Departmental Performance Report 2009-2010

For the period ending
March 31, 2010

The Honourable Christian Paradis,
P.C., M.P. (Mégantic-L'Érable)
Minister of Natural Resources

Canada

Natural Resources Canada

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Minister's Message

It is my pleasure to present the Departmental Performance Report for Natural Resources Canada (NRCan) for the reporting period ending March 31, 2010.

During this time, Canada began to emerge from the global recession with one of the strongest economies in the industrialized world. Its natural resources played a central role in this resurgence. The global economic recovery, however, is still fragile. The Government has therefore remained committed to keeping Canada's economy on track by working to complete the delivery of its successful Economic Action Plan (EAP).

Through the EAP, NRCan significantly expanded its ecoENERGY Retrofit – Homes program, taking direct action to maintain and create jobs when they were needed and in a way that effectively reduces Canada's greenhouse gas emissions. And NRCan's launch of the Clean Energy Fund is advancing Canadian leadership in tomorrow's clean energy technologies, creating long-term economic opportunities and environmental benefits.

NRCan also delivered EAP investments that are enhancing the competitiveness of the forest sector, driving long-term economic and environmental sustainability by fostering critical new markets, breakthrough products, and more efficient and environmentally-friendly processes. By rolling out the $1 billion Pulp and Paper Green Transformation Program, NRCan is helping the sector reduce GHG emissions, increase energy savings, and advance Canada's renewable energy production.

To ensure that the mining sector continues to contribute significantly to Canada's economy, NRCan launched the Green Mining Initiative, enabled new technologies and innovation in materials, and actively engaged in the on-going implementation of Canada's Corporate Social Responsibility Strategy. These initiatives are creating a more sustainable mining industry for the benefit of all Canadians.

In the North, the department's mapping, geomatics and geoscience-related activities support responsible development of the region's resource potential, attracting private investment, strengthening our understanding of the local environment and building capacity amongst northerners. NRCan's expertise continues to be used in mapping the underwater geological formations in the Arctic in support of Canada's submission under

the United Nations Convention on the Law of the Sea. The expansion of NRCan's Polar Continental Shelf Program not only strengthens one of the premier Arctic logistic facilities in the world, but also ensures the Program can play an integral role in the network of research infrastructure that the new Canadian High Arctic Research Station will anchor.

Across Canada, NRCan's commitment to improving both environmental protection and investor certainty for major resource projects continues to pay dividends for Canadians. By the end of 2009-2010, a total of 53 projects were being managed under NRCan's Major Project Management Office, representing close to $100 billion in potential new capital investment.

By identifying priorities for 2009-10 that were meaningful to Canadians and delivering real results, NRCan advanced its vision of improving the quality of life of Canadians by creating a sustainable resource advantage. And as a result of the Department's unwavering commitment to improving the competitiveness of Canada's natural resource sector, advancing leadership on the environment and enhancing the security of Canadians, we can all look forward to a more sustainable and prosperous future.

The Honourable Christian Paradis,
P.C., M.P. (Mégantic-L'Érable)
Minister of Natural Resources

Section I - Departmental Overview

Raison d'être

NRCan's vision is to improve the quality of life of Canadians by creating a sustainable resource advantage. It seeks to achieve this vision by working to improve the competitiveness of the natural resource sectors by ensuring the continuation of their significant contribution to Canada's economy; by supporting the sustainable development of Canada's resources in a manner that advances the country's global standing as a leader on the environment; and by using its knowledge and expertise of Canada's landmass to support the safety and security of citizens.

Responsibilities

The Minister of Natural Resources is specifically responsible for, or has responsibilities under, more than 30 <Acts of Parliament>[1]. The Minister's core powers, duties and functions are set forth in the *Department of Natural Resources Act,* the *Resources and Technical Surveys Act* and the *Forestry Act*. NRCan also works in areas of shared responsibility with the provinces.

Within the Government of Canada, the Minister of Natural Resources also has responsibilities for the natural resources <portfolio>[2], which includes the following:

- <**Atomic Energy of Canada Limited**>[3] (AECL);
- Two independent regulators: the <**National Energy Board**>[4] (NEB) and the <**Canadian Nuclear Safety Commission**>[5] (CNSC);
- Two offshore petroleum boards: the <**Canada-Newfoundland and Labrador Offshore Petroleum Board**>[6] (CNLOPB) and the <**Canada-Nova Scotia Offshore Petroleum Board**>[7] (CNSOPB); and
- <**Sustainable Development Technology Canada**>[8] (SDTC); the <**Energy Supplies Allocation Board**>[9] (ESAB) and the <**Northern Pipeline Agency**>[10] (NPA).

To deliver on its responsibilities, NRCan relies on a number of tools. It uses science and technology (S&T) to help address priorities and plan for the future. It develops policies, programs, and regulations that help create a sustainable resource advantage, supporting strong, competitive natural resource sectors that are environmentally and socially responsible. And it uses partnerships and international collaboration to help drive progress on issues important to Canadians.

Operating Context

In mid-2009 the world began pulling out of one of the deepest recessions in the past 50 years, as aggressive monetary and fiscal stimulus implemented by Canada and other like-minded nations put economies on the path to recovery. There are many encouraging signs that signal the success of this approach, with worldwide economic growth forecast to reach 4.6 percent in 2010. That said, the recovery is still fragile. Global growth indicators mask an unevenness between a strong recovery in many emerging countries, such as China and India, and more modest progress in some developed economies, such as the U.S. and Europe. And downside risks have risen sharply amid renewed financial turbulence, reflecting a drop in confidence in fiscal sustainability – particularly in Europe – and future growth prospects.

In Canada, stimulus measures taken by the government began to take hold, buoyed by the strength of the country's financial regulatory system. Through <Canada's Economic Action Plan>[11, 12] (EAP), targeted stimulus was delivered to communities, businesses and workers. EAP investments were also made to help ensure that Canada was in a solid position to succeed over the longer term in an ever-more globalized economy, where environmental leadership is emerging as a key competitive advantage.

The focus on the future is critical. Key trends that were underway prior to the recession have re-emerged and are expected to accelerate. Globalization and other long-term forces point to supply constraints for vital resources, rising demand from emerging economies, changing demographics, geopolitical uncertainties and growing expectations from citizens and investors for more responsible development. It is a future of complex economic, environmental, and social challenges and opportunities.

To succeed, Canada and its natural resource sectors are focusing on advancing a new approach to competitiveness, one that combines the economic imperatives of sound business drivers and improving productivity with the need to show environmental leadership and corporate social responsibility. They are continuing their move from a "volume" to a "value" focus, improving their regulatory processes to enhance both environmental protection and investor certainty. By working to produce and use resources in more efficient ways and by creating and commercializing greener products, technologies and services, a sustainable resource advantage is being secured for all Canadians.

NRCan Action

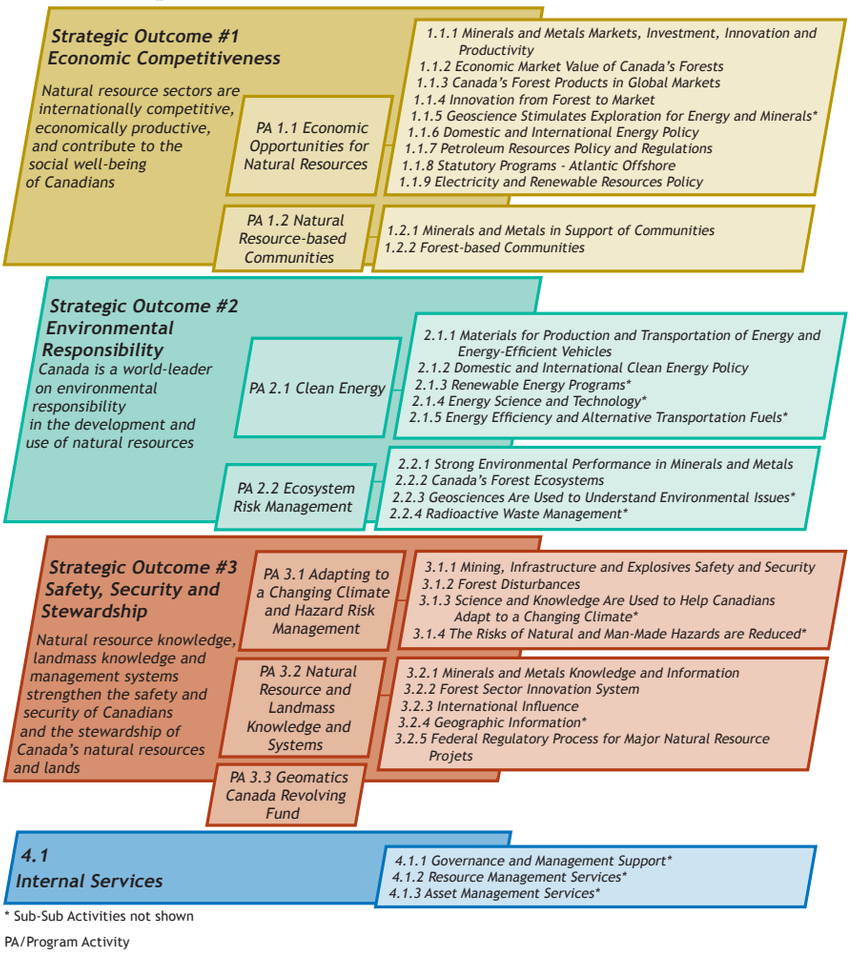
Over the past year, NRCan has responded vigorously to the demands for government action during the economic downturn, in the context of changing competitiveness.

To help secure Canada's economy, NRCan continued its important role in delivering the EAP. For example, the department provided significant short-term stimulus through the ecoENERGY Retrofit – Homes Program* and it made significant long-term investments in clean energy* and forest innovation* and market diversification*, in order to ensure Canada's future success. It also supported the development of programming to deliver assistance to communities and workers in transition through the $1 billion Community Adjustment Fund.

Through its successful Strategic Review exercise and its ongoing commitment to renewal, NRCan reshaped how it fulfills its core federal roles, with the objective of contributing more effectively to new competitiveness imperatives and positioning Canada as a new kind of global resource leader. Going forward, the department will work to pioneer geographic and knowledge frontiers where national interests deem it necessary; drive the national S&T and innovation agenda on natural resources; and build results-based, priority-driven partnerships. By using these roles to guide its activities, NRCan is leading the integration of sustainability and competitiveness for the long-term benefit of Canadians.

Strategic Outcomes and Program Activity Architecture (2009-10)

NRCan manages its program delivery through three Strategic Outcomes (SO) and seven Program Activities (PA) designed to achieve the expected results and deliver benefits to Canadians.



In 2009-10, NRCan developed new performance indicators at the SO and PA levels to address opportunities to improve reporting identified through Strategic Review. These performance indicators were used to enhance decision-making, manage more effectively, and present more balanced information to parliamentarians and Canadians.

At the SO level, NRCan tracks a range of key national macroeconomic and technological indicators that are influenced by departmental programming. At the PA level, NRCan has four classes of performance indicators:

- narrow socio-economic and technical measures;
- measures of knowledge and innovation[13];
- service standards; and
- indices of success[14].

In general, NRCan's performance target is for positive long-term trends in its performance indicators (usually over five years). Activity-specific performance targets have been established in cases where the department is reporting its performance in delivering highly specific outcomes (e.g., data on natural hazards). In a minority of cases, the department responds on an as-required basis to broader Government of Canada activities; hence, there are no specific targets for the corresponding indicators.

Performance Summary

Contribution of Priorities to Strategic Outcomes

In its <2009-10 Report on Plans and Priorities>[15], NRCan identified priorities (operational and management) it believed to be critical to the realization of its Strategic Outcomes and expected results over the planning period. These priorities helped shape the department's efforts in the development of policies, the pursuit of science and technology (S&T) initiatives, and the delivery of programs in support of its vision of improving the quality of life of Canadians by creating a sustainable resource advantage.

NRCan made significant progress in delivering on its priorities, while also encountering some challenges. The department's performance reflects its response to the demands of the day, while preparing for the economy of tomorrow. Through the EAP and key departmental initiatives, NRCan achieved real and lasting results for Canadians.

NRCan assesses its success in delivering priorities by summing the performance of constituent sub-activities in achieving "planned spending-weighted" expected results and outputs on time, and on budget. Performance status is assigned as follows: Met All, 99 percent and above; Mostly Met, 80-98 percent. Major accomplishments, status, and alignment to strategic outcomes and program activities for each of the operational and management priorities are summarized below.

Operational Priorities	Type	Status[16]	Linkages
Address climate change and air quality through clean energy	Previously Committed	Met All	SO 2 & 3 PA 2.1 & 3.1
Overview: NRCan delivered short-term economic stimulus through the <ecoENERGY Retrofit – Homes Program>*[17], supporting jobs in the home renovation industry, improving the efficiency of Canadian homes, and reducing Canada's greenhouse gas emissions. In 2009-10, the program provided grants to more than 190,000 homeowners. Unprecedented demand led the government to allocate additional funding of $285 million to augment the original EAP commitment. Longer term, the sustainability of Canadian energy production and consumption will be improved through NRCan's new <Clean Energy Fund>*[18], which is providing substantial investments in the research, development and large-scale demonstration of the clean energy technologies of tomorrow (e.g. carbon capture and storage).			
Support forest sector restructuring and a healthy forest	Previously Committed	Met All	SO 1, 2 & 3 PA 1.1, 2.2, 3.1 & 3.2
Overview: While the forest sector continued to face challenges during this period, particularly the North American lumber market, NRCan investments in expanding innovation and diversifying markets have set the course for sustainable and transformative change and improved long-term competitiveness in the forest sector. Through the EAP, the department, in collaboration with FPInnovations, accelerated research and applications of more efficient processes associated with the production of existing and the development of new forest-based products. Investments in the <Canada Wood Export Program>[19]*, the <North American Wood First Program>[20]*, and the <Value to Wood Program>[21]*, are diversifying markets at home and abroad. Trade and sales data show increased wood exports to China and South Korea (up 64 percent and 10 percent, respectively, from 2008 levels) and increased sales of Canadian wood used in North American non-residential construction of more than $100 million. In addition, the $1-billion Pulp and Paper Green Transformation Program was launched during the period and is showing early indications of major improvements of production processes, energy conversion (increased use of bio-based energy) and efficiency, and generally improved competitiveness in Canada's wood pulp sector.			

Operational Priorities	Type	Status[16]	Linkages
Strengthen Canada's minerals, metals and materials industries	Previously Committed	Met All	SO 1, 2 & 3 PA 1.1, 2.2 & 3.2
Overview: The competitiveness of the mineral exploration industry was supported in Budget 2009 with the renewal of the Mineral Exploration Tax Credit, as well as through the strengthening of strategic partnerships. Over the past year, longer-term competitiveness has been enhanced through the renewal and planned relocation of the CANMET Materials Laboratory to the McMaster Innovation Park, where its co-location with other industry and academic stakeholders will result in greater synergies. Competitiveness demands are being further addressed through the implementation of a pan-Canadian Green Mining Initiative which was endorsed by Mines Ministers in 2009 and supported by the Canadian Mining Innovation Council (CMIC) as a key element of their Mining Research and Innovation Strategy. As well, NRCan worked closely with other government departments to implement Canada's Corporate Social Responsibility Strategy. NRCan, in collaboration with the provinces and territories, launched a 10-year Mining Sector Performance Review to provide a balanced, credible, evidence-based analysis on the performance of the mining sector from 1998-2008.			
Advance Canada's resource interests and sustainability efforts in the Amercias and globally	Ongoing	Mostly Met	SO 1, 2 & 3 PA 1.1, 2.1 & 3.2
Overview: Over the past year, NRCan leveraged Canada's sustainable resource advantage for domestic and international economic growth. Work on Canada's Corporate Social Responsibility Strategy has helped the department advance this priority, supporting long-term business growth and success through the promotion of Canadian values internationally and contribution to the sustainable development of communities. Other key achievements include strengthening Canada's resource trade interests by demonstrating Canada's commitment to sustainable forest management through the Leadership for Environmental Advantage in Forestry initiative, as well as NRCan's role in Canada's Clean Energy Dialogue with the United States, which is exploring ways Canada and the U.S. can work together on key clean energy science and technology issues. In addition, NRCan signed Memoranda of Understanding with Brazil and Chile on the Sustainable Development of Minerals and Metals. Together, these efforts are working to leverage Canada's sustainable resource advantage for economic success in the short and long term. However, NRCan experienced some challenges in fully delivering on this priority. In the area of minerals and metals, the initiation of two planned industrial technology projects were delayed to 2010-11. In the area of clean energy policy, the timing of a new regulatory approach to Industrial Air Emissions was delayed to enable the Government of Canada to act in step with the US approach. Finally, in the area of forestry, the NRCan-led International Model Forest Network (IMFN) had engaged 31 countries, four less than the target.			
Support Canada's Arctic strategy and develop resource potential in the North	Ongoing	Met All	SO 1 & 3 PA 1.1 & 3.2
Overview: NRCan continued to support economic development in the North through its Geo-mapping for <Energy and Minerals (GEM) Program>[22]*. This program provides geological information in areas that were previously unmapped and helps lower risk to private sector investment in the development of potential energy and mineral resources. In addition, GEM is training the next generation of Canadian geoscientists required to address current and future capacity gaps, and contribute to prosperity and well-being in Canada's North. NRCan also worked with other government departments to produce science that will support Canada's submission to the UN Commission on the Law of the Sea for the delineation of Canada's continental shelf. This submission, if positively received, will allow Canada to gain international recognition of its sovereign rights over an area of more than 1.7 million square kilometres, for the exploration and development of natural resources on and below the seabed. NRCan also partnered with other government departments in planning for the Canadian High Arctic Research Station and spent $2 million allocated from the EAP to upgrade a key Arctic research facility in Resolute, Nunavut*.			

Operational Priorities	Type	Status[16]	Linkages
Improve regulatory performance for major natural resource projects	Previously Committed	Mostly Met	SO 3 PA 3.2
Overview: NRCan continued with the implementation of its Major Projects Management Office (MPMO), ensuring that Canada's sustainable resource advantage is enhanced by a stable, timely, well-coordinated and evidence-based regulatory process. A growing portfolio of major resource projects has benefited from these improvements, with a total of 53 projects managed under MPMO by the end of fiscal year 2009-10, representing close to $100 billion in potential new capital investment. NRCan also led collaborative efforts across the Government of Canada to identify opportunities to further improve the regulatory system for major resource projects. These efforts led to a number of actions proposed in the *Jobs and Economic Growth Act* – actions that will allow project reviews to start sooner, reduce delays and duplication, and result in better assessments. Fully delivering on this priority proved to be challenging; 81 percent of active or completed MPMO projects were on time or within eight weeks of their target timelines. Two key factors had an impact on those project reviews that were behind schedule; namely, process modifications related to the Supreme Court of Canada's *MiningWatch* decision, and process revisions caused by changes to the type of environmental assessment being conducted (largely originating from new project information or revised project proposals). In the absence of these factors, it is estimated that approximately 90 percent of project reviews would have met their respective targets.			
Strenghten the Canadian nuclear industry	Ongoing	Mostly Met	SO 1 & 2 PA 1.1 & 2.2
Overview: NRCan continued to help strengthen Canada's nuclear advantage by providing funding to Atomic Energy of Canada Limited (AECL) for its operations, including the development of the Advanced CANDU Reactor and for the safe and reliable operation of its laboratories. In December 2009, the government advanced on its commitment to restructure AECL, by issuing a call for proposals on the divestiture (in whole or in part) of AECL's commercial CANDU Reactor Division. In addition, NRCan worked with Health Canada to ensure that the best possible information on medical radio-isotopes was made available to the medical community in Canada in support of health care mitigation measures. An Expert Panel on Medical Isotope Production, established by the government in June 2009, submitted its report to the Minister of Natural Resources in November 2009. In response to the Panel's report, the government of Canada announced in March 2010 – amongst other measures – NRCan's Non-reactor-based Isotope Supply Program to invest in research, development and demonstration of novel isotope production technologies. Delivering on this priority was found to be more difficult than anticipated. Although a number of key milestones were achieved in NRCan's radioactive waste management programs, the completion of some milestones was delayed. These delays relate to program delivery such as planning, regulatory review, procurement, and implementation, as well as technical and social issues, similar to those experienced by other nations dealing with historic and legacy waste liabilities. The department has formally evaluated these challenges and put in place governance and program management responses that seek to address program delivery challenges and delays going forward.			

Management Priorities

Management Priorities	Type	Status	Linkages
Implement an integrated strategic framework and integrated planning and reporting	Ongoing Priority	Met All	SO 1, 2 & 3 PA 4.1
Overview: NRCan continued to advance horizontal collaboration and science and policy integration, as well as further implement its Strategic Framework. The Framework has worked to guide and underpin departmental decision-making and takes into account NRCan's vision and the importance of finding synergies within and among Canada's natural resource asset groups – the natural resource base, systems, and people and ideas. The Framework proved to be central to the success of NRCan's first Strategic Review, allowing the department to better understand how it needed to position itself for the future. As a result, NRCan was able to reallocate funding of more than $43 million to other government priorities, while becoming a department that is more efficient, clearly focused on core federal roles, and better aligned with the priorities of Canadians. NRCan also published its first Integrated Business Plan (IBP), demonstrating how NRCan is sharpening its focus and addressing issues important to Canadians. The IBP shows how the department integrates its programs, activities, and resources to deliver on priorities.			
Better integration and management of the natural resources portfolio	Previously Committed Priority	Met All	SO 1, 2 & 3 PA 4.1
Overview: To ensure the coherence of the Minister's diverse natural resource portfolio, NRCan developed a Portfolio Management Framework that articulates the principles of effective portfolio coordination. This complements NRCan's dedicated portfolio coordination office, which has now been operational for a full fiscal year (2009-10).			

Delivering on Canada's Economic Action Plan

NRCan received funding for new and expanded initiatives to deliver on Canada's EAP, as part of Budget 2009. Total funding received for 2009-10 for EAP initiatives was $349.7 million[23]; the department spent $339.8 million, or 97 percent. EAP initiatives, along with their respective budget and expenditures as of March 31, 2010, are presented below.

Expected Results	Indicators	Performance Status[24]	Budget 2009-10 ($ million)	Actual Spending 2009-10 ($ million)
Expanding Market Opportunities (Canada Wood Exports Program (CWEP), Value to Wood program, North American Wood First Program (NAWFP))				
Increase market opportunities for Canadian wood product producers through market development, branding, and technology development and transfer activities	Diversified markets for Canadian wood products; use of wood in North American non-residential construction; new markets for Canadian manufacturers of value-added wood products	Met All	19.0	18.3
Performance Summary: The CWEP contributed to an increase in wood exports to China and Korea by 64 percent and 10 percent respectively from 2008 levels. Likewise, the NAWFP influenced $54M in new Canadian wood sales and $54 million in US wood sales. The Value to Wood Program funded 24 research projects at five research organizations across Canada, and supported 200 technical projects to strengthen the competitiveness of the secondary manufacturing wood industry.				

Expected Results	Indicators	Performance Status[24]	Budget 2009-10 ($ million)	Actual Spending 2009-10 ($ million)
Expanding Market Opportunities (Support large-scale demonstrations of Canadian-style use of wood in offshore and domestic markets)				
Support initiatives to increase market opportunities for Canadian wood product producers in international (e.g., CWEP) and domestic (e.g., NAWFP) markets	Demonstration projects support initiatives to increase non-traditional uses of wood in offshore and domestic markets	Met All	4.3	3.8
Performance Summary: The offshore component of the large-scale wood demonstration initiative supported six wood-frame demonstration projects in China, South Korea and Italy. Additionally, domestic demonstration projects in Quebec and British Columbia are currently being considered for funding in 2010-11.				
Promoting Forest Innovation and Investment (Development of demonstration-scale pilot projects of new products for use in commercial applications)				
Construction of demonstration-scale pilot projects brings research to the next stage toward commercialization	An operating pilot plant to prove the scalability of new technology from laboratory to commercial application	Met All	3.0	2.2
Performance Summary: Collaborative research between NRCan and FPInnovations, through the Transformative Technologies Program, is advancing the commercialization of new and innovative value-added forest products. Planning for a partnership to construct a nanocrystalline cellulose pilot plant led to a $1.1 million commitment to carry out a feasibility and engineering study. As well, other pilot plants were under active consideration to produce lignin and methanol from pulp and paper streams for use in the manufacture of new industrial products and processes.				
Promoting Forest Innovation and Investment (Contributions to FPInnovations for its Transformative Technologies Program)				
To develop emerging and breakthrough technologies related to forest biomass utilization, nanotechnology and next generation forest products	New products and processes adopted by industry; new demonstration/pilot projects and trials; in-kind contributions leveraged from stakeholders; research institute consolidation	Met All	36.2	35.6
Performance Summary: A number of applications for the use of surplus biomass have been explored, ranging from energy production in mills to the extraction of biomaterials, including chemicals and nanocrystalline cellulose. In addition, inventory assessment technologies have been improved to provide more accurate, informative, and cost-efficient estimates of available biomass at the local and regional levels.				
Clean Energy Fund				
Support the development and demonstration of clean energy technologies	Number of demonstrated technologies that meet or surpass current best technologies; number of knowledge products made available to codes and developed standards; number of technology demonstrations leading to commercialization (long-term outcome)	Met All	20.0	20.0

Expected Results	Indicators	Performance Status[24]	Budget 2009-10 ($ million)	Actual Spending 2009-10 ($ million)
Performance Summary: In 2009-10, $466 million was announced for 3 large-scale carbon capture and storage (CCS) projects, and a further $146 million for 19 renewable and clean energy demonstration projects across Canada. Research, development and demonstration are being undertaken in the areas of clean fossil fuels; clean integrated electricity including clean coal, CCS, distributed power generation, and next generation nuclear; bioenergy systems; low emission industrial systems; clean transportation systems; and the built environment. The CEF is expected to reduce GHG emissions by 6 million tonnes by 2015.				
ecoENERGY Retrofit – Homes Program				
To encourage homeowners to improve the energy efficiency of their homes and reduce their greenhouse gas (GHG) emissions	Grant applications received; grant amounts paid; number of grants paid; GHG emission reductions; pre-retrofit assessments	Met All	232.9	231.2
Performance Summary: During 2009-10, there was unprecedented demand for the ecoENERGY Retrofit – Homes and the government provided additional funding of $285 million. On average, program participants have reduced their annual energy consumption by about 22 percent and GHG emissions by approximately 3 tonnes per house per year.				
Modernizing federal laboratories				
Maintenance and modernization of NRCan laboratories across Canada	Percentage of program funding contracted/awarded or out to tender for bids; percentage of funding not yet contracted/ awarded nor out to tender	Met All	17.1	17.1
Performance Summary: $17.1 million across 12 federal laboratory modernization projects was spent as planned. 141 (93%) of the 151 original work items were implemented. This has resulted in significant upgrades to NRCan facilities and improvement to NRCan's scientific capacity, while creating local employment. 171 jobs were created based upon benchmark stimulus employment metrics (1 job per $100,000 in infrastructure investment).				
Accelerating the Federal Contaminated Sites Action Plan				
Conducting site assessments, remediation and risk management activities on federal contaminated sites	Number of assessment projects planned, underway or completed; number of remediation/risk management projects planned, underway or completed	Met All	12.3	6.5
Performance Summary: The 4 assessment projects planned for 2009-10 and the first phase of the Booth Street Complex Remediation Project were completed, at lower than expected cost.				
Maintaining or upgrading existing Arctic research facilities				
Modernized and expanded logistics base in Resolute to support increased demands for Arctic logistics	Percentage of improved and upgrades logistics base completed	Met All	2.0	2.0
Performance Summary: NRCan partnered with other government departments to upgrade a key Arctic research facility in Resolute, Nunavut.				
Promoting energy development in Canada's North				
Conducting science and other activities to prepare for and respond to the Joint Review Panel (JRP) Report, related to the Mackenzie Gas Project	Geoscience expertise, effective preparations for and timely response to the JRP Report, and advice on induced oil and gas activities	Met All	3.0	2.8
Performance Summary: NRCan provided geoscience expertise related to the Mackenzie Gas project federal environmental assessment review. The department completed 501 new maps of northern Canada in support of this initiative.				

Performance by Strategic Outcomes

Strategic Outcome 1 - Economic Competitiveness

Natural resource sectors are internationally competitive, economically productive, and contribute to the social well-being of Canadians

Performance Indicator: Canada's share of world trade
Target: Positive five-year trend
Performance Against Target: Met All
Between 2004 and 2008 (the most recent data available) Canada's Trade Performance Index (TPI) ranking relative to all other nations for wood, wood products, and paper increased from 14th in the world, to 12th. Over the same period, Canada's TPI ranking for minerals, including energy and power, increased from 6th to 4th position.

Program Activity <Main Estimates>[25]	2008-09 Actual Spending	2009-10 ($M)				<Alignment to GoC Outcomes>[26] (or statutory obligations)
		Main Estimates	Planned Spending	Total Authorities	Actual Spending	
1.1 Economic opportunities for natural resources[27]	174.6	141.3	226.1	290.3	274.2	Strong Economic Growth
1.2 Natural resource-based communities[28]	11.2	11.2	11.1	14.8	10.9	Strong Economic Growth
Total	185.8	152.5	237.2	305.1	285.1	

Strategic Outcome 2 - Environmental Responsibility

Canada is a world leader in environmental responsibility in the development and use of natural resources

Performance Indicator:
(i) Canada's total annual energy savings due to efficiency;
(ii) NRCan's Contribution to advancement of innovative and environmentally responsible resource practices in the resource sector measured by uptake of knowledge, technologies, and demonstration projects
Target: Positive five-year trend
Performance Against Target: Met All
As of 2007, the most recent year for which data are available, energy efficiency in Canada had improved 16% since 1990. Using 1990 energy use as a baseline, Canada's energy savings due to efficiency increased from 908 petajoules (PJ) per annum in 2003 to 1,090 PJ per annum in 2007. Over the most recent five-year period for which data are available (2002-2006), NRCan's production of peer-reviewed scientific and technical papers in fields related to environmentally responsible practices in the resource sector was 1,847, an increase from 1,362 over the previous five-year period (1997-2001).

Program Activity <Main Estimates>	2008-09 Actual Spending	2009-10 ($M)				<Alignment to GoC Outcomes> (or statutory obligations)
		Main Estimates	Planned Spending	Total Authorities	Actual Spending	
2.1 Clean energy[29]	440.9	556.9	708.3	816.7	802.5	A Clean and Healthy Environment
2.2 Ecosystem risk management[30]	141.2	169.4	169.4	184.2	156.5	A Clean and Healthy Environment
Total	582.1	726.3	877.7	1,000.9	959.0	

Strategic Outcome 3 - Safety, Security and Stewardship

Natural resource knowledge, landmass knowledge and management systems strengthen the safety and security of Canadians and the stewardship of Canada's natural resources and lands

Performance Indicator: Contribution to the safety & security of Canadians, and the effectiveness of federal land stewardship and regulatory processes
Target: Positive five-year trend
Performance Against Target: Met All
Over the most recent five-year period for which data is available (2002-2006), NRCan's production of peer-reviewed scientific and technical papers in the field of geoscience, and in fields related to explosives' safety and security was 1,536, an increase from 1,445 over the previous five-year period (1997-2001). During the five-year period from 2005-06 to 2009-10, NRCan consistently exceeded its targets for timeliness and accessibility of landmass and natural hazard system data.

Program Activity <Main Estimates>	2008-09 Actual Spending	2009-10 ($M)				<Alignment to GoC Outcomes> (or statutory obligations)
		Main Estimates	Planned Spending	Total Authorities	Actual Spending	
3.1 Adapting to a changing climate and hazard risk management[31]	74.1	73.1	73.1	70.6	62.9	An Innovative and Knowledge-based Economy
3.2 Natural resources and landmass knowledge for Canadians[32]	83.1	101.7	101.7	124.2	113.5	An Innovative and Knowledge-based Economy
3.3 Geomatics Canada Revolving Fund[33]	1.0	1.9 -1.9	1.9 -1.9	7.7	0.5	An Innovative and Knowledge-based Economy
Total	158.2	174.8	174.8	202.5	176.9	
4.1 Internal Services[34]	258.8	177.0	177.0	310.5	306.3	
Sub-Total	**1,184.9**	**1,230.6**	**1,466.7**	**1,819.0**	**1,727.3**	
Statutory Programs						
1.1 Economic opportunities for natural resources	3,492.6	2,409.3	2,409.3	1,764.0	1,764.0	Statutory Obligations
Total NRCan	**4,677.5**	**3,639.9**	**3,876.0**	**3,583.0**	**3,491.3**	

Overview of NRCan's Financial and Human Resources

NRCan's actual spending for fiscal year 2009-10 was $3,491.3 million. Included in this amount is $1,764.0 million in support of the Atlantic Offshore Statutory Accords; the remaining $1,727.3 million was in support of departmental programs and initiatives.

Financial Resources ($M)

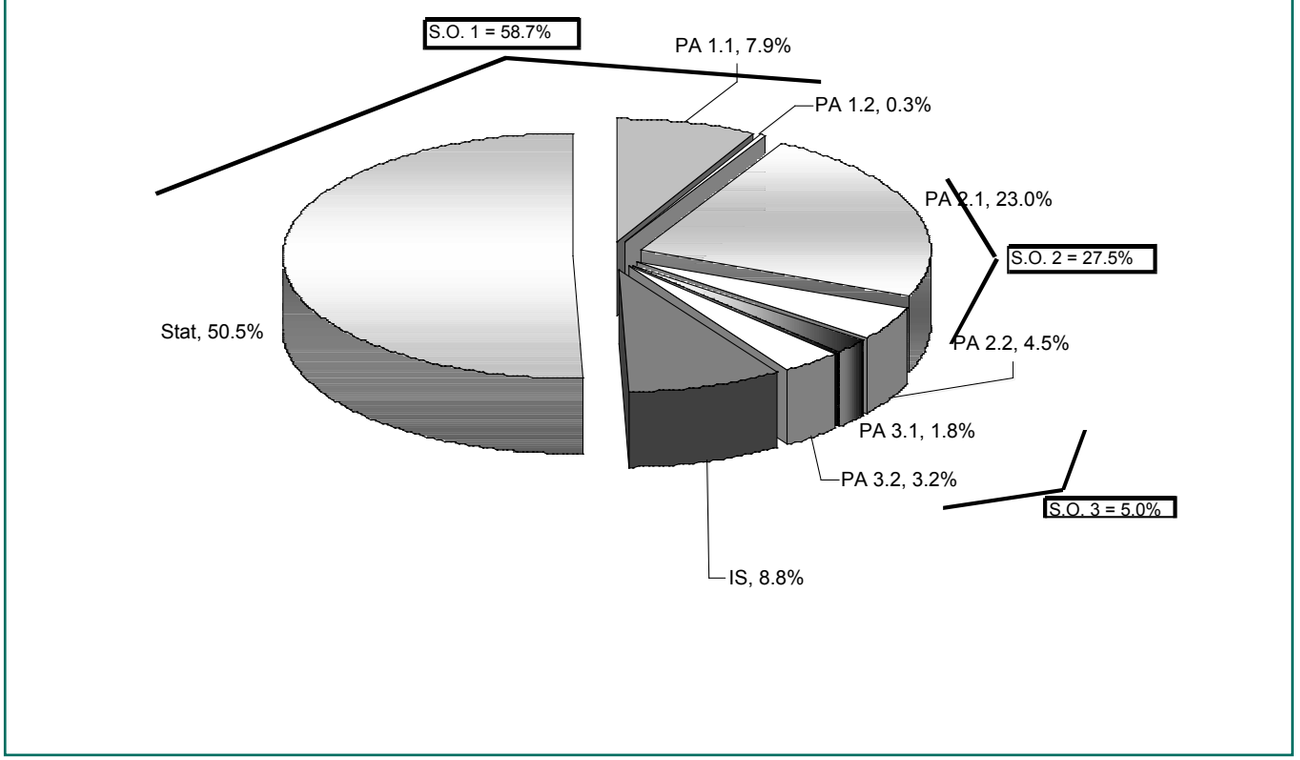
	Main Estimates	Total Authorities	Actual Spending
Program Spending[35]	1,230.6	1,819.0	1,727.3
Statutory Programs - Atlantic Offshore[36]	2,409.3	1,764.0	1,764.0
Total	**3,639.9**	**3,583.0**	**3,491.3**

Human Resources (Full-time Equivalents)

Planned	Actual	Difference[37]
4,513	4,566	53

Actual Spending by Strategic Outcome and Program Activity

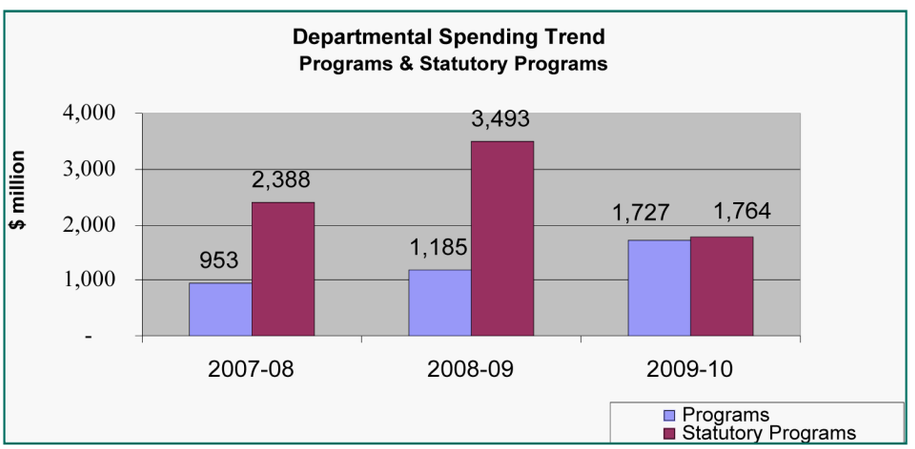
Under Strategic Outcome (SO) 1 – Economic Competitiveness, NRCan spent 59 percent of its resources. The Program Activity (PA) 1.1 – Economic Opportunities for Natural Resources, makes up the largest portion of the spending at 58.7 percent, given that it includes the statutory payments under the Atlantic Offshore Accords. Under Strategic Outcome (SO) 2 – Environmental Responsibility, NRCan spent 27.5 percent of its resources. In support of SO 2 – Environmental Responsibility, PA 2.1 – Clean Energy had the next highest spending at 23 percent of the total and at 84 percent of the Strategic Outcome. For SO 3 – Safety, Security and Stewardship, expenditures totaled 5 percent of departmental funding. Finally, PA 4.1 – Internal Services comprised 8.8 percent of expenditures.



PA 1.1 Economic Opportunities for Natural Resources
PA 1.2 Natural Resources-based Communities
PA 2.1 Clean Energy
PA 2.2 Ecosystem Risk Management
PA 3.1 Adapting to a Changing Climage and Hazard Risk Management
PA 3.2 Natural Resource and Landmass Knowledge and Systems
PA 3.3 Geomatics Canada Revolving Fund
IS Internal Services
Stat: Statutory Programs

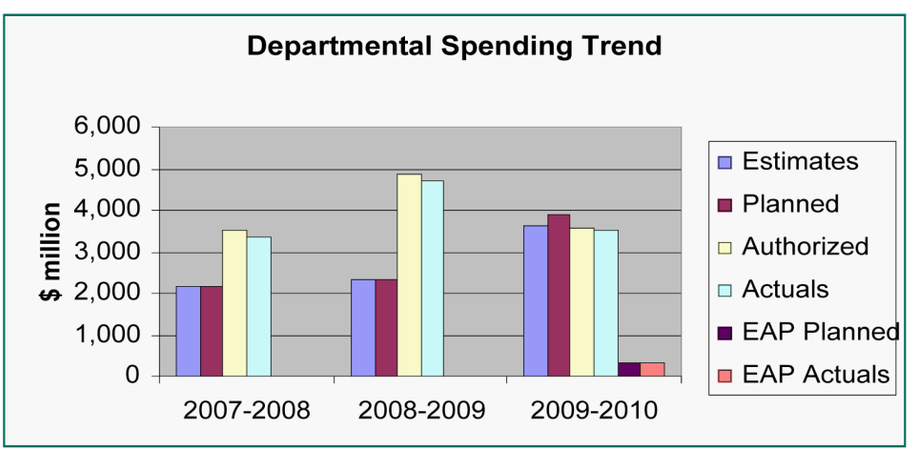
Expenditure Profile

Spending for departmental programs increased in 2009-10 from previous years – a $774.4 million and $542.4 million increase from 2007-08 and 2008-09 levels respectively. This is attributable to increased funding for the ecoENERGY Retrofit – Homes Program* ($232.9 million), the Pulp and Paper Green Transformation Program ($49.8 million), the completion of settlement agreements related to the Soldier Settlement Board ($83.0 million), Investing in Canada's Forest Sector* ($53.5 million), Accelerating the Federal Contaminated Sites Action Plan* ($12.3 million), and funding to support the modernization of federal laboratories* ($17.1 million). Overall, the spending increase for programs in 2009-10 is primarily associated with the EAP.



Pursuant to the Atlantic Offshore Accords, NRCan receives royalties for offshore oil and gas production, and subsequently pays a like amount to the provinces. As such, the expenditures under the various Accords are based primarily on oil and gas royalty revenues received, which are affected by both the price of oil and gas as well as production levels. The reduction of royalties received during 2009-10, from previous years' levels, reflects lower oil and gas prices and production levels. Hence, the decrease in Statutory programs.

The graph below compares the department's three-year spending trend for estimates, planned spending, authorized authorities, actual spending, and planned spending and actual spending for EAP initiatives.



Voted and Statutory Items ($M)

Voted or Statutory Items	Truncated Vote or Statutory Wording	Actual Spending 2007-08	Actual Spending 2008-09	Main Estimates 2009-10	Actual Spending 2009-10
Vote 1[38]	Operating Expenditures	678.6	719.2	700.3	869.7
Vote 2[39]	Capital Expenditures			0.0	8.9
Vote 5[40]	Grants and Contributions	211.4	382.0	457.0	780.5
Statutory	Minister of Natural Resources – Salary and Motor Car Allowance	0.1	0.1	0.1	0.1
Statutory	Contributions to Employee Benefit Plans	57.9	58.3	53.1	67.1
Statutory	Infrastructure costs relating to the exploration, development, production or transportation of oil and gas in the offshore area of Nova Scotia	0.6	0.6	1.4	1.3
Statutory	Canada-Newfoundland and Labrador Offshore Petroleum Board	2.2	4.1	7.2	4.9
Statutory	Canada-Nova Scotia Offshore Petroleum Board	2.6	2.8	3.4	2.2
Statutory[41]	Payments to the Nova Scotia Offshore Revenue Account	493.2	577.4	351.5	109.4
Statutory[42]	Payments to the Newfoundland Offshore Petroleum Resource Revenue Fund	1,701.0	2,351.0	2,045.9	1,180.9
Statutory	Grant to the Canada Foundation for Sustainable Development	1.6	19.0	20.0	0.0
Statutory[43]	Newfoundland and Labrador Fiscal Equalization Offset Payments	188.6	556.7	0.0	465.3
Statutory	Grants in Support of Energy Costs Assistance Measures	0.0	0.0	0.0	0.0
Statutory	Spending of proceeds from the disposal of Crown Assets	0.3	0.4	0.0	0.5
Statutory	Refund of amounts credited to revenues in previous years	1.3	0.0	0.0	0.0
Statutory	Grant to the University of Calgary, Institute for Sustainable Energy, Environment, and Economy	0.0	5.0	0.0	0.0
Statutory	Geomatics Canada Revolving Fund - Operational expenditures - Respendable revenue	3.0	0.9	0.0	0.5
Total		**3,341.1**	**4,677.5**	**3,639.9**	**3,491.3**

Risk Analysis

NRCan manages a wide range of uncertainties that could affect its ability to deliver its objectives and priorities. The identification of and response to these uncertainties constitute NRCan's Integrated Risk Management Framework (IRMF).

In 2009-10, the department took a proactive approach to identify and manage the risks associated with the delivery of NRCan-led EAP initiatives. With large expenditures and tight timeframes, there were high inherent risks to achieving EAP objectives.

To address these risks, NRCan established and implemented effective stewardship measures for individual EAP initiatives, as well as for the overall action plan, which included monitoring on an ongoing basis. To date, NRCan's elements of the EAP have been successfully delivered on time and on budget, and the outlook going forward is favourable.

In addition, the department successfully managed the risk related to the delivery of the multi-year project for renewing and relocating the CANMET Materials Technology Laboratory to the McMaster Innovation Park in Hamilton, Ontario. Risks relating to the construction of the new building, including human resources plans, were effectively mitigated by including contingencies in the costing and financial forecasting model, and by ensuring ongoing oversight at all levels within NRCan, and between NRCan and McMaster University.

In cooperation with Atomic Energy of Canada Limited (AECL) and Health Canada, the department managed risks to ensure safe and prudent operations of the National Research Universal (NRU) reactor, as well as the short- and long-term security of supply of medical isotopes for Canadians. Following recommendations from the Expert Review Panel on Medical Isotope Production, the Government of Canada announced – amongst other measures – NRCan's Non-reactor-based Isotope Supply Program, to invest in research, development and demonstration of novel isotope production technologies.

Finally, NRCan managed, on time and on budget, the high-priority project of collecting technical data that will be used to support Canada's submission to extend our continental shelf under the United Nations Convention on the Law of the Sea (UNCLOS). Data collection is proceeding on schedule, and current funding levels are projected to be fully adequate.

Section II – Analysis of Program Activities by Strategic Outcome

This section provides performance information on the delivery of programs and EAP initiatives that are critical to the realization of our strategic outcomes and priorities. More information about these programs and initiatives, as well as supporting evidence from <internal evaluation and audit reports>[44], can be found on our <website>[45].

During the reporting period, NRCan monitored and tracked its progress through quarterly reviews, which enabled early detection of problem areas and, wherever possible, implementation of corrective actions to deliver expected results within plans, timelines and budgets. These reviews also identified opportunities for improving performance measures used in the 2009-10 Performance Measurement Framework. The performance measures are currently being addressed by the department. The intention is to improve the quality of the framework, with a view to enhancing decision-making, managing more effectively, and presenting better and more balanced information to Parliament and Canadians. As a result, performance indicators in this document differ from those published in the corresponding <2009-10 Report on Plans and Priorities>[46].

Strategic Outcome 1 - Economic Competitiveness

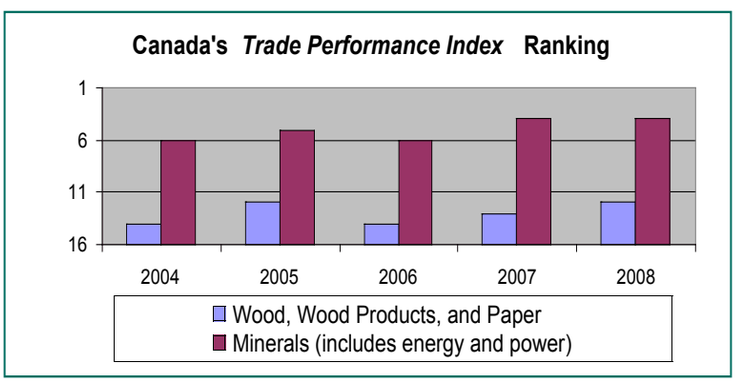
This strategic outcome encompasses the long-term objectives of a wide range of NRCan programming directed towards sustaining and strengthening natural resource sectors that are internationally competitive, economically productive, and contribute to the well-being of Canadians.

	2009-10 Financial Resources ($ millions) Net			2009-10 Human Resources (FTEs)	
	Planned Spending	Total Authorities	Actual Spending	Planned	Actual
Program	237.2	305.1	285.1	930	913
Statutory	2,409.3	1,764.0	1,764.0		

Expected Result	Performance Indicators	Targets	Status
Natural resource sectors are internationally competitive, economically productive, and contribute to the social well-being of Canadians	Canada's share of resource-based world trade	Favourable five-year trend	Met All

Performance Summary:

For 2009-10, NRCan met its target for positive trends in Canada's share of resource-based world trade[47]. In terms of competitiveness, Canada's rank in wood products trade improved in 2008 (most recent data). Also, Canada's trade in minerals performance, including energy and power, showed a favourable five-year trend. Canada maintained its position vis-à-vis other countries from 2007-08.



Meeting our Commitments

Although emerging from an economic downturn, Canada's trade performance in natural resources was strong. NRCan was working to accelerate economic development, prosperity and sustainability through S&T activities and programs, market development programs, as well as research and analysis as inputs to developing policy and regulations. These sectors are a driving force of Canada's economy, and in particular, in communities outside large cities.

NRCan, in collaboration with provinces and territories, worked to position Canada's natural resource sectors to take advantage of opportunities. NRCan's forest-based communities programming was effective at mobilizing partners, as indicated by consistent leveraging of NRCan funding: in 2008-09, NRCan contributed $7.2 million; its two community partnership programs were able to leverage $15.9 million in cash and in-kind contributions from partners to meet common goals.

Supported by NRCan's programs, the capacity of forest-based and Aboriginal communities to diversify their economies also increased. Evidence indicates that public engagement in local forest policy development and

transitional issues is increasing in communities engaged in the Forest Communities Program. Since 2005 there has been an estimated 20 percent increase in the number of partners engaged in community policy initiatives focusing on capacity building.

Benefits to Canadians

The natural resource sectors are a strong engine of economic growth and job creation in Canada. NRCan has been working to offset recent setbacks and support the Canadian natural resource sectors as they develop, adapt and grow. Investments in the natural resource sectors will mean more innovation, jobs for Canadians and a new kind of competitiveness, now and in the future.

Natural resources are also central to the economy of many communities across Canada, and natural resources industries are among the largest private employers of Aboriginal peoples. As the economic downturn and broader restructuring, notably in the forest sector, led to job losses, NRCan worked with communities to mitigate and alleviate the short-term effects. In the longer term, NRCan is working with partners in the private sector, academia, Aboriginals and other government departments to facilitate skills development as well as business and employment opportunities in Aboriginal communities.

Lessons Learned and Corrective Actions

Throughout the reporting period, NRCan evaluated many of its programs. The knowledge gained from these evaluations was then used to inform program delivery. In particular, several evaluations of forest programs recommended enhancement of performance measurement, regular monitoring and additional resources to expand the dissemination of technology transfer activities. NRCan has addressed these recommendations. It was found that the use of effective local and regional partnerships is key to delivering community-level, capacity-building initiatives, resulting in increased knowledge, skills and capacity to benefit from the evolving natural resource economy within resource-based communities. In addition, a new indicator of partnership effectiveness will be considered to monitor the level of funding leveraged under this strategic outcome.

It has been found that real and durable transformation in the forest sector lies in the synergies between this and other sectors, like energy, that leads to a manufacturing sector that relies on forest fibre inputs, but produces a much broader range of products, including bio-energy and bio-products. Future demonstration investments will be directed toward supporting these technology platforms. Another lesson learned was that future assessments of the performance of the Forest Communities Program will focus on funds leveraged by partnership organizations using seed funding from NRCan.

Managing Risks

In the roll-out of a major initiative, the renewal and planned relocation of the CANMET Materials Technology Laboratory, NRCan monitored and managed risks through multi-level oversight mechanisms. Furthermore, NRCan was able to manage the risks associated with the delivery of EAP initiatives so that implementation was both on time and on budget.

NRCan managed its medium to medium-high risk associated with resource-based communities, to ensure a sound alignment of programming and a strong relationship with various stakeholders. To enhance our partnerships, and thereby mitigate program risks, NRCan actively participated in many community-based projects. In addition, our recipient partners followed a well-defined reporting regime to help ensure that desired results were achieved.

Program Activity 1.1 - Economic Opportunities for Natural Resources

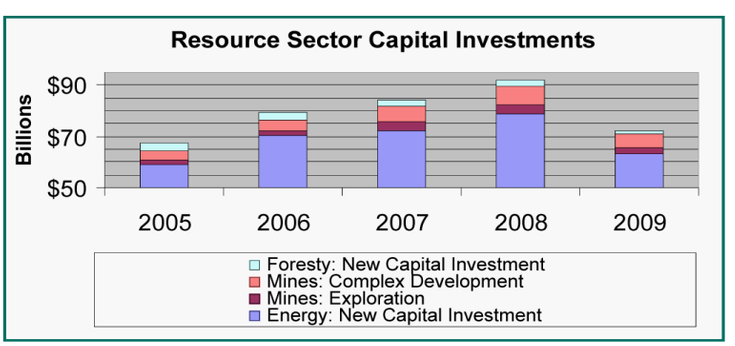
This program activity is designed to promote innovation, investment and the enhancement of the competitiveness of Canada's natural resources and related industries through the provision of knowledge and tools, trade development and the removal of barriers, both at home and abroad. This group of programs also delivers policies and regulatory and legislative work to manage federal responsibilities associated with Canada's oil, natural gas and electricity sectors, including critical energy infrastructure protection. It also provides oversight of the statutory programs for the Atlantic Offshore Accords.

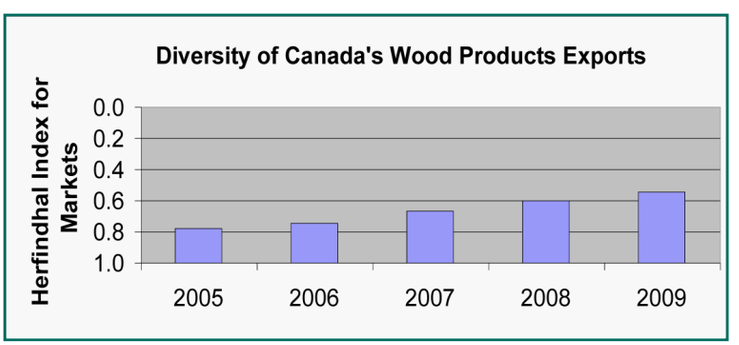
	2009-10 Financial Resources ($ millions) Net			2009-10 Human Resources (FTEs)	
	Planned Spending	Total Authorities	Actual Spending	Planned	Actual
Program	226.1	290.3	274.2	868	876
Statutory	2,409.3	1,764.0	1,764.0		

Expected Result	Performance Indicators	Targets	Status
Competitive national and international markets, stable economic opportunity and investment in natural resources	Capital investments and exploration investments in the resource sector[48]	Favourable five-year trend	Met All
	Diversity of Canada's wood products exports[49]	Favourable five-year trend	Met All
	Performance of programs in achieving expected results within plans, timelines, and budgets	Greater than 99% of programs delivered on plan, on time, and within budget (see endnote 14)	Met All

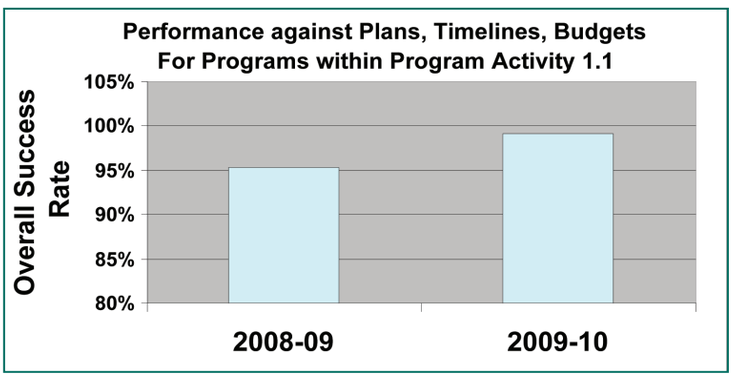
Performance Summary:

As expected during a recession, levels of capital investments declined in 2009 compared to 2008 in Canada's forests, mines, and energy industries. Despite this, trends over the last five years were positive in the mines and energy sectors, and natural resource-based investment has strengthened Canada's economy. The declining trend for forestry reflects the profound restructuring that has taken place in that sector. However, the diversity of Canada's wood products exports has increased over the past five years, a positive development as it increases the resilience of Canada's forest sector to changes in market conditions and consumer demands. Overall, NRCan met





its performance target for programs, achieving expected results within plans, timelines, and budgets.



Meeting our commitments

Competitiveness and Innovation

NRCan worked closely with provincial and territorial Ministers responsible for mining to ensure that the mining sector remained competitive and innovative. To this end, Ministers responsible for mining agreed to drive action to improve Canada's regulatory system, to support competiveness and position Canada for economic recovery. For the eighth consecutive year, Canada remained the top destination in the world for exploration spending. In 2009, Canada accounted for 16 percent of total planned world exploration budgets, or $1.2 billion.

In support of the Green Mining Initiative, NRCan established a Multi-Stakeholder External Advisory Committee and a federal/provincial/territorial working group to develop new green technology and practices for Canadian businesses to enhance global competitiveness of the Canadian mining industries. As well, two research papers were prepared: *Status of Green Mining in the Canadian Mining Sector* and *Study of Green Federal Initiatives and their Relevance to Mining and Exploration Companies*.

NRCan engaged with the Atlantic provinces and utilities through the Atlantic Energy Gateway initiative to promote and facilitate the development of clean and renewable energy sources in Atlantic Canada. The initiative is designed to complement all current and future energy plans and resources being undertaken in the region. In addition to helping to reduce greenhouse gas emissions in Atlantic Canada, the initiative is also designed to help the region capture economic benefits from the development and export of clean and renewable energy.

During a period of unprecedented weakness in the US housing market, efforts to diversify geographic markets for Canada's wood products continued to yield results when they were most needed. The <Canada Wood Export Program>*[50] led to significant increases in wood exports to China (up 64 percent to $381 million and a doubling of softwood lumber exports by volume) and South Korea (up 10 percent to $97.7 million) over 2008 levels. NRCan signed a Memorandum of Understanding with the City of Shanghai, China, on the use of wood products for affordable housing construction, which holds the potential to tap into large new markets. The <North American Wood First Program>*[51] continued to increase the use of wood in both Canada and the United States outside of the residential sector, through the provision of education, promotion and technical advice. This included directly influencing the choice of wood in almost 150 non-residential building projects, resulting in an increase in wood sales of more than $100 million. In addition, the <Value to Wood Program>*[52] funded 24 research projects at five research organizations across Canada, and supported more than 200 technical projects that will generate new and improved wood products and processes for the

secondary wood products manufacturing sector. Finally, the <Large-Scale Wood Demonstration Projects>*[53] supported six wood-frame demonstration projects in China, South Korea and Italy. For example, wood demonstration projects were erected at Expo 2010 in Shanghai, an event that is expected to draw an estimated 70 million attendees. In South Korea, a four-story duplex was constructed to illustrate how wood-frame construction can be energy-efficient, cost-effective, and in compliance with stringent fire, acoustic and seismic requirements.

Major buyers of wood and paper products worldwide are growing increasingly concerned with the environmental attributes of the products they purchase. Through the Leadership for Environmental Advantage in Forestry (LEAF) Program, NRCan worked with the forest industry and Canadian embassies and consulates to position Canada's world-class standards for sustainable forest management and environmental stewardship as a market advantage. In 2009-10, LEAF supported activities in the United States, Europe and Asia in areas like green building and procurement policies. For example, advocacy efforts helped influence the development of a green procurement policy by Sears, which included forest certification and represented concrete recognition of Canada's environmental credentials.

Forest innovation and investment was further supported through the <Transformative Technologies Program>*[54], through which FPInnovations is working to harness emerging and breakthrough technologies. For example, research conducted on nanocrystalline cellulose (derived from forest biomass) helped establish the viability of wood-based materials for the automotive, pharmaceutical and packaging industries. Furthermore, <demonstration projects>*[55] of operational-scale pilot plants are contributing to the commercialization of forest product-based technologies, processes, and products.

New Discoveries of Mineral and Energy Resources

The third phase of NRCan's <Targeted Geoscience Initiative>[56] (TGI-3), delivered in partnership with industry and universities, provided integrated geoscience knowledge pertaining to areas of high base metal potential, in order to stimulate private-sector resource exploration. TGI-3 exploration has leveraged significant funding from industry. To date, the TGI-3 expenditure has leveraged more than five times its funding from private investors and has already exceeded this ratio in British Columbia and Manitoba[57].

The <GeoMapping for Energy and Minerals Program>[58] (GEM) is focused on public geoscience in the North. In response to the economic downturn, spending was increased by $8 million, to $30 million for 2009-10, and small and medium-sized geophysical firms were contracted for data acquisition work. This accelerated spending enabled GEM to realize a very successful field season in which 9 major airborne surveys were completed. The GEM program is on track to map Canada's North to modern geologic standards; as of March 2010, 41.5 percent of Canada's Arctic region was adequately mapped to modern standards.

The new geological data collected from the 2009 field season was presented at geoscience forums such as the Territorial Geoscience Fora, the Mineral Exploration Roundup and the Prospectors and Developers Association of Canada's annual convention. As a result of the GEM program's work, industry has significantly increased their staking programs in Labrador, and on the Melville and Cumberland peninsulas in Nunavut.

Another key component of GEM is the establishment of community engagement and local economic opportunities created through field training and employment of community members, as well as good community relations through liaising with local schools and purchasing local goods and services. An Advisory

Group of Northerners was established and its advice is being actively followed, in addition to well-established, cost-shared collaborations with provincial, the Polar Continental Shelf Project and industry.

A 2009 <evaluation of geoscience programs>[59] related to economic opportunities concluded that they capitalized on opportunities to share with partners and stakeholders information, financial and in-kind resources, expertise and data, which has helped to maximize outputs on fixed budgets; contributed to the efficiency of other government departments and industry through the transfer of technology; and achieved significant cost reductions by coordinating data collection and other activities with their partners in other federal departments, provincial governments and the private sector, thereby reducing duplication.

Nuclear Energy Sector Renewal

The government continued to strengthen Canada's nuclear advantage by providing funding to Atomic Energy of Canada Limited (AECL) for its operations, including the development of the Advanced CANDU Reactor and several programs designed to maintain safe and reliable operations at the Chalk River Laboratories. Following an announcement in May 2009 that the government was moving forward with the restructuring of AECL, the process towards the divestiture, in whole or in part, of AECL's commercial CANDU Reactor Division was launched in December 2009, with a call to potential investors to submit proposals. The transaction is targeted for completion in fiscal year 2010-11. In addition, NRCan also worked with Health Canada to ensure that the best possible information on medical radio-isotopes (specifically, Technetium-99m) was made available to the medical community in Canada in support of health care mitigation measures. An Expert Panel on Medical Isotope Production was established by the Government in June 2009. The Panel submitted its <report>[60] to the Minister of Natural Resources in November, of the same year. In response to the Panel report, the government of Canada announced in March 2010 - amongst other measures - NRCan's Non-reactor-based Isotope Supply Program to invest in research, development and demonstration of novel isotope production technologies.

Contribution in Domestic and International Fora

NRCan worked to ensure that Canada's energy interests will be well-positioned in key international fora in 2010, namely the G8/G20 summits and the World Energy Congress, to be held in Quebec. In cooperation with the Department of Foreign Affairs and International Trade (DFAIT) and Environment Canada (EC), NRCan developed and refined Canada's position related to energy topics in the G8 such as carbon capture and storage, clean energy science and technology, and energy poverty. NRCan also collaborated with DFAIT, Finance Canada and EC in developing Canada's position on the rationalization and phasing out of inefficient fossil fuel subsidies in preparation for the 2010 G20 Leaders' Summit. Energy interests were also advanced bilaterally through the Canada-US Energy Consultation Mechanism. A new Memorandum of Understanding on energy cooperation with India was negotiated, which will help to build commercial opportunities with this important emerging economy.

During 2009-10, NRCan worked closely with DFAIT and CIDA in the implementation of Canada's Corporate Social Responsibility Strategy. NRCan also participated in key international events, such as China Mining, Indaba (South Africa) and the annual Prospectors and Developers Association of Canada conference, to promote trade and investment for Canada's minerals, metals and materials. The department led the preparation of expert advice as panel members for the United Nations Commission for Sustainable Development (UNCSD).

Domestically, NRCan organized a series of energy roundtables in fall 2009. These brought together a wide range of senior decision-makers from government, industry, academia, environmental non-governmental organizations, and other key sectors to discuss the next steps for advancing renewable energy production and clean energy research and systems in Canada. As a result of these discussions, NRCan produced a <series of reports>[61] that were shared with stakeholders and members of governments to contribute to ongoing discussions on Canada's energy future.

Program Activity 1.2 - Natural Resource-based Communities

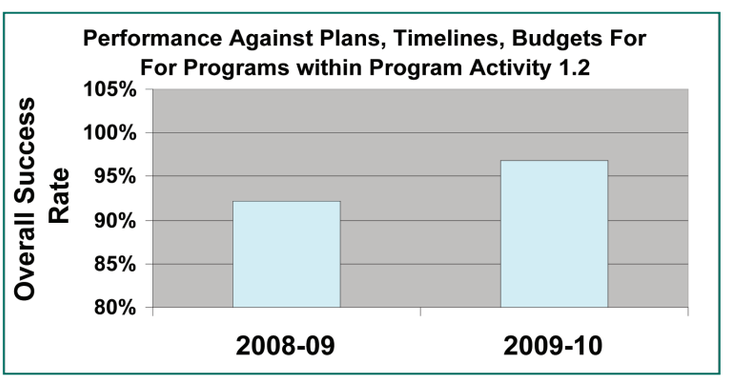
This program activity is targeted to increase Canada's knowledge of the impacts of the resource sectors' on communities that have a substantial reliance on resource-based industries and to improve the capacity and knowledge for increasing the number of opportunities through value-added products and services.

2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
11.1	14.8	10.9	62	37

Expected Result	Performance Indicators	Targets	Status
Increased knowledge, skills and capacity to benefit from the evolving natural resource economy with resource-based communities (both Aboriginal and Non-Aboriginal)	Performance of programs in achieving expected results within plans, timelines, and budgets	Greater than 99% of programs delivered on plan, on time, and within budget (see endnote 14)	Mostly Met

Performance Summary:

Overall, NRCan mostly met its performance target for programs, achieving expected results within plans, timelines, and budgets. Although this improved in 2009-10, the department experienced challenges delivering on all elements of this program activity. In the area of mines and minerals, fewer than planned intellectual property kits for assisting communities with competitiveness and environmental performance were completed. In the area of forestry, while key projects and initiatives were implemented, more time is required to realize the full economic impacts of community-based programming. The department's success in delivering today's programs is a leading indicator of the capacity of resource-based communities to benefit from the evolving natural resource economy.



Meeting our Commitments

Partnerships and Dialogue

NRCan continued to build international partnerships and signed Memoranda of Understanding with Chile, Brazil, China and India and a Letter of Intent with Mongolia. These are focused on facilitating dialogue on best practices in mining, sharing knowledge and information, exploring opportunities for joint research, and engaging in cooperative activities that will support the efforts of both countries to promote the sustainable development of their respective mineral-related industries. NRCan worked with DFAIT and CIDA to promote Canada's Corporate Social Responsibility Strategy by participating in multi-stakeholder events/ workshops in Canada and internationally (e.g., Australia, Ecuador, Colombia). NRCan hosted the Secretariat and was an active participant in the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development to foster cooperation on issues related to improving the contribution mining, minerals and metals make to sustainable development. NRCan was also an active participant in the African Mining Partnership and engaged in discussions with the UN Commission on Sustainable Development and the World Bank.

Domestically, Canadian mines ministers agreed to leverage Canada's comparative advantage in mining and identified <priorities going forward>[62] at the annual Energy and Mines Ministers Conference. Other partnerships and dialogue were fostered through working with the Mining Association of Canada, Vancouver Roundup, and the Prospectors and Developers Association of Canada.

Collaborative Initiatives

In 2009-10, the <Forest Communities Program>[63] and the <First Nations Forestry Program>[64] collectively supported more than 225 community, regional-level, and national partnership projects and initiatives aimed at increasing the capacity of forest-based and Aboriginal communities to make the transition to more diversified economies. Examples of key projects and initiatives to assist forest-based communities in achieving this outcome include: feasibility studies for communities to take advantage of biomass as a potential source of energy production; projects aimed at Aboriginal youth engagement, skills development and training; and climate change research and forest management adaptation strategies at the community level.

In addition, NRCan supported the federal Regional Development Agencies responsible for delivering the $1-billion Community Adjustment Fund to create employment opportunities in communities affected by the economic downturn, including those that are resource-dependent.

Strategic Outcome 2 - Environmental Responsibility

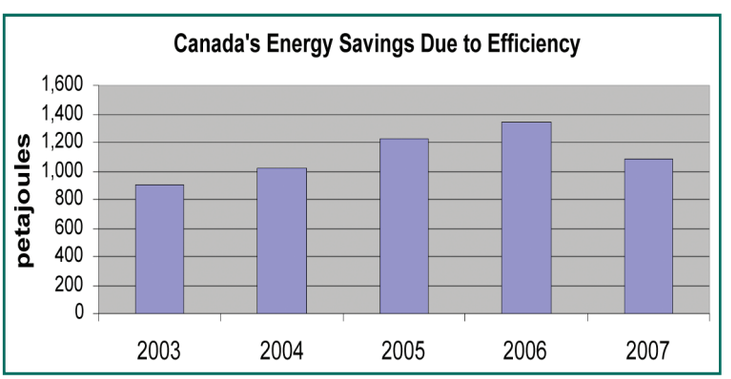
This strategic outcome encompasses the long-term objectives of a wide range of NRCan programming directed towards sustaining and strengthening Canada as a world leader in environmental responsibility in the development and use of natural resources.

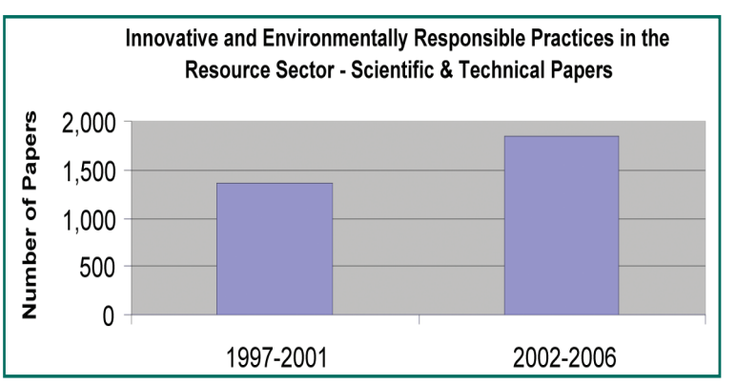
2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
877.7	1,000.9	959.0	1,287	1,211

Expected Result	Performance Indicators	Targets	Status
Canada is world leader on environmental responsibility in the development and use of natural resources	Canada's total annual energy savings due to efficiency	Favourable five-year trend	Met All
	NRCan's contribution to advancement of innovative and environmentally responsible practices in the resource sector measured by uptake of knowledge, technologies, and demonstration projects	Favourable long-term trend	Met All

Performance Summary:

NRCan met its targets for positive trends in Canada's total energy savings due to efficiency[65], and its contribution to the advancement of innovative and environmentally responsible practices in the resource sectors as measured by the uptake of knowledge, technologies and demonstration projects. This is evidenced by a 26 percent increase in publications of scientific and technical papers in 2001-2006 compared to 1997-2001[66].





Meeting our commitments

Increasingly, access to natural resources and the sustainable ways they are harnessed and used is emerging as a core source of competitive advantage among nations. Economic imperatives are now linked with environmental and social responsibility. NRCan is working to advance Canada's position in this context through the development of environmentally-friendly technologies, processes and products as well as by encouraging Canadians and industries to improve their environmental performance.

NRCan is also developing knowledge related to aquifers and forest ecosystems to support decision-making on groundwater issues, and the mitigation of risks around natural and human-caused disturbances. For example, NRCan is showing national leadership on S&T related to sustainable forest management, including the development and implementation of a coordinated and risk-based approach to combating forest pests. Furthermore, NRCan is fulfilling its obligations under the *Canadian Environmental Assessment Act* by conducting environmental assessments on federally regulated projects and for the management of nuclear waste.

Benefits to Canadians

NRCan helped Canadians improve energy conservation and energy efficiency in multiple sectors of the economy (e.g., homes, commercial buildings, vehicles and fleets), contributing to longer term sustainability and reducing the short-term costs of energy consumption. The department also worked to reduce the environmental impacts associated with the production and use of energy, and to increase the production of low-impact renewable energy, thereby advancing the environmental sustainability efforts that will benefit current and future generations.

NRCan's research in forest ecosystems is providing the scientific knowledge needed to ensure that Canada is a world leader in environmentally responsible development and sustainable use of forest resources. For example, NRCan continued to develop the foundational science for forest management practices in the boreal forest in partnership with universities, the forest industry, and the Government of Alberta. NRCan's foundational and applied science is essential to enabling policy development and decision-making that supports the sustainability of Canada's forest and the environmental credentials of the forest industry that relies on it.

NRCan's work and expertise are creating knowledge that enables Canadians to make decisions on environmental stewardship, conservation and environmental protection. This impacts the health and quality of life of Canadians, as well as the sustainability of their natural resources, now and in the future.

Lessons Learned and Corrective Actions

NRCan completed evaluations for Clean Transportation Energy and Cleaner Energy Systems for the Built Environment. Most of the findings indicated that programs were achieving their expected results. However, there were recommendations to clarify definitions and improve planning and reporting processes as well as governance. To address this, an improved governance structure was implemented that directs projects through theme-based portfolios to ensure activities are better managed and coordinated. In addition, a central project management information system was developed to monitor and report activities at the portfolio, program and project levels to facilitate more accurate and detailed financial and performance reporting.

Managing risks

NRCan continued to manage risks pertaining to the long-term relevance and excellence of its S&T activities. Several factors contributed to these risks, including the department's high proportion of short-term funding and the legacy of an undercapitalized asset base, including specialized facilities and equipment.

During 2009-10, NRCan managed uncertainty in demand for the ecoENERGY Retrofit – Homes Program* by increasing funding to meet unprecedented demand from homeowners. Participation in this program was closely monitored by an Executive Steering Committee which provided additional oversight and advice for decisions related to program management and operational changes.

NRCan took actions to mitigate a medium-high level of risk pertaining to the objectives and structure of NRCan's clean energy programming. Risk factors include the high proportion of program funding provided on a time-limited basis, and uncertainty surrounding the timing and impacts of potential domestic and international regulatory frameworks for GHG emissions. As per the government's commitment in the <2010 Speech from the Throne>[67], NRCan plans to review its energy efficiency and emissions reduction programs to ensure they continue to be an effective and efficient use of Canadian tax dollars. The department also engaged with domestic and international partners to ensure that its programs remained aligned with emerging regulatory measures.

Program Activity 2.1 - Clean Energy

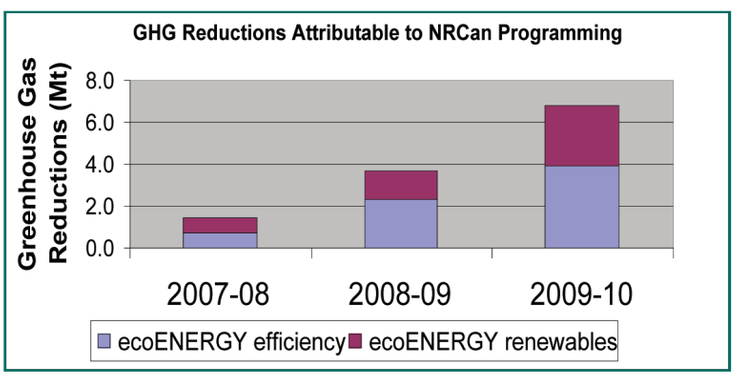
This program activity encompasses the development and delivery of energy S&T, policies, programs, legislation and regulations to reduce GHG and air pollutant emissions and other environmental impacts associated with energy production.

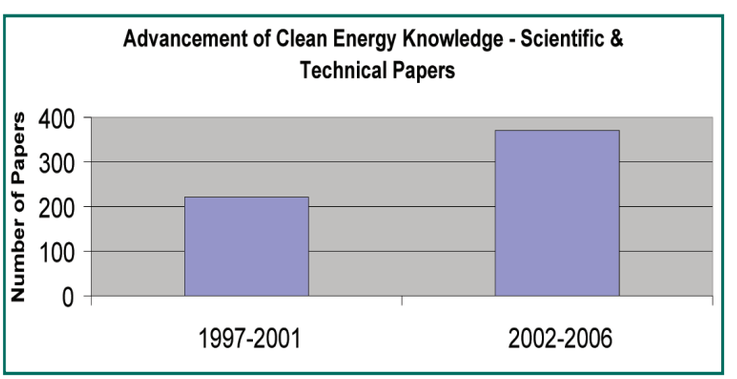
2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
708.3	816.7	802.5	933	921

Expected Result	Performance Indicators	Targets	Status
Increased energy efficiency, increased production of low-emission energy, and reduced environmental impacts associated with energy production and use	Clean energy production and GHG reductions attributable to NRCan programs	Favourable long-term trend	Met All
	NRCan's contribution to advancement of clean energy knowledge, and uptake of innovative clean energy solutions	Favourable long-term trend	Met All
	Performance of programs in achieving expected results within plans, timelines, and budgets	Greater than 99% of programs delivered on plan, on time, and within budget (see endnote 14)	Met All

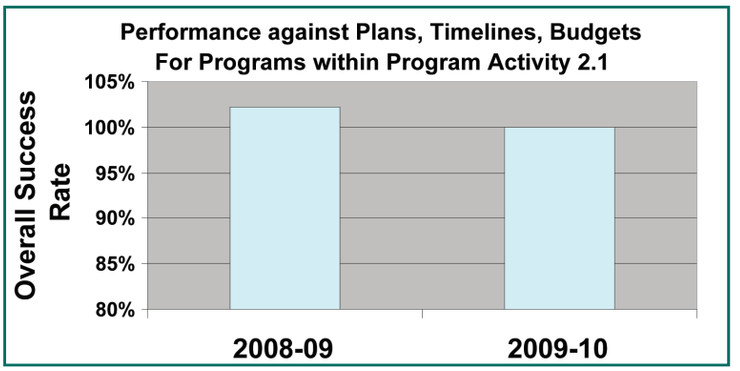
Performance Summary:

NRCan met its targets for positive trends in clean energy production and GHG reductions attributable to NRCan programming[68], and for its contribution to the advancement of clean energy knowledge and uptake of innovative clean energy solutions[69]. Through NRCan programming, GHG emissions were reduced by close to 7 megatonnes in 2009-10. The number of clean energy scientific and technical reports almost doubled – an increase from 221 to 372. Innovation, as measured by this indicator, is key to achieving improved environmental responsibility in the energy





sector and unlocking tomorrow's economic opportunities. Overall, NRCan met its performance target for programs, achieving expected results within plans, timelines, and budgets.



Meeting our commitments

The $795 million <Clean Energy Fund>*[70] is supporting long-term technology solutions to reduce and eliminate air pollutants including GHG emissions from the production and use of energy. In 2009-10, $466 million was announced for 3 large-scale carbon capture and storage <(CCS) projects>[71], and a further $146 million for 19 <renewable and clean energy systems demonstrations>[72] across the country. Research, development and demonstration were focused on cleaner fossil fuels, clean integrated electricity, bioenergy systems, low emission industrial systems, clean transportation systems, and the built environment.

The <Canada-U.S. Clean Energy Dialogue>[73] enhanced Canada-U.S. collaboration on clean energy technologies, such as CCS, allowed for continued cooperation on the International Energy Agency Weyburn-Midale Project, and advanced the development of compatible rules, standards and practices. In addition, it facilitated collaboration among Canadian and US electricity regulators, federal departments, agencies and the private sector in respect of reliability standards, cyber-security, training and recruitment, electricity storage, and smart-grid, inter-operability standards. For example, Canada and the U.S. agreed to adapt a building energy benchmarking tool to a Canadian context so that there would be a common commercial building energy rating system in both countries. Research initiatives were also launched that focused on the development of lightweight materials for vehicles, advanced biofuels, electricity demand response potential of buildings, ENERGY STAR, and others. Canada also developed a Memorandum of Agreement with the US on collaborative energy research and development (R&D).

NRCan contributed to the government's <ecoACTION Plan>[74] through renewable energy, energy science and technology, and energy efficiency initiatives as part of its suite of <ecoENERGY>[75] programs, as detailed below:

The <ecoENERGY for Renewable Power>[76] program signed agreements to fulfill and exceed the 4000 MW of renewable power capacity target. As of March 31, 2010, the program had 100 contribution agreements signed for 4419 MW of capacity, representing a commitment of $1.38 billion over ten years. The program is oversubscribed and is expected to commit the balance of the funding ($50 million) towards projects by the summer of 2010.

The <ecoENERGY for Renewable Heat Program>[77] surpassed its target to support at least 8 residential pilot projects – 14 pilot projects are underway. As well, 363 units have been installed in the industrial, commercial and institutional sectors, and another 301 units have contribution agreements in place for their installation. Two software design tools to support renewable heating design were developed and an additional tool is near completion.

The <ecoENERGY Technology Initiative>[78] supported research that will generate knowledge essential to achieving Canada's climate change goals. Activities were in the areas of cleaner fossil fuels, cleaner transportation, energy efficiency in residential, commercial and institutional buildings, improved industrial processes, carbon capture and storage, and bioenergy. Significant achievements for the year included: the completion of the first-of-its-kind in Canada, front-end engineering and design study for the EPCOR Genesee Integrated Gasification Combined Cycle plant in Alberta; the Vancouver Fuel Cell Vehicle Program completed five years of demonstration, testing and evaluation of the performance, durability and reliability of five Ford Focus fuel cell vehicles in real world operation; and a project is underway to develop computational tools for virtual testing and design capabilities for assessing advanced structural materials as applied to Generation IV nuclear technology systems.

Several of NRCan's ecoENERGY initiatives supported continued progress in the energy efficiency of all sectors and increased production and use of alternative transportation fuels in Canada. Notably, during fiscal year 2009-10: <ecoENERGY Retrofit>*[79] provided grants to more than 190,000 homeowners and signed 517 contribution agreements with small and medium-sized organizations. <ecoENERGY for Buildings and Houses>[80] labeled more than 12,000 new homes and 529,000 existing houses, led technical support workshops, and continued efforts to improve the current National Energy Code for Buildings by 25 percent. <ecoENERGY for Industry>[81] increased energy efficiency in industrial facilities through engagement and workshops, with more than 1,000 industry managers trained. <ecoENERGY for Fleets>[82] held 88 workshops and developed materials that were used to train 14,000 transportation professionals on energy efficient transportation practices. <ecoENERGY for Personal Vehicles>[83] provided Canadian consumers with valuable information through the 2010 EnerGuide for Vehicles fuel consumption guide and the Most Fuel Efficient Vehicles list, and more than 350,000 new drivers received in-class training on fuel efficient best driving practices using materials developed by the program.

Further supporting energy efficiency, NRCan developed amendments to the <*Energy Efficiency Act*>[84] to regulate standby power, with a view of saving power in more than 300,000 Canadian homes each year.

The <ecoENERGY for Biofuels>[85] program had a total of 21 signed contribution agreements as of March 31, 2010, representing a commitment of $966.2 million and domestic production of 1.6 billion litres of biofuels (1.4 billion litres of ethanol and 0.189 billion litres of biodiesel).

NRCan reports annually on the achievements of its clean energy programs in order to meet obligations under the <*Kyoto Protocol Implementation Act*>[86] and the <*Energy Efficiency Act*>[87]. The department also contributed to international reporting coordinated by Environment Canada in 2009-10, including Canada's <5th National Communication on Climate Change>[88] and <Canada's National Inventory Report 1990-2008>[89]. Reports are also provided annually on climate change and clean energy programming as an annex to Environment Canada's Departmental Performance Report.

In addition to supporting the <ecoACTION Plan>[90], NRCan carried out other activities in support of Clean Energy. NRCan contributed to international climate change negotiations, which culminated in 2009-2010 with the development of the Copenhagen Accord. The Accord reflects key Canadian principles, such as a call for a global solution toward long-term emission reductions, including all major emitters; actions by developing countries; and a commitment to financing, particularly for least developed countries. NRCan contributed specific expertise in such areas as technology, financing, adaptation and forestry.

The department's advanced materials and technologies R&D contributed to the advancement of knowledge and technologies supporting energy efficiency in transportation and clean energy, and as well, contributed

to a reduction in GHG emissions and other pollutants. To aid in vehicle weight reduction for greater fuel efficiency, new high-strength steel compositions were developed. New machinery to manufacture lightweight materials was installed at CANMET-MTL and allowed for the first magnesium alloy sheets to be produced in North America. The sustainability of using lightweight materials was validated through a life-cycle assessment. Materials' requirements for high-temperature power generation systems were identified and prototypes of high-temperature alloys, coatings, and ceramic materials were made.

The <Pulp and Paper Green Transformation Program>[91] is investing in Canada's pulp and paper sector in areas such as energy efficiency and renewable energy production. Agreements totalling more than $182 million were signed. Pulp and paper projects approved in 2009-10 are expected to result in improvements, including more than 500,000 MWh/year of new renewable energy production – enough to power 42,000 homes for a year, and annual energy savings of more than 87,000 gigajoules/year – enough to power 800 homes. This investment will facilitate a reduction of GHG emissions in pulp and paper mills in Canada while helping to position the sector as a leader in forest biomass-based renewable energy.

Program Activity 2.2 - Ecosystem Risk Management

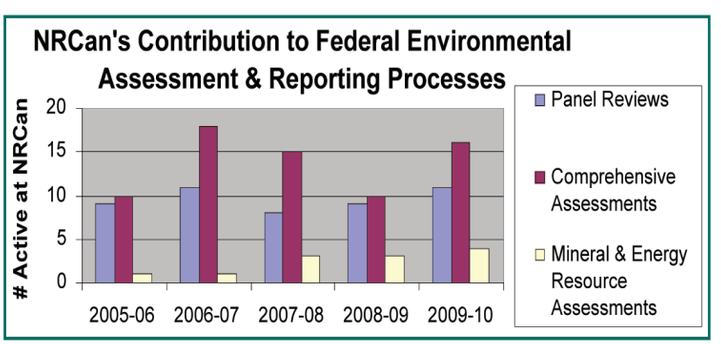
This program activity is designed to promote alternative technologies and practices in green technologies and mining, an understanding of forest dynamics, appropriate approaches for the long-term management of radioactive waste, and the provision of sound scientific advice to support responsible resource management initiatives which advance economic, environmental and social objectives.

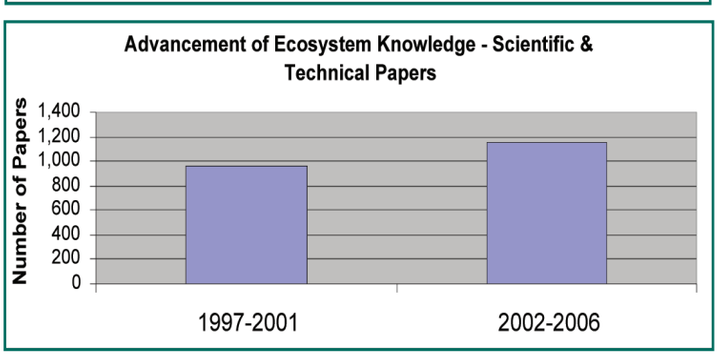
2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
169.4	184.2	156.5	354	290

Expected Result	Performance Indicators	Targets	Status
Canada understands and mitigates risks to natural resource ecosystems and human health	NRCan's contribution to federal environmental assessments, mineral and energy resource assessments for proposed protected areas on federal lands and waters, and related reporting processes	Fulfilling on-demand requirements (no quantitative target because variations in demand are beyond NRCan's control)	Met All
	NRCan's contribution to advancement of ecosystem knowledge, and innovative ecosystem risk management solutions	Favourable long-term trend	Met All
	Performance of programs in achieving expected results within plans, timelines, and budgets	Greater than 99% of programs delivered on plan, on time, and within budget (see endnote 14)	Mostly Met

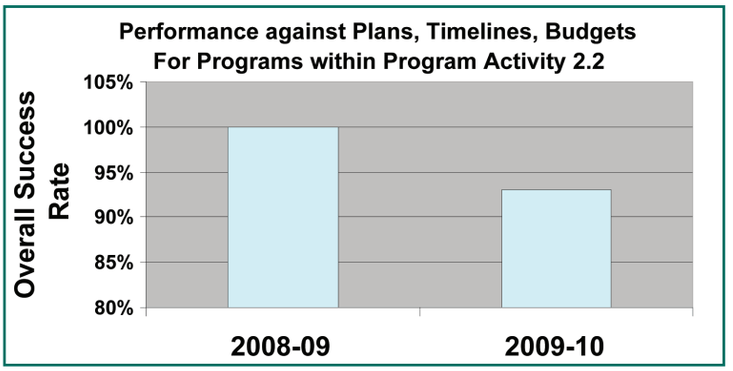
Performance Summary:

NRCan continued to meet its target of being a major contributor to federal environmental assessment and reporting processes[92] - including both Panel Reviews and Comprehensive Assessments – as required under the Canadian Environmental Assessment Act. In a similar fashion, NRCan contributed its expertise to Mineral and Energy Resource Assessments for the potential establishment of national parks and other protected areas. NRCan met its target for a positive trend in its contribution to the advancement of ecosystem knowledge and innovative ecosystem risk management solutions[93]: published scientific papers increased by 193 between the two five-year periods of 1997-2001 and 2002-2006 demonstrating NRCan's continued





commitment to advancing ecosystem knowledge and risk management solutions. However, delays were experienced by NRCan in delivering two elements of this program activity. In the area of geoscience for environmental issues, fulfillment of legacy commitments from earlier programming will extend one year beyond the original plan. In the area of radioactive waste management programs, a number of key milestones were achieved, yet the completion of some milestones was delayed. These delays were related to technical and social challenges of the work, as well as certain elements of program delivery, and are similar to those facing other nations dealing with historic and legacy waste liabilities. NRCan formally evaluated these challenges and put in place governance and program management responses that seek to maximize program delivery. Overall, NRCan mostly met its performance target for programs achieving expected results within plans, timelines, and budgets.



Meeting our commitments

Innovative New Technologies

NRCan continued to advance the Green Mining Initiative and at the 2009 Energy and Mines Ministers Conference, provincial and territorial Ministers endorsed the Pan-Canadian Green Mining Initiative (GMI) to improve the mining sector's environmental performance, ensure international competitiveness, and create green technology opportunities for Canadian businesses. Also in collaboration with the provinces and territories, NRCan initiated work to develop a compendium of green mining technologies and research being undertaken across Canada. NRCan allocated $8 million to advance 75 green mining projects during 2009-10. These projects have achieved real results, such as optimized energy consumption, reduced GHG emissions and operating costs, development of first-of-a-kind technologies, applications for domestic and international patents, and land reclamation for biomass crops. Finally, the department enhanced its partnership with the Canadian Mining Innovation Council which, endorsed GMI as a key component of its Mining Research and Innovation Strategy.

Forest Ecosystems Knowledge

NRCan supported Canada's obligations and advanced its forest-related interests relative to the United Nations Framework Convention on Climate Change (UNFCCC). In 2009-10, the department further developed and applied the Carbon Budget Model, which is now being evaluated and used both within Canada and internationally to monitor and forecast changes in forest carbon at the national level. The Carbon Budget Model is also providing critical empirical data on Canada's forests in support of ongoing international climate change negotiations and annual reporting on forest carbon sinks and sources under the UNFCCC. In addition, NRCan launched Canada's new <National Forest Inventory>[94] and initiated the Canadian Forest Carbon Science Plan, which will help identify key policy questions and research priorities to help guide and align Canadian forest carbon science research with the climate change agenda of the federal government.

Canada's Groundwater Resources

The department is collaborating with provinces and territories to conduct aquifer assessments that will provide the basis for informed decision-making on groundwater. NRCan is progressing well with its partners to map and assess the remaining 18 of 30 key regional aquifers. Three new aquifer assessments are scheduled to be completed by 2011-12. Common protocols and standards are being developed in collaboration with partners.

Nuclear Waste Management

Under the department's oversight and direction, the Nuclear Legacy Liabilities Program continued to reduce risks and liabilities at Atomic Energy of Canada Limited sites through the implementation of projects and activities to decommission out-dated infrastructure, restore lands affected by past operations, and improve the management of legacy waste. Example projects in 2009-10 include the decommissioning and demolition of five shutdown buildings; completing the solidification of the radioactive liquid waste stored at Whiteshell Laboratories; and completing recovery and clean-up activities for a waste burial at Chalk River Laboratories.

In 2009-10, the Port Hope Area Initiative, overseen by the department, achieved a number of major milestones. Based in part on NRCan's efforts, the Canadian Nuclear Safety Commission issued a Nuclear Waste Substance Licence for the Port Hope Project and the environmental assessment for the Port Granby Project was completed. Also, two detailed design contracts for these projects were issued by Public Works and Government Services Canada. The department also took ownership of one waste management facility.

Strategic Outcome 3 - Safety, Security and Stewardship

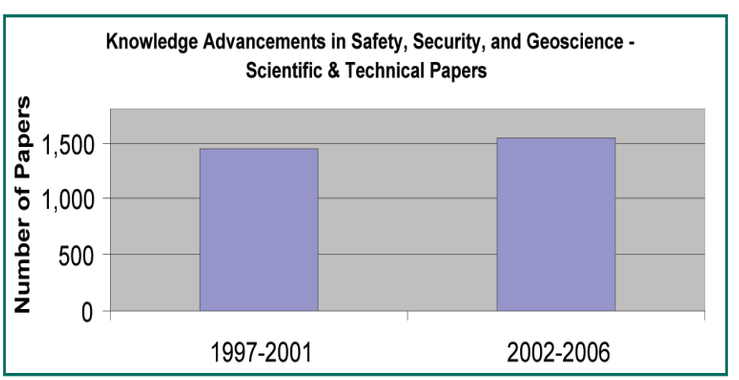
This strategic outcome encompasses the long-term objectives of a wide range of NRCan programming directed towards developing and disseminating natural resource and landmass knowledge, as well as sustaining and enhancing knowledge and management systems that strengthen both the safety and security of Canadians and the stewardship of Canada's natural resources and lands.

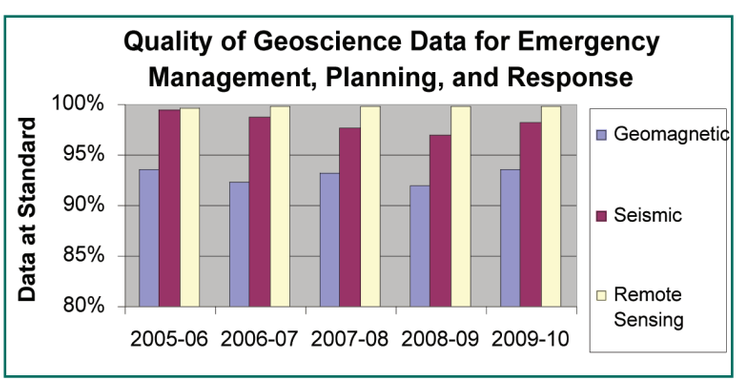
2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
174.8	202.5	176.9	1,208	1,108

Expected Result	Performance Indicators	Targets	Status
Natural resources and landmass knowledge strengthen the safety and security of Canadians and contribute to the effective governance of Canada	Contribution to the safety and security of Canadians, and the effectiveness of federal land stewardship and regulatory process	Favourable long-term trend for knowledge advancement Greater than 80% of active or completed MPMO projects within 8 weeks of target timeline Greater than 90% of landmass and natural hazard data meets timeliness and accessibility standards	Met All for Knowledge Advancement Met All for Federal Regulatory Process for Major Natural Resource Projects Met All for Quality of Geoscience Data

Performance Summary:

NRCan met its target for a positive trend in its contribution to the advancement of knowledge in safety, security, and geosciences[95]. The department also met its performance target for the regulatory process for major natural resource projects in the MPMO[96]. Finally, NRCan met its target for landmass and natural hazard system data, meeting timeliness and accessibility standards[97]. Information from these data systems informs Canadians and technical specialists of important geophysical parameters in near-real-time, including support for hazard and land use management regimes, and climate change monitoring.





Meeting our commitments

By providing authoritative and accessible geographic information, NRCan contributed to the effective governance of Canada, including sound decision-making on land management, sovereign rights and various economic, environmental, safety and security initiatives. To this end, there was significant uptake of NRCan geoscience by federal, provincial and territorial leaders, community planners, and other stakeholders, particularly related to climate change impacts and adaptation. Furthermore, NRCan contributed to the safety and security of Canadians by delivering on commitments related to the maintenance of Canada's boundaries and the regulation of mining, pipeline infrastructure and explosives.

The department also worked to improve the regulatory system for major natural resources projects. In support of the efforts of the forest industry to develop new products, NRCan delivered on its commitments related to the forest sector innovation system.

Benefits to Canadians

How Canada responds to the changing climate and manages risks from natural and human-induced hazards has a significant impact on the safety and security of Canadians. NRCan managed and mitigated current hazards and works to develop long-term mitigation and adaptation strategies based on scientific knowledge and expertise, thereby ensuring the safety and security of Canadians, as well as the responsible stewardship of the country's natural resources.

NRCan worked to produce scientific knowledge and data, and oversaw systems that facilitate knowledge creation and information-sharing on natural resources, in order to inform decision-making on the use and stewardship of natural resources. This included satellite monitoring of seasonal flooding and other national safety and security applications. It also worked to increase the efficiency and effectiveness of the regulatory review process of major natural resource projects, thereby increasing investment and creating jobs in Canada's natural resource industries.

Lessons Learned and Corrective Actions

The department implemented recommendations from the 2009 audit of the GeoConnections Program regarding procedures for processing collaborative agreements and completing recipient audits. Following these departmental actions, the program received an additional two years of funding in the 2010 Budget for its continuation.

The department has accepted and responded to recommendations from the 2009-10 evaluation of the Geographic Information Program: to work with the Department of Fisheries and Oceans, and other key stakeholders, to develop a strategy to implement a comprehensive rights management system (marine cadastre) for offshore Canada Lands. The task force has had preliminary meetings and a stakeholder workshop, resulting in the scoping out of an action plan.

The department also took the opportunity to identify areas of improvement going forward. Based on experiences in the past year, NRCan will collaborate with authorities directly responsible for infrastructure (e.g., Canadian Institute of Planners) to ensure that our science remains relevant, is used appropriately by decision-makers and meets current and future needs. With regard to NRCan's lead role in the International Model Forest Network, and as a result of shortfalls in receiving delegations from other countries, the department concluded that outbound missions are more effective at reaching a larger audience and adjusted its objectives accordingly.

Managing risks

NRCan continued to manage risks in the area of commercial explosives, the regulation of explosives' precursors, and the federal regulatory process for major resource projects. Further, it consistently implemented the 2007 Cabinet Directive on Improving the Performance of the Regulatory System for Major Resource Projects. NRCan also mitigated risks with regard to the legal framework for Aboriginal consultations by working towards a more concise and proactive management plan, in full compliance with the Government of Canada's consultation requirements, led by Indian and Northern Affairs Canada.

Program Activity 3.1 - Adapting to a Changing Climate and Hazard Risk Management

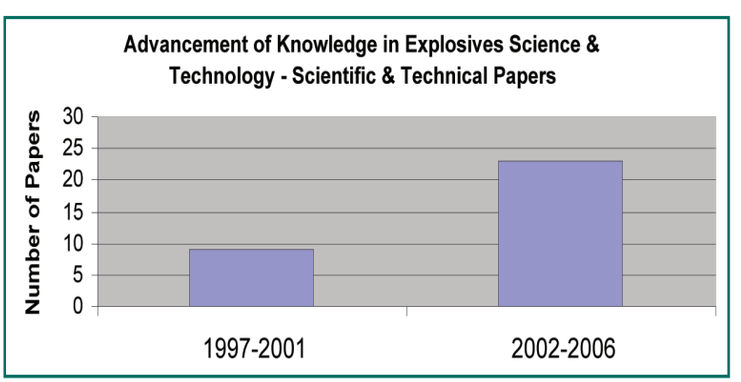
This program activity provides scientific knowledge and expertise to help the government, private sector and communities mitigate and adapt to the potential effects of a changing climate; reduce risks to Canadians and support emergency response in the event of natural and man-made hazards; and to ensure that regulations related to explosives and fireworks are evidence-based and enforced.

2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
73.1	70.6	62.9	638	476

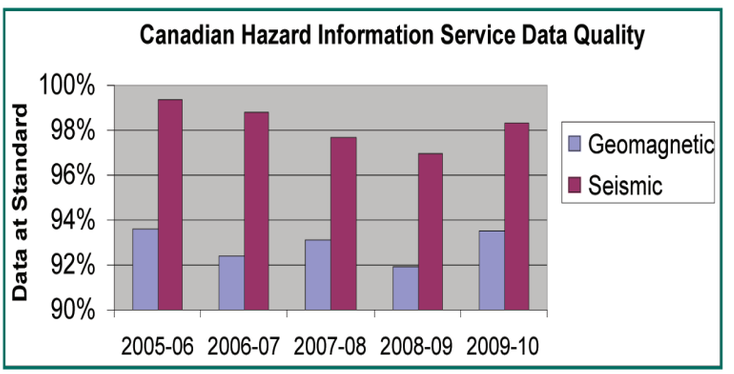
Expected Result	Performance Indicators	Targets	Status
Canada adapts to a changing climate and has the knowledge and tools to manage risks associated with natural hazards and hazards arising from human activities	NRCan's contribution to the safe and secure use of explosives in Canada, as measured by inspections and advancement of knowledge in explosives science and technology	Favourable long-term trend	Met All
	NRCan's contribution to climate change adaptation and natural hazard risk management, as measured by the uptake of adaptation knowledge and tools, and the timeliness and accessibility of natural hazard risk management knowledge and tools	Greater than 90% of natural hazard data meets timeliness and accessibility standards	Met All
	Performance of programs in achieving expected results within plans, timelines, and budgets	Greater than 99% of programs delivered on plan, on time, and within budget (see endnote 14)	Mostly Met

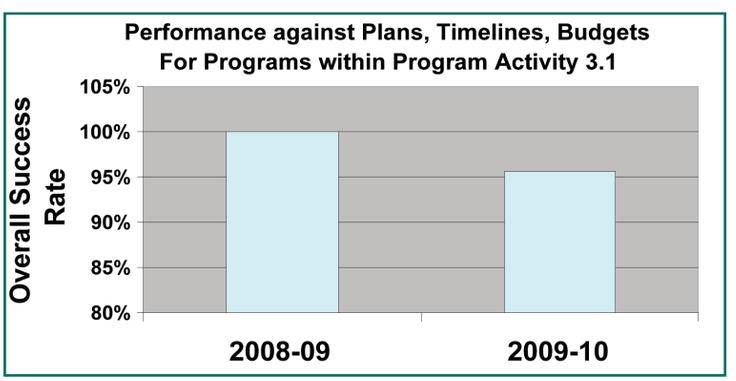
Performance Summary:

NRCan met its target for a positive trend in its contribution to the advancement of knowledge in explosives' science and technology[98]. This is evidenced by the number of papers more than doubling between 2001 and 2006. In addition, the department continued to exceed its target for greater than 90 percent natural hazard system data, meeting timeliness and accessibility standards[99]. Information from these data systems is used to inform Canadian and technical specialists of important geophysical



parameters in near-real-time for the purpose of improving the understanding and management of hazards arising from natural causes such as earthquakes, and potential interferences with power transmission and telecommunications due to solar storms. However, delays were experienced by NRCan in delivering two elements of this program activity. In the area of science and knowledge for climate change adaptation, financial constraints encountered in 2009-10 required adjustment of expectations, including a program extension for an additional two years. In 2009-10 all expectations were met based on the revised current year performance targets and the program is on track to meet all of its targets in future years. Overall, NRCan mostly met its performance target for programs achieving expected results within plans, timelines, and budgets.





Meeting our commitments

Mining, Infrastructure and Explosives Safety and Security

NRCan ensured that all planned projects related to the safety and security of Canadians with respect to mining, <pipeline infrastructure>[100] and <explosives>[101] were on track. NRCan enrolled almost 1,000 sites in the Restricted Components program with 115 inspections carried out, while in the explosives field the department issued 2,147 licences for explosives magazines and factories, performed 1,185 inspections, issued 485 import permits and authorized 1511 products. Furthermore, accidents and explosives thefts were slightly below the three-year average. A major program of testing modular buildings for blast resistance was successfully completed.

Forest Disturbances

The Mountain Pine Beetle Program (MPB) provided funding to reduce forest fire fuels threatening communities, including First Nations communities, in the beetle-impacted regions of British Columbia. NRCan continued to participate in research in Alberta and BC to assess the risk of eastward spread, in terms of timing, severity and mitigation strategies, which to date has revealed that a key boreal species (jack pine) is susceptible to MPB.

NRCan is the lead national scientific agency for comprehensive risk analyses, pest biology, and potential spread and pest management information to respond to significant invasive forest pests in support of the Canadian Food Inspection Agency's regulatory responsibilities. Over the past year, research continued to

inform the management strategies associated with the Brown Spruce Longhorned Beetle and the Emerald Ash Borer, which are having significant impacts on forests in Nova Scotia and Ontario.

In 2009-10, NRCan made significant and internationally recognized progress in reducing uncertainties concerning climate change impacts and in forecasting future impacts through its climate change research. For example, researchers, modelers, and remote sensing specialists have created a world-class prediction system for determining the carbon emitted from wildfire on an annual basis. In addition, NRCan's science, conducted, in collaboration with the provinces and territories, was key to developing an analysis of the vulnerability of tree species and adaptation options for Canada's forests, which is an important dimension of reducing the risks and maximizing the opportunities posed by climate change.

Adapting to a Changing Climate

The Climate Change Impacts and Adaptation Program established five Regional Adaptation Collaboratives covering all ten provinces; a Northern collaborative will be established by summer 2010. In addition, seven contribution agreements were put in place to develop decision-support tools. These tools have been completed for three of five theme areas: risk management guides for communities; tools for professional planners; and an upgraded protocol for professional engineers to assess infrastructure vulnerability.

NRCan also conducted a national benchmark survey of business and government decision-makers to assess their level of awareness and action on climate change adaptation. Evidence shows there has been a significant uptake of NRCan geoscience by federal, provincial and territorial leaders, community planners, and other stakeholders wanting information related to climate change impacts and adaptation.

Natural Hazards

NRCan contributed to advancing science and knowledge, and distributed information, on tsunamis, geomagnetic storms, landslides and volcanic eruptions. This initiative is essential to the safety of Canadians. The department continued to deliver its responsibilities related to the early acquisition of satellite images in order to respond to natural disasters, both in Canada and abroad through the United Nations. In response to the UN charter, NRCan provided satellite-based emergency mapping products to support Canadian authorities and international partners in Haiti and Chile. In addition, NRCan worked with the Royal Canadian Mounted Police to provide mobile and neutron radiation surveying for the Vancouver 2010 Olympics.

NRCan promulgated a new suite of core emergency management plans in accordance with its obligations under the *Emergency Management Act*, to position itself to effectively manage risks associated with acute incidents and reduce the risks associated with the response to such events.

Program Activity 3.2 - Natural Resource and Landmass Knowledge and Systems

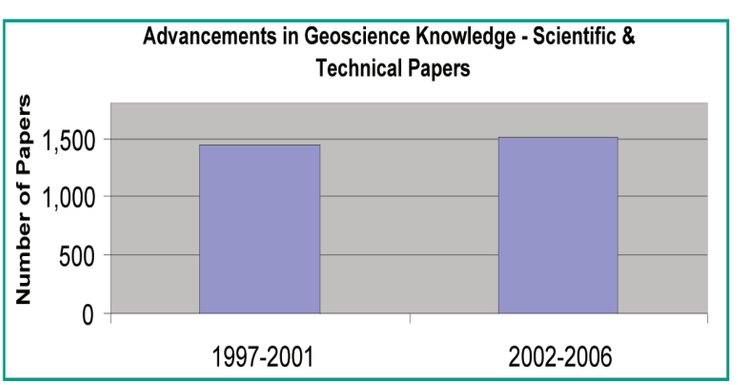
This program activity delivers a strengthened resource management system, supports the Minister's obligations to secure property rights, fundamental and precise geographic data to support decision-making and planning processes at all levels and an improved federal regulatory review process.

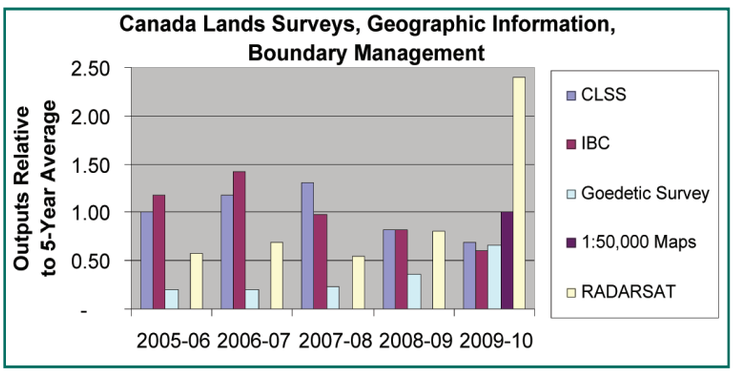
2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
101.7	124.2	113.5	570	620

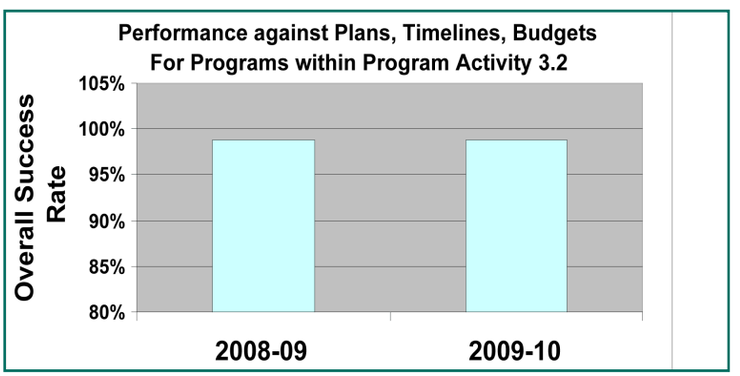
Expected Result	Performance Indicators	Targets	Status
Government has the necessary natural resources and landmass knowledge and systems required to both govern the country and position Canada to play a leadership role in federal/provincial/territorial and international fora	NRCan's contribution to the development and security of Canada through advancements in geographic knowledge, boundary management, and surveys & supporting systems for secure land tenure of Canada Lands	Favourable long-term trend for knowledge advancement Fulfilling on-demand requirements for boundary management, surveys and supporting systems (no quantitative target because variations in demand are beyond NRCan's control)	Met All for Advancement of Knowledge Met All for Fulfillment of Boundary Management, Surveys and Supporting Systems Requirements
	Effective management of the federal regulatory process for natural resource projects as measured by adherence to target timelines and service standards by all federal departments and agencies	Greater than 80% of active or completed MPMO projects within eight weeks of target timeline	Met All
	Performance of programs in achieving expected results within plans, timelines, and budgets	Greater than 99% of programs delivered on plan, on time, and within budget (see endnote 14)	Mostly Met

Performance Summary:

NRCan met its target for a positive trend in its contribution to the advancement of geoscience knowledge[102] as evidenced by an increase in the production of scientific and technical papers (from 1,436 to 1,513). The department continued to meet the requirements of the Canada Lands Survey System, the Canada-US International Boundary Commission, geodetic referencing, map production, and remote sensing imagery (RADARSAT)[103] (there is no quantitative target because variations in







demand are beyond NRCan's control). The outputs of these programs and activities are used by Aboriginal groups, land management specialists, other government departments and Canadians in support of sustainable land use management. In addition, the department met the target for the Major Projects Management Office (MPMO) to improve the performance of the regulatory review system: at the end of 2009-10, 81 percent of active or completed MPMO projects were on time or within eight weeks of the target timeline[104]. In addition to these successes, NRCan experienced minor delays in a range of elements of this program activity. For example, while NRCan continues to engage more countries in its International Model Forest Network (IMFN), plans to receive 5 delegations from participant countries were not realized. Overall, NRCan mostly met its performance target for programs, achieving expected results within plans, timelines, and budgets. NRCan has concluded that outbound missions are more effective at reaching a larger audience and has adjusted its objectives accordingly. A target to have 35 countries participating in the IMFN was not achieved; instead 31 countries were participating at the end of 2009-10.

Meeting our commitments

Mining Knowledge and Information

NRCan developed and communicated relevant, timely and reliable <knowledge on mining and metals>[105] industries to ensure private sector partners (including academia) can plan business activities and research, and to support the sustainable development of the mining industry, an important contributor to Canada's economic recovery.

In collaboration with the provinces and territories, the department produced the Annual Census of Mines, Quarries and Pits. This census presents important data on the mineral industry including the value and volume of Canadian production of 51 mineral commodities and 14 refined metals. NRCan also worked with the provinces and territories on the Annual Survey of Mineral Exploration, Deposition Appraisal and Mine Complex Development and Expenditures. The data from this survey provided an overview of expenditures associated with a mining project spanning the exploration and production phases. In addition, NRCan conducted monthly surveys on the production of Canada's leading minerals and metals, and produced commodity reviews and a statistical compendium that was published in the Canadian Mineral Yearbook. Finally, bulletins were produced to provide succinct snapshots regarding mining production, exploration, trade, employment and capital investments.

Forest Sector Innovation System

NRCan completed the consolidation of the national forest research institute, FPInnovations, which serves to drive forest sector innovation and transformation of the forest sector. The joint efforts of NRCan and FPInnovations have led to increased collaboration with the Natural Sciences and Engineering Research Council of Canada and the creation of the NSERC Forest Sector R&D Initiative. This initiative promotes collaborative research between FPInnovations and universities in support of the <Transformative Technologies Program>[106]. The establishment of four new university-led forest sector research networks - Value Chain Modeling, Innovative Wood Products and Building Systems, Innovative Green Papers, and Biomaterials and Chemicals – ensures that the government's investment ($34 over 5 years) is aligned with its priorities for the forest sector.

Maintenance of Canada's Boundaries

The government's survey-related obligations were met pursuant to: (1) the implementation of land claims programs; (2) the support of Canada's Aboriginal self-reliance initiatives, including First Nations Land Management Initiative, self-government, Treaty Land Entitlement, and Indian Oil and Gas; and (3) the obligations arising out of Accords with other government departments. In support of the latter, 36 agreements were created worth $4.25 million. For the Yukon, 90 percent of the surveys for claims are completed and on target, with the remaining 10 percent to be finalized by 2013-14.

In the Northwest Territories and Nunavut, Canada's survey-related obligations for the Tlicho Agreement, the Inuvialuit Final Agreement, and the Sahtu Dene and Metis Comprehensive Land Claim were met. The claims were also finalized, aside from the Tlicho Agreement, which continues to be addressed. Such activities are fundamental to managing authoritative property rights and land claim settlements, thereby facilitating land transactions, development and protection of Canada Lands and resources, especially in the North. 501 new topographic maps of Northern Canada were created, which provide fundamental geographic data used in decision-making on Canada Lands.

NRCan is on track to finalize the mapping of the continental shelf, with the aim of establishing the scientific basis for extending Canada's sovereign rights on the Atlantic and Arctic continental margins by 2011-12. The submission report will then be compiled by the Department of Foreign Affairs and International Trade for review at the December 2013 meeting of the United Nations Convention on the Law of the Sea (UNCLOS)[107].

Satellite data, composites and derived products from near-real-time and archived earth observation (EO) data contribute to economic, environmental, safety and security initiatives. For example, in 2009-10, NRCan supported Parks Canada in its reporting on land-cover changes and Emergency Response plans, with real-time flood mapping capacity.

NRCan continued to improve land-cover techniques and methodologies, as well as work in developing infrastructure plans in the North and supporting a more cohesive Government of Canada approach to remote sensing and earth observation policies. This groundwork allowed federal and provincial/territorial partners, other government departments, as well as external clients to access EO data and apply it in many ways.

Regulatory System for Major Natural Resource Projects

In its second year of operation, the MPMO made significant progress towards improving the performance of the regulatory system for major natural resource projects. New service standards have been established,

which are resulting in more timely and predictable project reviews. Project Agreements, with target timelines for key milestones during the regulatory review process, are also being developed for each project, and these commitments are being publicly tracked and monitored to ensure that project reviews remain on target. A growing portfolio of major resource projects have benefitted from these improvements. A total of 53 projects were being managed under the MPMO, representing approximately $100 billion in potential new capital investment.

81 percent of active or completed MPMO projects were on time or within eight weeks of their target timelines. Two key factors had an impact on those project reviews that were behind schedule; namely, process modifications related to the Supreme Court of Canada's *MiningWatch* decision, and process revisions caused by changes to the type of environmental assessment being conducted (largely originating from new project information or revised project proposals). In the absence of these factors, it is estimated that approximately 90 percent of project reviews would have met their respective targets.

Through the MPMO, federal departments and agencies worked together to identify opportunities to fundamentally improve environmental assessment and regulatory permitting processes. As a key first legislative step, the *Jobs and Economic Growth Act* introduced targeted changes that will improve the delivery of environmental assessments in Canada, allowing assessments to start sooner, reduce delays and duplication, and result in better assessments overall. The MPMO also worked in close collaboration with provincial governments to identify opportunities to improve the integration of federal and provincial processes (e.g., pilot projects such as the Line Creek Coal and Northwest Transmission Line delegation agreements with BC).

Program Activity 3.3 - Geomatics Canada Revolving Fund

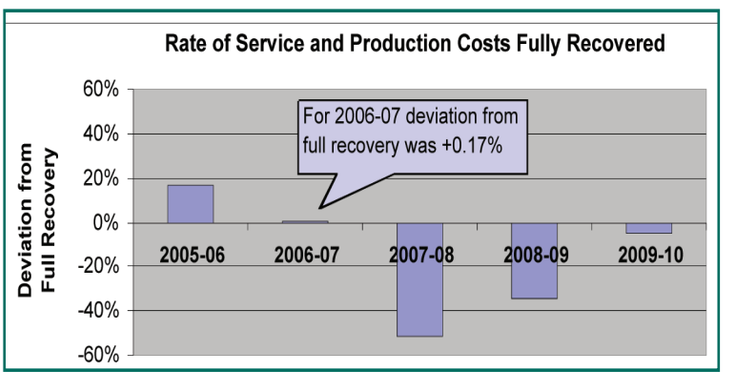
This program activity delivers on-demand, revolving fund products and services through full cost recovery to NRCan, other government departments and industrial clients.

2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
1.9	7.7	0.5[108]	16	12

Expected Result	Performance Indicators	Targets	Status
The demand by NRCan, other government departments and industrial clients for revolving fund products and services is met through full cost recovery	Percent rate of service and production costs fully recovered	Full cost recovery	Mostly Met

Performance Summary:

For 2009-10 NRCan mostly met its target for full recovery service and production costs. As anticipated for the period 2008-11, revenues declined due to the transition to a new business model.



Meeting our commitments

The period of 2008-11 represents a time of business transition for the Geomatics Canada Revolving Fund (GCRF), as revenues are expected to decline while expenditures remain proportionally higher.

From a financial perspective, the next few years will involve a period of equity reinvestment to support a smooth business transition and/or exit. As some of the capital investment is phased in over a 4-year period, risks will be mitigated by closely reviewing, on a yearly basis, forecasted revenues tied to capital investment. In light of increased planned expenditures, progress will be monitored and reviewed to ensure the GCRF is fully cost recovered through 2011.

Program Activity 4.1 - Internal Services

This Program Activity includes groups that support the needs of programs and other corporate obligations of the department. These groups are: Management and Oversight; Communications; Legal; Human Resources Management; Financial Management; Information Management; Information Technology; Real Property; Material; Acquisition; and Other Administrative Services. Internal Services includes only those activities and resources that apply across an organization and not to those provided specifically to a program.

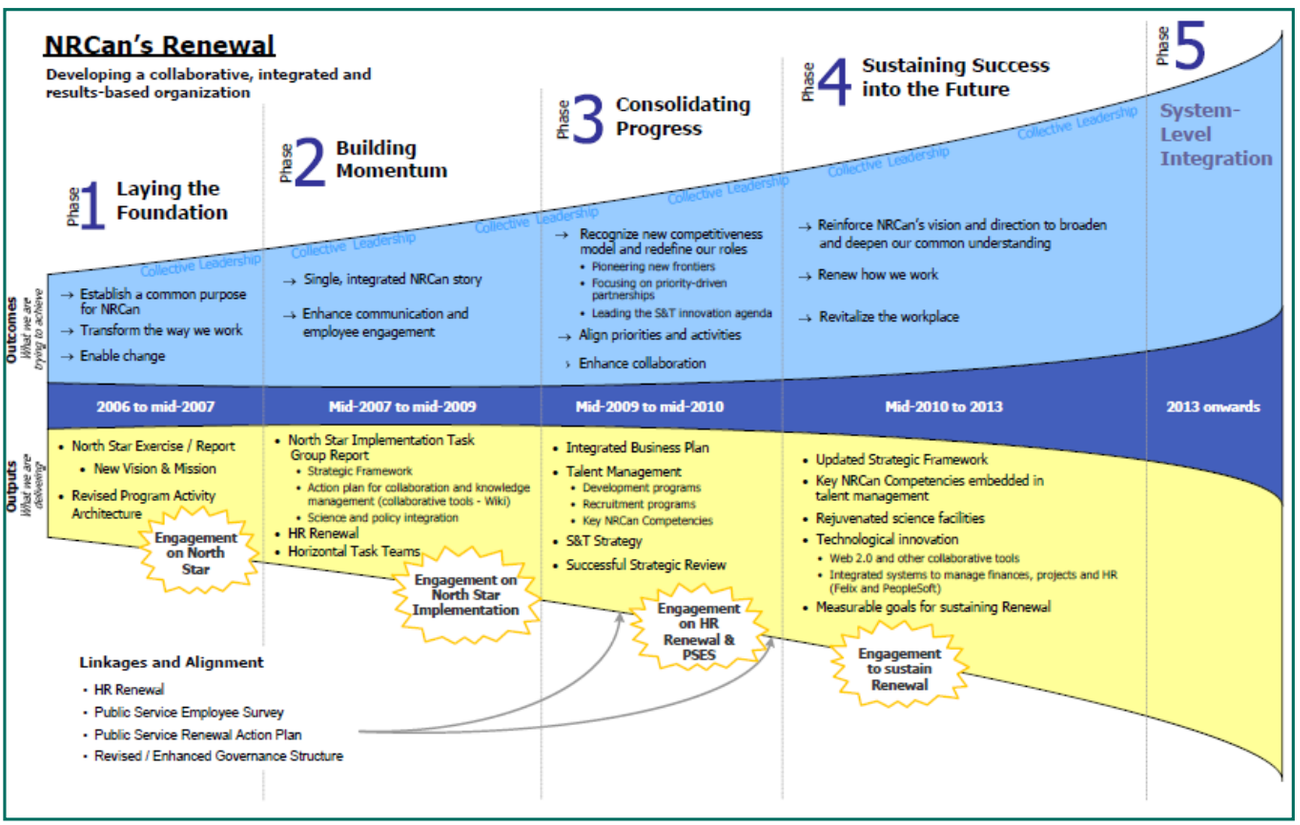
Key to the effectiveness and efficiency of this Program Activity is the ability of Internal Services to adjust and respond to evolving business priorities and requirements. Furthermore, Internal Services has a responsibility to provide the department with timely, efficient and effective support.

2009-10 Financial Resources ($ millions) - Net			2009-10 Human Resources (FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actual
177.0	310.5	306.3	1,088	1,334

Meeting our commitments

NRCan met its commitments and demonstrated positive results. Employees are embracing a culture of collaboration and information sharing through a suite of web 2.0 tools that facilitate content creation, dialogue, decision-making and knowledge transfer. With a growing community of bloggers, a wiki housing over 8,000 articles, the NRTube video-sharing site with nearly 300 videos watched more than 71,000 times, and a powerful search engine, the department has laid the foundation for the development of an Integrated Natural Resources Knowledge Base.

Renewing NRCan is a department-wide initiative. The graph below showcases NRCan's progress to renew itself since 2006, with a view of developing a more collaborative, integrated and result-based organization.



HR Renewal

The department established clear commitments in response to the 2009-10 Public Service Renewal Action Plan, and continued to apply integrated approaches to planning, recruitment, employee development and workplace renewal. NRCan continued its commitment to excellence in people management, recognizing that its employees are central to achieving its priorities efficiently. The department achieved results on key talent management initiatives through effective governance, collaboration and innovation. For example, NRCan's targeted On-Campus Recruitment Strategy and the implementation of Key NRCan and Key Leadership Competencies helped the department to increase its brand awareness as an employer of choice. In addition, building on the success of the Visible Minority Talent Management Program, NRCan was able to offer the career enhancement component of the program more widely, first to employees of other employment equity groups, then to all employees in the National Capital Region. NRCan also exceeded its 2009-10 targets for the Term Employee Management Strategy. By managing risk at a departmental level, NRCan is using indeterminate staffing to retain many talented young professionals previously employed as term employees.

Knowledge Management and Collaborative Technologies

NRCan improved several processes and systems during 2009-10. For example, a major achievement was the completion of a review of existing legacy systems and the identification of ways to streamline and maintain key business functionalities. This enabled the design of an efficient system which integrates finance, material

and project management. To implement this system, a Memorandum of Understanding was signed with Agriculture & Agri-Food Canada for collaboration on and implementation of a shared SAP system. This approach leverages expertise and is a cost-effective solution for replacing an aging financial system as well as many other stand-alone systems. The department also reached several milestones related to the PeopleSoft version 8.9 upgrade.

In support of knowledge management, NRCan expanded the departmental knowledge search to new collaborative tools including NRTube and Sharepoint, and received approval of a new departmental policy on Information Management, to further support the development of an integrated knowledge base. It also successfully merged the content of NRCan's Library catalogues using an open-source system known as Evergreen.

To strengthen delivery of internal projects, NRCan received approval of the NRCan Project Management Framework and launched the departmental Project Management Office.

Integration of Science and Policy

NRCan capitalized on research results and focused on facilitating communication of these results to those policy makers who need to understand and integrate this vital information. Moreover, the department developed a Science and Technology Strategy that positions NRCan as a recognized source of world-class natural resources S&T, a champion of applying S&T for sustainable natural resource advantage, and a leader in integrating S&T with policy and program decision-making. This strategy supports the government's S&T objectives of fostering Canadian advantages in entrepreneurship, knowledge and people.

Financial Management

A two-year, eight-point plan to strengthen NRCan's Financial Management was developed and implemented, leading to the strengthening of active monitoring, and clearer governance, accountability, roles and responsibilities. Furthermore, organizational and governance structures were improved, notably through the creation of the Resource Management Committee.

Real Property

NRCan successfully implemented Year 1 of the Accelerated Infrastructure Program – Modernizing Federal Laboratories*, Polar Continental Shelf Program* (Resolute, Nunavut) and Accelerating Federal Contaminated Sites Action Plan* (Booth Street, Ottawa, Ontario). 141 (93 percent) of the 151 original work items within the twelve projects were implemented. This resulted in significant upgrades to NRCan facilities and improvement to the department's scientific capacity, while at the same time creating local employment. Moreover, 171 jobs were created based upon benchmark stimulus employment metrics (1 job per $100,000 in infrastructure investment). Addressing deferred maintenance and the modernization of NRCan laboratories ensures the ongoing integrity of these physical assets that support regulatory functions and programs in research and technology development. An <audit of the Accelerated Infrastructure Program>[109] concluded that the program's management framework is well controlled.

Ministerial Portfolio Coordination

Fiscal year 2009-10 was the first full year of a dedicated portfolio coordination function being in place at NRCan. Benefits included the provision of integrated advice on government-wide initiatives, policy, program and funding submissions that affected the portfolio; proactive management of portfolio issues

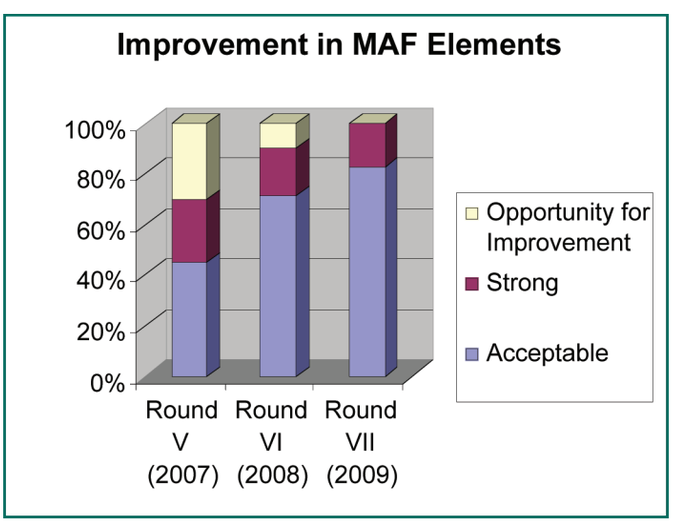
based on environmental scanning; and the coordination of planning and performance reporting activities from a portfolio perspective. NRCan also developed a Portfolio Management Framework that articulates the principles of effective portfolio coordination. The Treasury Board Secretariat acknowledged an improvement in NRCan's portfolio function as part of Round VII of the Management Accountability Framework assessment.

Integrated Business Plan

In addition, NRCan produced the first departmental Integrated Business Plan, which provides a more detailed roadmap on how the department is working to achieve its vision, and how activities support priorities. It also illustrates how all sectors of the department are working together to deliver on its commitments: by integrating its people, its physical and information assets, and its finances.

The department also introduced quarterly reporting to monitor and track its progress in the delivery of programs and EAP initiatives. Early detection of problem areas enabled program managers to make informed decisions and implement corrective actions where necessary, thus increasing the likelihood that programs would be delivered within plans, timelines and budgets.

As indicated by the results from Round VII of the Management Accountability Framework assessment, NRCan's overall management is on track. The chart below shows NRCan's improvement. In 2009, out of the 12 areas assessed, 2 were rated as Strong, 10 were Acceptable, and 0 were rated Opportunity for Improvement.



Section III - Supplementary Information

A. Financial Statements - Highlights

The financial highlights presented within this Report are intended to serve as a general overview of NRCan's financial position and operations.

For the Period ending March 31, 2010
Condensed Statement of Financial Operations

(in thousands of dollars)	Percentage Variance	2010	2009
ASSETS			
Financial Assets	11%	416,617	376,022
Non-Financial Assets	108%	170,319	81,974
TOTAL ASSETS	28%	586,936	457,996
Liabilities	0%	1,194,603	1,196,800
Equity	-18%	-607,667	-738,804
Total Liability & Equity	**28%**	**$586,936**	**$457,996**

For the Period ending March 31, 2010
Condensed Statement of Operations

(in thousands of dollars)	Percentage Variance	2010	2009
Transfer Payments	-34%	2,464,530	3,733,140
Operating Expenses	6%	951,455	898,591
Total Expenses	**-26%**	**3,415,985**	**4,631,731**
Total Revenues	- 45%	1,493,475	2,720,043
Net Cost of Operations	**1%**	**$1,922,510**	**$1,911,688**

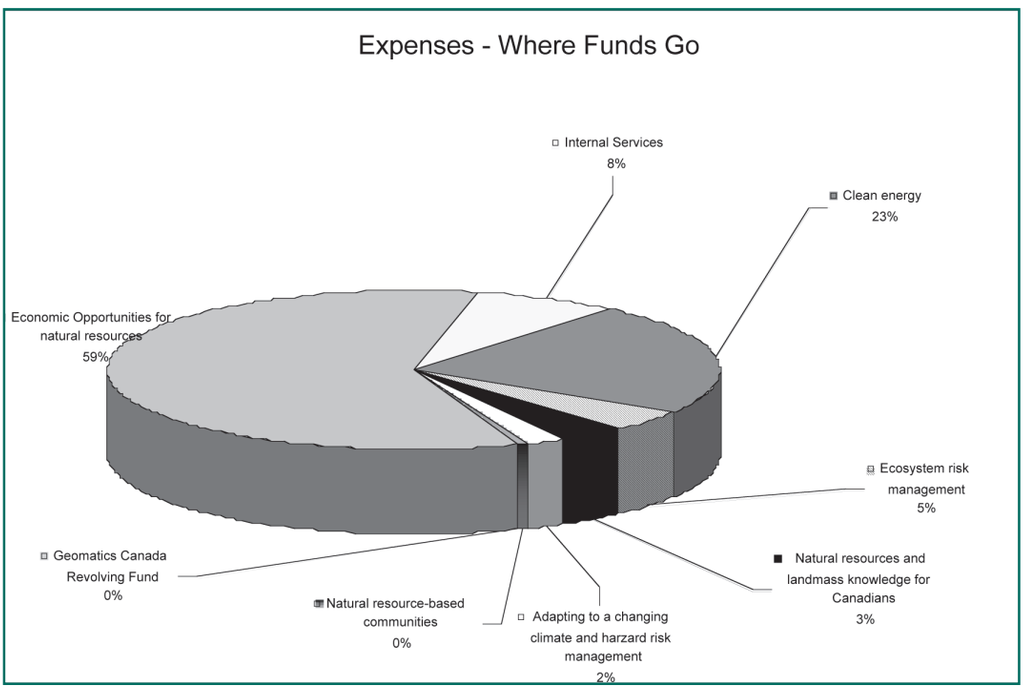
Condensed Statement of Financial Operations

Total Assets have increased by $129 million. The increase in Financial Assets is mostly attributable to more Accounts Receivable from external parties ($41 million). The increase in non-Financial Assets is mostly due to an increase in prepayments, as a result of an increase of $58 million in advance payments for transfer payment programs. The amount of liabilities remained fairly constant with liabilities at the end of the previous fiscal year.

Condensed Statement of Operations

The Net Cost of Operations remained fairly constant with the result of the previous fiscal year. Expenses and revenues under Economic Opportunities for Natural Resources have decreased in 2009-10 due to a reduction in the rate of production and in the value for crude oil (attributable to the volatile nature of such commodities) for Nova Scotia and Newfoundland and Labrador Offshore programs: expenses decreased by $1.5 billion, and the revenues by $1.2 billion. Interest revenues have increased by $272 million due to an increase in the Net Profits Interest revenues from the Hibernia Offshore Oil project ($306 million) and a decrease in other interest revenues ($34 million).

The following chart presents a distribution of Natural Resources Canada's total expenses in 2009-10 by program activity. Total expenses amounted to $3,415,985,000.



The Condensed Statement of Financial Position, complete NRCan financial statements, and that of the Geomatics Canada Revolving Fund can be found on <Natural Resources Canada's>[110] website.

B. List of Supplementary Information Tables

- Sources of Respendable and Non-Respendable Revenue
- User Fees / External Fees
- Details of Transfer Payment Programs (TPP)
- Up-Front Multi-Year Funding
- Horizontal Initiative – Improving the Performance of the Federal Regulatory System for Major Natural Resource Projects
- Green Procurement
- Response to Parliamentary Committees and External Audits
- Internal Audits and Evaluations

These tables can be found on the Treasury Board Secretariat's <website>[111].

Endnotes

[1] http://www.nrcanrncan.gc.ca/com/resoress/actacteeng.php?PHPSESSID=1ddbc9afab5f1a5ede94452759abf9b0

[2] http://www.nrcan.gc.ca/com/deptmini/portf-eng.php

[3] http://www.aecl.ca/site3.aspx

[4] http://www.neb.gc.ca/clf-nsi/rcmmn/hm-eng.html

[5] http://www.cnsc-ccsn.gc.ca/eng/

[6] http://www.cnlopb.nl.ca/

[7] http://www.cnsopb.ns.ca/

[8] http://www.sdtc.ca/

[9] http://www.appointments-nominations.gc.ca/prflOrg.asp?OrgID=ESR&type-typ=3&lang=eng

[10] http://www.infosource.gc.ca/inst/npa/fedtb-eng.asp

[11] http://www.actionplan.gc.ca/eng/index.asp

[12] Economic Action Plan initiatives are identified with *. A summary of all EAP initiative is provided in Section I.

[13] Knowledge and innovation indicators are presented in this report under SO 2, and PAs 2.1, 2.2, 3.1 and 3.2 as the sum of peer-reviewed scientific and technical papers published by NRCan researchers in a range of fields of enquiry over two successive five-year periods: 1997-2001 and 2002-2006. It is important to note that this presentation is just a partial view of NRCan's overall contribution to knowledge and innovation; further development of this set of indicators will appear in future DPRs.

[14] Indices of success are a summation of the performance of a program activity's constituent sub-activities in delivering planned-spending-weighted expected results and outputs that are on time and on budget. Note that indices of success are newly developed indicators for 2009-10. Data shown for 2009-10 indices of success illustrate actual performance, whereas data for the previous fiscal year – 2008-09 – are best estimates, and there is insufficient data available for fiscal year 2007-08 and earlier. The performance status is assigned as follows: Met All: 99% and above; Mostly Met: 80-98%.

[15] http://www.tbs-sct.gc.ca/rpp/2009-2010/inst/rsn/rsn00-eng.asp

[16] Performance of priorities is calculated as a summation of the constituent sub-activities in delivering planned-spending-weighted expected results and outputs that are on time and on budget. Performance status is assigned as follows: Met All: 99% and above; Mostly Met: 80-98%.

[17] http://oee.nrcan-rncan.gc.ca/corporate/retrofit-summary.cfm

[18] http://www.nrcan.gc.ca/eneene/science/ceffep-eng.php

[19] http://www.actionplan.gc.ca/initiatives/eng/index.asp?initiativeID=157&mode=3

[20] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=7&initiativeID=158

[21] http://www.valuetowood.ca/html/english/index.php

[22] http://gsc.nrcan.gc.ca/gem/index_e.php

[23] Employee Benefit Plan (EBP) and Public Works Government Services Canada (PWGSC) accommodation amounts have been included in the budget and actuals in this report. EBP funding was received through supplementary estimates and all adjustments were made at the end of the year.

[24] The performance status is assigned as follows: Met All: 99% and above; Mostly Met: 80-98%. The performance includes both planned initiatives and resources spent.

[25] http://www.tbs-sct.gc.ca/est-pre/index-eng.asp

[26] http://www.tbs-sct.gc.ca/ppg-cpr/home-accueil-eng.aspx

[27] The Soldier Settlement Board Agreement for an amount of $83.5M represents the main variance between the Planned Spending and Total Authorities.

[28] The main variance between the Planned Spending and Total Authorities within Natural Resource-based Communities Program Activity is the $2.9M approved through supplementary estimates as part of a program funded from Indian and Northern Affairs Canada

[29] The main variance between the Planned Spending and Total Authorities for Clean Energy Program Activity is the $49.8M approved through supplementary estimates and the ecoENERGY Retrofit - Homes program for an amount of $37.9M.

[30] The Collective Bargaining and Carry Forward for an amount of $14.6M, represents the variance between the Planned Spending and Total Authorities.

[31] Minor items explain the small variance between the Planned Spending and Total Authorities.

[32] The main variance between the Planned Spending and Total Authorities for Natural Resources and Landmass Knowledge for Canadians program activity is the $15.9 M approved through supplementary estimates.

[33] The variance is explained by the accounting treatment of the Geomatics Canada Revolving Fund. Funding unspent in one year moves forward into the future year as part of the total authority but is not part of the Main Estimates or Planned Spending. Actual expenditures are relative to the revolving funds needs and the 'variance' in one year becomes part of the total authorities in the following year.

[34] Commencing in the 2009-10 Estimates cycle, the resources for Program Activity: Internal Services are displayed separately from other program activities; they are no longer distributed among the remaining program activities, as was the case in previous Main Estimates. NRCan has incorporated the amounts for Internal Services for 2008-09 actuals in this DPR to address the comparability of spending and FTEs information by Program Activity between the fiscal years. In Internal Services, the Modernizing Federal Laboratories initiative for an amount of $17.1M, the Accelerating Federal Contaminated Sites Action Plan for an amount of $12.3M and the Collective Bargaining and Carry Forward for an amount of $14.8M represent the main variance between the Planned Spending and Total Authorities.

[35] The variance between Main Estimates and Total Authorities is explained by additional funding received through Supplementary Estimates A, B and C.

[36] The difference between the Main Estimates and Total Authorities is explained by lower royalty revenues received from the Atlantic Offshore Accords Statutory Programs. The revenues are affected by the price of oil and production levels. The amount of $1,764.0 M for Statutory Programs does not include EBP, Minister and car allowances, spending of proceeds from the disposal of Crown Assets and the Geomatics Canada Revolving Fund. It explains the variance between $1,764.0M and $1,839.9M stated in the Financial Statements.

[37] Due to the dispersed nature of NRCan's financial management system, the best estimate was used to determine the difference between Planned and Actual FTEs by Strategic Outcomes and Program Activities. NRCan is working towards implementing a SAP-based financial management system (Felix project) in 2011-12. Among other things, it will enable the department to better explain variances between planned and actual FTEs.

[38] Under Vote 1, NRCan received additional approvals during the fiscal year (through the Supplementary Estimates) totalling $149.8M. This included funding to support the ecoENERGY Retrofit – Homes Program, Investing in Canada's Forest Sector, the relocation and enhancement of the CANMET Materials Technology Laboratory, the Pulp and Paper Green Transformation Program, the assessment, management and remediation of federal contaminated sites, the modernization of federal laboratories, and the completion of Settlement Agreements with the provinces of Alberta and Saskatchewan in relation to the Soldier Settlement Board mineral rights. NRCan also received the following supplemental allocations during the fiscal year: $27.0M for collective bargaining; $39.4M carried over from the previous fiscal year; and $11.1M from TB Vote 30 (severance pay, parental leave, etc.).

[39] An internal reallocation of resources to create a Capital vote for the acquisition of machinery and equipment was done after NRCan received additional approvals during the fiscal year (through the Supplementary Estimates) totalling $8.9M.

[40] Under Vote 5, NRCan received additional approvals during the fiscal year (through the Supplementary Estimates) totalling $253.3M, which included funding to support the ecoENERGY Retrofit – Homes program, Investing in Canada's Forest Sector, the Pulp and Paper Green Transformation program, the Clean Energy Fund and the ecoENERGY for Biofuels program. Actual spending under Vote 5 was less than planned because $68.8M in spending was deferred to future years.

[41] The original 2009-10 Main Estimates forecast was based on royalty forecasts from the province. The 2009-10 actual expenditures reflect a decrease in payments to the province resulting from a decrease in gas prices.

[42] The original 2009-10 Main Estimates forecast was based on royalty forecasts from the province. These forecasts were significantly overstated when compared to 2009-10 actual expenditures due to decreases in both oil prices and production levels.

[43] Regulations under the provisions of the Fiscal Equalization Offset Payments in the Canada-Newfoundland Atlantic Accord Implementation Act allow Newfoundland and Labrador to be compensated for losses to equalization payments due to increases

in offshore oil and gas revenues. The province has an option of using the formula in accordance with the Act or can use the generic calculation under the equalization rules. If the latter is chosen, the Newfoundland and Labrador Fiscal Equalization Offset payment is zero. The increase reflects the province's decision to use the Accord Act formula, and the $465.3M represents the equalization offset payment for 2009-10, which is calculated by Finance Canada.

[44] http://www.nrcanrncan.gc.ca/com/resoress/pubpubeng.php?PHPSESSID=45cf88f73a946b28dfe3c6329d7ea785

[45] http://www.nrcan-rncan.gc.ca/com/

[46] http://www.tbs-sct.gc.ca/rpp/2009-2010/inst/rsn/rsn00-eng.asp

[47] Canada's share of resource-based world trade is measured by the Trade Performance Index (TPI) as defined and reported by the International Trade Centre of UNCTAD/WTO. TPI is the simple average of Canada's ranking compared to the world on five underlying indicators: i) value of net exports; ii) per capita exports; iii) share in world market; iv) product diversification and concentration; and v) market diversification and concentration. This indicator responds to NRCan's activities over the longer term, but may respond to other influences – such as global economic conditions - more immediately.

[48] Capital investments for forestry and energy are measured by "new capital investment" as defined and reported by Statistics Canada. In the case of mines, exploration investments are separated and measured by on-and off-mine-site "*exploration plus deposit appraisal*", less "*repair and maintenance*" as defined and reported by the Minerals & Metals Mining Statistics Division of NRCan. Data for 2005-2008 are actuals; data for 2009 are intentions. This indicator responds to NRCan's activities over the longer term, but may respond to other influences – such as domestic economic conditions - more immediately.

[49] Diversity is defined in terms of receiving countries as measured by a Herfindahl Index. Underlying data is collected from Statistics Canada *World Trade Atlas*. A value of 1.0 indicates only a single receiving country for all of Canada's exports; as the value moves towards zero, the more Canada has diversified its dependency on one receiving country. This indicator responds to NRCan's activities over the longer term, but may respond to other influences – such as economic conditions in destination markets - more immediately.

[50] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=157

[51] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=158

[52] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=121

[53] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=125

[54] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=123

[55] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=124

[56] http://ess.nrcan.gc.ca/tgi/index_e.php

[57] Studies have shown that industry invests on average $5 in exploration, and finds about $125 worth of minerals in the ground for each $1 invested in public geosciences programs.

[58] http://gsc.nrcan.gc.ca/gem/index_e.php

[59] http://www.nrcan.gc.ca/evaluation/reprap/2009/e20090611-eng.php

[60] http://nrcan.gc.ca/eneene/sources/uranuc/pdf/panrep-rapexp-eng.pdf

[61] http://www.nrcan-rncan.gc.ca/com/consultation/arcarc-eng.php

[62] http://www.nrcan.gc.ca/media/newcom/2009/200981a-eng.php

[63] http://cfs.nrcan.gc.ca/subsite/forest-communities

[64] http://cfs.nrcan.gc.ca/subsite/fnfp/home

[65] Canada's total energy savings due to efficiency are measured by the difference between energy use without energy efficiency improvements and energy use with energy efficiency improvements as defined and reported in Energy Efficiency Trends in Canada, 1990-2007. No data are available past 2007. The data are referenced to a 1990 baseline. This indicator responds to NRCan's activities over the longer term, but may respond to other influences (e.g., domestic economic conditions) more immediately. The 2007 drop in petajoule reductions is a result of a shift from conventional to more energy intensive unconventional oil production in the oil and gas sector.

[66] Results shown are the sum of peer-reviewed scientific and technical papers published by the Canadian Forest Service, CanmetENERGY, CANMET-MTL, and CANMET-MMSL as reported in a study commissioned by NRCan from Science-Metrix. The study is presented in Table 14 of the 2009 Evaluation of Minerals and Metals Sector (MMS) Science and Technology. This is a partial view of NRCan's overall contribution; further development of this indicator will appear in future DPRs.

[67] http://www.discours.gc.ca/eng/media.asp?id=1388

[68] GHG reductions attributable to NRCan programming are measured under the horizontal ecoACTION initiative administered by Environment Canada. NRCan programming beginning in 2007-08, and captured by this indicator includes eight different ecoENERGY programs: Buildings & Houses, Retrofit, Industry, Equipment, Personal Vehicles, Fleets, Renewable Power, and Renewable Heat.

[69] Results shown are the sum of peer-reviewed scientific and technical papers published by CanmetENERGY as determined by a study commissioned by NRCan from Science-Metrix. The study is presented in Table 14 of the 2009 Evaluation of Minerals and Metals Sector (MMS) Science and Technology. This is a partial view of NRCan's overall contribution; further development of this indicator will appear in future DPRs.

[70] http://www.nrcan.gc.ca/eneene/science/ceffep-eng.php

[71] http://polar.nrcan.gc.ca/

[72] http://www.nrcan.gc.ca/eneene/science/renren-eng.php

[73] http://www.climatechange.gc.ca/default.asp?lang=En&n=BDE8CD02-1

[74] http://www.ecoaction.gc.ca/index-eng.cfm

[75] http://www.ecoaction.gc.ca/ecoenergy-ecoenergie/index-eng.cfm

[76] http://www.ecoaction.gc.ca/ecoenergy-ecoenergie/power-electricite/index-eng.cfm

[77] http://www.ecoaction.gc.ca/ecoenergy-ecoenergie/heat-chauffage/index-eng.cfm

[78] http://www.nrcan.gc.ca/eneene/science/etiiet-eng.php

[79] http://oee.nrcan-rncan.gc.ca/corporate/retrofit-summary.cfm

[80] http://www.ecoaction.gc.ca/ecoenergy-ecoenergie/buildingshouses-batimentshabitations-eng.cfm

[81] http://www.ecoaction.gc.ca/ecoenergy-ecoenergie/industry-industrie-eng.cfm

[82] http://www.ecoaction.gc.ca/ecoenergy-ecoenergie/fleets-parcsvehicules-eng.cfm

[83] http://oee.nrcan.gc.ca/transportation/personal-vehicles-initiative.cfm

[84] http://www.nrcan-rncan.gc.ca/com/elements/issues/39/energ-eng.php

[85] http://oee.nrcan.gc.ca/transportation/ecoenergy-biofuels/index.cfm

[86] http://climatechange.gc.ca/default.asp?lang=En&n=7F9841C4-1

[87] http://oee.nrcan.gc.ca/publications/statistics/parliament08-09/index.cfm

[88] http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=EB302ECB-BA4E-4387-A279-DFFD600EA3EE

[89] http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=492D914C-2EAB-47AB-A045-C62B2CDACC29

[90] http://www.ecoaction.gc.ca/index-eng.cfm

[91] http://cfs.nrcan.gc.ca/subsite/pulp-paper-green-transformation

[92] The indicator measures NRCan's contribution on an on-demand basis to: 1) federal environmental assessment and reporting processes; and 2) Mineral and Energy Resource Assessments (MERA) for the potential establishment of national parks and other protected areas.

[93] Results shown are the sum of papers published by the Canadian Forest Service as determined by a study commissioned by NRCan from Science-Metrix. The study is presented in Table 14 of the 2009 Evaluation of Minerals and Metals Sector (MMS) Science and Technology. This is a partial view of NRCan's overall contribution; further development of this indicator will appear in future DPRs.

[94] https://nfi.nfis.org/home.php?lang=en

[95] Results shown here for safety, security, and geographic knowledge are the sum of papers published by the CANMET Canadian Explosives Research Laboratory, Geological Survey of Canada, and Geomatics Canada, as determined by a study commissioned by NRCan from Science-Metrix. The study is presented in Table 14 of them 2009 Evaluation of Minerals and Metals Sector (MMS) Science and Technology. This is a partial view of NRCan's overall contribution; further development of this indicator will appear in future DPRs.

[96] Twenty-one of the 53 projects being managed under the MPMO were actively undergoing or had completed a federal regulatory review process. A Project Agreement with target timelines had been signed for nearly all of these projects.

[97] Timeliness and accessibility of landmass and natural hazard system data is measured by: 1) Percent of target geomagnetic data posted to the web after quality control by the Canadian Hazard Information Service (CHIS); 2) Percent of target seismic data posted to the web after quality control review by CHIS; and 3) RADARSAT data reception accuracy within the Earth Observation Data Services (EODS) system. Deviations from 100% for these sources represent: a) technical disruptions such as transmission failures or data collection station outages; and b) data corruption such as interference from extraneous activities near data collection stations.

[98] Results shown here for safety, security, and geographic knowledge are the sum of papers published by the CANMET Canadian Explosives Research Laboratory, as determined by a study commissioned by NRCan from Science-Metrix. The study is presented in Table 14 of the 2009 Evaluation of Minerals and Metals Sector (MMS) Science and Technology. This is a partial view of NRCan's overall contribution; further development of this indicator will appear in future DPRs.

[99] Timeliness and accessibility of natural hazard system data is measured by: 1) Percent of target geomagnetic data posted to the web after quality control by the Canadian Hazard Information Service (CHIS); 2) Percent of target seismic data posted to the web after quality control review by CHIS. Deviations from 100% for these sources represent: a) technical disruptions such as transmission failures or data collection station outages; and b) data corruption such as interference from extraneous activities near data collection stations.

[100] http://www.nrcan-rncan.gc.ca/mms-smm/mate-mate/pip-pip-eng.htm

[101] http://www.nrcan-rncan.gc.ca/mms-smm/expl-expl/index-eng.htm

[102] Results shown here for geoscience knowledge are the sum of papers published by the Geological Survey of Canada and Geomatics Canada as determined by a study commissioned by NRCan from Science-Metrix. The study is presented in Table 14 of the 2009 Evaluation of Minerals and Metals Sector (MMS) Science and Technology. This is a partial view of NRCan's overall contribution; further development of this indicator will appear in future DPRs.

[103] The data shown here for boundary management and surveys illustrate: 1) New cadastral parcels added to the Canada Lands Survey System (CLSS); 2) Kilometres of vista and survey lines cleared on the Canada-U.S. border (IBC); 3) Average monthly access to geodetic referencing data that support geodetic and gravity information standards for precise positioning and geo-referencing (e.g., GPS); 4) New and/or updated 1:50,000 scale maps (only for 2009-10); and 5) Remote sensing scene production and client downloads of remote sensing data (RADARSAT). Certain of these measures – e.g., for the CLSS – are strongly influenced by domestic economic conditions; in addition, variation in the quantity of survey activities on the Canada-US border is strongly influenced by the difficulty of terrain in the area under survey.

[104] Twenty-one of the 53 projects being managed under the MPMO were actively undergoing or completed a federal regulatory review process. A Project Agreement with target timelines had been signed for nearly all of these projects.

[105] http://www.nrcan-rncan.gc.ca/mms-smm/pubr-pubr/pub-sta-eng.htm

[106] http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=3&initiativeID=123

[107] Under UNCLOS, coastal states can use scientific data to determine the outer limits of their continental shelf beyond the customary 200 nautical miles, which would give them the exclusive rights for the exploration of the resources found within their continental shelf. The treaty allows a country 10 years from ratification to submit the scientific proof; giving Canada until 2013 to submit its report.

[108] The Actual spending of the Geomatics Canada Revolving Fund is reducing due to the transition to a different funding model.

[109] http://www.nrcan.gc.ca/audit/reprap/2010/au1016-eng.php?PHPSESSID=6d0f11425632b1dcc64e6142525bbfcc

[110] http://www.nrcan.gc.ca/com/resoress/pubpub-eng.php

[111] http://www.tbs-sct.gc.ca/dpr-rmr/2009-10/index-en.asp