaging Canadians</p> <p>Working with partners to advance sustainable development</p> <p>Measuring sustainable development progress</p> <p>Maintaining a healthy environment</p> <p>Ensuring a sustainable future</p>	<p>To provide Canadians with:</p> <p>1 Information to make balanced decisions regarding natural resources</p> <p>2 Sustainable economic, environmental and social benefits derived from natural resources for present and future generations</p> <p>3 Strategies to reduce environmental impacts in the natural resources sector</p> <p>4 Safety and security in the natural resources sector</p> <p>5 A department that is efficiently and effectively managed</p>	<p>As demonstrated by:</p> <p>1.1 Easily accessible and integrated knowledge on the state of Canada's landmass and natural resources, and the economic, environmental, and social dimensions of their use.</p> <p>1.2 Greater national and international cooperation and consensus on sustainable development issues, policies, goals and actions.</p> <p>1.3 Fiscal, regulatory and voluntary approaches that encourage the sustainable development of natural resources.</p> <p>2.1 Greater economic opportunities and encouraging investment in innovative and higher-value uses of natural resources.</p> <p>2.2 Expanded access to international markets for Canadian resource-based products, knowledge, technologies and services.</p> <p>2.3 Increased capacity of communities to generate sustainable economic activity based on natural resources.</p> <p>3.1 Canada addressing its international Kyoto commitment to reduce greenhouse gases.</p> <p>3.2 Science, technologies and stewardship practices that reduce environmental impacts, conserve biodiversity, and increase the efficiency of resource development and use.</p> <p>3.3 Canada's environment safeguarded from the risks associated with natural resource development and use.</p> <p>4.1 Canadians safeguarded from natural hazards.</p> <p>4.2 A national framework for spatial positioning, mapping and boundary maintenance.</p> <p>4.3 Safe use of explosives and pyrotechnics.</p> <p>4.4 Enhanced safety and security in Canada's natural resource sector.</p> <p>5.1 Managing NRCan's resources responsibly.</p> <p>5.2 Continuously improving NRCan products, services, and operations.</p> <p>5.3 Sustainable development in NRCan operations.</p>



Operating Principles for Sustainable Development: 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

How NRCan will make a difference	Where NRCan will make a difference
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- Provide targeted knowledge and tools to inform decision-makers.
- Develop new national strategies for priority areas.
- Develop new tools to advance sustainable development.
- Provide targeted education and outreach.
- Promote Canadian sustainable development practices internationally.
- Develop a national consensus on forest issues.
- Analyze options for emissions trading.
- Promote innovation in resource development.
- Increase market access for Canadian resource-related industries.
- Expand efforts to promote international business development.
- Develop and disseminate information for community capacity.
- Build Aboriginal and community capacity to practice sustainable resources management.
- Enable communities to determine their energy options.
- Build infrastructure for sustainable communities.
- Reduce greenhouse gas emissions.
- Undertake science to understand climate change.
- Undertake science and technology to reduce environmental impacts.
- Develop partnerships to promote biodiversity.
- Research and development in support of a diversified energy base.
- Undertake science for risk assessment and policy making.
- Monitor and address natural hazards and disasters.
- Improve Canada's spatial reference infrastructure and the topographic information base.
- Promote safe communities by increasing public security related to explosives.
- Enhance health and safety for mine workers.
- Strengthen Departmental capacity to advance sustainable development.
- Measure NRCan's internal environmental, health and safety performance.
- Improve environmental health and safety compliance and awareness at NRCan.
- Manage hazardous and non-hazardous waste produced by NRCan operations.
- Develop and implement strategies to increase the efficiency of energy and resource use in NRCan operations.
- Develop a strategy to promote the use of eco-efficient goods and services within NRCan.

- Climate change

- Corporate stewardship and accountability

- Innovation

- Knowledge and information

- Leadership and partnerships

- Sustainable communities




The Public View

As responsibility for sustainable development rests with all Canadians, the Minister of Natural Resources Canada recognized the need to capture the views of citizens with different perspectives on the issue. To ensure *SDS – Now and for the Future* fully reflects these views, NRCan initiated a dialogue with over 2000 stakeholders throughout Canada.

During face-to-face consultations with departmental officials, representatives from industry, government, Aboriginal groups, NGOs, academia and others, Canadians consistently emphasized that NRCan should focus on issues that promise real progress towards the sustainable development of Canada's natural resources (Appendix C contains a summary of the consultations).

Building upon the issue scan from the Department's first Strategy, this SDS endeavours to address what stakeholders have indicated are the current and anticipated areas requiring increased attention in 2000 and beyond. Canadians have told us the following issues must remain top of mind, and that NRCan should direct its efforts to address these issues.

Promoting Canada as a model of sustainable development

In order to promote Canada's success in advancing sustainable development, both at home and abroad, we must demonstrate our country's capacity for innovation. Industry and government need to effectively communicate the

ways we contribute to the development of the natural resources sector by integrating knowledge and technologies that minimize waste, energy use and emissions.

Canada's reputation internationally affects our economy and trade opportunities. In order to expand these opportunities, the resource industry must be recognized globally for smart resource development.

To this end, NRCan will be an exemplary department – demonstrating the efficiency and effectiveness of sustainable development in its own operations, and sharing its experience and knowledge with other private and public organizations. Canada has information that may benefit other countries. Our ability to use natural resources responsibly, to mitigate potentially detrimental environmental impacts from resource development and to develop technologies for continued innovation can be transferred to resource managers worldwide. NRCan must work to raise global awareness that sustainable development goes beyond simply sustaining the quality of life we now have, that it is an opportunity to build a *better* quality of life.

Adjusting to changing economic and political circumstances

Globalization impacts the interrelationships among governments as well as between governments and citizens, and, consequently, on government policy choices.

The issues:

- Promoting Canada as a model of Sustainable development
- Adjusting to changing economic and political circumstances
- Promoting technology and resource use for sustainable development
- Creating jobs and building sustainable communities
- Providing information to Canadians
- Engaging Canadians
- Working with partners to advance sustainable development
- Measuring sustainable development progress
- Maintaining a healthy environment
- Ensuring a sustainable future

In the 1997 Strategy, we acknowledged that meeting global responsibilities was important and, indeed, this is still the case. However, in the intervening years the playing field has been altered and the ways in which we meet these responsibilities have changed.

Aboriginal land claim settlements, new international obligations related to climate change and biodiversity, and stringent environmental regulations leave society facing tough sustainable development decisions.

In the time it takes a tree to grow, we have moved from forest exploitation to international scrutiny of our forest management practices. Many consumers, especially those in foreign markets, are placing more emphasis on environmental values in their purchasing decisions.

These challenges are compounded by the fact that the rate of change is accelerating. In an age of instant communications and global connectedness, the future is coming at us at an incredible speed.

All countries and all sectors of the economy are subject to these changes. The business climate of the 21st century, characterized by increasing market integration, developments in information technology, and unparalleled process and product innovations, will mean that leading economies like Canada cannot operate in isolation. Canada's relationships with other governments, our activities in foreign exchange, our import and export activities will ultimately affect sustainable development.

Furthering the sustainable development of natural resources and having access to a rules-based global market place is in Canada's enlightened self-interest.

Promoting technology and resource use for sustainable development

Average productivity growth in the natural resources sectors has been three times higher than the rest of the economy over the past two decades. The sustainable development challenge for industry, governments and individuals will be to ensure that continued economic development and social well-being are compatible with ecological support systems.

Canadian industry and consumers would benefit from further improvements in resource efficiency, by developing materials, products and industrial

processes and services that are more eco-efficient.

For example, NRCan programs help to improve efficiency in the use of energy. Other programs encourage better utilization of renewable resources such as forests and greater use of wind and solar power. There is also a need for Canada to refine the ways we harvest used timber products and recycle minerals and metals.

NRCan's advances in science and technology can help drive the transition toward a less energy- and material-intensive society to one of a more sustainable energy and materials mix.

Creating jobs and building sustainable communities

Natural resources are the lifeblood of 3.6 million Canadians in more than 650 communities, many of which are rural, remote, northern and Aboriginal. Canadian communities are undergoing dramatic changes as a result of the transition to a knowledge economy and are confronted with multiple social, environmental and economic challenges. Rural areas face cyclical economic downturns, loss of traditional industries, changing demographics and concerns over environmental degradation. Urban areas face increasing demands

Horizontal Themes for Sustainable Development across the Government of Canada

To advance sustainable development at the federal level, departments and agencies have begun to coordinate their activities in eight thematic areas. The themes are:

- i Sustainable Development in Government Operations
- ii Productivity through Eco-efficiency
- iii Sustainable Development Knowledge and Information/Indicators and Reporting
- iv Sustainability in Communities
- v Federal Sustainable Development Strategy for the North
- vi Sustainable Development and Healthy Canadians
- vii International Aspects of Sustainable Development
- vii Social and Cultural Aspects of Sustainable Development

These themes are cross-cutting in nature and their influence is broader than just one single department or agency. As such, these themes are shaping NRCan's SDS as well as the strategies of other federal departments and agencies.

NRCan is co-leading the first four of these eight themes and is an active participant in the fifth.



on the life support systems, such as air, water and infrastructure, as cities and towns continue to grow.

In spite of the complexities of these issues, there are opportunities arising from these challenges. What communities require to seize the potential of the knowledge-based economy are the skills, tools and information to capitalize on change.

NRCan works to increase the capacity of Canadians to generate, obtain, use and discuss geographical information in order to ensure that citizens in these communities are heard and their needs met. Improved communication and consultation tools, along with more effective partnerships with other government departments, other communities and the private sector, will strengthen the ability of Canada's Aboriginal, rural and northern communities to plan, make decisions and share valuable best practices crucial to sustaining the livelihood of these communities.

Providing information to Canadians

Many people cite the environment as a top priority but do not connect their actions with environmental consequences regarding the products we consume, the habits that form the routines of our daily lives and the impacts of our individual actions. Making balanced decisions that take into account a broad range of social, economic and environmental aspects of our actions can be difficult and time consuming.

To make sustainable development a reality, Canadians require knowledge to inform their decisions and the actions they take.

Shifting towards sustainable choices demands readily accessible information and positive reinforcement. Research on sustainable development issues, and the transfer of that knowledge to the broader public, is critical to achieving Canada's sustainable development goals. NRCan's efforts to close the gap between acquiring and disseminating knowledge will lead to more sustainable activities.

Engaging Canadians

As a science-based department, NRCan has a great deal of information to share, but it also has a lot to learn from others. Resource dependent communities want a say in their collective futures. Similarly, those who live in urban areas are seeking solutions regarding the amounts of waste generation, transportation systems and their contribution to greenhouse gas emissions, among others.

Canadians want assurance that their input will be considered and incorporated when making decisions about the sustainable development of the country's natural resources. NRCan will seek the advice and perspectives of all Canadians through ongoing stakeholder engagement, by encouraging them to participate as informed parties in this process.

Working with partners to advance sustainable development

Sustainable development, by its very nature, requires the integration of input and feedback from diverse disciplines. Sustainable development issues also often transcend community, provincial and federal boundaries and jurisdictions. Consequently, it is essential that governments work together and with others outside of the public sector to move sustainable development initiatives forward.

Canadians want greater cooperation among different sectors and jurisdictions. They believe NRCan should pursue its responsibilities in partnership with an array of stakeholders and in ways that complement the work of other partners committed to sustainable development progress.

NRCan recognizes gains will be realized through openness to new approaches and adaptation to new knowledge, technology, information and ideas. We are committed to better coordination of sustainable activities and greater participation in shared opportunities – with other governments and departments at all levels, communities, industry, associations and individuals – through integrated planning and co-operative implementation.

Measuring sustainable development progress

Indicators such as groundwater quality, the stock of our forests or the take-up of recycling by industry can let us know if we are on track towards a healthier environment, a prosperous economy and a sustainable society. Progress can occur, and be measured, on a number of levels including the international, national, provincial, community and corporate arenas and, even, at the individual level.

Management tools and systems, targets and indicators are necessary to let Canadians know if we are moving in the right direction. They can also reveal areas requiring further action. As our understanding of the factors that influence sustainable development expands and deepens, there is a need to calibrate and communicate new knowledge to Canadians. A proactive approach to planning and corrective action is necessary in the short term to ensure longer term benefits.

NRCan's contributions to the development of criteria and indicators for sustainable development, as well as the dissemination of this knowledge, is essential to ensuring all stakeholders recognize where they can make a difference and take action within their areas of influence.

Maintaining a healthy environment

The need to act as stewards of our natural resources vs. the immediate economic benefits from its use are often in conflict. This reality demands "smart" resource development that strikes the right balance – resulting in a healthier environment and the assurance the integrity of ecosystems is not at risk, while ensuring ongoing economic growth through the development of green resource products, services and processes.

Increased education, dissemination of information, dialogue with stakeholders, working with partners, development of technology, legislation and management systems are all mechanisms that NRCan employs to address these trade-offs and to achieve results.

Ensuring a sustainable future

It is incumbent on Canadians, as stewards of a significant part of the earth's environment and resources, to demonstrate global leadership in sustainable development and to support the efforts of other countries as they adopt sustainable development practices.

NRCan must be a proactive partner, both domestically and internationally, supporting the efforts of governments, industry, communities and individuals to capitalize on knowledge and technology to generate economic growth and environmental solutions that meet the needs of society, now and in the future.

