



NATURAL RESOURCES CANADA
OUR 2012-15
INTEGRATED
BUSINESS
PLAN



TABLE OF CONTENTS

Message from the Deputy Minister and the Associate Deputy Minister	5
Executive Summary	7
Introduction	9
Strategic Context and Priorities	11
A. Canada: A Global leader in natural resources	11
B. Strategic Context	
C. Strategic Priorities	14
Corporate Context and Priorities	23
A. Corporate Context	23
B. Corporate Priorities	27
Risk Management	33
Conclusion	34
Annex A – People Component	35
Annex B – Sector Integrated Business Plans	40
Annex C – Deliverables by Program Activity Architecture	41
Strategic Outcome 1: Canada's Natural Resource Sectors are Globally Competitive	43
Strategic Outcome 2: Natural Resource Sectors and Consumers are Environmentally Responsible	48
Strategic Outcome 3: Canadians Have Information to Manage their Lands and Natural Resources, and are Protected from Related Risks	52

MESSAGE FROM THE DEPUTY MINISTER AND THE ASSOCIATE DEPUTY MINISTER

It is our pleasure to present NRCan's 2012–15 Integrated Business Plan (IBP). This plan describes the context in which we operate, identifies our strategic and corporate priorities and highlights key activities to deliver on in the short and medium term. In sum, it presents a high-level roadmap for the coming years.

As recognized in the Economic Action Plan 2012, NRCan stands at the heart of the priorities of the government, with a critical role to play in the future prosperity of the country. This is an opportunity for us to seize. Collectively, we must build on our policy leadership, scientific excellence and strong business practices to continue to serve Canadians to the best of our abilities.

At the same time, we must acknowledge and address the challenges that we are facing. Of particular interest is the current period of adjustment in support of the government's objective to return to a balanced budget. In this context, NRCan is reducing its workforce through a process that we aim to be as transparent, fair and efficient as possible. We are conscious that these necessary changes are challenging to affected employees and their families, as well as to all of our colleagues who are concerned with the health of our workplace. For your remarkable dedication and professionalism in this time of change, we thank you and reiterate our commitment to support our staff.

The IBP is particularly important in this special context. It needs to be both ambitious and realistic. We have indicated that we are not simply asking employees to do more with less. Rather, we need to be clear in our priorities and deliverables. We also need to focus on our core roles and expertise, be efficient in our business practices and put in place strategies to mitigate risks. And we need to act on the results of the Public Service Employee Survey in order to be an employer of choice. Our goals are many, but through careful planning and execution we will be able to continue to achieve meaningful results for Canadians.

These results have to speak both to our common vision of creating a sustainable resource advantage for Canada and to our strategic outcomes: supporting the competitiveness of the natural resource sectors; enhancing environmental responsibility; and ensuring that Canadians have the information to manage our land and natural resources, together with related risks. These results will be achieved through careful management, including maintaining our focus on the department's four corporate priorities: asserting our policy leadership, mobilizing our science & technology, transforming our business and growing our human capital.

We all have a part to play in our new plan. We therefore encourage you to read its details here and to discuss with your colleagues and managers how we all can contribute to the success of our department and improve the lives of Canadians. In addition, since this plan builds on the integrated business plans of individual sectors, we also invite you to consult your own sector's plan to learn the specifics for your work area and to see how they contribute to the plan for NRCan as a whole.

In our current time of change, the IBP is a key tool to help guide discussions on how we advance our work as an organization. While being mindful of the challenges ahead, with this IBP in hand, we are confident in the future of NRCan and in the ability of its employees to help shape the future of Canada.



Serge P. Dupont Deputy Minister



Karen Ellis Associate Deputy Minister

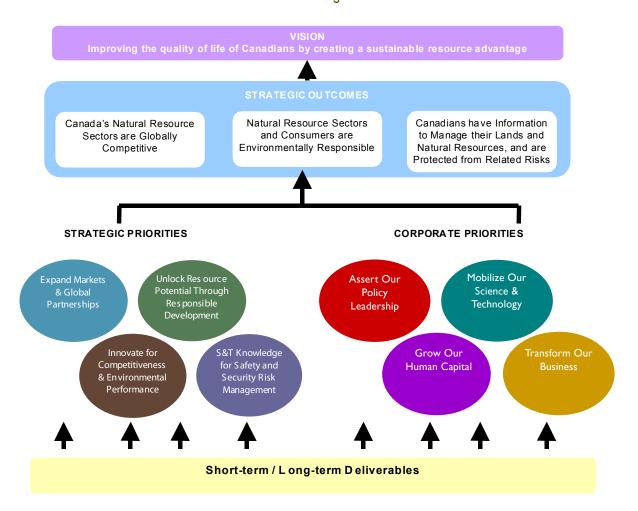
EXECUTIVE SUMMARY

NRCan's vision is to improve the quality of life of Canadians by creating a sustainable resource advantage. The Integrated Business Plan (IBP) 2012–15 is a cohesive and carefully developed plan to achieve that vision.

Our country's vast natural resource endowment is the cornerstone of Canada's and Canadians' prosperity. Accordingly, NRCan stands at the forefront of the government's agenda. We contribute directly to strong economic growth by supporting the competitiveness of our natural resource sectors. We enable a clean and healthy

environment by ensuring that these sectors and consumers of energy and other resources are environmentally responsible. And we contribute to the safety and security Canada by providing Canadians with the information they need to manage their lands and natural resources and to protect them from related risks. The chart below summarizes the different parts of this plan and illustrates how they come together to form a truly integrated roadmap for the organization.

2012-15 Framework for Integrated Business Plan



The world is currently undergoing significant changes that will impact the future of our natural resources. In this context, the department has established four strategic priorities that leverage our expertise and core mandate and respond to the government's priorities by enhancing the responsible, safe development and use of natural resources. These priorities are:

- Expanding markets and global partnerships creating and seizing new opportunities for our natural resources;
- Unlocking resource potential through responsible development — generating economic growth and jobs in a sustainable manner;
- Innovating for competitiveness and environmental performance — developing new products, increasing efficiency, decreasing production costs and reducing our environmental footprint; and,
- Leveraging S&T knowledge for safety and security risk management — providing information that allows us to mitigate risks related to public safety, security and environmental protection.

In delivering on our strategic priorities, we will focus our collective efforts on achieving results through efficient and effective performance. *How we work* is key. The department's four corporate priorities serve as clear guideposts in this effort:

 Asserting our policy leadership — being adaptable and flexible in responding to, aligning with, and influencing policy discussions and decisions;

- Mobilizing our science & technology being effective in extending the most up-to-date knowledge to the entire innovation system: industry, university and other levels of government;
- Transforming our business modernizing our practices to increase the efficiency and effectiveness of our services and operations; and,
- Growing our human capital developing our employees' skills and leadership qualities.

NRCan will be focusing on its priorities while managing the transition, caring for its employees and fulfilling the values of the public service. It will also continue to deliver on its core role and mandate, thereby achieving its strategic outcomes and delivering results to Canadians.

The IBP provides details on how our priorities and strategic outcomes will be achieved. Each sector also has in place a similar plan that presents in great detail its own activities and the specialized contributions of its employees. All NRCan employees are encouraged to read their sector's plan together with the IBP to get a clear sense of where the department is going and why, and to see for themselves how our various initiatives fit together to achieve our common purpose of improving the quality of life for Canadians by creating a sustainable resource advantage.

INTRODUCTION

Our Vision

NRCan's vision is to improve the quality of life of Canadians by creating a sustainable resource advantage.

Our work is organized to serve three strategic outcomes: supporting the competitiveness of the natural resources sectors, enhancing environmental responsibility, and ensuring that Canadians have the information to manage

our land and natural resources and related risks (see our Program Activity Architecture).

The vision and the strategic outcomes are key reference points for us and are intended to guide our work over the longer term. They capture our core value proposition for Canadians, and they are also aligned with the <u>Government of Canada Outcomes</u> and <u>priorities</u>.

Outcomes

Government of Canada Outcomes

- √ Strong economic growth
- \sqrt{A} clean and healthy environment
- √ A safe and secure Canada

NRCan Strategic Outcomes

- √ Canada's natural resources sectors are globally competitive
- $\sqrt{\ }$ Natural resources sectors and consumers are environmentally responsible
- √ Canadians have the information to manage their lands and natural resources, and are protected from related risks

New NRCan Values and Ethics Code



Public Service values and ethics stand at the core of who we are, define our responsibility as public servants, and are our foremost obligation. These values and ethics are: respect for democracy; respect for people; integrity; stewardship; and excellence.

To give expression to public service values and ethics in our working environment, NRCan's <u>Values and Ethics Code</u> was launched in April 2012. This code builds on the updated <u>Values and Ethics Code for the Public Sector</u> that applies to all the public sector, but it addresses ethical risks or potential conflict situations that the Department or its employees face in their daily activities. NRCan's code supports both our business culture and operational requirements.

For more information on the code visit the <u>Values and Ethics Centre of Expertise Wiki page</u> and for more information on its implementation, please see Annex A – People Component.

A Time of Change



"In every country, public sector institutions are undergoing change. This is also unavoidable in Canada. Indeed, change is essential if the Public Service is to become a more productive, leaner and more relevant institution, and if it is to remain a career of choice for talented young Canadians."

Sixth Report of the Prime Minister's Advisory

Committee on the Public Service

Our Plan 2012-15

The vision and strategic outcomes are high-level and long-term. The three-year Integrated Business Plan (IBP) focuses on pursuing them through a deliberate, well-articulated and cohesive plan. Accordingly, the plan presents key priorities across sectors and measurable short-term and longer-term activities. The 2012-15 Framework for Integrated Business Plan (see executive summary) summarizes the different parts of this plan and illustrates how they come together to form a truly integrated roadmap for the organization.

The plan has not been conceived as an abstract, top-down concept. Rather, it builds on the firm foundation of the sectors' own Integrated Business Plans — all of which ultimately support NRCan's vision, strategic outcomes and priorities. These Sector Plans, listed with links in Annex B. provide more details and specificity on your sector's context, priorities and deliverables.

In order to successfully realize our vision, it is critical that we understand the trends that affect Canada's natural resources and the associated risks and opportunities. In response to this context, we define our *strategic priorities*, which are the first section of the Plan. The subsequent section focuses on our operational capacity, both human and financial, and the question of how we will address organizational opportunities and risks through our *corporate priorities*.

STRATEGIC CONTEXT AND PRIORITIES

A. Canada: A Global leader in natural resources

Canada is fortunate to have one of the largest, most diverse natural resource endowments in the world. Natural resources are fundamental to the Canadian economy and to Canadians' high standard of living. In 2011, Canada's energy, mining and forest sectors accounted for:

- · over 10% of Canada's real gross domestic product;
- close to 800,000 well-paying jobs for Canadians, or 5% of total employment;
- \$233.3 billion in exports, or 55% of Canada's total exports; and
- \$106.3 billion in new capital investments.

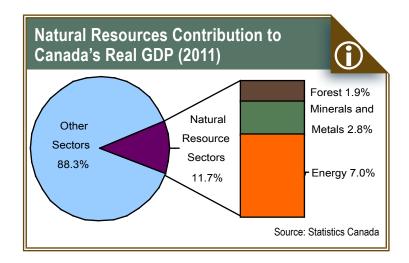
These economic contributions, along with Canada's world ranking as a commodity producer, speak to the importance of natural resources sectors for Canada's prosperity and for the Government's policy agenda. Canada is a competitive, reliable and responsible supplier of natural resources to North America and the world:

- We are among the world's top producer and exporter of a wide range of commodities;
- We have an open, market-based economy that encourages competition inward and outward investments, notably with large Canadian mining investment abroad (cumulative assets of \$129B in 2011); and
- Canadian firms working at home and abroad provide a wide range of technologies, services and expertise in support of responsible resource development.

Yet, a changing and uncertain world requires that our natural resource sectors evolve. Current challenges include attracting investments to realize Canada's resource potential, diversifying markets and innovating to improve competitiveness and environmental performance.

The federal government has a role to play in helping to create an environment for economic success, notably by improving the investment climate, strengthening international trade opportunities, and accelerating innovation toward responsible resource development and use. This goal must be pursued in close co-operation with

other levels of government, industry, researchers and other partners. Fundamentally, it is a matter of taking action today to ensure Canada's prosperity for the future.



Global Ranking



	Global Production Rank	Percent of Glob Production
Energy Sector		
Petroleum	Sixth	4,0%
Natural Gas	Third	5,4%
Electricity	Sixth	3,1%
Hydroelectricity	Third	11,0%
Uranium	Second	20,5%
Mineral and Metals Sector		
Nickel	Third	12,7%
Zinc	Fourth	6,6%
Gold	Sixth	4,3%
Copper	Ninth	3,3%
Potash	First	26,0%
Diamonds	Sixth	8,8%
Salt	Fifth	5,4%
Gypsum	Seventh	3,6%
Forest Sector		
Softwood Lumber	Second	12,5%
Wood Pulp	Second	10,6%
Newsprint	Second	13,2%
	nada's Natural Resourc	(1/50)

B. Strategic Context

Ongoing global geopolitical, economic and technological changes are affecting the future of Canada's natural resources.

Emerging economies are shaping the future

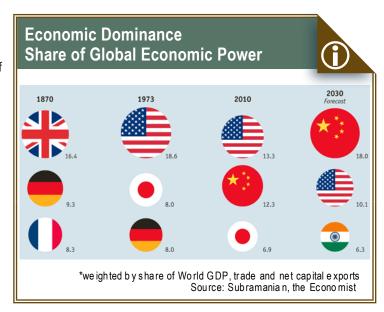
By 2030, emerging economies are expected to account for over 60% of global GDP. In 2010, China surpassed Japan to become the world's second largest economy and replaced the U.S. as the greatest energy user. Other fast-growing Asian markets will also play key roles. Thus, India is expected to become the 4th largest economy by 2025.

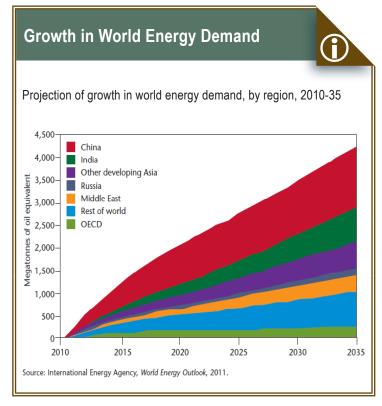
While economic growth is expected to remain modest in developed countries, growth in emerging economies has the momentum to continue driving world demand for natural resources. China, India and other emerging economies will require growing amounts of energy, to power their industrial, residential and transportation sectors; wood products for housing and construction; and metals for their manufacturing industries and infrastructure.

A highly competitive global market concerned with security of supply

This trend is creating new opportunities for natural resources exporters, including Canada, that are competing to supply this new demand. Meanwhile, political unrest and instability in some key commodity supply regions are contributing to longer-term uncertainty and concern over access to resources. This concern can be increased by natural incidents or low-probability yet high-impact events, such as the oil spill in the Gulf of Mexico and the tsunami in Japan and its related impact on Fukushima nuclear reactors.

This uncertain global environment is leading some large importers of resources — such as the European Union and China — to pursue strategic alliances with exporters. Rising demand also favours the expansion of world





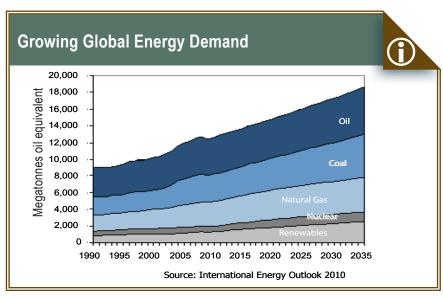
production to unconventional oil and gas resources (e.g. oil sands, shale oil and shale gas) and the development of resources located in areas with higher costs and risks (e.g. deep offshore, Arctic).

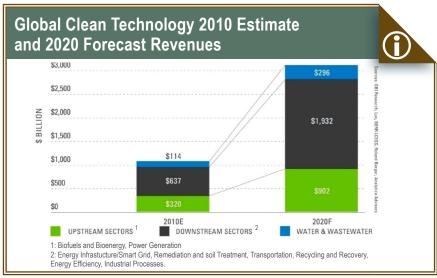
The combination of these trends — growing demand, concerns over supply security, higher production costs — is driving higher commodity prices. While a challenge for the global economy, they create opportunities for resource exporters like Canada. They also drive innovation to increase efficiency in the production, transportation and use of natural resources.

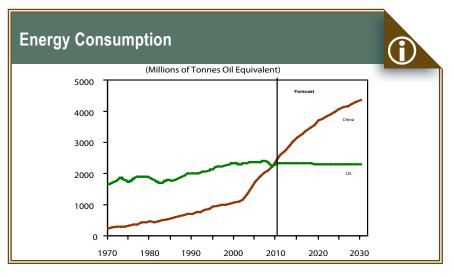
The world invests in innovation

Responsible resource development and use entail an ongoing quest for innovation to drive economic and environmental outcomes. Fossil fuels will remain a dominant source of global energy for decades to come. However, major economies including the U.S. and China have made significant investments toward energy innovation — driving energy efficiency, cleaner fossil fuels and new renewable energy technologies. Innovation leads to the export and diversification of energy supplies, while generating new growth opportunities and improving environmental performance, including lower greenhouse gas (GHG) emissions. Mining, forestry and related sectors face the same imperative of innovation for long-term success.

Resource development is expected to be responsible and reflect current knowledge of our vital ecosystems for health, safety, security and quality of life. Managing the full costs of resource use across the entire life cycle will become a more important competitiveness factor over time. Improved environmental performance can lead to greater resource efficiency (e.g. recycling), productivity gains (e.g. use of new technologies), better branding and greater public acceptance of resource and related infrastructure development.







What it means for Canada

Diversifying markets. Canada can position itself as a reliable global supplier and leverage its resource base to seize the opportunity of exports to fast-growing economies, while maintaining its strong relationship with the U.S. The U.S has been the traditional destination for Canada's resources, accounting for 98% of our energy exports, 65% of forestry exports and 53% of mineral and metals exports. Market diversification will help mitigate the risk of heavy reliance on a flattening U.S. demand for natural resources. This will require new strategies and relationships to ensure market access, and the right conditions for establishing the infrastructure to reach growing markets.

Sound investment climate. Natural resource sectors are global in scope, and Canada will need to maintain an open investment climate and two-way capital flows to develop its resource base and stay competitive. Over the next 10 years, more than 500 projects worth more than \$500 billion could come on stream in the mining and energy sectors. For this activity to materialize, system-wide regulatory improvements will be required to ensure both efficient and timely reviews and strong environmental protection. Adequate skilled labour will also be a key requirement, given anticipated strong demand in resources sector.

Innovation: knowledge for economic and environmental performance. Leveraging our global position and unlocking our natural resources potential will depend upon the availability of key geospatial data and sound investments to enhance competitiveness through the efficient and responsible use and development of our resources, including in the North. Focusing efforts on research and development and demonstrations (RD&D) in energy, mining, forestry and related domains of innovation will pay long-term dividends in several ways: fostering productivity gains and product diversification, creating new commercial opportunities, optimizing the full potential of our resources, and ensuring that we seize market opportunities in an evolving and highly competitive global market.

Science and technology knowledge for public safety and security. Our scientific research and technology generate new knowledge and ideas pertinent not only to resource development and use, but also to our basic understanding of natural and man-made hazards and, geopolitically, our boundaries and domains of sovereignty. Leveraging this

new knowledge is critical to informing government decision making on risk management and enabling Canadians to prepare for and manage threats and emergencies. For instance, geographic and geological data guide and stimulate private sector efforts to develop natural resources while also supporting emergency management and response teams for public safety, security and environmental protection. Open access to this data also enables innovation through the market development of new value-added geomatics and geoscience products, services and businesses.

C. Strategic Priorities

To address the various trends, opportunities and risks that may affect Canada's natural resources over the coming years, four mutually reinforcing strategic priorities were identified to guide the Department:

- · Expand markets and global partnerships;
- Unlock resource potential through responsible development;
- Innovate for competitiveness and environmental performance; and
- Leverage S&T knowledge for safety and security risk management.

This section provides information on three fundamental questions: what NRCan will do under each priority, which sectors are involved, and how we will know whether we have been successful. The section also links these priorities to the key risks in the department's Corporate Risk Profile, and the activities to expected results under the Performance Measurement Framework (PMF).

Integrated Risk Management at NRCan: Responding to Risks and Seizing Opportunities



Critically, this plan is based on a deliberate risk approach. NRCan's approach to risk management and mitigation is comprehensive and anchored in the <u>Integrated Risk Management Policy Framework</u>. External and internal risks and opportunities, identified in the previous sections, consistent with the Department's <u>Corporate Risk Profile</u>, served as a basis for an extensive integrated planning process – at both the Sector and the Departmental levels.

1. Expand Markets and Global Partnerships



Why it is a priority

 Market access for natural resource products generates significant benefits to Canadians.
 With slower than anticipated economic growth and increasing domestic supply of oil and gas in the United States together with high demand for natural resources in fast growing economies in the Asia–Pacific region, Canada must focus on expanding and diversifying its markets and on positioning itself as a reliable and responsible supplier worldwide.

What we will do

Short term

- Develop and strengthen bilateral partnerships in the Asia–Pacific region (China, Japan, Korea, India). (All)
- Deepen bilateral engagement on energy with the U.S., including through the Energy Consultative Mechanism, and the <u>Clean Energy Dialogue</u>. (ES, IETS, SPI)
- Position Canada as a reliable and responsible natural resources supplier and promote acceptance of our products, including through targeted government-to-government activities and multilateral fora – e.g. Asia–Pacific Economic Cooperation, International Energy Agency, International Energy Forum. (ESPS, All)

1. Expand Markets and Global Partnerships

Stakeholders/Partners

Government of Canada:

 Department of Foreign Affairs and International Trade, Transport Canada, Canadian International Development Agency

External:

Provinces and territories, Industry, Aboriginal communities

Links to the Corporate Risk Profile

- Global Competition for Resources There is a risk that Canada's natural resources potential will not be optimally realized if market access and diversification are not in place to seize opportunities generated by global demand and competition for resources.
- Global Economy There is a risk that uneven / uncertain growth (e.g. European Union challenges) will impact the global economy and price demand for Canada's natural resources.

Expected Results

 Natural resource sectors have increased access to markets and new market segments, resulting in higher levels of the export and production of commodities and related value-added goods and services.

- Address existing and potential market barriers to the exports of our natural resources (e.g. European Union Fuel Quality Directive) through targeted government-to-government engagement. (All)
- Support the forest industry's market diversification activities in targeted offshore markets, as well as in the U.S. and Canada. (CFS).
- Support Canada's Corporate Social Responsibility strategy and the Extractive Industries Transparency Initiative to safeguard Canada's reputation, international relations and partner interests. (MMS, SPI)

Medium term

- Energy Pathways modelling work will help us to better understand how Canada can maximize the economic benefit of its energy resources over the longer term while being responsive to global trends, technology and environmental goals.
- Collaborative work with provinces on major resource opportunities will help inform the development of the government's plans for investment in infrastructure.

Did you know?



NRCan's Major Project Management Office (MPMO) provides management and oversight for the regulatory review of more than 75 major resource projects representing approximately \$185 billion of potential new investment across Canada. Find out more about proposed major resource projects through the MPMO Tracker. In addition, it is estimated that there could be more than 500 major resource projects representing some \$500 billion over the next 10 years in Canada's energy and mining sectors.

The MPMO plays in a key leadership role in advancing the Government's <u>Responsible Resource</u> <u>Development Plan</u>. Announced in Budget 2012, with \$165 million of funding, this Plan has four key objectives: more predictable and timely reviews, reduced regulatory burden and duplication reduction, strengthened environmental protection, and enhanced consultations with Aboriginal peoples.

2. Unlock Resource Potential Through Responsible Development



Why it is a priority

- The responsible development of Canada's resources holds the promise of hundreds of thousands of jobs and billions of dollars in economic activity across the country. Over the next 10 years, about \$650 billion could be invested in new mining and energy projects.
- Seizing this opportunity will require attracting capital, building necessary infrastructure, relying on geosciences knowledge (including in the North), having an efficient and effective regulatory system that promotes sound environmental stewardship, and meaningful engagement with Canadians and Aboriginals.

Stakeholders/Partners

Government of Canada:

 Environment Canada, Aboriginal Affairs and Northern Development, National Energy Board, Canadian Environmental Assessment Agency, Transport Canada, Human Resources and Social Development Canada, Citizenship and Immigration Canada, Fisheries and Oceans Canada.

External:

 Provinces and territories, Aboriginal communities, non-government organizations, industry

Links to the Corporate Risk Profile

- Barriers to Investment There is a risk that NRCan and government-wide efforts to improve the regulatory system for large resource projects will not satisfactorily address barriers to investment from regulatory inefficiencies or meet requirements for environmental and social responsibility.
- S&T There is a risk that NRCan's science activities and results may not adequately target or address the key natural resource issues of tomorrow.

What we will do

Short term

- Coordinate implementation of system-wide legislative proposals to modernize the federal regulatory system for project reviews and oversee government-wide efforts to align federal and provincial processes to achieve "one project, one review." (MPMO)
- Provide expert information and advice for environmental assessments under relevant federal legislation. (MMS, ESS)
- Provide public geoscience knowledge and tools through the Geo-mapping for Energy and Minerals (GEM) and the Targeted Geoscience Initiative 4 (TGI-4) programs to support private sector decision making for exploration and to stimulate discovery of mineral and energy resources. (ESS)
- Prepare a proposal for Geo-mapping for Energy and Minerals Phase II, to commence April 2013. (ESS)
- Strengthen collaboration with other departments and stakeholders to support responsible resource development in the North and to realize socioeconomic benefits for Northerners. (MMS, ESS, ES)
- Conduct three projects related to climate change geoscience adaptation measures regarding infrastructure designs or implementation in the North (e.g. linear transport corridors, new infrastructure). (ESS)
- Develop the Inuvik Satellite Station and build the Arctic Spatial Data Infrastructure to contribute to Northern innovation and connectedness. (ESS)
- Provide scientific data and analyses required to finalize Canada's submission to the United Nations Convention of the Law of the Sea (UNCLOS) to extend our sovereign rights on the Atlantic and Arctic continental margins. (ESS)

2. Unlock Resource Potential Through Responsible Development

 UNCLOS – There is a risk that delays or cost pressure in the horizontal seabed mapping program (NRCan, Department of Fisheries and Oceans, Department of Foreign Affairs and International Trade) will compromise the success of Canada's submission to the United Nations Convention on the Law of the Sea (UNCLOS).

Expected Results

- Natural resources sectors have increased investment.
- Public and private sectors establish and implement leading world-class practices to mitigate the environmental impacts of natural resource development.

- Provide essential support (e.g., land surveying) to Aboriginal programs, including Additions to Reserves, Treaty Land Entitlement and the First Nations Property Ownership initiative identified in Budget 2012. (ESS)
- Communicate to domestic and international audiences environmental performance improvements in oil sands development. (ESPS)

Medium term

- Pursue analysis for defining the economic opportunities and benefits from resource development over the next 10 years.
- Explore and develop for consideration longerterm measures for regulatory efficiency and effectiveness.
- Test the concept of developing place-based mineral resources development blueprints through multi-stakeholder engagement. These blueprints will allow public and private actors to address in a more integrated manner the opportunities and barriers to resource development.
- Interdepartmental work to understand the labour market challenges in the natural resource sectors will help to prioritize labour market activities and engagement with Aboriginal communities where major natural resource projects are under development.

Did you know?



The <u>Polar Continental Shelf Program</u> supported 146 projects during the 2010-11 Arctic field season. The Resolute facility accommodated 739 people and served 11,553 meals to facilitate safe and efficient research in a challenging and dangerous environment.

3. Innovate for Competitiveness and Environmental Performance



Why it is a priority

- Canada must develop natural resources in a responsible way while competing with low-cost producers.
- Innovation is critical to both competitiveness and environmental performance. Long-term competitiveness and environmental performance will be supported by investing and partnering with industries to develop and implement new processes and value-added products and technologies.

Stakeholders/Partners

Government of Canada:

 Industry Canada, National Research Council, Natural Sciences Engineering Research Council, Environment Canada, Atomic Energy Canada Limited, Sustainable Development Technology Canada

External:

 Provinces and territories, Industry, Academia, International partners

What we will do

Short term

- Promote market adoption of high-value Canadian forest products (e.g. green biomethanol), processes (e.g. optimizing of wood flooring manufacturing) and technologies (e.g. converting waste heat to power). (CFS)
- Review mandate, governance and operating and financial structure of Atomic Energy of Canada Limited's Nuclear Laboratories. (AECL-R)
- Negotiate a loan guarantee for the planned Lower Churchill hydro project in Atlantic Canada. (ES)
- Complete small-scale carbon and storage projects; additional contribution agreements for large-scale carbon capture storage projects to be signed to enable private-public partnership demonstrations. (ES)
- As part of the Green Mining Initiative, conclude agreements related to the development of clean processing methods for rare earth elements and alternative energy for underground mining vehicles. (MMS)
- Implement concrete measures to address regulatory barriers to the adoption of green mining technologies and processes. (MMS)
- Implement contribution agreements under the Eco-Energy for Biofuels Program and renewable power.
- Implement Budget 2012 Isotope Technology
 Acceleration Program to pursue the accelerated
 development of both cyclotron and linear
 accelerator technologies for future safe and
 reliable supply of medical isotopes for Canadians.
 (AECL-R)
- Communicate information on energy-efficient technologies and practices to stimulate market adoption. (ES)

3. Innovate for Competitiveness and Environmental Performance

Links to the Corporate Risk Profile

- S&T There is a risk that NRCan's science activities and results may not adequately target or address the key natural resource issues of tomorrow.
- AECL There is a risk that an unsuccessful restructuring of AECL will maintain significant exposure to financial risks for the Government of Canada and NRCan.

Expected Results

- Natural resource sectors step up development and deployment of new products and processes as a result of NRCan information and initiatives.
- Energy consumers and producers adopt environmentally responsible products and practices.
- Stakeholders invest in research, development and demonstration to address environmental challenges.

- Develop energy innovation framework to guide energy S&T activities in concert with federal partners. (IETS, ES)
- Undertake R&D projects to develop lightweight and other advanced materials for economic and energy efficiency. (MMS, IETS)

Medium term

- The Tailings Management Horizontal Task
 Team will provide insight on improved
 tailings management approaches that can
 lead to substantial competitive advantages
 for Canada. By engaging across NRCan
 and other departments, the Task Team will
 strengthen science—policy linkages and identify
 opportunities that ensure a whole-of-government
 approach to the responsible management of
 tailings in all phases of the mining life cycle.
- The importance of energy innovation for unlocking the full potential of Canada's energy resources and knowledge will be explored through analysis of Canada's energy innovation system, including understanding the actors and their linkages, Canadian strengths, challenges and opportunities, and international comparisons. The role of governments and the use of various instruments, particularly in the pre-commercialization phase, will be investigated with the intent of exploring options to enable Canadian firms to prosper globally.

Did you know?



Over 800 <u>Super E houses</u>* have been built to date in Japan, the UK and China, generating over \$40 million in revenues for Canadian companies. In addition, a project in China, in partnership with Canada Wood, of 1,000 Super E homes is currently underway.

* (Construction techniques developed in Canada with NRCan support that promote energy conservation, environmentally responsible construction and healthy housing)

4. Leverage S&T Knowledge for Safety and Security Risk Management



Why it is a priority

- With increased considerations for security and risk management as they relate to natural resources and to natural and man-made hazards, NRCan must continue to leverage its knowledge and work with partners to prepare for and manage threats and emergencies.
- Furthermore, NRCan will play a key role
 in providing up-to-date information on our
 natural resources and landmass through Open
 Government, a whole-of-Government initiative to
 ensure Canadians have easy access to the right
 information, in the right format and in a timely
 manner.

Stakeholders/Partners

Government of Canada:

 Public Safety, Department of National Defence, Canadian Space Agency, and federal partners for climate change / adaptation and the open geodata.

External:

Provinces and Territories, Industry, International organizations.

Links to the Corporate Risk Profile

 Hazards Information – There is a risk that technology failures or other gaps prevent NRCan from providing an effective, timely response and information dissemination in the event of civil emergencies (e.g. earthquake).

What we will do

Short term

- Deliver a national climate change adaptation platform providing a forum to exchange and generate new knowledge and inform implementation of adaptation strategies for communities and the natural resource sectors. (ESS)
- Contribute to the real-time capability for emergency response by providing open geospatial data and expertise for the Multi-Agency Situational Awareness System. (ESS)
- Develop a federal geospatial platform to deliver interoperable, accurate geospatial and geoscience information that is essential for land-use management and public safety. (ESS)
- Improve the framework for risk analyses related to Canada's forest pests and deliver information on high-priority risks. (CFS)
- Assess the risks and impacts of wild land fire in Canada's forest, and on the safety and security of Canadians, and disseminate information to key stakeholders. (CFS)

4. Leverage S&T Knowledge for Safety and Security Risk Management

- Climate & Climate Policy There is a risk that there will be more pronounced / severe climate change impacts and uncertain international policy responses.
- Major Industrial Incident There is a risk of a resource sector industrial incident with major regional / global impacts.
- Terrorism in North America There is a risk of a terrorist attack in North America with systemic impacts.

Expected Results

- Risks to natural resources sectors, infrastructure and human health are safely managed.
- Public, private sectors and academia use trusted, accurate, Government of Canada geoinformation for decision making and research.

- Undertake research projects to develop countermeasures for offshore oil spills, which will lead, among other things, to the development of oil spill response strategies tailored for the Arctic environment. (ES, IETS)
- Complete the process for the modernization of explosive regulations. (MMS)

Medium term

Innovation in geospatial infrastructure, systems
and data will allow NRCan — through collaboration
with federal, provincial and territorial partners as
well as academia and industry stakeholders —
to continue to drive innovation of the Canadian
Geospatial Data Infrastructure, ensuring the
development and dissemination of high-value,
open, standards-based geo-data to support key
economic, social and environmental priorities and
promote competitiveness.

Did you know?



Canada's leadership in sustainable forest management is helping other countries around the world to improve their forest knowledge and practices, including conservation and sustainable management of forest resources, notably through the International Model Forest Network. The Canadian Forest Service is also helping countries use its <u>Carbon Budget Model</u> to better understand carbon dynamics in their forest, and the <u>Canadian Forest Fire Danger Rating System</u> is being used to measure fire potential and guide fire management activities.

CORPORATE CONTEXT AND PRIORITIES

The previous section presented what we intend to do: our strategic priorities and activities in support of our vision. This section presents how we will deliver: the rigour and diligence to which we aspire in the execution of our core activities.

Concretely, we need to ensure that our resources are aligned to our strategic priorities. Our collective efforts and assets must work together to deliver those priorities. We need to innovate, building on a strong culture of collaboration, and we need to improve efficiencies in the way we work together. We also need sound governance, supported by integrated planning and reporting, to ensure accountability.

A. Corporate Context

Sound management frameworks, systems and practices

NRCan has in place sound management frameworks, systems and practices and must continuously look at ways to further increase the effectiveness and efficiency of its operations.

In recent years, efforts have been deployed to strengthen our management. We have revised our governance structure, updated our Program Activity Architecture and Performance Measurement Framework, adopted an Integrated Risk Management Policy Framework and revised our Corporate Risk Profile. We have developed a new code on Values and Ethics, defined core NRCan Competencies and implemented a new financial system. Efforts have also been devoted to enhance management practices, including through the engagement of managers in monthly "toolkit" sessions to equip them with the appropriate tools and knowledge.

NRCan's excellence in management has been recognized by the Treasury Board Secretariat and other central agencies: for the third consecutive year, NRCan has received a series of strong and acceptable ratings on its management report card, the Management Accountability Framework.

NRCan in Numbers



- 4,200 the number of current indeterminate employees, including: scientists, engineers, economists, program experts, policy advisors, and internal services experts
- \$1,600M the department's operating budget for 2012-13
- 32 the number of programs the department administers

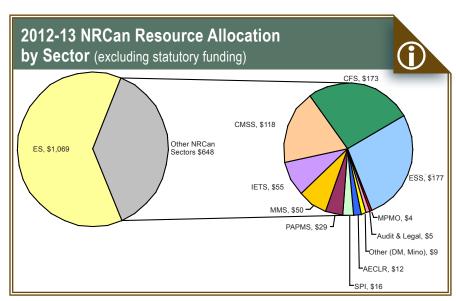
Financial context

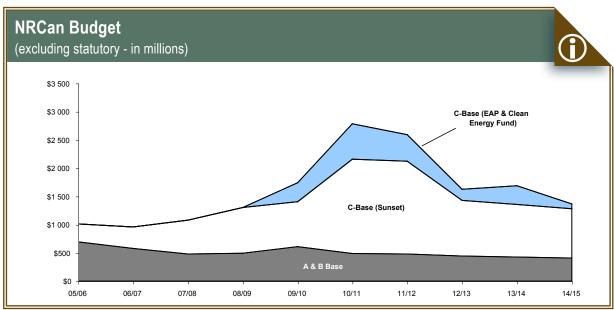
Our total budget for fiscal year 2012-13 is \$2,851 million, including planned \$1,253 million in statutory payments (mostly Atlantic Offshore Accords). As announced in Budget 2012, NRCan's contribution to the Government's deficit reduction action plan is \$107 million annually – or 10% of our review base – to be achieved by April 1, 2014.

NRCan Spendings		\$
Planned Spending (\$M)	2011-12	2012-13
Operating programs (including G&Cs)	2,453	1,598
Statutory programs	1,270	1,253
Total	3,724	2,851

At the same time, Budget 2012 funded a number of targeted investments that will help meet our priorities in the areas of responsible resource development, forest sector transformation, medical isotope technology and earth observation. (Some noteworthy NRCan measures in Budget 2012)

As illustrated in the graph, NRCan is projecting over the three-year planning horizon to return to 2008-09 funding levels. This change is due to various factors, including the implementation of the 2009 Strategic Review, the sunsetting of various Economic Action Plan initiatives, the transfer of IT-related responsibilities and resources to Shared Services Canada and the implementation of Budget 2012.





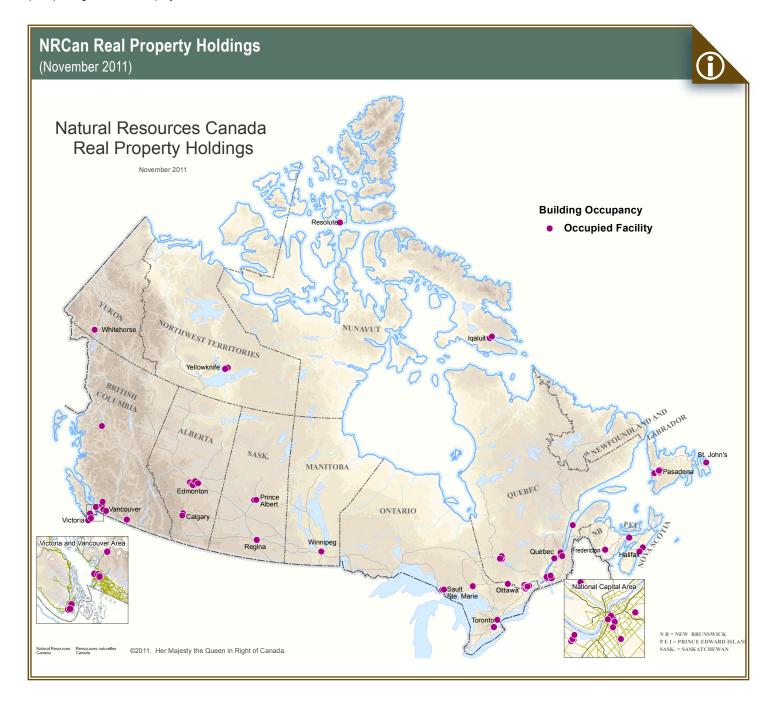


Managing the transition and ensuring the long-term financial sustainability of NRCan are paramount responsibilities of management in order to engage efforts of staff across the department.

Our people

NRCan has a diverse and highly skilled workforce. As of March 31, 2012, NRCan employed 4,200 indeterminate employees, most of whom are in the Scientific and Professional (44%) and Administrative and Foreign Service (35%) categories. Our employees work in offices and

laboratories from coast to coast to coast. About half of NRCan's 94 occupied facilities are in the National Capital Region, with the remainder being distributed from the Atlantic, through Quebec, Ontario, to the Western and Pacific regions and Northern Canada.

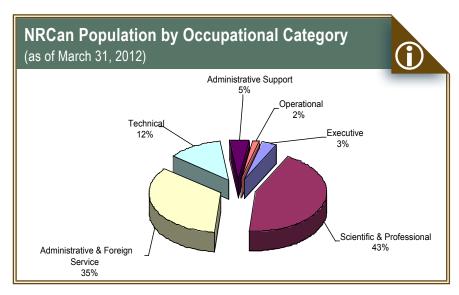


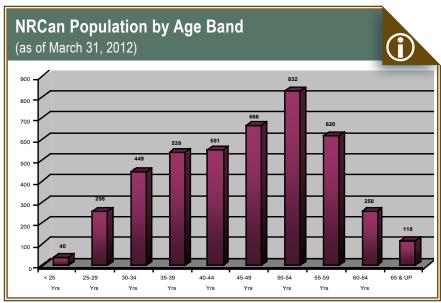
Our workforce composition reflects the changing demographics in Canada, with 59% of our employees over the age of 45. While 11% of employees are eligible to retire in 2012, this number is expected to rise to 29% by 2017.

A key challenge and primary responsibility is to manage the human resource impacts of the current transition to a smaller organization. Impacts are felt across all regions, and across all of our functions: policy, science, program delivery and internal services.

Attrition, including retirements, is helping the department adjust to its fiscal realities. However, other workforce adjustment measures have and are being implemented to achieve the required savings. NRCan remains committed to approaching this period of adjustment with sensitivity, leadership and innovation, guided by our public service values.

In January 2012, the department initiated a restructuring of two internal services sectors:
Corporate Management and Services Sector (CMSS) and Public Affairs and Portfolio Management Sector (PAPMS).
Some of the restructuring is linked to larger federal initiatives such as the consolidation of pay and benefits functions in Miramichi, New Brunswick.
One hundred positions will be eliminated as a result of this exercise.





A second workforce-adjustment process was initiated last April following Budget 2012. Two hundred and twenty-nine positions will be eliminated as a result.

In collaboration with our bargaining agent colleagues, NRCan is striving to minimize the impact of workforce adjustment on employees. The department's management team continues to make its best efforts to find opportunities for affected employees who wish to stay within the core public administration.

For more information, please consult the workforce adjustment wiki page.

Skills and competency mix

As noted above, NRCan has a highly specialized workforce, notably in the areas of science and technology. The impact of expected retirements as well as the changing nature of NRCan's scientific work in support of the Government priorities needs to be effectively managed in order to maintain the department's leading-edge scientific capability and knowledge base. It is recognized that specialized competencies and knowledge take years to develop and, in many cases, cannot be acquired directly from the private sector. Identifying the skills and competencies required and areas where gaps may occur, as well as knowledge transfer and management, will be a key focus for the next years.

Attracting and retaining employees with the right mix

Given the specialized nature of the expertise required and the length of time needed to develop it, a key risk is not being able to attract employees, or losing them, due to workforce or workplace issues. Fortunately, the 2011 **Public Service Employee Survey** (PSES) results are overall positive, indicating that the department continues to be strong in the areas of employee engagement, encouragement to innovate, positive employee relations with managers, and a respectful workplace.

However, some areas require continued attention, such as:

- harassment, discrimination and informal conflict in the workplace;
- workload and overtime;
- · official languages; and
- · career development.

B. Corporate Priorities

The <u>four corporate priorities</u> NRCan established in 2011–12 give clear direction to ensure that NRCan is ready both to respond effectively to the government's agenda and to sustain high performance on our core business for the long term: asserting policy leadership, mobilizing science and technology, transforming the department's business, and growing its human capital. These priorities will serve as guideposts as the department enters a new period where it will be expected to play a prominent role in supporting the government agenda within an environment where fiscal resources are more constrained.

NRCan's performance will be enhanced by focusing on several points: executing its core activities well; rigorously aligning people and resources to Government priorities; being resilient; renewing ourselves through judicious investments; and ensuring our activities are mutually reinforcing.

The department will also leverage its governance structure to deliver on the priorities and enable broad-based input, and participation that promotes top-down and bottom-up communication and ensures greater integration and accountability.

In short, the corporate priorities aim at adapting the way we do our business. Their overall goal is to enable the department to be nimble, adaptable and high-performing.

NRCan 2011 PSES Results



Largest changes since 2008

Results improved

- Employees know where to go in case of ethical dilemmas
- Useful supervisors feedback on job performance
- Assigned work completed during regular working hours

Results decreased

- · Opportunities for promotion
- Satisfaction on the ways informal complaints are resolved
- Satisfaction on the ways NRCan responds to harassment and discrimination

For more information on NRCan results, visit the <u>Deputy Ministers' Corner</u>

Report to the Prime Minister



"Although the core of the Public Service will not fundamentally change in the years to come, how we work must. The Public Service of tomorrow will be defined by a number of key characteristics – achieving excellence in all that we do will require our institution to be collaborative, innovative, streamlined, high performing, adaptable and diverse". (p.8)

Nineteenth Annual Report to the Prime Minister on the Public Service of Canada

1. Asserting Our Policy Leadership



Why it is a priority

 In a rapidly changing policy environment, NRCan must: be nimble and adaptable; effectively use networks and collaborative mechanisms; and look to the future — both in the medium and the long term — in order to respond to, align with and influence policy decisions and direction.

Links to the Corporate Risk Profile

 Capacity Management – There is a risk that uncertainty, the sunsetting of funding, the implementation of the deficit reduction action plan and longer-term structural challenges will affect NRCan's ability to deliver on its policy priorities.

Expected Results

- Sound and timely advice provided to the Minister and Government of Canada on how to advance the natural resources agenda.
- Key stakeholders/ partners are engaged and aware of NRCan perspectives.

What we will do

- Consider opportunities to deliver on the government's broader mandate beyond shorter-term priorities, including energy innovation, labour markets, infrastructure and longer-term perspectives for the global economy and natural resources.
- Assert horizontal policy leadership in advancing policy, legislative and regulatory proposals through the Major Projects Deputy Minister Committee chaired by NRCan.
- Develop and present Budget 2013 proposals to the Minister in consultation with portfolio agencies, grounding advice and recommendations in sound economic and science evidence.
- Lead collaboration with other departments to enhance the accessibility, use and impact of federal geospatial data.
- Update the Portfolio Management Framework to modernize guiding principles, governance and roles and responsibilities in order to support portfolio coherence and GoC priorities.
- Implement the five-year evaluation plan under a new, risk-based approach.

Did you know?



For the last 10 years, NRCan has offered recognition to outstanding business and community <u>ENERGY</u> <u>STAR</u> participants for their energy efficiency promotions? Two of this year's recipients included Toronto Community Housing and Sears Canada. ENERGY STAR identifies the most efficient products and houses available in the Canadian market, and is recognized as such by over 70% of the Canadian population.

2. Mobilizing Our Science and Technology



Why it is a priority

 NRCan's effectiveness involves the entire innovation system: industry, universities and other levels of government. We operate in the global context, and globalization directly impacts how we mobilize our science and how we innovate.

Links to the Corporate Risk Profile

- Capacity Management There is a risk that uncertainty and sunsetting of funding, the implementation of the deficit reduction action plan and longer-term structural challenges will affect NRCan's ability to deliver on its S&T priorities.
- Science and Technology There is a risk that NRCan's science activities and results may not adequately target or address the key natural resource issues of tomorrow.
- Capital Assets There is a risk that aging NRCan real property and S&T equipment portfolios compromise workplace safety and the delivery of science programs.

Expected Results

- GoC investments on S&T are informed and responsive to the needs identified by a wide range of stakeholders.
- The conduct of S&T activities builds on the comparative advantages of the stakeholders of the innovation system.

What we will do

Short term

- Strengthen corporate S&T governance and accountability through the S&T Board chaired by the Deputy Minister.
- Document and track NRCan's 25 Signature S&T projects to better assess and convey the relevance, quality and impact of NRCan S&T.
- Implement the S&T publications policy to enhance the awareness of, access to and use of NRCan S&T in policy advice and decision making.
- Develop the Policy and Science Integration
 Community of Practice to promote science/policy
 integration and share best practices.
- Provide online services and tools to access free, high-quality data in a simple and open format, and integrate databanks of geoscience information via a one-stop geoportal.

Medium term

- Advance and adopt corporate-wide approach to S&T priority setting, impact measurement and Intellectual Property management.
- Increase engagement of external advisors and stakeholders in S&T governance through the S&T Board and other fora.

Did you know?



A 10% reduction in vehicle weight reduces fuel consumption by 6 to 8%. Lighter materials will enable fuel efficiencies, reduce fossil fuel consumption and lower greenhouse gas emissions.

Did you know?



CanmetENERGY in Varennes is the National Centre of Expertise for Process Integration.

Process Integration is a powerful approach to optimizing energy use and power generation in industrial facilities. To date, 53 large and medium-sized companies benefit from PI, resulting in energy cost savings of \$54 million annually and a reduction in direct greenhouse gas emissions of 0.3 million tonnes per year.

3. Transforming Our Business



Why it is a priority

Our objective is to modernize the business of our department, with a focus on ensuring the effectiveness and efficiency of our services and operations. Our efforts are part of a governmentwide pursuit of excellence across core functions. To identify improvements and transform our business, we are engaging internally and externally. This includes improving information management and technology (IMT) strategic planning and governance, enhancing electronic records and document management, and refining back-office business processes.

Links to the Corporate Risk Profile

 Capacity Management – There is a risk that uncertainty and the sunsetting of C-based funds, the implementation of the deficit reduction action plan and longer-term structural challenges with the department's overall budget will affect NRCan's ability to deliver on its priorities.

What we will do

Short term

- Optimize IMT governance and investments across the department through development of an IMT Strategic Plan.
- Launch the GCDocs project to establish a new platform for electronic records and document management.
- Continue to consolidate and improve the accessibility of NRCan's web presence, as well as implement targeted initiatives to optimize IT resources.
- Improve internal business processes in response to engagement sessions with managers and practitioners.
- Optimize quality, timeliness and cost of translations.
- Deliver Departmental Security Plan and Investment Plan.
- Implement Budget 2012 reduction measures in an efficient, effective and sensitive manner.
- Engage stakeholders, and update NRCan's Communications and Public Participation Framework.

3. Transforming Our Business

Information Management & Technology –
 There is a risk that NRCan not optimally meet information management requirements, given new statutory requirements (e.g. ATIP), legal process requirements (e-discovery), GCDocs implementation and the increasing number of digital information assets. There is also a risk that the IT infrastructure will not be aligned with NRCan operations (notably S&T operations), negatively impacting the department's performance.

Expected Results

- NRCan operations and internal processes are nimble, adaptable and responsive to policy, S&T and program delivery needs.
- Opportunities to increase the effectiveness and efficiency of NRCan operations are identified and implemented.
- A rating of "acceptable" or "strong" in the following areas of management of the Management Accountability Framework:
 - · Managing for Results
 - Evaluation
 - · Financial Management and Control
 - · Management of Security
 - Risk Management
 - · Information Management
 - · Information Technology

Medium term

- Analyse and review NRCan's financial structure beyond 2014–15.
- Continue consultation, training and information sessions on Management Control Framework.
- Support the Federal Laboratory Integrated
 Governance initiative, led by the Canadian Food
 Inspection Agency and the Public Health Agency
 of Canada through data collection and analysis to
 investigate cluster opportunities.

4. Growing Our Human Capital



Why it is a priority

To deliver on its priorities and Strategic
Outcomes, NRCan must: maximize its
human capital; recruit strategically, drawing
from Canada's diversity; develop the right
competencies and leadership; and ensure
the transfer of knowledge from established
and retiring personnel to the next generation.
Maximizing the contribution and career
development of our people, from their first to
their last day of service, will be key.

Links to the Corporate Risk Profile

 Workforce – There is a risk that NRCan will not manage deficit reduction action plan implementation effectively and that it may not be able to support effective talent management including recruitment, retention and learning.

Expected Results (as per MAF)

- Deficit reduction action plan-related measures are fairly and timely implemented.
- NRCan has the capacity and the expertise to deliver on its priorities during and after the implementation of the deficit reduction action plan and other reduction initiatives are completed.
- A rating of "acceptable" or "strong" in the following areas of management of the Management Accountability Framework:
 - · Values & Ethics
 - · People Management

What we will do

- Implement next phases in succession planning and talent mapping, strengthen performance management through tools and training, and establish an NRCan strategy to grow our leaders.
- Address areas of focus identified in the 2011 Public Service Employee Survey results; implement sector and corporate-wide action plans and engage employees in sustainable solutions.
- Engage management and staff on the new Values and Ethics Code for the Public Sector and the NRCan Code.
- Continue the implementation of NRCan's Official Languages Action Plan and implement tools for managers and employees working in bilingual workplaces.
- Implement and monitor the 2012–15 Employment Equity Action Plan, a key element of NRCan's commitment to build an organization that values employees for their differences, aims to treat all with fairness and respect, and fosters employee engagement.
- Finalize and implement a three-year action plan to support wellness and disability management.

Did you know?



In June 2012, two teams from NRCan received the prestigious <u>Public Service Award of Excellence</u>. This award recognizes employees who have demonstrated excellence in the achievement of results for Canadians, while reflecting the priorities of the Public Service of Canada and demonstrating key leadership competencies.

The Kimberley Process Office team was recognized in the "Excellence in the Citizen-Focused Service Delivery" category for its outstanding contribution in developing strategic partnerships and innovative service delivery to help streamline the export of Canadian diamonds.

In the "Employment Equity and Diversity" category, NRCan's Visible Minority Talent Mapping Pilot team was recognized for creating an approach that improves the upward mobility of visible minority employees.

RISK MANAGEMENT

As a large and diverse organization, NRCan prepares for and manages a wide range of risks and opportunities. The foundation of the department's approach to risk management is the <u>Integrated Risk Management Policy Framework</u>, which is based on the recognition that a solid understanding of the risk environment is key to achieving business objectives.

We are committed to strengthening our risk management practices by continuing the implementation of the Integrated Risk Management Policy Framework. We will also elaborate a risk management action plan mapping out initiatives to stengthen business practices over the next two to three years.

In delivering on its objectives, the department also works at identifying operational risks, assessing their potential impact and putting in place mitigation measures to bring them to an acceptable level. The <u>Corporate Risk Profile</u> outlines NRCan's main strategic, external and

operational risks, including the level of risk (likelihood and consequence), mitigation strategies and key accountabilities. All sectors also have a Sector Risk Profile, annexed to their Integrated Business Plans, that outlines their specific risks and mitigation strategies.

These risks and the department's actions in response to them will be reviewed regularly to reflect the changing external and operational context and to ensure that NRCan is able to meet its priorities and commitments. In light of the fiscal and operating context for 2012–13, particular attention will be paid to the Workforce and Capacity Management risks.

The <u>department's governance structure</u> will be leveraged to review risks. Lead sectors and the Executive Committee will be responsible for reviewing progress against plans and for discussing risks on a regular basis. All Sectors will also be reviewing and updating their Sector Risk Profile.

CONCLUSION

As the foregoing shows, the 2012–15 Integrated Business Plan is far-reaching in scope. It presents the priorities we have established to determine what we will do and how we will do it so that we can coherently pursue our vision and strategic outcomes together.

It also clearly recognizes the challenges that we are facing, including adjustments flowing from Budget 2012. At the same time, it provides a way forward. Building on our people's strengths, expertise and dedication, it is meant to enable us collectively to serve Canadians to the best of our combined abilities.

But this plan will prove to be truly useful only if we all play our part in it, building on the foundation of our Code of Values and Ethics. Whether we are scientists, policy analysts, financial officers or managers, success depends on our careful execution, our diligent progress monitoring and our thorough reporting.

Sector-specific and corporate-wide reporting processes will bring together our individual and team successes and challenges, allowing performance issues to be dealt with at the appropriate level and in a timely fashion. Key ways

for the department to report on progress are through the following:

- the <u>Quarterly Financial Reports</u>, which compare planned and actual expenditures for both the quarter and year-to-date and are mandated under the <u>Financial Administration Act</u>;
- the <u>Departmental Performance Reports</u>, which present to Parliament the results achieved against the planned performance expectations set out in the corresponding Report on Plans and Priorities;
- the quarterly financial and non-financial reviews, which outline areas where performance shortfalls are expected, enabling the Executive Committee to take early corrective measures when possible; and
- the various <u>audits</u> and <u>evaluations</u>, which provide insights on potential improvements to our management practices, program design, and other matters.

Annex A – People Component

On Track and Staying the Course

Human resources management has never been as important as it is in today's changing workforce and landscape.

Becoming a model employer and serving Canadians with excellence depends on attracting, developing, engaging and retaining talented employees.

Over the past year, through NRCan's corporate priority on *Growing our Human Capital*, the department has focused on supporting a highly productive, well-trained and well-led workforce. The experience we have acquired and the investments we have made in our people and in support of the Public Service renewal agenda have positioned us well to respond to upcoming challenges and opportunities resulting from Budget 2012 reductions, new priorities and organizational changes.

The roadmap and priorities established under our *Growing our Human Capital* priority will continue to be the framework as we move forward to build on our high-performing organization, equipped and managed to maximize contributions from our employees and to deliver the best service to Canadians.

Challenges and Opportunities

Budget 2012 expenditure reductions

Since 2011–12, NRCan has been preparing to meet the goals of the Government of Canada deficit reduction action plan. This has involved reviewing programs and operations with a view to transforming how we work, improving efficiency and effectiveness, and generating savings.

Our actions are grouped under four themes:

- 1. Streamlining corporate support to achieve efficiencies and ensure sustainability;
- 2. Focusing on core roles and aligning to government priorities;
- 3. Focusing on work that provides clear economic benefits, and adapting to changing circumstances;
- 4. Scaling back programs where necessary to maintain affordability.

As a result of Budget 2012 and other departmental restructuring, this year will require important investment and particular attention as NRCan supports employees throughout workforce adjustment. Our success will require that employees be treated fairly — both those who are leaving and those who are staying.

Changing Demographics and Landscape

In the coming months and years, NRCan will be faced with several challenges, including: changing demographics (aging workforce, new generational needs); potential skill shortages; a shrinking workforce; evolving learning needs; new work methods; and the need to foster a performance culture. These challenges will require various responses, including:

- developing talent and strategically investing in people;
- ensuring continuity in leadership development. especially in critical areas;
- maximizing opportunities and the flexibilities of the various human resources acts and policies;
- exercising authority by introducing new approaches to managing;
- developing collaborative and team-oriented approaches to meeting the need for increasingly holistic and horizontal approaches to issues; and
- building a strong foundation that embraces public service values, our linguistic duality and diversity.

NRCan has a highly specialized workforce, notably in the areas of science and technology. The impact of expected retirements and the changing nature of NRCan's scientific work in support of the government priorities need to be effectively managed in order to maintain the department's leading-edge scientific capability and knowledge base. It is recognized that specialized competencies and knowledge take years to develop and, in many cases, cannot be acquired directly from the private sector. Identifying the particular skills and competencies required and the areas where gaps may occur, as well as knowledge transfer and management, will be a key focus for the next few years.

Governance of the Human Resources Management Function

Every person at NRCan has a role to play in helping to achieve the results set out in this plan. The Deputy Minister has overall accountability for human resources management for NRCan. The DM, with the assistance of the Associate DM, sets the strategic direction and priorities for human resource management. The Assistant Deputy Minister, Corporate Management and Services Sector, sets out the foundation and people services that will enable managers to meet their business goals efficiently and effectively. ADMs and managers/supervisors within their region or sector, in partnership with their employees, are accountable for the implementation of good human resource management in order to provide a healthy workplace and ensure a productive and innovative workforce, together with leadership that ensures alignment with NRCan priorities.

Human resources management is a collective responsibility. The Human Resources Renewal Committee (HRRC), which comprises sector representatives and is chaired by two ADMs, assists the Deputy Minister and members of the Executive Committee in fulfilling their obligations by identifying priorities and advising on implementation strategies. The human resources management agenda is also supported by various champions in specific functional areas.

Our workforce

NRCan has a diverse and highly skilled workforce that is located across the country in seven regions. Of the 4,200 indeterminate employees, most are distributed in the Scientific and Professional (44%) and Administrative and Foreign Service (35%) categories.

NRCan's workforce composition reflects the changing demographics in Canada, with 59% of its employees over the age of 45. While 11% of employees are eligible to retire in 2012, this number is expected to rise to 29% by 2017. While approximately 36% of employees retire the year they become eligible, departures due to retirement could have an impact on leadership capacity and retention and could create skills/competency and knowledge gaps.

Human Resources Management Priorities

NRCan is committed to ensuring is the continuity of a robust and effective organization that is able to deliver on its key operational priorities and other activities in a cost-effective manner. As managers play a key role

in the management of our human capital, the department is mobilizing the Management Community through town halls with executives and learning events to enhance their capacity. NRCan is also committed to doing this in a way that is consistent with Public Service values, which are the foundation of creating a healthy workplace and of maintaining the confidence and trust of Canadians.

In response to NRCan's most recent Management Accountability Framework (MAF) assessment, and also to mitigate the risks identified in the Corporate Risk Profile, the following priorities have been identified for the 2012-13 period.

1. Implement Integrated Talent Management Approach

Given demographic shifts and fiscal pressures impacting resourcing levels, the effective management of our talent is increasingly important for achieving business results. NRCan's approach to talent management is a

structured and integrated strategy that aligns ongoing transformation and corporate priorities with performance management and employee development. Talent management is premised on the values of access, transparency and fairness by ensuring that all employees are supported in their learning and development while maximizing their contribution.

NRCan's Talent Management Program builds on the foundational structures and successes of HR Program and lessons learned from initiatives such

Renewal, the Executive Talent Management as the Visible Minority Talent Management Program (VMTMP) and Leaders on the Move (LOTM).

Investing in People

"Through this process of change, it is essential to continue recruiting talent... to ensure a continuous stream of leaders for the decades to come. It is also necessary to sustain investments in employee training and development to ensure that the Public Service maintains the capacity to do its job even as the total size of the workforce is shrinking."

 Sixth Report of the Prime Minister's Advisory Committee on the Public Service

In response to challenges (or capacity and capability gaps) and employee feedback through the Public Service and NRCan Employee Surveys, NRCan will focus on three key elements of the talent management strategy this year:

- Enhance Employee Performance Management: In 2012, NRCan will further strengthen the current Performance Management Program. The 2011–12 performance evaluation exercise will introduce two new elements: a Review Officer (next management level up) as quality control check of performance evaluations, and ADM/DG sector-level collective discussions on capacity gaps and trends. As well, for the 2012–13 performance cycle, managers will ensure that all employees have defined work objectives, learning plans, mid-year discussions and written end-of-year performance evaluations.
- Assess Critical Positions and Talent Management Discussions Below the Executive Level: NRCan will identify critical areas and positions at the EX equivalent and EX minus 1 levels. This will allow the department to anticipate future vacancies and be better positioned to ensure continuity of key positions.
- Focus Leadership Development Investments: NRCan will support leadership development by better utilizing experiential on-the-job learning opportunities. In 2012–13, NRCan will develop a strategy for growing our leaders, focusing on EX equivalents and EX minus 1s. The strategy will set out elements of leadership development that sectors can utilize to build required leadership competencies based on succession and business needs as well as on EE and OL objectives.

2. Respond to Survey Results

The **Public Service Employee Survey** (PSES) is an important part of NRCan's approach to engaging employees. With a participation rate of 71.4%, the overall 2011 PSES results indicate that the department continues to be strong in the areas of employee engagement, encouragement to innovate, positive employee relations with managers and a respectful workplace to work.

However, efforts are still required in five areas of improvement: senior leadership and direction; workload and overtime; official languages; harassment and discrimination; and career development. To ensure that ongoing progress is

Engaged NRCan Employees

The recently conducted 2011 Public Service Employee Survey (PSES) showed that, in spite of the uncertainty facing our institution, public servants remain very engaged and committed to their work: 78 percent of NRCan employees like their jobs, 74 percent have a sense of satisfaction with their work, 86 proud of the work they do, and 90 percent are willing to put in the extra effort to get the job done.

being made in these key areas, employees can expect over the spring and summer months to be engaged at the local level, to discuss the results and to build and implement meaningful solutions. In early fall, employee feedback will be consolidated for the revision of sector and departmental NRCan Employee Survey (NES) Action Plans to help address common themes and to fulfil the Management Accountability Framework (MAF) requirements, as well as to serve to validate and readjust our priorities under Growing our Human Capital. Finally, in mid-to-late fall employees can expect to receive an updated action plan and to be informed on the progress achieved to date.

3. Build and Strengthen a Culture of Excellence

NRCan is committed to strengthening its human capital, notably by drawing on the strength of its diverse workforce, by supporting linguistic duality and by fostering a culture of values-based decision making. The recently introduced *Values and Ethics Code* (NRCan code) outlines the values and behaviours expected of all NRCan employees. The code supports NRCan's business culture and operational requirements and addresses ethical risks or potential conflict situations that the department or its employees could face. For this year, NRCan will be focusing much of its attention on *Building Awareness and Understanding*. As a first step, presentations are being made to all sector management teams during the spring to clarify expectations. Secondly, awareness and training sessions will be offered to all employees in the fall using various media. As well, managers and employees will be required to complete the Canada School of Public Service *Paving the Way* course, which provides participants with important information on the Values and Ethics Code for the Public Service. Over the course of the fall, managers and employees will also have access to a customized NRCan online tool kit to increase and maintain their knowledge of the various aspects and application of the NRCan code and Values and Ethics Code for the Public Sector.

The initiatives identified in the <u>Employment Equity Action Plan 2012–15</u> will help create a culture that promotes and integrates employment equity and diversity into our daily business operations. In 2012–13, the focus will be on launching the plan and beginning to implement early actions within the plan's four strategic objectives: strengthened accountability and governance through the creation of the EE Advisory Committee; targeted outreach in order to foster the careers of women in science; prevention of harassment and discrimination through mandatory training; and enhancement of awareness of disability management via the implementation of the Wellness and Disability Management Initiative.

NRCan's business objectives directly involve the provision of high-quality services to Canadians in both official languages. NRCan's <u>Official Languages Action Plan</u> (OLAP) 2011–14 embodies our department's commitment to a departmental culture that willingly, instinctively and proactively fulfils its legal obligations.

Raising awareness remains a priority. For this year, NRCan will provide information sessions and deliver training sessions to managers to help them understand their roles and responsibilities for *Language of Work and Supervision*. NRCan will also focus its attention on building tools that will support the department's continued efforts to ensure that both official languages are equally acknowledged and form part of a natural and welcome feature of the workplace, including promoting bilingual meetings. NRCan's contribution to the development of Official Language Minority Communities will be a priority this year, with the implementation of a strategic framework and the unfolding of two pilot projects with selected communities. Specifically, one francophone community will be selected from outside Quebec and one anglophone community will be selected from within Quebec.

NRCan is committed to wellness and disability management and will put in place the necessary elements to assist with the implementation of the public service—wide Disability Management Initiative (DMI). NRCan's *Wellness and Disability Management Initiative* will strengthen the department's efforts toward ensuring that our employees and managers have a supportive, responsive and consistent approach at NRCan in supporting workforce and workplace well-being.

4. Public Service Renewal

In moving forward on Public Service Renewal, NRCan will need to sustain its focus on human resources management and continue to provide leadership and support to employees, working in collaboration with bargaining agents and central agencies. Our priorities and investments have been carefully selected to ensure alignment with the Public Service Renewal priorities, direction and business imperatives. Given the current context, NRCan will ensure to proceed with care and determination in the pursuit of excellence in the public service. To ensure that progress is achieved in addressing our various challenges and gaps, our central reporting requirements, Management Accountability Framework, Departmental Staffing Accountability Report, reporting to the Clerk of the Privy Council, and Employee Engagement activities on progress achieved against the Public Service Renewal priorities will provide us with the benchmarks and indicators for effective people management.

Conclusion

The key expected results below will help us anchor and guide our actions, and measure how we can be successful in managing our workforce as we go through the current period of adjustment.

Engaged and Informed: As employees are critical to NRCan's success, input from all employees and collaborative partners is strongly supported, sought and sustained.

Aligned and Supportive Leadership: Leaders at NRCan at all levels are required and fostered across the organization. A key contribution of senior executives and managers is to be genuine, be constantly visible, exemplify the organization's values and support, encourage and enable employees to deliver on their commitments.

Helpful and Responsive Service: The prime focus of both employees and managers is to respond quickly to external and internal client service needs and to go the extra mile to resolve any problems they may have.

Continuous Learners: Employees and managers shape and manage their skills and learning development to continuously position the organization to meet its mandate of serving Canadians.

Values and Ethics: Our strong and enduring public service values will help us navigate the challenging transition and be critical to how we inspire, make decisions, collaborate and implement change.

Annex B – Sector Integrated Business Plans

Sectors:

Atomic Energy of Canada Limited Restructuring

Canadian Forest Sector

Corporate Management and Services Sector

Earth Sciences Sector

Energy Sector

Innovation and Energy Technology sector

Major Project and Management Office

Mining and Minerals Sector

Public Affairs and Portfolio Management Sector

Science and Policy Integration

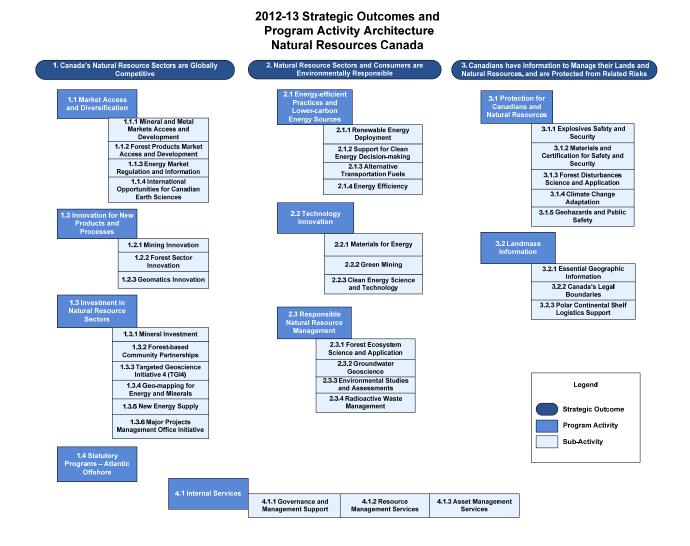
Task Force on Energy Security, Prosperity and Sustainability

Annex C – Deliverables by Program Activity Architecture

Key deliverables by program activity

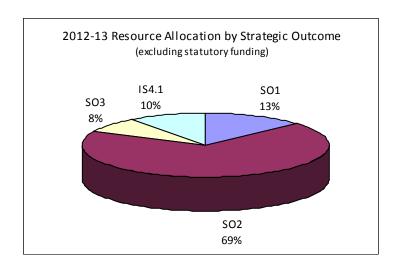
This section focuses on what NRCan will do in 2012–13. It outlines key deliverables and the results we are trying to achieve, together with the ways in which we will allocate resources and measure success. These deliverables are presented by program activity and strategic outcome, as per the department's Program Activity Architecture.

The majority of NRCan resources will be devoted to short-term, specific deliverables. At the same time, the department will allocate some resources and efforts to plan for and help position Canada's natural resource sectors for the future by advancing its medium-term agenda.



Financial Resource Allocations

This graph presents the 2012–13 resource allocations by NRCan strategic outcome, excluding statutory funding.



The following comprehensive table presents a breakdown of NRCan resource allocation by sector and by program activity.

2012-13 Resource Allocations by Strategic Outcome and Activity

								(\$000))								
	ESS	ES	MMS	IETS	CFS	CMSS	MINO	DMO	AUDIT	LEGAL	MPMO	PAPMS	SPI	AECL-R	ESPS	DM*	Total
SO1	64,757	1,152,348	14,253	-	120,774		-	-	-	-	3,702		-	5,000	823	-	1,361,657
1.1	233	17,394	2,210		27,438									5,000	823		53,098
1.2	8,829		3,294		86,580												98,703
1.3	55,694		8,750		6,756						3,702						74,902
1.4		1,134,954															1,134,954
SO2	11,652	1,051,604	28,509	55,116	23,855	-	-	-	-	-	-	-	-	6,679	-	-	1,177,415
2.1		557,016															557,016
2.2		221,944	26,963	55,116	1,113									6,679			311,815
2.3	11,652	272,644	1,546		22,742												308,584
SO3	100,354	-	6,936	-	28,237		-	-	-	-	-	-	-	-	-	-	135,527
3.1	24,881		6,936		28,237												60,054
3.2	75,473		-														75,473
IS4.1		-		-		118,220	1,550	2,173	3,764	1,194		29,213	16,056			4,631	176,619
Total	\$ 176,763	\$ 2,203,952	\$ 49,698	\$ 55,116	\$ 172,866	\$ 118,220	\$ 1,550	\$ 2,173	\$ 3,764	\$ 1,194	\$ 3,702	\$ 29,213	\$ 16,056	\$ 11,679	\$ 823	\$ 4,631	\$ 2,851,218

^{*}The DM Reserve Residual balance after allocations to Sectors is \$4.6 as at May 29, 2012. This amount has been included in Internal Services for the purpose of this exercise. However, it could be reallocated to another Strategic Outcome and Activity during 2012-13.

SO1 - Strategic Outcome 1: Canada's Natural Resource Sectors Are Globally Competitive

SO2 - Strategic Outcome 2: Natural Resource Sectors and Consumers Are Environmentally Responsible

SO3 - Strategic Outcome 3: Canadians Have Information to Manage Their Lands and Natural Resources, and Are Protected From Related Risks

IS4.1 - Internal Services 4.1

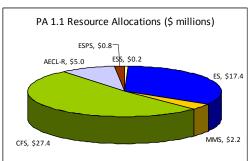
Strategic Outcome 1: Canada's Natural Resource Sectors Are Globally Competitive

Canada is a major producer and exporter of natural resources. Being competitive in Canadian and foreign markets is imperative to the nation's economic growth. NRCan can contribute to this strategic outcome by supporting Canada's natural resource sectors in three aims: to expand and diversify their markets, to respond to growing demand from emerging economies, and to diversify their product offerings.

Program Activity 1.1: Market Access and Diversification

The objectives of this program activity are to break down trade and policy barriers and to support access and success in domestic and global natural resource markets.

Number of FTEs: 222¹ Budget: \$53M



Deliverables	Expected Results	Performance Indicators and Targets
Develop and strengthen bilateral partnerships in the Asia–Pacific region (China, Japan, Korea, India). (All)	Natural resource sectors have increased access to markets and new market segments.	Natural resource sectors have access to markets and new market segments, as measured by exports of energy products,
Deepen bilateral engagement on energy with the U.S., including through the Energy Consultative Mechanism and the <u>Clean Energy</u> <u>Dialogue</u> . (ES, IETS, SPI)		minerals and metal products and forestry products. Target: Favourable 10-year trend Canadian direct investment abroad
Position Canada as a reliable and responsible natural resources supplier and promote acceptance of our products, including through targeted government-to-government activities and multilateral fora, e.g. Asia—Pacific Economic Cooperation, International Energy Agency, International Energy Forum.		Target: Favourable 10-year trend

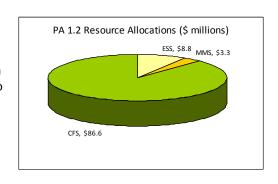
¹ All FTEs numbers are from the RPP 2012–13 and do not reflect SOR measures.

43

Deliverables	Expected Results	Performance Indicators and Targets
(ESPS, AII)		
 Address existing and potential market barriers to export our natural resources (e.g., European Union Fuel Quality Directive) through targeted government-to- government engagement. (All) 		
 Support the forest industry's market diversification activities in the U.S. and Canada. (CFS) 		
 Review the mandate, governance and operating and financial structure of Atomic Energy of Canada Limited's Nuclear Laboratories. (AECL-R) 		
 Recommendations to modernise the nuclear civil liability legislation put forward. (AECL-R) 		
Communicate to domestic and international audiences the environmental performance improvements in oil sands development. (ESPS)		

Program Activity 1.2: Innovation for New Products and Processes

Optimizing the production and use of Canada's natural resources and the processes by which they are developed will improve the productivity of the natural resource sectors upstream supply claim and downstream users. The objective of this program activity is twofold: to enhance productivity and to encourage natural resource sectors to develop and adopt new technologies, processes, and products. This is achieved by conducting science, research, development, and demonstrations on new applications, technologies, processes, and products.



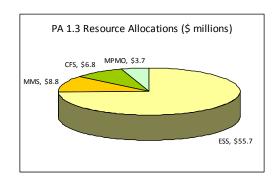
Number of FTEs: 319 Budget: \$98.6M

	Expected Results	Performance Indicators and Targets
Promote market adoption of high-value Canadian forest products (e.g. green biomethanol), processes (e.g. optimization of wood flooring manufacturing) and technologies (e.g. converting waste heat to power). (CFS)	Natural resource sectors develop and/or adopt technologies, processes and/or new products as a result of NRCan information and initiatives.	Number of new technologies, processes and/or products in the market place resulting from NRCan information. Target: 5 (annual)
Provide online services and tools to access and integrate geoscience information via a one-stop geoportal to facilitate access to high-quality free data in a simple and open format, thereby encouraging competitiveness and improving the ability to innovate. (ESS)		Research and development (R&D) expenditures in natural resource sectors as defined by total intramural R&D expenditures in energy, mining and forestry sectors. Target: Favourable 10-year trend
	Public and private sector organizations have increased cost-efficiency or productivity resulting from the integration of geomatics or geoscience policies, tools and frameworks.	Number of citations of cost- efficiency and productivity gains in public or private sector organizations (in ESS annual program performance reports). Target: 5 (annual)

Program Activity 1.3: Investment in Natural Resource Sectors

Currently, investing in the development of natural resources is costly and risky, due to large upfront capital requirements and uncertain timelines and dividends of development. The objective of this program activity is to encourage natural resource sector investments by decreasing the risk of development or increasing knowledge on opportunities. This objective is achieved by advancing federal system-wide regulatory improvements and providing funding and information on the various factors that determine the potential economic viability of natural resources.

Number of FTEs: 492 Budget: \$74.6M



Deliverables	Expected Results	Performance Indicators and Targets
Coordinate implementation of system- wide legislative proposals to modernize the federal regulatory system for project reviews and oversee government-wide efforts to align federal and provincial processes to achieve "one project, one review." (MPMO)	Increased investments in natural resource sectors.	New capital Investment in forest, energy, minerals and metals sectors. Target: Favourable 10-year trend
Provide public geoscience knowledge and tools through the Geo-mapping for Energy and Minerals (GEM) and the Targeted Geoscience Initiative 4 (TGI-4) programs to support private sector decision making for exploration and to stimulate discovery of mineral and energy resources. (ESS)		
 Prepare proposal for Geo-mapping for Energy and Minerals Phase II, to commence April 2013. (ESS) 		
 Release three reports and strategic assessments on offshore and new energy supply. (ES) 		
 Organize five scientific workshops with key stakeholders to share TGI-4 knowledge. (ESS) 		
 Support Canada's Corporate Social Responsibility strategy and the Extractive Industries Transparency Initiative to safeguard Canada's reputation, international relations and partner interests. (MMS, SPI) 		
 Implement 15 Aboriginal forestry Initiative contribution agreements with Aboriginal Affairs and Northern Development Canada and other federal departments. (CFS) 		
 Produce five Aboriginal Forestry Initiative products and tools. (CFS) 		

Program Activity 1.4: Statutory Programs – Atlantic Offshore

This program activity involves effecting and monitoring timely payments under the *Atlantic Offshore Accord Acts*.

Number of FTEs: 0

Budget: \$1,135M (ES only)



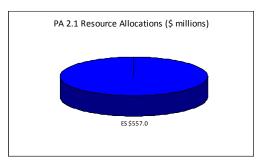
	Deliverables	Expected Results	Performance Indicators and Targets
•	Make offshore transfer payments. (ES)	Management of statutory requirements related to offshore petroleum in Nova Scotia and	Timeliness and accuracy of offshore payments.
		Newfoundland and Labrador in a timely and efficient manner.	Target: Accurate payment on time (100%)

Strategic Outcome 2: Natural Resource Sectors and Consumers Are Environmentally Responsible

Energy use and natural resource development can have negative impacts on land, water and air, which can affect the well-being of current and future generations. NRCan works to ensure that natural resources are developed and used in an environmentally responsible manner.

Program Activity 2.1: Energy-efficient Practices and Lower-carbon Energy Sources

Canada's energy markets are defined by consumption and production decisions. However, consumers and producers do not necessarily make decisions that minimize their impact on the environment due to several barriers, including: 1) a lack of awareness of available options and their benefits; 2) insufficient capacity for adoption (e.g. regulatory frameworks, codes and standards, etc.); and 3) financial risk. The objective of this program activity is to address these barriers and encourage and enable energy



consumers and producers to adopt cleaner and more efficient technologies, products, services and practices. This objective is achieved through education and outreach activities, targeted incentives and regulatory interventions that keep pace with technological changes

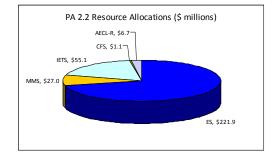
Number of FTEs: 318 Budget: \$557M (ES only)

Deliverables	Expected Results	Performance Indicators and Targets
 Advance Canada's clean energy and technology interests at environmental and climate related international fora (e.g., clean energy and technology). (ES) Negotiate a loan guarantee for the planned Lower Churchill hydro project in Atlantic Canada. (ES) 	Energy consumers and producers adopt environmentally responsible products and practices.	Canada's total annual energy savings due to efficiency (difference between energy use with and without energy efficiency improvements; the units are petajoules [PJ])
 Implement contribution agreements under the Eco-Energy for Biofuels Program and renewable power. Contribute to 11.30-13.21 petajoules of energy savings through the ecoENERGY Efficiency initiatives. (ES) 		Target: Favourable five-year trend in PJ saved (2006 baseline) Renewable electricity generation capacity in megawatts Target: Favourable five-year trend in megawatts (2005 baseline)

Deliverables	Expected Results	Performance Indicators and Targets
Support training sessions, including webinars and conferences, on energy efficiency products and practices (170,200 individuals in the transportation sector; 400 in the building sector; 500 in the housing sector; and 750 (in the industrial sector). (ES)		Biofuel production in Canada Target: Favourable five-year trend
Manage 104 contribution agreements under the EcoEnergy for Renewable Power program. (ES)	The	Did you know? • National Energy code for Buildings 201
 Produce a report on regulatory approaches taken by other countries on marine renewable energy management. (ES) 	ene Mo 199	ablishes an overall 25% improvement in ergy efficiency over the previous code, t del National Energy Code for Buildings 97. For the first time ever, the new code ces Canada on a comparable footing wi
 Support two codes and standards committees actively working on developing and updating codes and 	cou	intries that lead the world in energy cient building construction.
standards related to alternative fuels and support the establishment of two natural gas local support networks. (ES)		

Program Activity 2.2: Technology Innovation

Solutions to the environmental challenges faced by the natural resource sectors require sustained efforts in research, development and demonstration. The objective of this program activity is to encourage academia, industry and the public sector to research, develop and demonstrate innovative solutions to environmental challenges encountered in the natural resource sectors. This objective is achieved through the generation and dissemination of scientific knowledge and through the development and demonstration of new technologies.



Number of FTEs: 759 Budget: \$311M

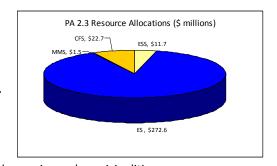
Deliverables	Expected Results	Performance Indicators and Targets
Undertake research projects to develop countermeasures for offshore oil spills, which will lead to the development of	Third parties invest in research, development and demonstration to	Number of third-party investments in research, development and

	Deliverables	Expected Res	ults	Performance Indicators and Targets
	oil spill response strategies tailored for the Arctic environment. (IETS/ES)	address environme challenges.	ental	demonstration (RD&D) to address environmental
•	Complete small-scale carbon and storage projects; additional contribution agreements for large-scale carbon capture storage projects to be signed to enable private—public partnership demonstrations. (ES)			challenges.
•	Implement one pilot-scale pressurized oxy-fuel and gasification energy conversion system. (IETS/ES)			
•	Develop and validate two new materials technologies to be used in pipeline projects to transport fossil fuels. (MMS)			
•	Start Canada-wide research initiative targeting advancement in mining technology. (MMS)			Did you know?
	As part of the Green Mining Initiative, conclude agreements related to the development of clean processing methods for rare earth elements and alternative energy for underground mining vehicles. (MMS)		export produc quarte	a is the world's second-largest net ter of electricity and third-largest cer of hydroelectricity. In fact, three ers of the electricity generated in a does not emit any greenhouse gase
•	Prepare field exhibitions and workshops to demonstrate cost-effective practices related to wood-based biomass. (ES)			
•	Strengthen collaboration with other departments and stakeholders to support responsible resource development in the North and realize socio-economic benefits for Northerners. (MMS, ESS, ES)		Canada	Did you know? a's per capita emissions of carbon
	Implement concrete measures to address regulatory barriers to the adoption of green mining technologies and processes. (MMS)		per pe	e in 2012 were 20.3 tonnes equivalen rson, their lowest level since tracking in 1990.
•	Develop energy innovation framework to guide energy S&T activities in concert with federal partners. (IETS, ES)			
	Undertake R&D projects to develop lightweight and other advanced materials for economic and energy efficiency. (MMS, IETS)			
)	Implement Budget 2012 Isotope Technology Acceleration Program to			

Deliverables	Expected Results	Performance Indicators and Targets
pursue the accelerated development of both cyclotron and linear accelerator technologies for future safe and reliable supply of medical isotopes for Canadians. (AECL-R)		
Communicate information on energy- efficient technologies and practices to stimulate market adoption. (ES)		

Program Activity 2.3: Responsible Natural Resource Management

Greater knowledge of risks and environmentally responsible practices could help to prevent and reduce the environmental impacts of natural resource development. The objectives of the program activity are to enable government departments, regulatory bodies and industry to assess these impacts to the environment and to develop, monitor and maintain resources and ecosystems or manage wastes responsibly. These objectives are achieved through the provision of assessments and knowledge rooted in sound science, as well as through waste management efforts in collaboration with provinces, federal agencies and municipalities.



Number of FTEs: 336 Budget: \$308.5M

Deliverables	Expected Results	Performance Indicators and Targets	
Provide expert information and advice for environmental assessments under relevant federal legislation. (MMS, ESS)	Public and private sectors establish practices to mitigate	Number of public and private sectors' new/updated policies, regulations or other	
Develop remote sensing methodologies. (ESS)	the environmental impacts of natural resource development.	decision-making tools. Target: 3 (annual)	
 Undertake coordination of the construction of enabling nuclear waste management facilities in Port Hope and Clarington, Ontario, as part of Phase II of the Port Hope 	Federal government implements waste management practices that meet modern	Number of contaminated sites where environmental risks are reduced.	
 Area Initiative program. (ES) Implement the agreement with the province of Saskatchewan for the safe decommissioning of the Gunnar uranium mine and mill sites. (ES) 	standards for safety and environmental protection.	Target: Environmental risks reduced at AECL's Whiteshell and Chalk River Laboratories, Port Granby and Welcome waste management facilities,	
Fund an integrated waste plan for Atomic		and Northern Transportation Route sites (annual).	

Deliverables	Expected Results	Performance Indicators and Targets
Energy of Canada Limited's (AECL) Nuclear Laboratories under the Nuclear Legacy Liabilities Program. (ES)		
Generate new knowledge to support forest management practices to mitigate the effects of climate change and address forest ecosystems integrity. (CFS)		
Advance seven interprovincial Canadian aquifer studies with the view to complete them in 2014. (ESS)		

Strategic Outcome 3:

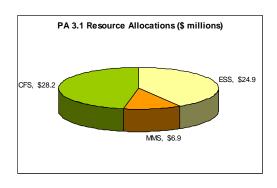
Canadians Have information to Manage their Lands and Natural Resources and Are Protected From Related Risks

By providing knowledge on Canada's lands and natural resources, NRCan enables informed decision making, facilitates the responsible development and management of our natural resources and land, and ensures the safety and security of Canadians and the management of risks associated with natural and man-made hazards.

Program Activity 3.1: Protection for Canadians and Natural Resources

Natural resource development and other activities, together with changes in the environment, pose risks to human health, natural resources and infrastructure. Without appropriate coordination and knowledge on the management of these risks, the impacts may be severe. The objective of this program activity is to enable other government departments, communities and the private sector to manage these risks to humans, natural resources and infrastructure. This objective is achieved through regulation and the creation and dissemination of knowledge.

Number of FTEs: 569 Budget: \$59.8M

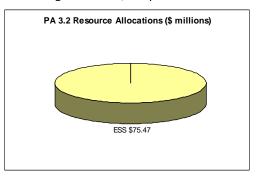


	Deliverables	Expected Results	Performance Indicators and Targets	
•	Deliver a national climate change adaptation platform providing a forum to exchange and generate new knowledge and inform implementation of adaptation strategies for communities and the natural resource sectors. (ESS)	Risks to natural resource sectors, infrastructure and human health are safely managed.	resource sectors, infrastructure and human health are safely managed. Target: 4 (annual) Number of active collaborat	infrastructure Target: 4 (annual) Number of active collaborations
•	Improve the framework for risk analyses related to Canada's forest pests and deliver information on high-priority risks. (CFS)		with the public and private sector that manage risks to human health, natural resources and infrastructure	
•	Assess the risks and impacts of wild land fire in Canada's forest and on the safety and security of Canadians, and disseminate information to key stakeholders. (CFS)		Target: three collaboration agreements (annual)	
•	Produce four new geohazard assessment and risk management guidelines. (ESS)			
•	Implement a robust information system based on Canadian commercial cloud technology. (ESS)			
•	Complete 65% of the planned inspections for licensed explosive factories and magazines. (MMS)			
•	Maintain a minimum of 4,800 Canadians holding one or more valid non-destructive testing certifications issued by NRCan. (MMS)			
•	Provide timely decision, technical information and advice for environmental assessment. (MMS, ESS)			
•	Amend the explosive regulations and meet statutory obligations. (MMS) Conduct three projects related to climate change geoscience adaptation measures regarding infrastructure designs or implementation in the North (e.g. linear transport corridors, new infrastructure). (ESS)			

Program Activity 3.2: Landmass Information

NRCan provides clearly defined legal boundaries, a robust property system framework, authoritative geographic infrastructure and fundamental geospatial information on Canada's landmass. The absence of these contributions would have negative impacts for the Canadian economy, environment and standard of living. This program activity delivers Canada's regulatory system for Canada Lands legal surveys, the fundamental geodetic reference system, earth observation and mapping information. Together, these support the Canadian public, other federal departments and levels of government, the private sector and

academia in carrying out a variety of decisions founded on location-based information, such as land transactions, commercial/industrial development, transportation and logistics. This information enables the effective management of Canada's natural resources and lands, including opportunities for collaboration across jurisdictions (i.e. cross-border planning, regulatory efficiency), thereby advancing the interests of Canada's natural resource sectors, both domestically and at the international level.



Number of FTEs: 416 Budget: \$75.47M

Deliverables	Expected Results	Performance Indicators and Targets
 Contribute to the real-time capability for emergency response by providing open geospatial data and expertise for the Multi-Agency Situational Awareness System. (ESS) Develop a federal geospatial platform to deliver interoperable, accurate geospatial and geoscience information that is essential for landuse management and public safety. (ESS) 	Public, private sectors and academia use trusted, reliable, accurate Government of Canada geoinformation for decision making and research.	Number of public, private sectors and academia using landmass information Target: Six large federal departments/ agencies (annual) Client satisfaction or benchmarking results on Canada's legal boundary framework for effective governance, economic and social development
 Provide the scientific data and analyses required to finalize Canada's submission to the United Nations Convention of the Law of the Sea (UNCLOS) to extend our sovereign rights on the Atlantic and Arctic continental margins. (ESS) Provide essential support (e.g., land surveying) to Aboriginal programs including Additions to Reserves, Treaty Land Entitlement and the First 		Target: Positive trend on biannual client satisfaction surveys (rotational among key client groups: Aboriginal, other government departments, industry). Baseline years ending 2012–13 (annual)

Deliverables	Expected Results	Performance Indicators and Targets
as identified in Budget 2012. (ESS)		
Construct additional accommodation and hangar space at the Polar Continental Shelf Program facility, in collaboration with the Department of National Defence. (ESS)		
Contribute to the Canadian Institute to High Arctic Research Station and centre of excellence for Arctic science logistics in collaboration with the Department of Aboriginal Affairs and Northern Development. (ESS)		
Develop Inuvik Satellite Station as well as build the Arctic Spatial Data Infrastructure to contribute to Northern innovation and connectedness. (ESS)		

Program Activity 4.1: Internal Services

This program activity regroups three areas: governance and management support, resource management services and asset management services. The overall objective is to provide relevant, efficient and effective services to the program areas and to the Minister, Deputy Ministers and the senior management team.

Internal Services comprise a wide range of services, such as IT, finances, communications, legal and human resources. They also comprise support to

Other (Mino, DMO), \$8.35 Audit & Legal, \$4.96 SPI, \$16.06 PAPMS, \$29.21

the Minister, Deputy Ministers and the senior management team in setting priorities, implementing strategies and plans; allocating resources; and monitoring, measuring and reporting progress against plans.

Number of FTEs: 1063 Budget: \$176.80M

Deliverables	Who leads	Expected Results
 Implement Budget 2012 reduction measures in an efficient, effective and sensitive manner. Develop and present Budget 2013 proposals to the Minister in consultation with portfolio agencies, basing advice and recommendations on sound economic and science evidence. Advance interdepartmental and federal-provincial-territorial work on opportunities for Canada's resource sectors and requirements related to infrastructure and labour markets. Implement the five-year evaluation plan under a new risk-based approach. Strengthen risk management practices by continuing the implementation of the Integrated Risk Management Policy Framework. Strengthen corporate S&T governance and accountability through the S&T Board chaired by the Deputy Minister. Document and track NRCan's 25 Signature S&T projects to better assess and convey the relevance, quality and impact of NRCan S&T. Implement the S&T publications policy to enhance the awareness of, access to and use of NRCan S&T in policy advice and decision making. Develop the Policy and Science Integration Community of Practice to promote science/policy integration and share best 	Chief Scientist CMSS	 Minister and Deputy Ministers get sound and timely advice NRCan's agenda is communicated to key stakeholders NRcan's priorities are aligned with GoC priorities; activities and programs are properly resourced and support the achievement of these priorities and of legislative obligations; progress achieved on risk management and performance Increased document management efficiencies; knowledge transfer facilitated Increased effectiveness of our science and policy functions Increased efficiencies of IMT services and IMT-related investments Compliance with GoC/TBS policies achieved Highly productive, well-trained and well-led workforce
practices. • Engage stakeholders and update NRCan's communications and Public Participation framework.	PAPM	
 Update the Portfolio Management Framework to modernize the guiding principles, governance and roles and responsibilities to support portfolio coherence and GoC priorities. Optimize quality, timeliness and cost of translations. Launch the GCDocs project to establish a 	CMSS	

	Deliverables	Who leads	Expected Results
	new platform for electronic records and document management.		
a	Optimize IMT governance and investments across the department through development of an IMT Strategic Plan.		
ŀ	mprove resource management by narmonizing cost recovery practices for abs.		
r	mprove internal business process in response to engagement sessions with managers and practitioners.		
٥	Continue to consolidate and improve accessibility of NRCan's web presence, as well as implement targeted initiatives to optimize IT resources.		
1	Deliver departmental security plan and nvestment Plan.		
i s	mplement next phases in succession planning and talent mapping; strengthen performance management through tools and training; and establish an NRCan strategy to grow our leaders.		
r	Address areas of focus identified in the 2011 Public Service Employee Survey results; implement sector and corporate wide action plans and engage employees in sustainable solutions.		
\	Engage management and staff on the new /alues and Ethics Code for the Public Sector and the NRCan Code.		
i	Continue the implementation of NRCan's Official Languages Action Plan and mplement tools for managers and employees working in bilingual workplaces.		
i E k k	To foster employee engagement, mplement and monitor the 2012-15 Employment Equity Action Plan 2012-15, a key element of NRCan's commitment to build an organization that values employees for their differences, aims to creat all with fairness and respect.		
ļ ķ	Finalize and implement a three-year action plan to support wellness and disability management.		

