

# 2010-2011 ESTIMATES

Natural Resources Canada

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## A Report on Plans and Priorities

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



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It is my pleasure to present the *2010-2011 Report on Plans and Priorities* for Natural Resources Canada.

This report comes at an important time for Canada. Following the economic downturn, we are seeing a recovery of Canada's economy. It is critical that we keep this recovery on track. The Government is doing its part, continuing to deliver the necessary economic stimulus through its successful *Economic Action Plan* – and NRCan is playing a key role in this success.

The *Economic Action Plan* is also investing in the future success of Canada and our natural resource sectors. Canada is responding to a new model of competitiveness globally, where advancing environmental leadership has become a key economic imperative. Going forward, Canada will create green jobs through innovation, grow its market share and enhance its social licence to operate through continually improved environmental performance. In these ways and others, we will make the most of our position as a natural resources powerhouse.

Through its investments and science, NRCan is advancing the competitiveness of the resource sectors with programs to support clean energy, innovative forest sector technologies and products, green mining and new materials and manufacturing processes. We are creating a better future for Canada through the Clean Energy Fund and the \$1-billion Pulp and Paper Green

Transformation Program, which allows pulp and paper mills to invest in new technologies to improve energy efficiency and environmental performance. These and other investments will create the jobs and build the economy of tomorrow.

The Government is committed to making Canada the best place in which to invest, and NRCan's Major Projects Management Office has already improved Canada's investment climate, while maintaining the high environmental standards expected by Canadians.

Our Government will also ensure that Canada can realize the vast potential of the North. Building on NRCan's storied history in the region, it will work to advance sustainable resource development and create opportunities for northerners through programs such as Geo-mapping for Energy and Minerals.

By delivering on the priorities of the Government, NRCan will continue to advance its vision of improving the quality of life for Canadians by creating a sustainable resource advantage for Canada.

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



## Section I - Overview

### Raison d'être and Responsibilities

**N**RCan's raison d'être is to improve the quality of life of Canadians by helping to create a sustainable resource advantage. The department's aim is to position Canada as a leader in clean energy and sustainable resource development, globally. Underpinning this objective is the premise that access to natural resources, and the sustainable ways in which they are produced and used, has emerged as a core source of competitive advantage among nations.

To fulfill its mandate, NRCan conducts activities in areas of core federal jurisdiction that fall within its legislated roles and responsibilities, working towards outcomes supportive of economic competitiveness, environmental responsibility, the safety and security of Canadians and the stewardship of natural resources.

The Minister of Natural Resources is specifically responsible for, or has responsibilities under, more than 30 Acts of Parliament. The 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*. Within the Government of Canada, the Minister of Natural Resources also has responsibilities for the natural resources portfolio, which includes:

- Atomic Energy of Canada Limited (AECL);
- two independent regulators: the National Energy Board and the Canadian Nuclear Safety Commission;
- two offshore petroleum boards: the Canada-Newfoundland and Labrador Offshore Petroleum Board and the Canada-Nova Scotia Offshore Petroleum Board; and
- Sustainable Development Technology Canada, the Northern Pipeline Agency, and the Energy Supplies Allocation Board.

To deliver on its responsibilities, NRCan relies on a number of tools. It uses science and technology (S&T) to help address priorities, such as supporting Canada's extended continental shelf submission under the United Nations Law of the Sea Convention, facilitating the development of more fuel-efficient cars through materials research, and increasing energy efficiency for industry and individuals. It develops policies and programs that help create a sustainable resource advantage, supporting strong, competitive natural resource sectors that are environmentally and socially responsible. And it uses partnerships to help drive progress on the major issues, such as the deployment of carbon capture and storage technology.

### Planning Context

#### Emerging Economic Recovery

Following one of the most severe economic downturns in over 50 years, Canada is now in the early stages of recovery. Already, the Canadian economy has experienced a modest expansion with continued growth expected throughout 2010. Encouraging economic prospects are due, in large part, to the successful monetary and fiscal policies implemented by Canada and other like-minded countries. Here at home, Canada's Economic Action Plan (EAP) is continuing to deliver timely and targeted stimulus measures to help communities, businesses and workers. At the same time, the EAP is helping ensure that Canada emerges from the downturn 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.

#### Responding to Today, Preparing for Tomorrow

**Delivering Stimulus to Maintain Jobs** – NRCan, as the primary federal partner in natural resources with the provinces, territories, industry and others, is playing an important role in creating the conditions that support both the economic recovery and future

success of Canada. The department is delivering short-term economic stimulus through initiatives such as the ecoENERGY Retrofit for Homes Program, which will improve the efficiency of over 500,000 homes, supporting jobs in the home renovation industry, and reducing both the long-term energy costs for homeowners and residential greenhouse gas emissions. In fact, unprecedented demand led the Government to propose an additional \$285 million in funding for this program to be spent in 2010-11. NRCan is also supporting the federal Economic Development Agencies that are delivering the \$1-billion Community Adjustment Fund to create employment opportunities in communities affected by the economic downturn, including those that are resource-dependent.

**A New Competitiveness Model** – NRCan is also focused on preparing Canada and the natural resource sectors for the economy of tomorrow. In the 21st century, natural resources are being defined in ways that are different from the past. In this future, Canada can expect ongoing price volatility for commodities, intense global competition, complex environmental and social challenges, and new economic opportunities. Canada must lead in meeting domestic and global expectations that the natural resource sectors give increasing emphasis to environmental responsibility along with the traditional economic drivers. This requires the need to accelerate a shift from a “volume” to “value” focus for natural resources in order to keep high quality jobs in the country and ensure a rising quality of life. It requires effective regulatory processes to support investment and protect the environment. It means that Canada must become a global leader in producing and using resources in more efficient ways, and in creating and commercializing greener products and technologies. And it offers global opportunities to advance our position as a natural resource powerhouse, including strengthening our nuclear industry.

In short, succeeding in this new reality demands a competitiveness model that facilitates sustainable, resource-driven growth. It is a model that combines the economic imperatives of a sound business climate

and improving productivity, with the need to show environmental leadership and corporate social responsibility. Canada has started this transition and is on the right path. It must now use its early successes as a base for building momentum and becoming a leader in making the new competitiveness model a reality.

**Embracing the New Reality** – Canada and its leading resource companies are embracing this new competitiveness model. The country’s mining companies know their success depends on how well they make use of advanced technologies in exploration, extraction, and production, recognising that their social licence to operate, in Canada and abroad, increasingly depends on the soundness of its environmental performance and social responsibility.

Canada’s forest sector is going through an intense period of transformative change as it seeks to develop a new operating model with diversified forest products and expanded market opportunities. Its future rests on how well it adjusts to a global market with increasing competition and emphasis on environmental performance while continuing to shift from its historical volume-based commodity focus (e.g., lumber and pulp) toward a more diversified, market-driven emphasis on product value.

The country’s energy sectors are no different. They are sophisticated developers and users of new technologies and materials, contributing billions of dollars in production investment, including in renewable and alternative energy. Going forward, they face complex challenges mitigating economic drivers (such as strong and increasing growth) and growing environmental imperatives (related to extraction and green house gas emissions), as well as in updating the energy infrastructure.

**NRCan Leadership** – The Government, with the help of NRCan, is driving Canada’s future competitiveness and building a sustainable resource advantage for its citizens. NRCan has taken action with programs that range from supporting the development of new forestry technologies and products and the diversification of



markets at home and abroad, along with programs that identify resource potential such as Geoscience Mapping for Energy and Minerals. Other activities have been undertaken to improve the performance of the regulatory system for natural resource projects and better support competitiveness in the manufacturing sector through innovative partnerships such as the relocation of the CANMET Materials Technology Laboratory into an updated facility in Hamilton. The Clean Energy Fund, delivered by NRCan, is resulting in important investments in green energy technologies to move Canada toward a future of clean energy. The ecoENERGY suite of programs is also helping drive the development of renewable power and alternative fuels. In addition, the recent \$1-billion Pulp and Paper Green Transformation Program will allow pulp and paper mills in all regions of Canada to invest in new technologies that improve environmental performance in areas such as energy efficiency and renewable energy production. Federal programs have been put in place to support the development of new forestry technologies and products, as well as the diversification of markets at home and abroad.

### Establishing Priorities

NRCan has set for itself priorities which support the Government's objectives and respond to the demands of the new global competitiveness model. NRCan will focus on:

1. **improving the performance of the regulatory system for major project reviews** which will help ensure that Canada is the best country in which to invest;
2. **enabling competitive resource sectors**, with a focus on innovation in the forest sector and green mining to enhance market opportunities and create the jobs and economy of tomorrow;
3. **advancing the clean energy agenda**, in Canada, through science, technology advancements and program investments;

4. **managing nuclear issues** to meet Canada's energy and environmental needs, while reducing costs and risks to taxpayers, and positioning Canada's nuclear industry to prosper; and
5. **advancing sustainable resource development in the North** to help Canada realize the vast potential of the region's people and resources.

### Renewing NRCan and its Role

NRCan has been undergoing a process of departmental renewal, spurred by the need to develop a more collaborative, integrated and results-based organization and advance Public Service Renewal. A strategic framework was developed to guide and underpin our way of doing business, highlighting our vision and science and policy integration. Horizontal collaboration and collaborative tools have been harnessing knowledge and expertise. A strong focus has been put on human resources renewal, from recruitment to development of our staff and talent management. In 2009, NRCan completed a strategic review assessment of the priority and performance of its programs. Going forward, NRCan renewal will focus on priorities and continue to improve its management systems, renew its workforce, and strengthen accountabilities.

As a key player in the delivery of the Government's agenda, the department has examined its roles to determine where it can best lead and how it can best help Canada harness the full value of all of its assets – its vast resource base, its people and ideas, and its systems, such as regulation and infrastructure – to build a stronger, more resilient resource economy. Going forward, the department will work to pioneer geographic and knowledge frontiers when and where the national interest deems it necessary. It is committed to driving an S&T innovation agenda to achieve a sustainable resource future. Through priority-driven partnerships, the department is working to deliver on its priorities with stakeholders to leverage their strengths and align around common objectives.

## Risk Framework

As a large and diverse organization, NRCan is faced with a wide range of uncertainties that could impact its ability to deliver on its objectives. The department identifies and responds to these uncertainties via an Integrated Risk Management (IRM) Framework. This framework includes the following:

- identifying, assessing, and managing risks to the successful attainment of all of its program sub-activities in concert with integrated business planning (with particular emphasis on grant and contribution programs and capital investments);
- continuous corporate-level forecasting, tracking, and management of issues that could affect or require a response from the department;
- preparing for, and – if necessary – responding to a range of emergency situations that fall within the mandate of the Minister of Natural Resources (including business continuity);
- maintaining policies, processes and monitoring in support of sound financial control; and
- maintaining a robust internal audit function, informed by the other elements of the IRM Framework.

For fiscal 2010-11, the department is facing and actively managing a range of key, high-level risks:

- NRCan has been implementing and delivering on significant elements of the Government's EAP, including an enhanced ecoENERGY Retrofit program, substantial forestry-related programming, and the Clean Energy Fund. This effort has been attended by risks associated with the rapid design and/or scale-up of large dollar value programming; for example, the capacity to develop, implement, and monitor grant and contribution agreements has needed to be quickly enhanced. The department

has successfully met these challenges, and the risks associated with the EAP – while still of note and requiring close attention – are expected to diminish in 2010-11.

- In order for NRCan to deliver on its current priorities and advance its vision for a sustainable Canadian resource advantage, the department must sustain and enhance its world-class S&T establishment. A key element of this establishment is a diverse and complex asset base that includes specialized real property, scientific and technical equipment, systems, and fleets. In general, this asset base is aging and under-capitalized. Ensuring targeted deployment of scarce capital resources to areas of the greatest need and greatest programming impact requires rigorous oversight and responsiveness to issues and opportunities. In this area, and for 2010-11, NRCan will continue modernization of key laboratories under the Accelerated Infrastructure Program of the EAP; in addition, NRCan will achieve key milestones in the relocation and renewal of its CANMET Materials Technology Laboratory (MTL) on the campus of McMaster University in Hamilton, Ontario.
- NRCan has a track record of successfully delivering major short-term programming initiatives with large, high priority, but time-limited funding streams – the major share of the department's current funding is of this type. This funding structure carries with it certain inherent risks; in particular, it increases the uncertainty of managing long-lived capital assets and highly qualified personnel. As NRCan's funding streams expand and contract in response to Government priorities, so must the department work to ensure that its corporate infrastructure is robust, resilient, and flexible.

## Strategic Outcomes and Program Activity Architecture

NRCan manages its program delivery through three strategic outcomes (SO) and seven program activities (PA) that are designed to achieve the expected results that collectively contribute to the realization of the strategic outcomes.

<b>Strategic Outcome #1 Economic Competitiveness</b> Natural resource sectors are internationally competitive, economically productive, and contribute to the social well-being of Canadians	PA 1.1 Economic Opportunities for Natural Resources	1.1.1 Minerals and Metals Markets, Investment, Innovation and Productivity
		1.1.2 Securing Forest Product Markets
		1.1.3 Advancing Forest Product Innovation
		1.1.4 Aligning Forest S&T Governance
		1.1.5 Supporting Energy and Mineral Exploration
		1.1.6 Energy Policy
	1.1.7 Statutory Programs - Atlantic Offshore	
	PA 1.2 Natural Resource-based Communities	1.2.1 Minerals and Metals in Support of Communities
		1.2.2 Forest-based Community Partnerships
<b>Strategic Outcome #2 Environmental Responsibility</b> Canada is a world leader on environmental responsibility in the development and use of natural resources	PA 2.1 Clean Energy	2.1.1 Materials for Production and Transportation of Energy and Energy-Efficient Vehicles
		2.1.2 Clean Energy Policy
		2.1.3 Renewable Energy
		2.1.4 Energy Science and Technology
		2.1.5 Energy Efficiency and Alternative Transportation Fuels
		2.1.6 Energy-based Sustainability in Pulp and Paper
	PA 2.2 Ecosystem Risk Management	2.2.1 Strong Environmental Performance in Minerals and Metals
		2.2.2 Forest Ecosystems Science and Application
		2.2.3 Environmental Geoscience
		2.2.4 Radioactive Waste Management
<b>Strategic Outcome #3 Safety, Security and Stewardship</b> 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	PA 3.1 Adapting to a Changing Climate and Hazard Risk Management	3.1.1 Mining, Infrastructure and Explosives Safety and Security
		3.1.2 Forest Disturbances Science and Application
		3.1.3 Climate Change Geoscience and Adaptation
		3.1.4 Public Safety Geoscience
	PA 3.2 Natural Resource and Landmass Knowledge and Systems	3.2.1 Minerals and Metals Knowledge and Information
		3.2.2 Essential Geographic Information and Support
		3.2.3 Federal Regulatory Process for Major Natural Resource Projects
	PA 3.3 Geomatics Canada Revolving Fund	N/A
	<b>4.1 Internal Services</b>	4.1.1 Governance and Management Support
4.1.2 Resource Management Services		
4.1.3 Asset Management Services		

## Contribution of Priorities to Strategic Outcomes

For the 2010-11 planning period, the department has identified priorities (operational and management) that are critical to realizing its SOs and that contribute to achieving the Government's agenda. These priorities represent key areas of focus for the department in moving forward, in 2010-11, to inform policy development, the pursuit of our science and technology initiatives, and delivery of our programs. Programs or initiatives that directly contribute to Canada's Economic Action Plan initiatives have been identified. More information about NRCan's programs and initiatives can be found at [www.nrcan.gc.ca](http://www.nrcan.gc.ca).

Priority: Improving the Performance of the Regulatory System for Project Reviews	Supports SO: 1-2-3	Previously Committed Priority
<p><i>Why is this a priority?</i> Addressing the challenges facing the federal regulatory system for project reviews is key to creating the conditions for an innovative and prosperous economy, protecting the health and safety of Canadians and conserving the environment.</p> <p><i>What are the plans for meeting this priority?</i> Through the Major Projects Management Office (MPMO), NRCan will continue to provide overarching management of the federal regulatory review process for resource projects and to work collaboratively with other federal regulatory departments and agencies to develop and implement innovative new approaches to continually improve performance of the federal system. This work will include the development and implementation of a whole-of-government strategy to modernize the regulatory review process for project reviews, including improvements to the federal legislative and/or regulatory framework. It will also include working collaboratively with provincial governments to identify opportunities to improve the integration of federal and provincial review processes.</p>		
Priority: Competitive Resource Sectors	Supports SO: 1-2-3	Previously Committed Priority
<p><i>Why is this a priority?</i> Canada's natural resource sectors are facing long-term, structural challenges. Supporting enduring, sustainable and transformative change is key to improving the long-term economic competitiveness and sustainability of these sectors.</p> <p><i>What are the plans for meeting this priority?</i> NRCan will deliver on this priority with substantial new funding for FPInnovations (EAP initiative) — Canada's integrated forest products research institute — for the acceleration of a long-term research agenda focusing on the development of knowledge and technologies to transform the forest sector with new products and new end-uses for wood fibre (EAP initiative). NRCan will also make new substantial contributions to grow a broader portfolio of forest product markets, both at home and abroad, and will ensure that the environmental reputation of the sector reflects the reality of its strong record of sustainability.</p> <p>As key elements of delivering on this priority, NRCan will renew and relocate its CANMET Materials Technology Laboratory to the world-class McMaster Innovation Park in Hamilton, Ontario.</p>		

<sup>1</sup> An ongoing priority has no end date; a previously committed priority has an estimated end date and was committed to in prior budgets or main estimates documents.



Priority: Clean Energy	Supports SO: 1-2	Previously Committed Priority
<p><i>Why is this a priority?</i> Energy is one of the largest segments of the economy and Canada’s leading resource export. This wealth of resources already makes Canada an energy superpower. NRCan is working to make Canada a clean energy superpower. Strong federal leadership is critical to ensuring that all of Canada’s energy resources can continue to contribute to the country’s economy, while meeting domestic and global expectations that energy be produced and used in cleaner and sustainable ways.</p> <p><i>What are the plans for meeting this priority?</i> NRCan supports a clean energy transition through the delivery of programs including its suite of ecoENERGY programs, part of the Government’s broader ecoACTION plan. In general, the department takes action in three key themes: energy efficiency; renewables and clean electricity; and cleaner fossil fuels and alternatives.</p> <p>NRCan’s clean energy programs support the Government’s objectives by encouraging the uptake of energy efficiency products and services (e.g., the ecoENERGY Retrofit Initiative [EAP initiative]); developing markets for new clean technologies (e.g., the ecoENERGY for Renewable Power Program); and supporting industry-specific innovations (e.g., the Pulp and Paper Green Transformation Program).</p> <p>NRCan will continue to support Canada’s science and innovation system and pursue international collaboration to drive clean energy research and development. In particular, the ecoENERGY Technology Initiative and the Clean Energy Fund (EAP initiative) support the research, development and demonstration of cutting-edge clean energy technologies.</p>		
Priority: Managing Nuclear Issues	Supports SO: 1-2	Ongoing Priority
<p><i>Why is this a priority?</i> Nuclear energy plays a critical role in Canada’s energy mix. The Government’s nuclear policy is driven by three over-arching objectives: (i) meeting Canada’s energy and environmental needs safely, economically and reliably; (ii) reducing costs and risks for taxpayers while maximizing returns on Canada’s investments in nuclear; and (iii) positioning Canada’s nuclear industry to seize domestic and global opportunities.</p> <p><i>What are the plans for meeting this priority?</i> NRCan will deliver on this priority in partnership with key entities in the Minister’s portfolio and other government departments. In particular, NRCan will support Atomic Energy of Canada Limited’s (AECL) efforts toward the renewal of its infrastructure to meet health, safety, security and environmental requirements, and the development of advanced CANDU reactor designs. NRCan will continue to implement the announced restructuring of AECL, and the offering of its commercial reactor division, with the objective of positioning Canada’s nuclear industry to take maximum advantage of domestic and international opportunities. Throughout the restructuring process, AECL funding pressures will need to be managed in order to preserve the value of the asset. NRCan will also support the Canadian Nuclear Safety Commission in its efforts to improve the effectiveness and efficiency of the regulatory approvals process. Together with Health Canada, NRCan will work to ensure that Canadians have a secure supply of medical isotopes. Finally, NRCan will continue to manage the Government of Canada’s radioactive waste liabilities.</p>		

Priority: Sustainable Resource Development in the North	Supports SO: 1-3	Ongoing Priority
<p><i>Why is this a priority?</i> A key objective of the government is to realize the vast potential of Canada's North, strengthen Canada's sovereignty and promote northern economic and social development, which requires private sector investment. NRCan is supporting the industry in making informed and effective investment decisions by providing improved landmass, offshore and resource knowledge and certainty of tenure.</p> <p><i>What are the plans for meeting this priority?</i> The five year/\$100 million Geo-mapping for Energy and Minerals Program (GEM) will lead to increased private sector investment in new energy and mineral resources in the North, implemented in collaboration with territorial governments and local communities. NRCan is undertaking legal boundary surveys of Aboriginal land claims to support economic development, providing logistical support for Arctic research, and completing the topographic mapping of the North by 2012 that will provide the geographic information to help manage economic development.</p>		

## Management Priorities

Priority: Integrated Management Excellence	Supports SO: 1-2-3	Ongoing Priority
<p><i>Why is this a priority?</i> NRCan's ability to successfully deliver on its mandate and operational priorities is dependent upon the timely and effective support provided by internal services (such as strategic policy and planning, human resources, finances).</p> <p><i>What are the plans for meeting this priority?</i> Further refinements to the integrated business planning process and an improved governance structure will help align operational priorities with the corporate strategies, notably those related to people and financial management. These include several components, such as improvements to the priority-setting exercise, the creation of a Resource Management Committee to strengthen financial management at the department level, a strengthened science and policy leadership capacity to help deliver on operational priorities, and a strengthened Departmental Audit Committee.</p> <p>The implementation of the Strategic Review decisions will ensure a greater alignment of activities with the priorities of Canadians, whereas the implementation of the S&amp;T Strategy will enable the department to better address complex issues that transcend particular resource sectors.</p> <p>The renovation of both the Program Activity Architecture and the Performance Measurement Framework will improve senior management's ability to measure performance and make strategic resource reallocations.</p>		
Priority: Modernizing Infrastructure and Systems	Supports SO: 1-2-3	Previously Committed Priority
<p><i>Why is this a priority?</i> NRCan's ability to successfully deliver on its mandate and operational priorities is also dependent upon timely financial information and access to adequate facilities.</p> <p><i>What are the plans for meeting this priority?</i> As part of the Accelerated Infrastructure Program (EAP initiative), NRCan has received funds to continue to modernize its laboratories in 2010-11. These investments are critical to deliver on its S&amp;T priorities. NRCan is also modernizing its financial system, replacing its 22 year-old legacy system with SAP.</p>		

## Delivering on Canada's Economic Action Plan (EAP)

Expected Results	Indicators	Planned Spending 2010-2011
<b>Expanding Market Opportunities (Canada Wood, Value to Wood, North American Wood First Programs)</b>		
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	PA 1.1 - \$21.0M
<b>Expanding Market Opportunities (Support large-scale demonstrations of Canadian-style use of wood in offshore and domestic markets)</b>		
Support related initiatives to increase market opportunities for Canadian wood product producers in offshore (e.g., Canada Wood Program) and domestic (e.g., North American Wood First) markets	Demonstration projects support initiatives to increase non-traditional uses of wood in offshore and domestic markets	PA 1.1 - \$5.7M
<b>Promoting Forest Innovation and Investment (Development of demonstration-scale pilot projects of new products for use in commercial applications)</b>		
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	PA 1.1 - \$37.0M
<b>Clean Energy Fund</b>		
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 standards developed; number of technology demonstrations leading to commercialisation (long-term outcome)	PA 2.1 - \$174.9M
<b>ecoENERGY Retrofit – Homes Program</b>		
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	PA 2.1 - \$389.9M

Expected Results	Indicators	Planned Spending 2010-2011
<b>Promoting Forest Innovation and Investment (Contributions to FPInnovations for its Transformative Technologies Program)</b>		
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	PA 1.1 - \$43.8M
<b>Modernizing federal laboratories</b>		
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	PA 4.1 - \$24.8M PA 3.1 - \$5.9M
<b>Accelerating federal contaminated sites</b>		
Conducting site assessments, remediation and risk management activities on federal contaminates sites	Number of assessment projects planned, underway or completed; number of remediation/risk management projects planned, underway or completed	PA 4.1 - \$8.6M

## Planning Summary

NRCan's planned spending for fiscal year 2010-11 is \$4,455.9 million. Included in this amount is \$1,676.4 million in planned spending for the Atlantic Offshore Accords statutory payments. The Accords provide that the benefits of revenues from the offshore should flow to provinces as if the resources were on land, and direct that these revenues be collected by the Receiver General for Canada, with a like amount to be paid to the provinces (Newfoundland and Labrador and Nova Scotia). As the amounts credited to the Receiver General and paid out of the Revenue Fund are the same, there is no net liability incurred by the federal government as a result of the increase in payments to the provinces.

Departmental planned spending is expected to decrease in 2011-12 and 2012-13 as the EAP initiatives and sunseting programs wind down.



## Financial and Human Resources

Planned Spending	2010-11	2011-12	2012-13
Program Spending	2,779.5	1,681.3	1,234.9
Statutory Programs — Atlantic Offshore	1,676.4	1,354.7	1,010.9
<b>Total</b>	<b>4,455.9</b>	<b>3,036.0</b>	<b>2,245.8</b>
<b>Full-Time Equivalents (FTEs)</b>	<b>4,571</b>	<b>4,347</b>	<b>4,300</b>

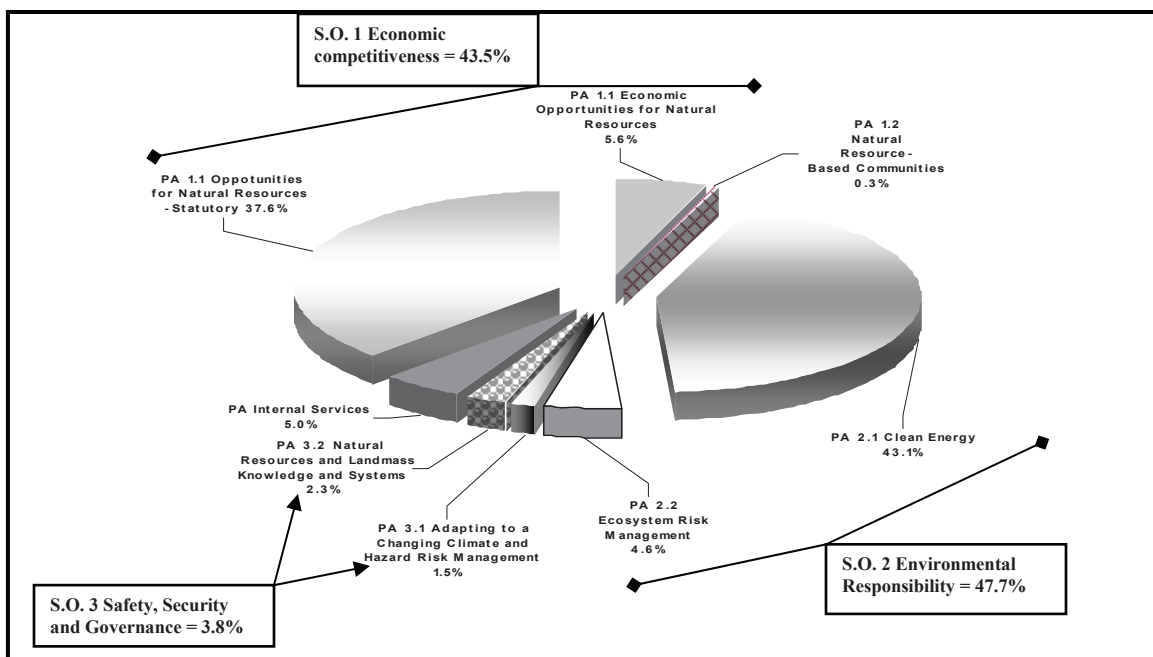
### Allocation of Funding by Strategic Outcome and Program Activity

The chart below reflects the allocation of NRCan’s planned spending by strategic outcome and by program activity for the 2010-11 fiscal year.

NRCan plans to spend 43 percent of its resources under strategic outcome (SO) 1 – Economic Competitiveness. The Economic Opportunities for Natural Resources program activity makes up the largest portion of the funding given that it includes the statutory payments under the Atlantic Offshore Accords.

The Clean Energy program activity has the next highest planned spending at 43 percent of the total and at 90 percent of SO 2 – Environmental Responsibility. Spending under this program activity promotes increased energy efficiency, increased production of low-emission energy, and reduced environmental impacts associated with energy production and use.

The balance of the planned spending for the remaining program activities is less than 6 percent of the total budget in each case.



The following table details how funds will be allocated by strategic outcomes and program activities over the planning period.

<b>Strategic Outcome 1: Economic Competitiveness</b>						
Natural resource sectors are internationally competitive, economically productive, and contribute to the social well-being of Canadians						
<b>Performance Indicator:</b> Canada's share of world trade relative to OECD nations					<b>Target:</b> Favourable trend over the long term	
Program Activity <Main Estimates>	Expected Result	Forecast Spending 2009-10 (\$M)	Planned Spending (\$M)			<Alignment to GoC Outcomes> (or statutory obligations)
			2010-11	2011-12	2012-13	
1.1 Economic opportunities for natural resources <sup>2</sup>	Competitive national and international markets, stable economic opportunity and investment in natural resources	304.3	248.1	148.3	119.4	Strong Economic Growth
1.2 Natural resource-based communities	Increased knowledge, skills and capacity to benefit from the evolving natural resource economy within resource-based communities (both Aboriginal and non-Aboriginal)	14.4	11.8	11.9	11.9	Strong Economic Growth
<b>Strategic Outcome 2: Environmental Responsibility</b>						
Canada is a world leader on environmental responsibility in the development and use of natural resources						
<b>Performance Indicators:</b> (i) Canada's total annual energy savings due to efficiency (ii) Contribution to advancement of innovative and environmentally responsible practices in the resource sectors measured by uptake of knowledge, technologies and demonstration projects					<b>Target:</b> Favourable trend over the long term	
Program Activity	Expected Result	Forecast Spending 2009-10 (\$M)	Planned Spending (\$M)			<Alignment to GoC Outcomes> (or statutory obligations)
			2010-11	2011-12	2012-13	
2.1 Clean energy <sup>3</sup>	Increased energy efficiency, increased production of low-emission energy, and reduced environmental impacts associated with energy production and use	831.8	1,918.7	1,113.5	717.2	A Clean and Healthy Environment

<sup>2</sup> Reduced spending in 2010-11 compared to 2009-10 is mainly due to the one-time funding for the Soldier Settlement Board payment in 2009-10. Reduced spending in the other years is mainly from the Forestry Market and Diversification programs.

<sup>3</sup> Funding increases in 2010-11 are for the Pulp and Paper Green Transformation Program, Clean Energy Fund (EAP initiative), Clean Energy Agenda, and ecoENERGY Retrofit (EAP initiative) and ecoENERGY for Biofuels programs.

2.2 Ecosystem risk management <sup>4</sup>	Canada understands and mitigates risks to natural resource ecosystems and human health	180.0	205.7	89.3	97.6	A Clean and Healthy Environment
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### 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 and security of Canadians, and the effectiveness of federal land stewardship and regulatory processes

#### Target:

Favourable trend over the long term

Program Activity	Expected Result	Forecast Spending 2009-10 (\$M)	Planned Spending (\$M)			<Alignment to GoC Outcomes> (or statutory obligations)
			2010-11	2011-12	2012-13	
3.1 Adapting to a changing climate and hazard risk management	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	77.9	68.6	61.9	50.4	An Innovative and Knowledge-based Economy
3.2 Natural resource and landmass knowledge and systems <sup>5</sup>	Canada has the natural resource and landmass knowledge to contribute to the development of the country through maps, property rights, boundary management, statistics and integrated decision-making, and plays a leadership role in federal/provincial/territorial and international fora	108.1	103.6	85.2	74.4	An Innovative and Knowledge-based Economy
3.3 Geomatics Canada Revolving Fund <sup>6</sup>	The demand by NRCan, other government departments and industrial clients for the revolving fund products and services is met through full cost-recovery	1.9 (1.9)	1.9 (1.9)	1.9 (1.9)	1.9 (1.9)	An Innovative and Knowledge-based Economy
4.1 Internal Services <sup>7</sup>		212.2	223.0	171.2	164.0	
Sub-Total		1,728.7	2,779.5	1,681.3	1,234.9	

<sup>4</sup> The reduction from 2010-11 funding levels in 2011-12 and 2012-13 is a result of lower planned spending under the Nuclear Legacy Liabilities program.

<sup>5</sup> Reduced spending under the United Nations Convention of the Law of the Sea (UNCLOS) initiative.

<sup>6</sup> All activities are performed on a cost recovery basis.

<sup>7</sup> Higher spending in 2009-10 and 2010-11 is attributable to the Modernizing Federal Laboratories Program (EAP initiative).

Statutory Programs						
1.1 Economic Opportunities for natural resources <sup>8</sup>		2,182.2	1,676.4	1,354.7	1,010.9	Statutory Obligations
<b>Total NRCan<sup>9</sup></b>		<b>3,910.9</b>	<b>4,455.9</b>	<b>3,036.0</b>	<b>2,245.8</b>	

## Expenditure Profile

The graph illustrates the departmental spending trend for the period 2006-07 to 2012-13. Key points include the following:

### *Programs (including EAP initiatives):*

- Program spending has been increasing since 2006-07 and is expected to continue through 2010-11, after which a decrease is expected.
- Increases to forecast spending in 2009-10 resulted primarily from increases to the ecoENERGY for Biofuels program, the Pulp and Paper Green Transformation Program, the Soldier Settlement Board, Modernizing Federal Laboratories Program (EAP initiative), Budget 2009 announcements for the ecoENERGY Retrofit Program (EAP initiative), the Federal Contaminated Sites Action Plan (EAP initiative), and the Investing in Canada's Forest Sector programs (EAP initiative).
- Planned spending increases for 2010-11 are attributed primarily to the Pulp and Paper Green Transformation Program which has been allocated \$800 million in 2010-11 up from \$200 million in 2009-10. Other increases will occur in the CANMET MTL Relocation Program, the Clean Energy Agenda, the Forestry Market Diversification and Innovation programs, the Clean Energy Fund (EAP initiative), the ecoENERGY for Biofuels Program, the Modernizing Federal Laboratories Program (EAP initiative), the grant to Sustainable Development Technology of Canada (SDTC), the Nuclear Legacy Liabilities Program and Collective Bargaining.
- Planned spending decreases for 2011-12 are attributed primarily to the Nuclear Legacy Liabilities Program, the ecoENERGY for Biofuels Program, the Clean Energy Agenda, the ecoTRANSPORT Strategy, the Pulp and Paper Green Transformation Program, the grant to SDTC, and the Forestry Market Diversification and Innovation programs.
- Planned spending decreases for 2012-13 are attributed to sunsetting or reduced funding for the ecoENERGY Technology Initiative, the relocation of CANMET MTL, the Adaptation Theme for the Clean Air Agenda, and the ecoENERGY for Biofuels Program.

<sup>8</sup> Statutory programs under the Economic Opportunities for Natural Resources program activity – NRCan makes various statutory payments to Nova Scotia, Newfoundland and Labrador through its responsibility for offshore energy resources. The Atlantic Offshore Accords provide that the benefits of revenues from the offshore should flow to provinces as if the resources were on land.

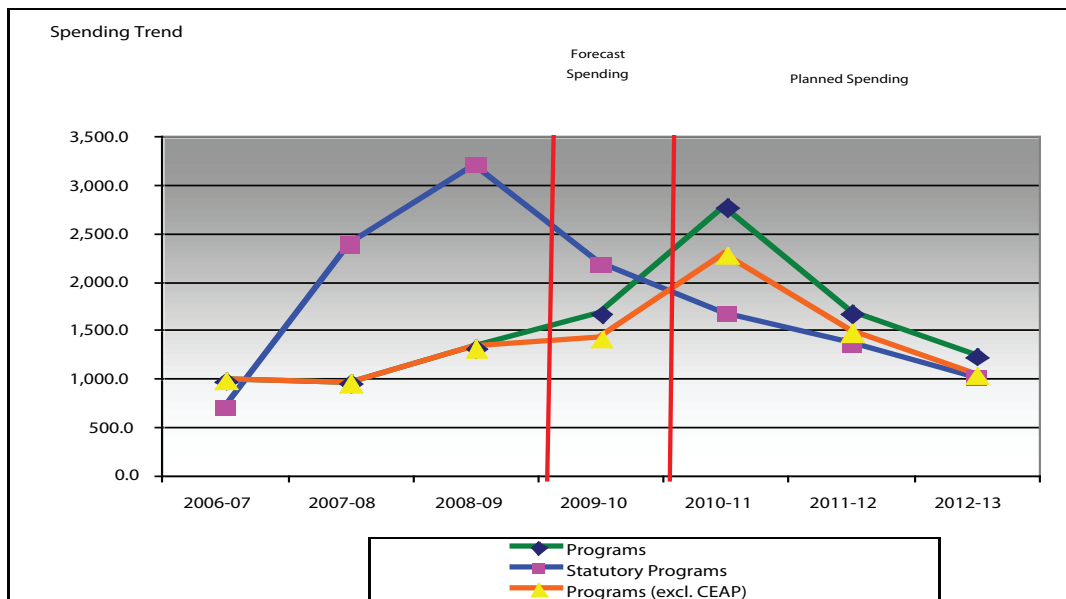
<sup>9</sup> Planned spending includes adjustments for Supplementary Estimates Appropriated, Supplementary Estimates Statutory and other adjustments identified by Treasury Board.

*Statutory Programs:*

- Statutory payments under various Atlantic Offshore Accords are based primarily on oil and gas royalty revenues received which are affected by both the price of oil and production levels. The significant increase in actual expenditures is largely as a result of the significant increase in oil prices experienced in the 2007-08 and 2008-09 fiscal years. The anticipated spending decrease and subsequent reduction in planned spending for 2009-10 and subsequent years reflects the latest forecast of oil price and production levels: the federal government expects to collect offshore-related revenues at a level similar to that prevailing in the years prior to 2007-08.

*Programs (excluding Canada’s EAP initiatives):*

- This trend is provided to illustrate the significant impact of EAP initiatives on NRCan’s program planned spending in the period 2009-10.
- The trend excludes all EAP initiatives, namely: the Clean Energy Fund, Modernizing Federal Laboratories Program, the Investing in Canada’s Forest Sector Program, and the ecoENERGY Retrofit – Homes Program.
- The spike in program spending excluding EAP initiatives that is apparent for 2010-11 is attributable to the Pulp and Paper Green Transformation Program.



## Voted or Statutory Items

Voted or Statutory Items	Truncated Vote or Statutory Wording	Main Estimates (\$M) 2009-10	Main Estimates (\$M) 2010-11
1 <sup>10</sup>	Operating expenditures	700.3	805.8
5 <sup>11</sup>	Capital		15.1
10 <sup>12</sup>	Grants and Contributions	457.0	1,877.6
(S)	Minister of Natural Resources – Salary and Motor Car Allowance	0.0	0.0
(S)	Contributions to Employee Benefit Plans	53.2	57.8
(S)	Canada-Nova Scotia Development Fund	1.4	0.0
(S)	Canada-Newfoundland Offshore Petroleum Board	7.2	6.5
(S)	Canada-Nova Scotia Offshore Petroleum Board	3.4	3.4
(S)	Payments to the Nova Scotia Offshore Revenue Account	351.5	295.3
(S)	Payments to the Newfoundland Offshore Petroleum Resource Revenue Fund	2,045.9	1,371.2
(S)	Grant to the Canada Foundation for Sustainable Development Technology	20.0	20.0
(S)	Geomatics Canada Revolving Fund		
	- Operational expenditures	1.9	1.9
	- Respendable revenue	(1.9)	(1.9)
<b>Main Estimates</b>		<b>3,639.9</b>	<b>4,452.7</b>
Adjustments:			
Supplementary Estimates – Appropriated		458.7	
Supplementary Estimates – Statutory		(227.1)	
Direct Funding		39.4	
Other Adjustments			3.2
<b>Total Planned Spending</b>		<b>3,910.9</b>	<b>4,455.9</b>

\* Pursuant to the Atlantic Offshore Accords, NRCan makes payments to the provinces of Newfoundland and Labrador, and Nova Scotia in amounts equal to royalties collected in relation to the offshore. This increase reflects the latest forecast of offshore related revenue the federal government expects to collect over the planning period.

<sup>10</sup> The increase of \$105.6 million in Vote 1 is mainly due to planned spending to support Canada's EAP.

<sup>11</sup> A Capital Vote (Vote 5) has been established for fiscal year 2010-11 as planned spending exceeds the \$5 million threshold for establishing a capital vote.

<sup>12</sup> The increase of \$1,205.6 million in Vote 10 is mainly due to planned spending to deliver Canada's EAP.

## Section II - Analysis of Program Activities by Strategic Outcome

Government of Canada Outcome: Strong Economic Growth	
<p><b>Strategic Outcome 1: Economic Competitiveness</b></p> <p>Natural resource sectors are internationally competitive, economically productive, and contribute to the social well-being of Canadians</p>	<b>NRCan Priorities</b>
	Competitive Resource Sectors
	Clean Energy
	Managing Nuclear Issues
	Sustainable Resource Development in the North

**N**RCan delivers on this strategic outcome and associated priorities for the 2010-13 period through two program activities:

**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, at home and abroad. This group of programs delivers policies, regulatory and legislative work to manage federal responsibilities associated with Canada's oil, natural gas and electricity sectors, critical energy infrastructure protection, as well as oversight for statutory programs for the Atlantic offshore.

**Natural Resources-based Communities:** This program activity is targeted to increase Canada's knowledge of the impacts of the resource sectors' evolution 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.

Basic Facts - Strategic Outcome 1 Planned Spending & Full-time Equivalents			
	Program \$M	Statutory \$M	FTEs
2010-11	259.9	1,676.4	897
2011-12	160.2	1,354.7	875
2012-13	131.3	1,010.9	871

The **performance** of these program activities and their strategic outcome will be measured by the following **indicators**. In all cases, NRCan's target is for a favourable trend over the long term, but some indicators – as noted with an \* – may respond to other influences more immediately (e.g., world and domestic economic growth, the activities of other levels of government, etc.).



Levels	Outcome/Expected Results	Indicators
Strategic Outcome 1	Natural resources sectors are internationally competitive, economically productive, and contribute to the well-being of Canadians	Canada's share of resource-based world trade relative to OECD nations*
Program Activity 1.1	Competitive national and international markets, stable economic opportunities and investment in natural resources	Capital investments and exploration investments in the resource sectors*
		Diversity of Canada's forest products exports*
		Performance of programs in achieving expected results within plans, timelines and budgets
Program Activity 1.2	Increased knowledge, skills and capacity to benefit from the evolving natural resource economy within resourced-based communities (both Aboriginal and non-Aboriginal)	Resource sector employment attributable to NRCan programming
		Performance of programs in achieving expected results within plans, timelines and budgets

Key activities and programs that contribute to the achievement of the outcome, expected results and associated priorities are presented below. NRCan is also heavily involved in delivering on Canada's Economic Action Plan which has an objective to stimulate growth during the recession. Initiatives that directly contribute to this Plan have been identified.

		Planned Spending & Full-time Equivalents			
		2010-11	Program \$M	Statutory \$M	FTEs
<b>1.1 Economic Opportunities for Natural Resources</b>		2010-11	248.1	1,676.4	835
		2011-12	148.3	1,354.7	813
		2012-13	119.4	1,010.9	809
<b>NRCan Priorities</b>	<b>Initiatives</b>				
Competitive Resource Sectors	NRCan expands offshore market opportunities and promotes the environmental credentials of Canada's forest products through programs such as the Canada Wood Export Program (EAP initiative) and the Leadership for Environmental Advantage in Forestry; diversifies domestic market opportunities through the North American Wood First Initiative (EAP initiative) and the Value to Wood Program (EAP initiative); and promotes investment and innovation in forest research that harnesses emerging and breakthrough technologies through the Transformative Technologies Program (EAP initiative), in partnership with FPIinnovations.				



<p>Competitive Resource Sectors</p>	<p>CANMET Materials Technology Laboratory is moving to the world-class McMaster Innovation Park in Hamilton, Ontario, enhancing its work with industry and academic partners on productivity issues through research and commercialization of new or improved materials and processes. NRCan is working to improve the competitiveness of the mining industry by working with stakeholders to promote the development of environmentally-friendly technologies and processes through the Green Mining Initiative; implement a corporate social responsibility strategy; and to address other challenges including declining base metal reserves.</p> <p>The department provides national leadership among key stakeholders in the forest innovation system in the development of strong partnerships that will focus priority-setting on knowledge and research in areas critical to the sustainability and competitiveness of the forest sector. Institutional arrangements will be established and reinforced to support an effective forest sector, in particular, the integration of NRCan's Canadian Wood Fibre Centre into FPIinnovations (EAP initiative).</p>
<p>Clean Energy</p>	<p>NRCan will represent the country's energy interests in various international fora, such as the G8/G20 summits and the World Energy Congress, all scheduled to take place in 2010. The department is providing advice and expertise in support of the sustainable development of Canada's energy resources, while ensuring energy security and economic prosperity. This includes the deployment of carbon capture and storage in Canada's oil sands.</p> <p>Industry and stakeholders must have the authoritative and timely geoscience information and knowledge required to identify new energy resources and their potential for development. NRCan geoscience helps the private sector find new conventional land-based and offshore energy and mineral deposits and develop non-conventional resources such as geothermal energy. The Geoscience for future Energy Resources program will assess the potential of new and cleaner energy sources in Canada by highlighting the potential of those resources.</p>
<p>Managing Nuclear Issues</p>	<p>NRCan will support Atomic Energy of Canada Limited's (AECL) efforts toward the renewal of its research and development capacity and infrastructure and the development of the advanced CANDU reactor. NRCan will continue to implement the announced restructuring of AECL, and the offering of its commercial reactor division, based on its policy objectives that include positioning Canada's nuclear industry to take maximum advantage of domestic and international opportunities. NRCan will also support the Canadian Nuclear Safety Commission in its efforts to improve the effectiveness and efficiency of the regulatory approvals process. Together with Health Canada, NRCan will work to ensure that Canadians have a secure supply of medical isotopes.</p>
<p>Sustainable Resource Development in the North</p>	<p>Sustainable oil, gas and minerals resource development remains the best option for significant northern economic development. Geo-mapping for Energy and Minerals (GEM) is a \$100M/5yr initiative that will generate new geoscience data and interpretation in Canada's North and adjacent offshore areas, where 60 percent of the area is not adequately mapped. GEM will stimulate new mining and energy exploration and development by reducing the exploration risk, thus encouraging investment in Canada's North for the benefit of Northerners.</p> <p>Moreover, the Polar Continental Shelf Program is a national service delivery organization that supports multi-disciplinary research in the Canadian Arctic by providing efficient and cost-effective logistical support to researchers from Canadian government agencies, northern communities, and independent and university groups conducting scientific activities in isolated areas throughout the Canadian Arctic.</p>

**Benefits for Canadians:** The natural resource sectors are a strong engine of economic growth and job creation in Canada. NRCan is working to offset recent setbacks and support the Canadian natural resource sectors as they develop, adapt and grow. Stronger natural resource sectors will mean more jobs for Canadians now and in the future.

		Planned Spending & Full-time Equivalents		
			\$M	FTEs
1.2 Natural Resources-based Communities		2010-11	11.8	62
		2011-12	11.9	62
		2012-13	11.9	62
NRCan Priority	Initiatives			
Competitive Resource Sectors	Through its Forest Communities Program, develop and share knowledge, tools and best practices through collaborative working arrangements and initiatives involving eleven community-level partnership organizations, the Canadian Model Forest Network and other forest sector collaborators and forest community stakeholders.			
	In collaboration with the department of Indian and Northern Affairs, Human Resources and Skills Development Canada and the federal development agencies, develop and implement new Aboriginal forestry partnership initiatives aligned with the government's Aboriginal Economic Development Framework and focused on emerging and sustained regional scale forest-based opportunities across the country. The Whitefeather Forest Management Initiative in northern Ontario and 'local supply, local labour' First Nations housing initiatives in Manitoba are examples of collaborative initiatives that will be pursued and supported.			
	NRCan is working closely with the provinces, territories, industry and other stakeholders to conduct a performance review of the mining sector, over the past decade, in order to showcase improvements and to identify opportunities for future improvements that will positively impact natural resource-based communities.			

**Benefits for Canadians:** Natural resources are central to the economy of many communities across Canada, and natural resource sectors are among the largest private employers of Aboriginal peoples. While recent economic conditions and broader sector restructuring, notably in the forestry sector, have led to job losses, NRCan is working with communities to mitigate and alleviate the short-term effects. On a longer term outlook, NRCan is working specifically with Aboriginal communities, other government departments and industry to facilitate their access to skills development, business and employment opportunities.

Government of Canada Outcome: A Clean and Healthy Environment

**Strategic Outcome 2: Environmental Responsibility**

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

**NRCan Priorities**

Competitive Resource Sectors

Clean Energy

Managing Nuclear Issues

**N**RCan delivers on this strategic outcome and associated priorities for the 2010-13 period through two program activities:

**Clean Energy:** This program activity encompasses the development and delivery of energy S&T, policies, programs, legislation and regulations to reduce greenhouse gas (GHG) and air pollutant emissions and other environmental impacts associated with energy production.

**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 sustainable resource management initiatives which balance environmental and social concerns against economic prosperity.

**Basic Facts - Strategic Outcome 2**

**Planned Spending & Full-time Equivalents**

	\$M	FTEs
2010-11	2,124.4	1,365
2011-12	1,202.8	1,184
2012-13	814.8	1,157

The **performance** of these program activities and their strategic outcome will be measured by the following **indicators**. In all cases, NRCan's target is for a favourable trend over the long term, but some indicators – as noted with an \* – may respond to other influences more immediately (e.g., world and domestic economic growth, the activities of other levels of government, etc.).

Levels	Outcome/Expected Results	Indicators
Strategic Outcome 2	Canada is a world leader on environmental responsibility in the development and use of natural resources	Canada's total annual energy savings due to efficiency*
		Contribution to advancement of innovative and environmentally responsible practices in the resource sectors measured by uptake of knowledge, technologies and demonstration projects
Program Activity 2.1	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 programming
		NRCan's contribution to advancement of clean energy knowledge, and uptake of innovative clean energy solutions
		Performance of programs in achieving expected results within plans, timelines and budgets
Program Activity 2.2	Canada understands and mitigates risks to natural resource ecosystems and human health	NRCan's contribution to federal environmental assessment and reporting processes
		NRCan's contribution to advancement of ecosystem knowledge and innovative ecosystem risk management solutions
		Performance of programs in achieving expected results within plans, timelines and budgets

Key activities and programs that contribute to the achievement of the outcome, expected results and associated priorities are presented below. NRCan is also heavily involved in delivering on Canada's Economic Action Plan which has an objective to stimulate growth during the recession. Initiatives that directly contribute to this Plan have been identified.

		Planned Spending & Full-time Equivalents		
			\$M	FTEs
<b>2.1 Clean Energy</b>		2010-11	1,918.7	969
		2011-12	1,113.5	805
		2012-13	717.2	778
NRCan Priority	Initiatives			
Clean Energy	<p>Through the suite of ecoENERGY programs, NRCan is working to improve the energy efficiency and increase the production and use of alternative transportation fuels in order to limit GHG emissions. Examples of programs include:</p> <ul style="list-style-type: none"> <li>• ecoENERGY for Buildings and Houses and ecoENERGY Retrofit (EAP initiative) — help homeowners and small and medium organizations in the construction and retrofit of energy-efficient buildings and houses through grants, financial assistance and outreach;</li> <li>• ecoENERGY for Biofuels supports domestically-produced renewable alternatives to gasoline and diesel and encourages the development of a competitive renewable fuels industry in Canada by providing an incentive directly to new and existing producers;</li> <li>• ecoENERGY for Renewable Power provides incentives to businesses, municipalities, organizations and institutions to increase Canada's supply of clean electricity from renewable sources such as wind, biomass, low-impact hydro, geothermal, solar photovoltaic and ocean energy; and</li> <li>• ecoENERGY Technology Initiative funds research and development on the next-generation clean energy technologies, including renewable energy from clean sources such as wind, solar, tidal, and biomass. Research is also geared toward increasing clean energy supply, and reducing energy waste and pollution from conventional energy sources.</li> </ul> <p>NRCan manages the Clean Energy Fund (EAP initiative) that enables and supports research and greater use of technologies to reduce GHG emissions from energy production and use. This includes research on cleaner fossil fuels (e.g., carbon capture and storage) and renewable energy.</p> <p>Through the Vehicle Structural Materials Program, and in partnership with universities, industry and federal scientists, the department is researching clean energy solutions for the automotive sector and the nuclear reactor sector (based on high performance, new or improved lightweight materials, ultra high strength steel, and other innovations).</p> <p>With its Pulp and Paper Green Transformation Program, the department is investing in innovation and technology that will enhance the environmental and commercial sustainability of the pulp and paper industry. The program will support capital investments at pulp and paper mills across Canada that aim to improve energy efficiency; increase the production of renewable energy; and improve the industry's overall environmental performance.</p>			

**Benefits for Canadians:** NRCan helps Canadians improve energy conservation and energy efficiency in multiple sectors of the economy (e.g., homes, commercial buildings, vehicles and fleet), contributing to the longer term sustainability and reducing the short-term costs of energy consumption. The department is working 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.

		Planned Spending & Full-time Equivalents	
2.2 Ecosystem Risk Management			
	2010-11	205.7	396
	2011-12	89.3	379
	2012-13	97.6	379
NRCan Priorities	Initiatives		
Competitive Resource Sectors	<p>The department is advancing the Green Mining Initiative, in collaboration with stakeholders, to develop, identify and promote the use of green technology in mining. The focus for the reporting period will be on footprint reduction, innovation in waste management, ecosystem risk management and mine closure and rehabilitation.</p>		
	<p>NRCan will continue to develop forest ecosystems knowledge and predictive tools that are critical to understanding the nature and extent of Canada's forests and how they are changing over time as a result of natural and human-caused disturbances, particularly in view of a changing climate.</p>		
	<p>As host to the International Model Forest Network Secretariat, NRCan will provide Canadian forestry leadership and expertise to advance the broader international agenda for responsible development and use of forest resources.</p>		
	<p>The department is working with provinces and territories to conduct aquifer assessments that will provide the basis for informed decision-making on groundwater issues. To date, 12 of the 30 key regional aquifers have been mapped and evaluated; NRCan is working with its partners to map the remaining 18 with common protocols and standards. Three new aquifers assessments are scheduled to be completed by 2011-12.</p>		
Managing Nuclear Issues	<p>Departmental geoscience knowledge and expertise is provided on federal environmental assessments to ensure that adverse environmental impacts are identified and mitigated, and on major energy and mineral resource assessments to inform decision-making and provide for a balanced approach to conservation, environmental and economic development.</p>		
	<p>NRCan provides ongoing oversight of the Nuclear Waste Management Organization to ensure that progress is being made on implementing a safe and secure plan – Adaptive Phased Management approach – for the long-term management of nuclear fuel waste. In addition, NRCan is continuing progress on the long-term management of the federal responsibility of radioactive waste.</p>		

**Benefits for Canadians:** NRCan's work and expertise creates knowledge that is critical in making 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.



Government of Canada Outcome: An Innovative and Knowledge-based Economy	
<p><b>Strategic Outcome 3: Safety, Security and Stewardship</b></p> <p>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</p>	<b>NRCan Priorities</b>
	Improving the Performance of the Regulatory System for Project Reviews
	Competitive Resource Sectors
	Sustainable Resource Development in the North

**N**RCan delivers on this strategic outcome and associated priorities for the 2010-13 period through three program activities:

**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.

**Natural Resources 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.

**Geomatics Canada Revolving Fund:** This program activity is about meeting the demand by NRCan, other government departments and industrial clients, for revolving fund products and services through full cost recovery.

Basic Facts - Strategic Outcome 3 Planned Spending & Full-time Equivalents		
	\$M	FTEs
2010-11	172.2	1,246
2011-12	147.1	1,226
2012-13	124.8	1,210

The **performance** of these program activities and their strategic outcome will be measured by the following **indicators**. In all cases, NRCan's target is for a favourable trend over the long term, but some indicators – as noted by an \* – may respond to other influences more immediately (e.g., world and domestic economic growth, the activities of other levels of government, etc.).

Levels	Outcome/Expected Results	Indicators
Strategic Outcome 3	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	Contribution to the safety and security of Canadians, and the effectiveness of federal land stewardship and regulatory processes
Program Activity 3.1	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 S&T
		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
		Performance of programs in achieving expected results within plans, timelines and budgets
Program Activity 3.2	Canada has the natural resource and landmass knowledge to contribute to the development of the country through maps, property rights, boundary management, statistics and integrated decision-making, and plays 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 and supporting systems for secure land tenure of Canada Lands
		Effective management of the federal regulatory process for major natural resource projects as measured by adherence to target timelines and service standards by all federal departments and agencies
		Performance of programs in achieving expected results within plans, timelines and budgets
Program Activity 3.3	The demand by NRCan, other government departments and industrial clients for revolving fund products and services, is met through full cost-recovery.	Percent of rate of service and production costs fully recovered

Key activities and programs that contribute to the achievement of the outcome, expected results and associated priorities are presented below. NRCan is also heavily involved in delivering on Canada's Economic Action Plan which has an objective to stimulate growth during the recession. Initiatives that directly contribute to this Plan have been identified as such.



		Planned Spending & Full-time Equivalents	
		\$M	FTEs
<b>3.1 Adapting to a Changing Climate and Hazard Risk Management</b>		2010-11	68.6
		2011-12	61.9
		2012-13	50.4
NRCan Priority	Initiatives		
Competitive Resource Sectors	<p>NRCan coordinates national and intergovernmental strategies that address the management and mitigation of forest disturbances (e.g., pests and wildland fires); provides ongoing scientific capacity and expertise to support the Canadian Food Inspection Agency’s mandate in pest response; develops climatic data and forecasts in support of Environment Canada’s climate change monitoring; and works with Emergency Preparedness Canada in responding to wildland fires. To better assess risks, forecast impacts, and develop mitigation and adaptation strategies related to alien forest insects, NRCan will build a state-of-the-art Invasive Species Centre in Sault Ste. Marie in partnership with the Ontario Ministry of Natural Resources.</p> <p>Canada’s explosives regulations will be updated to reflect modern industrial practices with a view to strengthen the safety and security of the public and workers involved in the explosives industry in Canada.</p> <p>The impacts, risks and opportunities of climate change with respect to Canada’s forests and lands are being assessed, and mitigation and adaptation strategies are being developed in collaboration with partners and stakeholders. Focus of activities will be on changes to permafrost, glaciers, land use, sea levels and the forest.</p> <p>NRCan plays a leadership role in providing accurate, objective scientific information on the risks and opportunities faced by Canadian communities and industries as a result of a changing climate. In conjunction with Environment Canada, information is being assembled which could form the backbone of a national adaptation framework. The Regional Adaptation Collaborative program will continue to help Canadians develop approaches to adapt to climate change specific to their region; it will also be used for the development of tools and methodologies to integrate climate change adaptation strategies by various private and public sector stakeholders. In addition, an accessible knowledge-base will be created to assist in determining how climate change will affect Canadians — their land, their communities and their economic activities.</p>		

**Benefits for 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 manages and mitigates 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.

		Planned Spending & Full-time Equivalents	
		\$M	FTEs
3.2 Natural Resources and Landmass Knowledge and Systems		2010-11	103.6
		2011-12	85.2
		2012-13	74.4
NRCan Priorities	Initiatives		
Improving the Performance of the Regulatory System for Project Reviews	<p>The Major Projects Management Office (MPMO) provides overarching management of the federal regulatory review process for major natural resource projects. In close collaboration with other federal regulatory departments and agencies, the MPMO is working to implement:</p> <ul style="list-style-type: none"> <li>• greater process predictability and clarity with target timelines and service standards outlined in project agreements for each major resource project (e.g., average review timeline reduced by half);</li> <li>• new performance measures and management controls that ensure timely resolution of project issues; and</li> <li>• new and more effective Aboriginal/Crown consultations approaches.</li> </ul> <p>The MPMO also continues to lead ongoing collaborative research and analysis aimed at developing new approaches to improve the way in which environmental assessment, regulatory permitting and Aboriginal engagement and consultation are conducted for major resource projects, including opportunities to improve the federal legislative/regulatory framework.</p>		
Sustainable Resource Development in the North	<p>NRCan is currently conducting geoscience and is mapping the continental shelf to establish the scientific basis for extending our sovereign rights on the Atlantic and Arctic continental margins under the United Nations Convention on the Law of the Sea.</p> <p>The stewardship of Canada's natural resources and lands requires knowledge of its geography. NRCan will continue to provide accurate and accessible geographic information. This work includes meeting Canada's obligations related to legal boundaries, the provision of essential geographic information and expertise to decision-makers which includes the completion of topographic mapping of Canada's North.</p>		

**Benefits for Canadians:** NRCan works to produce scientific knowledge and data, and oversees systems that facilitate the knowledge creation and information sharing on natural resources, all with a view to inform decision-making on the use and stewardship of natural resources. It also works to increase the efficiency and effectiveness of the regulatory review process of major natural resource projects, thereby increasing investments and creating jobs in our natural resources.

3.3 Geomatics Canada Revolving Fund	Planned Spending & Full-time Equivalents		
		\$M	FTEs
	2010-11	1.9 (1.9)	0
	2011-12	1.9 (1.9)	0
	2012-13	1.9 (1.9)	0

The Geomatics Canada Revolving Fund (GCRF) was created to allow Geomatics Canada to shift the costs from taxpayers at large to specific users who benefit directly from the goods and services provided. The GCRF currently has two lines of business: the Map Generator and Colour Correction projects which produce new topographic maps, and the Satellite Services which invests in ground stations and computers to leverage investments from international partners and increase business opportunities.

**Benefits for Canadians:** The revenue retention mechanism of Geomatics Canada allows it to recover its full costs from direct users of the services, thereby avoiding any costs to taxpayers at large.

4.1 - Internal Services	
NRCan Priorities	Integrated Management Excellence
	Modernizing Infrastructure and Systems

This program activity regroups three sub-activities which assist NRCan in delivering on its mandate and priorities: governance and management support; resource management services; and asset management services. 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. NRCan is taking steps to strengthen this ability and will focus, over the planning period, on two departmental management

priorities, namely integrated management excellence and improved infrastructure and systems. These management priorities will enable the department to better align its priorities to those of Canadians, its activities to its priorities, and its resources to its activities. They will also increase its capacity to monitor the financial and non-financial performance of its activities and programs.

		Planned Spending & Full-time Equivalents		
Program Activity 4.1 - Internal Services		\$M	FTEs	
		2010-11	223.0	1,063
		2011-12	171.2	1,062
2012-13	164.0	1,062		
NRCan Priorities	Initiatives			
Integrated Management Excellence	Further refinements to the integrated business planning process and an improved governance structure will help align operational priorities with the corporate strategies, notably those related to S&T, people and financial management. They include several components, such as improvements to the priority-setting exercise, the creation of a Resource Management Committee to strengthen financial management at the department level; a strengthened Departmental Audit Committee; and an improved capacity to integrate science and policy.			
	The strengthening of NRCan's policy capacity and the implementation of strategic review decisions will ensure a greater alignment of activities with the priorities of Canadians.			
	The renovation of both the Program Activity Architecture and the Performance Measurement Framework will improve senior management's ability to measure performance and realign activities and funds.			
Modernizing Infrastructure and Systems	Ensure the ongoing integrity of physical assets to support regulatory functions and programs in research and technology development through the maintenance and modernization of NRCan laboratories across Canada (EAP initiative).			
	Upgrade and renew key systems, such as Felix/SAP, PeopleSoft, with a view to improve information provided to decision-makers.			

## Section III - Supplementary Information

### Links to Additional Information

The following information can be found on the Treasury Board Secretariat's web site at <http://www.tbs-sct.gc.ca/rpp/2010-11/info/info-eng.asp>.

1. Details of Transfer Payment Programs Exceeding \$5 Million/Year
  - a. 3-year Summary Plan for Transfer Payments<sup>13</sup>
2. Up-Front Multi-Year Funding
3. Green Procurement
4. Horizontal Initiative – Improving the Performance of the Federal Regulatory System for Major Natural Resource Projects
5. Internal Audits
6. Internal Evaluations
7. Sources of Respendable and Non-Respendable Revenue
8. Summary of Capital Spending by Program Activity
9. User Fees

<sup>13</sup> This plan is available at <http://www.nrcan-rncan.gc.ca/com/resorress/pubpub-eng.php>.