

Department of Natural Resources



**Annual Performance Report
2013-14**

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Message from the Minister



Speaker of the House of Assembly

Dear Mr. Speaker:

In accordance with the *Transparency and Accountability Act*, I hereby submit the 2013-14 Annual Performance Report for the Department of Natural Resources. The report includes the Mines and Energy Branches of the department and the Forestry and Agrifoods Agency.

This report provides an account of the department's performance towards its annual objectives for 2013-14 as well as its three-year goals for 2011-14. The outcomes reported reflect government's strategic directions for the province's natural resources. My signature below is indicative of my accountability for the actual results reported.

Sincerely,

A handwritten signature in black ink, appearing to read 'D Dalley', written in a cursive style.

Derrick Dalley
MHA, Humber East
Minister of Natural Resources



Department of Natural Resources

Performance Reporting

The *Transparency and Accountability Act* requires government departments, agencies, boards and commissions to engage in a formal planning and reporting process. As part of this process, the department must prepare and publish a strategic plan every three years. The strategic plan identifies the goals and objectives chosen by the department to advance its priorities over the planning period. Under this planning model, goals represent targeted outcomes over a three-year cycle, while objectives cover smaller achievements targeted for each year within the planning period. The strategic plan also lays out the department's overall mission which represents its single most important focus area and is typically carried through two planning cycles (usually six years) and reflected in two, subsequent, strategic plans. When engaging in the strategic planning process, the department must step back from day-to-day operations and identify the areas of its mandate that are of strategic importance to clients and/or the province as a whole, and identify mechanisms for advancing work in these areas. By publishing these plans, the department is able to inform the citizens of the province of what these priority areas are and how it plans to move them forward.

After the strategic plan is finalized and published, the department is required to monitor performance and provide periodic updates to the public on progress towards the priorities identified. Each year, the department prepares an annual performance report which provides updates on the achievement of annual objectives. In the final year covered by a planning period, the department must also report on progress toward the goals set out in the strategic plan. In the last year of a mission period, the department must provide an update on achievements toward its overall mission.

This past fiscal year was the third and final year in the Department of Natural Resources' 2011-14 strategic planning period. As a result, this report will provide an account of the department's performance towards its annual objectives for 2013-14 as well as its three-year goals for 2011-14. Reporting on the status mission achievements will appear in the department's annual performance report for 2016-17.



Department of Natural Resources

Report Outline

The Department of Natural Resources is responsible for regulating and encouraging sustainable development of the province's natural resources¹, namely minerals, energy (oil, gas, hydro, wind, biofuels), forest assets and agriculture/agrifoods resources. To carry out its duties, the department is divided into two main areas of operation: the Mines and Energy Branches, commonly referred to as “the department” in the remainder of this report, and the Forestry and Agrifoods Agency, commonly referred to as “the agency”. These two areas share a number of central functions and collaborate on select initiatives but, otherwise, operate independently of one another, each offering a distinct set of programs and services for their respective natural resource sectors. As a result, this annual performance report is divided into two “sub-reports” setting out performance results for the Mines and Energy Branches and the Forestry and Agrifoods Agency separately.

¹ Within the Government of Newfoundland and Labrador, fisheries resources are the responsibility of the Department of Fisheries and Aquaculture and wildlife resources are the responsibility of the Department of Environment and Conservation.



Mines and Energy Branches



Photo Credits, previous page:

Top: Teck Duck Pond Operations, Mine Site at Night (Teck)
Bottom: Terra Nova FPSO (Suncor)



Mines and Energy Branches

Introduction

The Department of Natural Resources, through the Mines and Energy Branches (the department), has responsibility for legislative, regulatory and policy functions related to the mining, oil and gas and electrical utility sectors. The mines and energy sectors are key contributors to the province's gross domestic product (GDP), employment and overall economic growth. These sectors also make significant contributions to the provincial treasury in the form of royalties and taxes. The following sections provide an overview of the mining, petroleum and electricity sectors in the province.

Mining

Newfoundland and Labrador has a large and diversified minerals industry that provides a wide variety of commodities to the world market. Large scale world class iron and nickel in Labrador dominate mineral shipments but a variety of smaller mines produce gold, copper, zinc and other commodities. There is also a very active quarry sector in the province that provides aggregate to fuel economic development.

There continues to be significant progress on new developments that may result in new mines in the near future. Alderon Iron Ore Corporation's Kami iron ore project near Wabush in Labrador West has been released from environmental assessment at both the provincial and federal levels. In February 2014, the company announced completion of a power purchase agreement with Newfoundland and Labrador Hydro for electricity to service its operations. The power will be transmitted over a new power line, sanctioned by the Provincial Government, from Churchill Falls to service the Labrador West area. Once in operation the Kami project is expected to ship eight million tonnes of iron concentrate per year with a mine life of over 30 years.

In March 2013, Vale Newfoundland and Labrador Limited and government reached agreement on an amendment to the Voisey's Bay Development Agreement that sees a commitment to an underground mine at the existing Voisey's Bay nickel mine in Labrador. Detailed studies are underway in preparation for formal sanction in 2015, and first production in 2019. The underground mine will extend the Voisey's Bay mine life by at least another 15 years and increase overall employment at the site.

Government's own exploration work on the Julienne Lake iron deposit has identified another important opportunity for mine development in the Labrador Trough. This work has identified a high quality deposit with a resource of over 1 billion tonnes of iron ore,



Mines and Energy Branches

located close to existing infrastructure. The department solicited proposals from industry parties interested in developing the resource and in 2014 entered into discussions with a prospective developer. The deposit has the potential to host a mine that could offer major employment and revenue benefits for the people of Newfoundland and Labrador.

The province also hosts a vigorous mineral exploration sector, including many locally-based companies and individuals who provide expertise and financing to seek the next generation of mineral wealth. Exploration for minerals is conducted throughout the province, providing a source of employment in rural areas, as well as the potential for new industrial growth. Government supports exploration through modern on-line mineral rights systems, efficient permitting, comprehensive public geoscience, and direct financial support to junior exploration companies and prospectors.

Value of Mineral Shipments

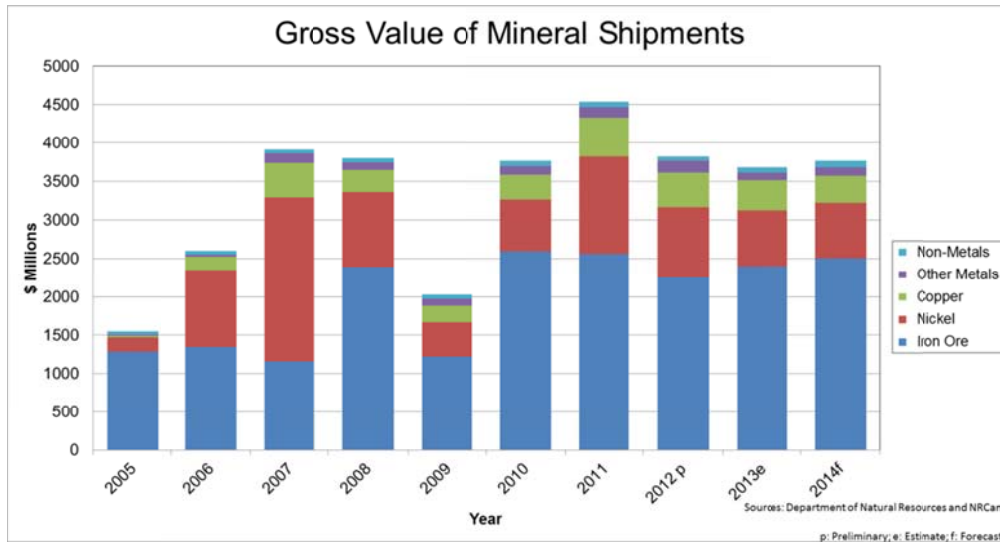
Based on forecasts by the province's mining companies, the gross value of mineral shipments for 2014² will be approximately \$3.8 billion. This is up slightly from the estimated 2013 value of nearly \$3.7 billion. In 2012 mining accounted for nearly 8.6 per cent, or close to \$2.7 billion, of the province's nominal gross domestic product of \$31.7 billion.³

² Adjusted to reflect diminished shipments from the recent idling of Wabush Mines.

³ GDP figures provided by the Department of Finance, Economics and Statistics Branch, and are as of March 4, 2014.



Mines and Energy Branches



Gross Value of Mineral Shipments

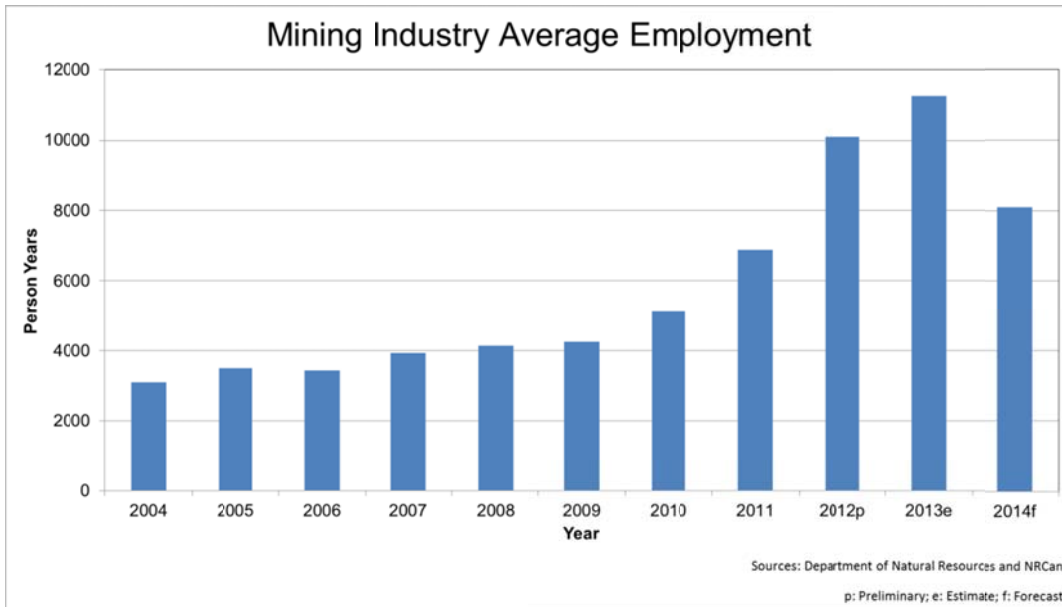
Iron ore, nickel and copper make up the largest portion of the province's mineral shipments but production also includes gold, cobalt, zinc, peat and other industrial minerals.

Employment

Direct employment in the minerals industry hit an all-time record high for 2013 at 11,250 person-years. Employment numbers for 2014 are forecasted to decrease to 8,100 person-years. This is primarily attributed to the completion of the first phase of construction activity at the hydromet nickel processing facility at Long Harbour.



Mines and Energy Branches



Average Employment

Exploration Expenditures

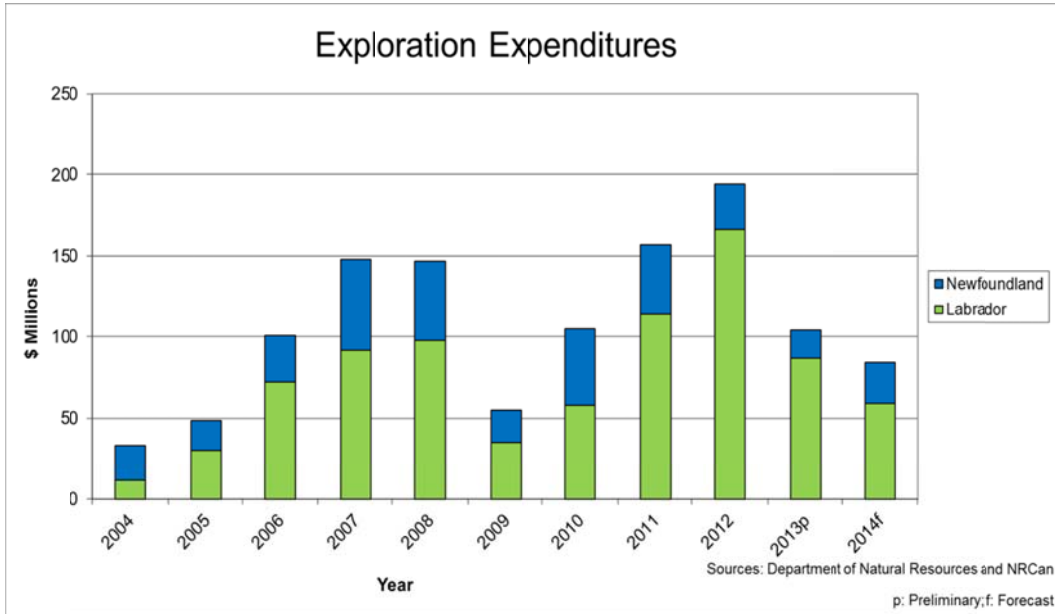
Mineral exploration expenditures for 2014 are forecast to be nearly \$84 million. This is a significant drop from last year's estimated value of \$104 million. While several factors have contributed to the decline, it is mainly due to the inability of companies to raise capital on the open market. This issue is not specific to the Newfoundland and Labrador environment as the entire exploration sector in North America has experienced similar problems in raising capital.

Despite global dampening of the industry, Newfoundland and Labrador's mineral exploration industry is still faring well. In a 2013 survey⁴ the Fraser Institute named Newfoundland and Labrador as the most improved in ranking amongst Canadian jurisdictions as measured by the Policy Perception Index (PPI). The PPI is a composite measurement which ranks the overall policy attractiveness of the 112 international jurisdictions involved in the survey. Newfoundland and Labrador went from 18th place in 2012 to 9th place in 2013. Policy factors considered in the PPI rankings include current regulations, taxation regimes, land use issues, infrastructure and community development.

⁴ Fraser Institute Annual Survey of Mining Companies 2013.



Mines and Energy Branches



Mineral Exploration Expenditures

Energy

Oil and Gas

The oil and gas industry has become an increasingly important part of Newfoundland and Labrador's economy since production began at the Hibernia oil field in 1997. In 2012, oil extraction and support activities accounted for 28.2 per cent of the province's nominal GDP, at over \$8.9 billion. In 2013, these same activities resulted in 3.8 per cent of provincial employment, or roughly 8,800 person years.⁵

To date the province's operating projects have produced more than 1.46 billion barrels⁶ of oil. In 2013, Newfoundland and Labrador produced approximately 25 per cent of Canada's conventional light crude oil⁷ with offshore projects producing over 229,000 barrels of oil per day, on average.

⁵ The Economy, 2014.

⁶ Total as of February 28, 2014: 1,457,714,816 barrels.

⁷ National Energy Board.



Mines and Energy Branches

Over the last several years, existing projects have begun expansions of their operations. One of these – the White Rose Expansion Project – will see the construction of a well head platform to allow for the development of West White Rose. The platform will have a stand-alone concrete gravity structure and topsides which will be tied-back to the existing SeaRose Floating Production and Storage Offloading vessel. The decision to use a well head platform was announced in October, 2013 and represented an amendment to the original benefits terms of the 2007 White Rose Expansion Project Framework Agreement. Using a wellhead platform for this project will deliver an estimated 115 million barrels of oil. This will result in improved resource recovery and increased revenue to the province. This project also signals an innovative way of developing smaller satellite developments in Newfoundland and Labrador. A significant portion of the well head platform will be constructed in the province at Argentia, including the concrete gravity structure and accommodations modules.

The existing Hibernia, Terra Nova, White Rose and North Amethyst oil fields⁸ will soon be joined by the Hebron project. The construction phase of the Hebron development began in 2012 with first oil expected in 2017. It is estimated that Hebron will produce more than 700 million barrels of oil. The Hebron field will be developed using a stand-alone concrete gravity based structure (GBS) which is being constructed in Newfoundland at Labrador at Bull Arm. The GBS will support an integrated Topsides deck that includes a living quarters and facilities to perform drilling and production. A substantial portion of the Topsides is also being fabricated in the province, and the integration will be performed at the Bull Arm site.⁹

In 2013, a new major discovery was made in the province's Flemish Pass basin by Statoil Canada and its partner Husky Energy. Statoil announced that its first Bay du Nord exploration well found between 300 and 600 million barrels of recoverable oil¹⁰. Statoil previously announced two other discoveries in the same basin, signaling the potential for future commercial discoveries and development projects in a new region of the province's offshore. With this and other positive exploration findings, along with existing offshore success and industrial capabilities, Newfoundland and Labrador is positioned to be an increasingly important player in the international oil and gas industry.

⁸ The White Rose and North Amethyst oil fields are both being produced under the White Rose project.

⁹ Hebron Project web site, www.hebronproject.com.

¹⁰ Statoil Canada News Release, September 26, 2013.



Mines and Energy Branches

Electricity

In addition to oil and gas, the province is home to large stores of clean, renewable energy. Newfoundland and Labrador has nearly 7,500 megawatts (MW) of electric generating capacity, of which approximately 90 per cent is hydro and wind, as well as transmission and distribution systems serving about 280,000 customers.

Electricity utility service is provided by Newfoundland and Labrador Hydro (Hydro) and Newfoundland Power. Hydro is a subsidiary of Nalcor Energy (Nalcor), a Crown corporation, and is primarily a generation and transmission utility providing over 80 per cent of the electricity consumed in the province as well as providing distribution services in Labrador and to rural parts of the island. Newfoundland Power is primarily a power distribution utility, with some generation and transmission assets, operating on the island portion of the province. Newfoundland Power purchases the majority of its customer electricity supply from Hydro. Both are regulated by the Board of Commissioners of Public Utilities (PUB).

There are two primary generation-transmission systems in the province: the Island-interconnected system and the Labrador-interconnected system. The Island-interconnected system has a total generating capacity of approximately 1,950 MW, 75 per cent of which originates with Hydro. The Labrador-interconnected system serves customers from Labrador West to the Lake Melville region and is powered by electricity generated at the Churchill Falls hydroelectric generation plant located on the upper Churchill River. The majority of the 5,428 MW generated at Churchill Falls is sold into external markets with the exception of up to 525 MW used in the Labrador-interconnected system. In addition to the two primary systems in the province, there are another 21 electrically-isolated coastal community systems in place. These systems are powered primarily by small diesel generation.

The province is also home to the Lower Churchill Project which is being led by Nalcor. Phase I of the project is underway and includes the development of three major components: an 824 MW hydro generation facility on the river at Muskrat Falls and two transmission links, one between Labrador and the island and another between the



Graphic of dam to be constructed at Muskrat Falls



Mines and Energy Branches

island and Nova Scotia. The project will result in:

- long-term stable electricity, rates for people of the province;
- lowest-cost power for homes and businesses;
- decreased dependence on oil and unstable electricity prices;
- energy for future mining and industrial development in the province;
- connection to North America's electricity grid for exports; and,
- environmental benefits through renewable power – 98 per cent sustainable energy.



Mines and Energy Branches

Overview of the Department

The department's responsibilities for natural resource development in the mining and energy sectors are executed by staff in two branches, the Mines Branch and the Energy Branch.

Mines Branch

The Mines Branch is divided into three main divisions:

The **Mineral Development Division** is responsible for the approval and permitting of mining operations through the *Mining Act*; the administration of the Mineral Incentive Program; the collection, analysis and publication of mineral production data; and the assessment and rehabilitation of abandoned mine sites across the province.

The **Mineral Lands Division** is responsible for the administration of mineral land tenure through the *Mineral Act*, the *Mineral Holdings Impost Act* and related legislation, including the issuance of exploration licenses and production leases; the administration of quarry material rights and developments, including on-going field investigations, through the *Quarry Materials Act*; the issuance of exploration approvals and follow-up inspections; the maintenance of the core library system and the provincial mineral rights registry.

The **Geological Survey Division** is responsible for mapping and interpreting the province's geology; conducting geochemical and geophysical surveys; conducting mineral deposit studies; maintaining and publishing maps, reports and databases concerning the province's geological and mineral endowment, including geographic information system databases and web-delivery; and promoting the province's mineral potential.



Mines and Energy Branches

Energy Branch

The Energy Branch is divided into three main sections, each made up of several divisions.

The **Petroleum Development Section** is responsible for fostering the exploration, development and production of the province's hydrocarbon resources. Responsibilities include: the provision of technical services in the areas of petroleum geoscience, petroleum engineering and petroleum operations to facilitate sustainable development and management for both onshore and offshore deposits; and, the provision of marketing and promotional services, both nationally and internationally, to help ensure continued interest and investment by industry.

The **Royalties and Benefits Section** is responsible for maximizing the benefits to the local economy from the development of major resource projects. Responsibilities include: the negotiation, development and administration of energy and mines project agreements and royalty legislation/regulations; the negotiation and monitoring of industrial benefits commitments related to energy and mines resource developments; the auditing of petroleum project costs and revenues to verify the accuracy of royalties paid to the province; the provision of energy-related economic/financial and supply/demand information, analysis and advice to inform resource management decisions; and the promotion of the province's industrial capacity and capabilities.

The **Energy Policy Section** is responsible for developing, planning and coordinating legislative, regulatory and policy matters relating to the province's energy sector. Responsibilities include: the management/co-management of onshore/offshore petroleum exploration and development, including regulatory development and compliance; electricity industry governance and structure, electricity industry markets, alternative energy, and responsibility for the *Electrical Power Control Act*; and general policy, planning and coordination related to the energy sector, including a lead role in the implementation of the province's Energy Plan.



Mines and Energy Branches

Employees

As of March 31, 2014, the Department of Natural Resources' Mines and Energy Branches had 195 positions. At the time of reporting there were 179 staff members.

Branch	Female	Male	Total
Mineral Resources	29	58	87
Energy	23	29	52
Financial Operations (1)	4	6	10
Executive Support (2)	15	7	22
Executive	2	6	8
Total	73	106	179

1. Financial Operations staff are shared with the Forestry and Agrifoods Agency and the Department of Fisheries and Aquaculture.
2. A number of employees in Executive Support are shared with the Forestry and Agrifoods Agency.

Physical Location and Web Site

The department's main office is located in the Natural Resources Building in St. John's which houses the majority of department staff. Several staff members work at departmental/government facilities in Grand Falls-Windsor, Pasadena and Goose Bay. In addition, several employees are located at the department's geochemical lab at the Howley Building in St. John's.

The department's main office address is as follows:

Department of Natural Resources
50 Elizabeth Avenue
P.O. Box 8700
St. John's, NL A1B 4J6

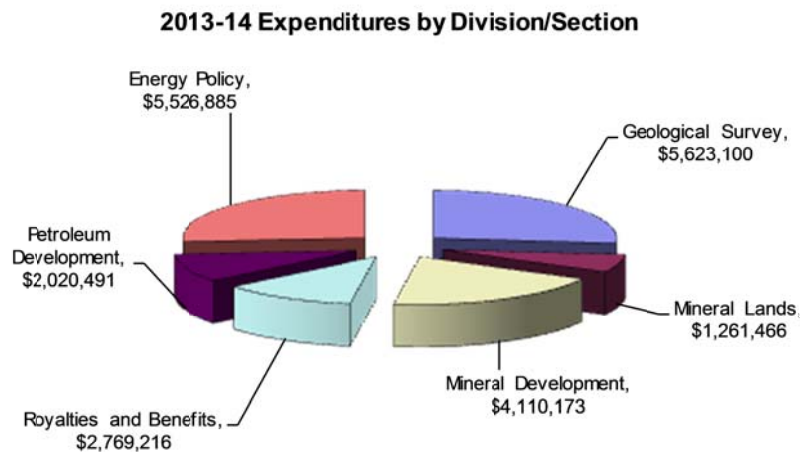
The department's web site address is www.gov.nl.ca/nr. A link to the department's web site is also provided on the main web site for the Government of Newfoundland and Labrador at www.gov.nl.ca.



Mines and Energy Branches

Expenditures

In 2013-14, expenditures for the divisions and sections of the Mines and Energy Branches were just over \$21 million. The chart below shows expenses for the three divisions of the Mines Branch as well as the three sections of the Energy Branch. These figures do not include \$6.6 million related to executive and support services that were shared with the Forestry and Agrifoods Agency.



In addition to these amounts, \$1.9 million was directed toward operational funding for the C-NLOPB and \$530.86 million was directed to Nalcor for oil and gas activities and the Lower Churchill Project. For more information on expenditures for the year, refer to Appendix I.



Mines and Energy Branches

Mandate

The mandate of the Mines and Energy Branches includes supervision, control and direction of all matters relating to promotion, exploration and development of mineral and energy resources and related industry developments including:

- Mines, minerals, quarries, quarry materials and beaches;
- Onshore petroleum resources;
- Offshore petroleum resources, managed jointly with the federal government;
- Electrical generation and transmission;
- Overall responsibility for provincial energy supply and demand;
- Development, monitoring, supervision, assistance or other government intervention into any of the industries as described above;
- Petroleum royalties and associated matters, within or outside the province; and,
- Identifying, assessing and monitoring industrial benefits commitments from major resource development projects.

For a complete list of the department's legislative responsibilities please refer to Appendix II and/or the House of Assembly website at www.assembly.nl.ca.

Primary Clients

The department is, ultimately, accountable to the residents of the province. Other primary clients include:

- Resource exploration and development companies;
- Electrical generation and supply distribution companies;
- Energy consumers (refined petroleum products and electricity for industrial, commercial and residential customers);
- Supply and service companies in the mineral, petroleum and electricity sectors; and,
- Other Provincial Government departments, crown corporations and agencies.



Mines and Energy Branches

Lines of Business

Resource Policy

Working closely with key stakeholders, the department develops, maintains and administers resource policy to coordinate and facilitate sustainable development and management. In doing so, the department directly and indirectly develops, monitors and/or initiates supporting regulatory and benefits activities.

Resource Management

In the onshore area of the province, the department ensures that industry follows responsible resource development and management practices for the maximum benefit of the people of the province. To achieve this, the department monitors resource development activities to ensure adherence to relevant policy and is responsible for the development and administration of royalty regimes for petroleum projects (onshore and offshore). The department also administers title allocation and ensures compliance with site development and rehabilitation requirements¹¹.

With respect to offshore petroleum activity the department discharges its operational resource management functions under a joint federal-provincial regime administered by the C-NLOPB.

In the electricity sector, the department provides advice and support for government decision-making related to resource management. Other resource management activities are implemented through the PUB and Newfoundland and Labrador Hydro.

Resource Exploration and Assessment

This line of business is a major contributor to the advancement of exploration in the province's mineral and petroleum sectors. The department's main lever in attracting resource exploration is through the collection and dissemination of geoscience data. Through investment and direct geoscience research, the department accumulates and distributes preliminary scientific information to the exploration community. The availability of this information reduces overall exploration risk and provides an incentive for industry players to explore in Newfoundland and Labrador. It is this exploration

¹¹ A number of onshore resource management activities are carried out by the Department of Environment and Conservation (e.g., monitoring compliance with environmental regulations and land use management, etc.) and Service NL (e.g., monitoring compliance with occupational health and safety regulations).



Mines and Energy Branches

activity that will lead to new resource development projects, along with the associated economic benefits to the province. As a supplement to its work in the area of geoscience, the department also maintains an extensive library of drill core samples originating from mineral and onshore petroleum exploration activities and provides training, mentoring and other supports to prospectors.

Promotion and Facilitation of Resource Development

Resource development projects generally tend to be long term and capital intensive and generate significant economic and employment benefits. These projects can be important catalysts of growth, particularly for rural areas, as well as for the development of industrial infrastructure and the province's supply and service capabilities. Activities are specifically directed to negotiating, promoting and facilitating well-planned, responsible mineral and energy development and associated business and employment opportunities.

Mission Statement

By March 31, 2017, the Department of Natural Resources will have supported the growth of the energy and mineral resource industries in a sustainable manner for the benefit of future generations.

Vision

The vision of the Department of Natural Resources is a province that realizes the full benefit from the sustainable development of its natural resources.



Mines and Energy Branches

Values

During the 2011-14 planning period, the department's employees were guided by the following core values.

- Professionalism** Each individual demonstrates high professional standards and positive attitudes, and delivers quality service in an objective, timely and responsive manner.
- Innovation** Each individual demonstrates initiative, creativity and flexibility in responding to challenges and change.
- Safety** Each individual holds the personal safety of themselves and co-workers in the highest regard and will promote workplace safety at all times.
- Diversity** Each individual encourages an open exchange about ideas and decisions, and welcomes the varied opinions that contribute to new creative ideas and the development of comprehensive programs and services.
- Leadership** Each individual takes every opportunity to successfully integrate and use available resources within the department for the attainment of organizational goals.
- Collaboration** Each individual is open to sharing their knowledge with others and actively seeks the opinions and ideas of others to achieve the desired results.



Mines and Energy Branches

Outcome of Goals and Objectives

This section of the Annual Performance Report details the department's accomplishments related to the following, as set out in the 2011-14 Strategic Plan:

- 1) 2013-14 objectives; and,
- 2) 2011-14 goals.

Issue 1: Market Attraction and Exploration

As shown by the industry overviews provided above, the economy of the province benefits greatly from energy and mining developments. The revenues to the province from these sectors help enable the Provincial Government to invest in social and economic programs such as education, health care, and infrastructure. Continued progress in the resource sector is key to ongoing social and economic development in the province. To keep resource revenues flowing well into the future, new developments will need to come on stream. For that to happen, new, economically viable resources must be found through exploration.

The petroleum and mineral industries are global in scale. Companies operating in these industries assess potential exploration locations around the world based on a number of factors. The most important of these is resource potential, that is, the likelihood - based on scientific evidence - of finding a commercially viable petroleum reserve or mineral deposit. Exploration companies use existing geoscience data to determine the resource potential of prospective sites. One of the department's primary goals, therefore, is to increase the amount of geoscience data collected in the province and make it available to prospectors and exploration companies. The department also emphasizes the global promotion of Newfoundland and Labrador as an attractive region for exploration, development and commerce, and helps maintain a regulatory framework that is responsible and competitive with other jurisdictions.

During the planning period, the department continued to advance efforts in all of these areas. Related achievements were in direct support of the Provincial Government's strategic direction toward *increased exploration and development of mining and energy resources*. In defining this strategic direction, government identified three primary areas where results should be focused: *acquisition and promotion of geoscience data*, *increased exploration and development activity*, and *enhanced marketing and promotion of our natural resources*. The department's actions supported all three focus areas.



Mines and Energy Branches

Objective

By March 31, 2014 the Department of Natural Resources will have increased geoscience and promotional activity to advance the province's ability to compete in the mines and energy sectors.

Measure: Increased geoscience and promotional activity

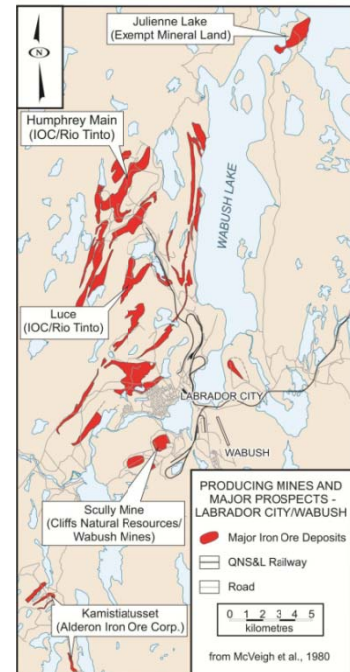
Objective Indicators

1. Advanced efforts toward the development of the Julienne Lake deposit

Over the last several years, the department has been progressing efforts toward the development of the Julienne Lake iron ore deposit in western Labrador. The deposit is located approximately 25 kilometres from Wabush and Labrador City in "exempt mineral land", meaning land where all mining rights are reserved for the Crown.

Government funded exploration work defined a valuable resource more than double the size of previous estimates (over 1 billion tonnes of ore). The deposit is of high quality and is easily mined. Preliminary studies suggest Julienne Lake could develop into a major iron ore mine, with production, employment and economic benefits of similar levels to that expected for the Kami development.

Based on the results of government's exploration work, a call for expressions of interest was made and six proponents were asked to provide detailed proposals for mine development by May 2013. During the year, proposals were evaluated and the department entered into discussions with a prospective developer. The deposit represents a unique opportunity for the department to support increased employment and industrial benefits in the province and in western Labrador, in particular.



Map showing distribution of iron ore deposits in the Labrador City-Wabush area (adapted from McVeigh et al., 1980)



Mines and Energy Branches

2. Increased overall the collection and distribution of geoscience data relative to the province's mineral resources.

The department's Geological Survey conducted new geoscience field work, research and analysis and published/distributed new geoscience data and related information regarding the province's mineral resources. Some specific achievements included:

- Nine field programs on the island portion of the province:
 - Gold metallogeny (central);
 - Base metal studies (central and western);
 - Bedrock mapping (eastern and western);
 - Biogeochemical sampling (central);
 - Surficial geological mapping (Springdale/Bay d'Espoir areas);
 - Aggregate resource assessments (Clareville area); and,
 - Continuation of a coastal erosion monitoring program.
- Two field programs in Labrador:
 - Continued assessment of iron ore deposits (western Labrador); and,
 - Bedrock mapping (Ashuanipi complex, western Labrador).
- Released 64 new geoscience-related publications including maps, reports, and open files.
- Added 150 new records to the Mineral Occurrence Data System (MODS) database in 2013-14. There are now 6,750 MODS files available online. The MODS is the principal repository for geological information on the province's mineral resources and consists of a mineral occurrence database (including location, geology, mineralogy, geochemistry, geophysics, exploration history, grade, resources present, history of production, bibliography, etc.), and a collection of mineral occurrence maps. The mineral exploration community uses MODS data in conjunction with other geoscientific data sets to help guide their mineral exploration programs.
- Completed analysis for more than 50 elements on over 3,300 rock and till samples collected by Geological Survey geologists during field programs. Approximately 80 per cent of these analyses were performed at the Geological Survey Division's laboratory in St. John's. The remainder (mostly those requiring gold and other specialized analyses) were conducted at external laboratories. The geochemical analysis of geological samples provides insight into ore-forming processes and the dispersion of elements in the surficial environment, all of



Mines and Energy Branches

which is of direct or indirect interest to the mineral industry. Findings from 2013 will be incorporated into open-file reports which are in preparation and will be released during 2014-15. These reports, and other reports on the geology of the province, provide data that will help guide future private-sector mineral exploration activity by identifying prospective areas of the province, encouraging claim staking, subsequent mineral exploration projects and resource development.

- During 2013-14, 454 new assessment files were posted to the web. There are now approximately 10,500 assessment reports available online. The purpose of an assessment report is both to provide documentation that exploration work has been done on a mineral license and to provide a permanent record of this work for future explorers.
- Completed the redesign of the department's online Geoscience Atlas, an interactive mapping resource. The Geoscience Atlas contains information on decades of investment by the Provincial Government in geological field studies covering the whole province. The updated design will support modern web browsers and mobile tablets. A newly-introduced feature will be an interactive mapping application that allows investors to print custom geoscience maps, overlay multiple layers of data simultaneously, and download the most up to date information available. With an average of more than 20,000 users and over 250,000 online visits by national and international stakeholders each year, the web-based Geoscience Atlas is a leading source of information for the mineral exploration industry.

3. Provided support for an overall increase in the acquisition of geoscience data relative to the province's petroleum resources.

During the year, the department provided funding in the amount of \$495,000 to Nalcor through the Offshore Geoscience Data Program (OGDP) to offset the costs of Nalcor's participation in a multi-client, controlled source electromagnetic (CSEM) data acquisition program in the eastern Newfoundland region. Data will be acquired in the region of recent deep water discoveries in the Flemish Pass Basin and extend outward to cover areas identified on new seismic acquired in the area. Being a multi-client program, the data will be made available to companies interested in exploring in this and other deep water areas.



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Through the Petroleum Exploration Enhancement Program (PEEP), the department co-funded the Seafloor Mapping for Onshore/Offshore Bedrock Correlation in Offshore Basins, western Newfoundland project. The objectives of the project are to demonstrate the benefits of high resolution multi-beam sonar and sub-bottom profiler data to assist with mapping submarine bedrock trends, structures and features and aid interpretation of conventional seismic and potential field data.

The department collaborated with the C-NLOPB and Natural Resources Canada (NRCan) to establish, and launch, a scheduled land tenure system where areas open for bidding are scheduled in advance versus the previous program of annual Calls for Bids. The new land tenure system will provide industry with certainty regarding both timing and location of available lands, and is a facilitator of multi-client geoscience data acquisition. Such a system provides all players, new entrants to the province's offshore in particular, with the time necessary to conduct complete geoscience assessments, including the acquisition of new data, in order to prepare an informed bid on parcels of lands.

4. Continued promotional activity to potential and existing participants in the province's mines and energy sectors.

Mines

Mineral exploration is critical in locating new mineral deposits that can lead to mines. Exploration companies look at investment opportunities around the world, and promotion of the province's mineral potential is critical in attracting exploration investment.

The department promoted the province's mineral potential at major conferences and trade shows across Canada and locally including:

- Prospectors and Developers Association of Canada (PDAC);
- Exploration Roundup;
- Quebec Mines;
- Mineral Resources Review;
- Baie Verte Mining Conference; and,
- Labrador Expo.

National events (PDAC, Exploration Roundup, Quebec Mines) represent the premier exploration and investment focused conferences in Canada, with the PDAC being one of the largest and most important global events. This allows the province's mineral potential to be showcased to a large number of exploration companies and investors from around



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the world. Local events (Mineral Resources Review¹², Baie Verte and Labrador Expo) allow the department's current activities to be highlighted with the local mining community and also the general public.

A key component of the promotion effort during the year was development of new technical materials. The promotions team collaborated with the Matty Mitchell Resource Room in helping prospectors promote their projects at various events.

The department partnered with Mining Industry NL and the Department of Innovation, Business and Rural Development at Canada Mineral Investment Forums in Beijing, Shanghai and Toronto, and the China Mining Conference in Tianjin, and provided technical and logistical support for participating junior companies from the province. In Shanghai, the department partnered with Quebec and China-based Mysteel, in organizing an investment workshop on Labrador Trough iron ore.

The department also grew its strategic relationship with the Chinese Ministry of Land and Resources by way of field tours of gold mines and advanced projects in Newfoundland for two Chinese industry and government delegations. In June, the department helped facilitate meetings in Beijing between the Premier's delegation and senior executives from Chinese central government and state-owned mining enterprises. From the St. John's office, the promotions team regularly interacted with China-based investors.

English and Mandarin promotion areas of the departmental website and the "Investments" page were maintained during the year. Promotional articles and ads in the Canadian Mining Journal, the Mining Journal (UK) and the Engineering and Mining Journal were also developed.

Energy

During the year, the department continued to implement program elements and strategies as outlined in the comprehensive petroleum resource marketing plan. The purpose of the plan, completed by the province's strategic energy advisor Wood Mackenzie, is to increase exploration attraction in the province's petroleum industry. The key elements of the plan are to make new and existing geoscience information

¹² Mineral Resources Review also attracts significant out of province interest.



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available to potential new entrants and to build awareness of the potential of highly prospective onshore and offshore sedimentary basins.

Staff members from the department's Petroleum Development Section participated in four core marketing events on a national/international basis sponsored by the Canadian and American Associations of Petroleum Geologists and Geoscientists and two events at the provincial level.

The national/international events included:

- Winter NAPE Expo and International Pavilion in Houston, TX;
- APPEX Global Prospect and Property Expo, London, UK;
- American Association of Petroleum Geologists (AAPG) Annual Conference and Exhibition, Houston, TX; and,
- Canadian Society of Petroleum Geologists Geoconvention, Calgary, AB.

The provincial events included:

- Atlantic Canada Petroleum Show, St. John's; and,
- Western Newfoundland International Oil and Gas Symposium, Steady Brook.

The focus during 2013-14 was to promote key activities that have taken place recently including: the availability of new, modern seismic data through the TGS/PGS multi-client Two-dimensional (2-D) seismic survey; new resource opportunities with the announcement of the implementation of a flexible land tenure system that includes scheduled lands in the frontier areas and annual licensing rounds in mature areas; and the increased prospectivity in the region with Statoil's major oil discovery in the Flemish Pass Basin.



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Goal

By March 31, 2014 the Department of Natural Resources will have advanced the province's ability to compete in the mines and energy sectors.

Measure: Advanced ability to compete

Goal Indicators

1. Increased geoscience data collection and promotion through participation in initiatives such as the Petroleum Exploration Enhancement Program (PEEP) and Offshore Geoscience Data Program (OGDP)

Over the past three years, the OGDP has supported increased geoscience data collection and promotion through collaboration with other entities such as the North Atlantic Petroleum Systems Assessment Group, and the Geological Survey of Canada (GSC), as well as through direct investment in specific projects. One of the collaborative initiatives, undertaken with the Irish Shelf Petroleum Studies Group was the Plate Reconstruction Project. One of the most significant direct investment projects during this same period was the acquisition of a large-scale, regional 2-D multi-client survey offshore Labrador. This survey resulted in a modern data set for the region that has been promoted internationally. Other projects commenced under OGDP include satellite seeps surveys and slick mapping, a regional pore pressure study, a regional rock physics study, seabed core analysis and biostratigraphic analysis.

The PEEP has supported increased geoscience data collection and promotion through the funding/co-funding of 26 projects since program inception in 2009 with fifteen projects being awarded over the 2011-14 period. Over the past year, three new projects have commenced and previously-approved projects continued. New projects include Deformation History of the Bay St. George Sub-basin, Seafloor Mapping for Onshore/Offshore Bedrock Correlation in Offshore Basins, Western Newfoundland (co-sponsors Research & Development Corporation, OGDP and GSC) and Detailed Compositional Analysis of Light Hydrocarbons (C1-C4), Trace Elements and Soil Salts in Western Newfoundland. Several investigators presented findings to date at a PEEP workshop which was held in October, 2013. The department participated in the eighth International Symposium on Oil and Gas Resources in Western Newfoundland presenting information related to work conducted under the PEEP to assist explorers in Western Newfoundland better understand basin evolution.



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In addition to PEEP and OGD, the Geoscience Data Project provided funding to improve geoscience capacity in the department's Petroleum Geoscience Division by providing access to specialized professional services, securing modern geoscience software and related maintenance agreements, secure data and core sample curation obligations and enhancing the marketing of petroleum resource prospectivity and potential in the region in support of data acquisition activities. This investment is aimed at increasing resource promotion and exploration activity in offshore and onshore areas.

2. Increased activity by the department's Geological Survey Division

Since 2011 the Geological Survey has initiated several new programs, designed to meet the needs of client groups. These are in addition to ongoing bedrock, quaternary, geochemistry, granular aggregate programs initiated before 2011. New programs and projects include:

- An iron ore geoscience research project to better understand iron ore deposits within the province, i.e., where they are and how they form, to assist the mineral exploration industry;
- A study of gold mineralization in eastern Newfoundland, including the Burin Peninsula;
- A program to assess areas vulnerable to coastal erosion. This was initiated under funding from the Office of Climate Change, Energy Efficiency and Emissions Trading;
- Regional bedrock mapping in the Bonavista Peninsula region of eastern Newfoundland;
- Regional bedrock mapping in the Ashuanipi Complex of western Labrador; and,
- Surficial geological mapping and till geochemistry in the Springdale and Bay d'Espoir areas.

The department's geochemical laboratory purchased two new pieces of analytical equipment – an ICP-MS and an ICP-OES which significantly enhanced the laboratory's analytical capabilities. The ICP-MS (Inductively Coupled Mass Spectrometer) and ICP-OES (Inductively Coupled Optical Emission Spectrometer) are pieces of analytical equipment that measure the amount of various elements within rock, till, lake sediment or water samples collected during Geological Survey field programs. This equipment is able to analyze more elements with more accuracy and precision than was previously available at the department's laboratory, and has consequently reduced the number of analyses completed by external laboratories. This has resulted in significant cost savings as well as improvements in data quality.



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During the planning period, the department also released a new report from the provincial hazards-mapping program. A Vulnerability to Geological Hazards report for the town of Conception Bay South was released in 2012. The purpose of this program is to reduce the loss of life, property, and infrastructure, plus the protection of environmental and cultural resources in the province that result from damage caused by natural disasters. The program provides information on geological hazards which can then be used by municipal councils in developing a plan to mitigate the effects to such hazards.

Data continues to be disseminated through our main delivery portal, Geoscience Online. Since 2011 there have been approximately 899,500 sessions by over 60,000 unique visitors, 659,000 geofiles (pdfs) have been downloaded, and there have been over 66,500 MODS inquiries. This is a measure of the demand for geoscience data provided by the Geological Survey.

The Geological Survey continues to promote the province's mineral resources at national and international forums, with an emphasis on increasing exposure to the Asia-Pacific markets. The Geological Survey also continues to develop geoscience outreach and education initiatives.

The Geological Survey continues to forge relationships with other government departments and agencies, notably Municipal and Intergovernmental Affairs, Environment and Conservation, Transportation and Works, Tourism, Culture and Recreation, Fire and Emergency Services, and the Office of Climate Change and Energy Efficiency on a range of issues from fossil regulations, geotourism initiatives, advice on slope stability and other hazards, land-use planning, water resource assessments, petrographic analysis for construction aggregate and climate change geoscience.

3. Increased marketing of the province's mineral and energy resource opportunities

Mineral Resources

The department delivered a wide array of domestic and international investment attraction initiatives designed to strengthen the province's mineral sector. These focused primarily on conferences in domestic investment centers (PDAC, Toronto; Exploration Round-up, Vancouver), neighboring provinces (Quebec Mines, Quebec City) and local venues (Mineral Resources Review). The department partnered with the Department of Innovation, Business and Rural Development in the annual mining suppliers forum at



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Mineral Resources Review and at the Baie Verte Mining Conference, Labrador Expo and Northern Exposure/Northern Lights. Staff also helped prospectors promote their projects at these events. Promotion led to new option agreements, new exploration activity and increased interest from new and existing players.

The department also strengthened business and government relationships in China, raising the profile of the provincial mineral sector there and providing junior mining companies with a ready platform for their targeted investment attraction programs. The promotions team co-organized annual Canada Mineral Investment Forums in Beijing, Toronto, Hong Kong and Shanghai, coordinating the participation of junior mining companies from the province in same. The team also participated annually in the China Mining Conference (Tianjin) and provided technical and logistical support for participating local junior companies.

The department partnered with Chinese industry associations and the central government in mineral investment conferences (Toronto, Montreal and Vancouver) with provincial industry participation. The department also coordinated field trips for Chinese government and industry participants to Newfoundland and Labrador mining and exploration projects, responded to enquiries from China-based investors, and facilitated high-level meetings between the Newfoundland and Labrador and Chinese governments and industry players.

A key element of the promotions strategy has always been development of technical, venue-specific promotional products, many of which are translated into Mandarin. The department also developed and maintained English and Mandarin investment areas of the departmental website. Promotional and industry-related articles and accompanying commodity-based advertisements were produced for publication in domestic and international trade journals.

Energy Resources

Participation in marketing and promotion events forms the basis of resource promotion activities for the province as identified in the comprehensive petroleum resource marketing plan. These events are local, national and international in scope thus allowing the province to compete directly with global competitors in the area of exploration attraction. Core events targeted by the department are identified in Objective Indicator 4 above.



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The department has also been active in promoting the potential of the province directly to geoscience professionals by participating in major technical conferences. In 2012-13 the department, in concert with Nalcor Energy – Oil and Gas, sponsored and attended the bi-annual Conjugate Margins Conference which was held in Dublin, Ireland. This international conference focused mainly on the petroleum potential of the Atlantic Margins, which include some of Newfoundland and Labrador’s sedimentary basins. Through its support and participation in 2012-13, Newfoundland and Labrador was awarded the rights to host the conference in 2014-15. Hosting this international event will allow the province to showcase its resource prospectivity to a worldwide audience.

During the 2011-14 period, the province has made major investments in new geoscience initiatives for the purpose of making new data available. One of the key initiatives has been the continued expansion of a major offshore multi-client seismic survey. The results of the survey saw the expanded delineation of sedimentary basins off the coast of Labrador and the possibility of new resource opportunities in the deeper waters of many basins. To promote the results of the survey to a targeted audience, the department helped organize and participated in a promotional “roadshow” in 2013-14 with stops in Calgary, Houston and London. This promotional effort was done in partnership with Nalcor Energy – Oil and Gas and international seismic contractors PGS and TGS and communicated the positive results of the survey to industry representatives.

The department also spent a considerable amount of time during this period working with the Federal Government and the C-NLOPB to improve the offshore land licensing process to make it more attractive to new entrants. The end result was the announcement by the C-NLOPB in late 2013-14 of the implementation of a new Scheduled Land Tenure System. This new system allows more time for the collection of new geoscience data and the subsequent evaluation of petroleum potential in the province’s lesser explored basins.

4. Developed and implemented approved strategies to increase resource exploration

For this indicator, strategy development refers to internal planning work that identified a number of measures the department would pursue to encourage continued and/or increased exploration. Priorities emerging from this work included the continuation of efforts to increase geoscience data acquisition and availability as well as the continuation of promotional activities, both of which are addressed directly in a number of the preceding indicators.



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Priorities also included collaborative efforts with other regulatory bodies toward the modernization of the province's offshore regulatory regime which will assist in advancing global competitiveness and contribute to increased exploration.

- During the planning period, the department was a participant in the Federal-Provincial Offshore Land Tenure Policy (FPOLT) Working Group. The working group is focused on the improvement of the offshore land tenure regime, and related policy matters, with the aim of attracting new prospective explorers and expanding oil and gas development activities. The group's process to date has involved a series of workshops and consultations, including discussions with international seismic contractors and experts in the fields of geophysics and commercial matters. An early result from this work was the implementation of the new Scheduled Land Tenure System, referenced above (refer to Issue 2, Objective Indicator 5 for more information).
- The department also continued to participate as a partner in the Frontier Offshore Regulatory Renewal Initiative (FORRI). FORRI is a collaboration between federal, provincial and territorial governments, and their regulators, which have responsibility under legislation and/or regulations for offshore and/or frontier petroleum activities. Over the past three years, the department worked with FORRI partners towards the modernization of existing legislation and regulations.

5. Completed a Minerals Strategy for the department and initiated implementation of approved recommendations related to exploration

Changes in policy direction have led to some delays in finalizing the planned Mineral Strategy. In the interim, the department has initiated a number of policy priorities for the sector including:

- Revising criteria for assistance under the Mineral Incentive Program to reduce waiting times on grant approvals, and to encourage grassroots exploration;
- Revision to the *Mineral Act* to increase the 20-year limit on exploration licenses to 25 years - this change allows companies who make discoveries late in the term of an exploration license more time to advance these discoveries before the license expires;
- Strategic promotion of the province's resource potential to exploration companies all around the world for the purpose of attracting exploration investment; and,
- Investment in public geoscience to expand the province's comprehensive public geoscience database.



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6. Developed and implemented policy and program changes necessary to support resource exploration and development activities

Mines

During the 2011-14 period, the department worked with officials from the Department of Justice on the development of an amendment to the *Mineral Act* designed to encourage mineral exploration activity on existing mineral licenses. Under the amendment, a term of 25 years on mineral licenses will replace the current maximum term of 20 years, thus allowing a license holder more time to explore a license area. However, there will be mandatory requirements for license holders to ensure progress continues to be made on the development of the property. A license holder with a license past 20 years will have to spend more on mineral exploration each year to keep the license in good standing. In addition, restrictions on license size are expected to encourage exploration over a wider geographical area within existing licenses.

Energy

With the completion of planned Energy Plan funding for geoscience initiatives in 2012-13, the department requested and was granted \$1 million in budget 2013-14 to fund the Geoscience Data Project, as well as to continue support of PEEP and OGDG initiatives. This funding was used to ensure continued advancement of the province's geoscience database through the acquisition of new data. Funding was also used to increase the department's capacity (e.g., software) for geoscientific analysis. Once acquired and analyzed, data is used to define and promote the resource potential in both onshore and offshore regions.

Through its work with FORRI and FPLOT initiatives, the department advanced efforts toward the development of modernized legislative, regulatory and policy regimes for the province's offshore petroleum industry. A modernized regime will make Newfoundland and Labrador more competitive with jurisdictions around the world in terms of its ability to attract exploration by industry. Of the initiatives advanced by these groups, the implementation of the new land tenure system was a key achievement in terms of continued exploration work in the offshore, particularly by new entrants to the region.

Internally, the department made adjustments to its programming to improve the overall effectiveness of its petroleum marketing activities. Staff responsible for promoting the province's petroleum service and supply capabilities, traditionally housed under the department's Benefits Division were realigned to the Petroleum Marketing and



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Promotions Division. Combining the marketing activities in one division will allow for synergies and cross-promotional opportunities at all petroleum-related events attended by the department.



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Issue 2: Sustainable Resource Development

Sustainable development within the province's petroleum and mineral sectors consists of three primary components: maintaining exploration/development activities; responsible management of developments; and remediation of environmental impacts associated with past developments.

Maintaining Exploration/Development Activities

As discussed under Issue 1, current resource developments and discoveries will eventually need to be replaced through successful exploration in order to sustain the province's mineral and petroleum industries for the long term. While encouraging new exploration is the most important element in sustaining the province's petroleum and mining sectors, ensuring the province has competitive policy and regulatory frameworks is also important. The department's commitments and achievements in this area are consistent with the Provincial Government's strategic direction to *ensure maximum benefits to the province through the strategic development of our resources*. Long-term sustainability of the province's mineral and petroleum industries is the cornerstone of benefits maximization.

Responsible Management of Development

The department manages development projects through the administration of legislation and regulations designed to guide and govern mineral and petroleum development. In its role as regulator, the department monitors project activity and performance to ensure compliance with legislative and regulatory requirements, as well as contractual requirements specific to individual projects. The department endeavors to work with industry to assist in interpreting and incorporating these requirements into operations early in the lifecycle of a project. The legislative, regulatory and contractual framework covers a range of issues including production methods to maximize resource yield; safety and environmental practices; royalty calculation and remittance mechanisms; and benefits practices in areas such as project employment, expenditures and gender/diversity commitments.

During the year, the department continued to monitor and manage mineral and petroleum exploration and development activity. Well-regulated industries that are managed responsibly ensure non-renewable resources are developed to their maximum potential and that the province and its citizens benefit as much as possible from the



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resulting economic spinoffs. These and other efforts during the year are consistent with the Provincial Government's overall strategic direction to *ensure maximum benefits to the province through the strategic development of our resources*. In particular, some of these efforts have been in direct support of three of the focus areas identified under this strategic direction: *supporting increased local industrial and employment benefits, increased participation of women and underrepresented groups in natural resource projects and influencing/ informing strategic research and development investments*. The strategic direction toward a *stable and competitive energy supply for domestic use and export to market* was also supported during the planning period through the department's work on the Energy Innovation Roadmap. Specifically, the focus area of *alternative energy research and development* is reflected in a number of the opportunity areas identified for further study.

Remediation of Environmental Impacts

Current provincial legislation requires mineral and petroleum exploration and development companies operating in the province to leave resource development sites in good environmental condition once exploration and/or development activities have ceased. Detailed rehabilitation and closure plans with financial assurances are now part of every project approval. However, this has not always been the case and, in the past, some mining sites were abandoned by operators and left in unacceptable condition. The department is committed to performing rehabilitation work at such former mine sites, and continued to advance this commitment during the planning period.



Buchans tailings area before and after rehabilitation work

Photo: Department of Natural Resources



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Objective

By March 31, 2014 the Department of Natural Resources will have continued progress toward the long-term sustainability of the mineral and energy sectors.

Measure: Continued progress toward the long-term sustainability of the mineral and energy sectors

Objective Indicators

1. Continued to invest in remediation work at orphaned and abandoned mines with primary focus on the highest-priority sites

During the year, the department's primary focus with respect to remediation was on the former Gullbridge copper mine. Progress included:

- Completion of emergency repairs of dam breach;
- Hiring of a consultant to review alternatives for final closure of the Gullbridge tailings management area;
- Completion of detailed design for Phase 1 of the recommended alternative and issued tender for construction;
- Completion of construction for Phase 1; and
- Preparations for tender of design and inspection of Phase 2 work.

In addition, dam inspections were completed at tailings dams at the former Rambler and Whalesback mine sites.

2. Expanded benefits monitoring processes to meet the requirements found in new benefits agreements

During 2013-14 the department filled a number of existing vacancies and realigned resources in the Benefits Division to enable increased efforts around negotiation and monitoring of industrial benefits on major natural resource projects. An enhanced benefits monitoring approach was developed to better reflect the requirements of new benefits agreements and ensure that related commitments are monitored effectively. An interim benefits tracking tool was implemented and work began on the development of a comprehensive benefits monitoring database.



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There has been increased engagement with project operators to monitor progress toward benefits commitments as well as to identify and address any areas of concern. The importance of benefits monitoring and reporting were stressed during benefits negotiations and new agreements included enhanced benefits reporting requirements.

3. Finalized legislative amendments to the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* to incorporate an occupational health and safety regime

Bill 1, an act to amend the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* received Royal Assent on May 16, 2013. The federal Accord Act amendments received Royal Assent on June 9, 2014 and are expected to come into force in early 2015, pending the finalization of necessary administrative issues.

The amendments establish a new occupational health and safety (OHS) regime applicable to the Newfoundland and Labrador offshore area. In particular, the amendments:

- Provide a new OHS regime applicable to workplaces in the offshore area by adding a new Part III.1 to the *Accord Acts*;
- Clarify the roles and responsibilities of the federal and provincial governments, C-NLOPB, operators, employers, employees and other key parties to the new OHS regime;
- Clarify that the new regime applies to workers at offshore workplaces, as well as to workers who are in transit to and from workplaces in the offshore area; and,
- Provide administrative and enforcement powers to health and safety officers, including powers of inspection and investigation, and the ability to order measures to prevent or to address any OHS dangers.

The Federal Government and the governments of Newfoundland and Labrador and Nova Scotia jointly manage oil and gas resources in the respective provincial offshore areas under bilateral *Accord Act* agreements. The C-NLOPB and the Canada-Nova Scotia Offshore Petroleum Board were created to regulate petroleum activity in each jurisdiction. As such, cooperation by stakeholders from the respective governments and boards was required in the development of these legislative amendments.



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4. Progressed negotiations with Natural Resources Canada and the Nova Scotia Department of Energy on proposed legislative amendments to the Accord Acts and subordinate legislation to modernize the offshore petroleum regime including strengthening of the offshore liability requirements

The Federal Government introduced Bill C-22, the *Energy Safety and Security Act* into parliament on January 30, 2014. The Bill has passed second reading and currently sits with the Standing Committee on Natural Resources. Bill C-22 modifies Canada's civil liability regime for the offshore oil and gas industry. Notably, it increases the absolute liability threshold to \$1 billion for operators of offshore oil and gas facilities. It is anticipated that the Bill will receive Royal Assent in the Fall of 2014 following which a provincial "mirror" version of the Bill will be introduced into the House of Assembly. During 2013-14, Department of Natural Resources officials were actively involved in technical working groups with Natural Resource Canada and the Government of Nova Scotia preparing legislation, including the development of regulations related to cost recovery, financial responsibility and administrative and monetary penalties.

5. Progressed discussions with Natural Resources Canada and the C-NLOPB to design a new process to award exploration licenses.

During the year, the department continued to work with the C-NLOPB and NRCAN to develop a modernized land tenure system. The new system was announced on December 19, 2013 and is designed to be informed by the geoscience data available about the province's one million square kilometers of prospective offshore lands. Based on the quantity and quality of available data, the province's offshore area has been divided into eight regions and three categories, "mature", "high-activity" and "low-activity", that are reflective of the level of activity and overall oil and gas development status. Regions designated as "mature" are characterized by well-understood geology and a history of extensive exploration, delineation and development drilling, supplemented by substantial seismic coverage. Licensing in these regions will continue on the traditional annual cycle. "High-activity" regions are typified by a combination of regional, 2-D and local, 3-D seismic data, supported by exploration drilling sustained by hydrocarbon discoveries. Lands in these regions will undergo a two-year cycle of licensing. The "low-activity" category is best described as underexplored with coarse-grid, 2-D seismic data and an associated lower-level of geoscientific understanding that would benefit from a longer licensing period. As such, lands in this category will follow a four-year licensing cycle. In addition, these areas will be scheduled in advance providing industry certainty regarding both timing and location of available lands. This new land tenure system provides all players, including new entrants to the province's offshore,



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with the time necessary to conduct complete geoscience assessments, including the acquisition of new data, in order to prepare an informed bid on parcels of lands.

Goal

By March 31, 2014 the Department of Natural Resources will have implemented enhanced sustainable development practices in the mines and energy sectors.

Measure: Implemented enhanced sustainable development practices

Goal Indicators

- 1. Enhanced benefits capture processes including the monitoring of direct and indirect benefits accruing to the province through the development of mineral and energy resources**

During the planning period the department completed a thorough review of the Benefits Division and realigned resources to more effectively negotiate and monitor benefits accruing to the province from the development of major natural resource projects.

As new benefits agreements are negotiated, lessons learned from previous agreements are considered, resulting in more robust commitments from operators, as well as enhanced reporting requirements and structures. New agreements have included gains in areas such as procurement, employment, apprenticeship, training, gender equity and diversity, and improved monitoring processes have increased accountability for project operators.

Development began on a comprehensive benefits monitoring database to provide in-depth analysis and reporting on benefits capture. This system is now moving to application development and is scheduled for completion in 2014-15. An interim process was also introduced which immediately improved monitoring and provided an ability to quantify the impact that benefits agreements have for the province. As a result, it can be reported that in 2013, more than \$4.9 billion dollars was spent in the province by natural resources project that report to government and, at peak, more than 16,000 Newfoundlanders and Labradorians were employed on those projects in the oil and gas, mining and electricity sectors.



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2. Enhanced policy capacity to support long-term sustainability of the mines and energy sectors including gender equity and diversity policy

Policy capacity in the department to support long-term sustainability of our sectors has advanced in two key areas: the ongoing advancement of the policy framework used to guide the negotiation process, and the advancement of a benefits monitoring database.

Policy decisions supporting the development of benefits agreements continue to advance with each project negotiation. There have been substantive changes over the planning period in a number of measures to support sustainability through growing labour capacity, enhancing project diversity and increasing local business access. Recent results of note include advancements in the negotiation of apprenticeship ratios, scholarship funding, childcare provisions, collective agreement language, supplier diversity, business access, and participation targets. As each agreement is negotiated, the policy decisions supporting the negotiation become part of the framework for the next negotiation process, thus enhancing policy capacity overall, including measures specific to gender equity and diversity benefits.

As referenced above, the department also initiated development of a benefits monitoring database to support data acquisition, monitoring and analysis activities. The department has been working through the finalization of the requirements gathering phase with plans to transition to application development in the near future. Once fully operational the database will support current benefits monitoring activities – including the monitoring of gender equity and diversity benefits – and help inform future policy decisions.

3. Supported completion and initial implementation of the Energy Innovation Road Map

As a result of a public Request for Proposals issued by the department in 2011-12, a contract for the development of two Energy Innovation Roadmaps covering Onshore Wind in Harsh Environments and Energy Transmission was awarded in May, 2012 to Hatch Ltd., an engineering consulting firm. These Roadmaps were completed in March, 2013. In addition to issuing the RFPs, the department supported this process by chairing a committee of officials from the department, the Research & Development Corporation and Nalcor to evaluate proposals, providing funds for the contract, and chairing a steering committee which guided, monitored and managed the project.

In August, 2012 the department issued RFPs for two other roadmaps on the topics of Deepwater Exploration and Production Technologies in Harsh Environments and



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Remote Energy Systems. These RFPs have since been put on hold due to budgetary restrictions.

4. Completed Minerals Strategy and begun implementation of priority initiatives related to sustainable development

Changes in policy direction have led to some delays in finalizing the planned Mineral Strategy. In the interim, the department has made progress in a number of areas related to sustainable development. The department has continued to progress in its commitment to address orphaned and abandoned mines in the province, and has begun development of a policy on land relinquishment and long term maintenance at orphaned and abandoned mines. More information on these items has been provided under Goal Indicator 5 below.

5. Increased investment in the mitigation of orphaned and abandoned mines, thereby decreasing environmental and safety hazards

During the 2011-14 period the department increased its overall investment in the rehabilitation of orphaned and abandoned mines by approximately \$2.5 million. In 2011-12 the department completed a detailed safety review of tailings dams at the former Gullbridge, Whalesback and Rambler mine sites. Based on this review work, in 2012-13 the department began dam repair work at the Gullbridge site. Unfortunately, in December 2012 the Gullbridge tailings dam failed while the department's contractors were making repairs. The department implemented emergency repairs to the dam and began efforts toward a final repair solution that would result in the closure of the Gullbridge tailings management area. Since that time, a consultant hired by the department identified and evaluated alternatives for dam closure. The alternative selected required two phases of construction work of which Phase 1 has been completed. At the end of 2013-14, the department had begun tender preparations for services associated with Phase 2.

To complement this work, the department put in place a systematic, documented program of dam inspection and maintenance for orphaned and abandoned mines in the province. In addition, the department began the development of a formal policy on land relinquishment and long term maintenance at orphaned and abandoned mines. Land relinquishment refers to the acceptance of lands back by the Crown after mine closure and rehabilitation by operators.



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6. Enhanced mechanisms to support environmental sustainability within our industries

Mines

Over the past three years, the department has taken steps in support of environmental sustainability as it relates to mineral exploration activity in the province. In 2012-13, the department began drafting a new, updated set of Mineral Exploration Guidelines. The new guidelines will, among other things, more clearly outline best practices in terms of environmental protection and rehabilitation measures that should be followed when conducting mineral exploration work. At the end of 2013-14, a complete draft of the guidelines had been developed and was under review. The department will continue to progress the development of the new guidelines during the 2014-17 planning period.

During the 2011-14 period, the department also increased its inspections of mineral exploration sites, the purpose of which are to ensure that regulatory requirements and other appropriate measures are being taken to protect and rehabilitate the environment, as well as avoid archaeological sites and preserve the natural viewscape. During this period the department increased collaboration with representatives of other departments by inviting them to accompany inspections of mineral exploration sites. At different times during the period, department staff were accompanied by personnel from the Department of Environment and Conservation (Environmental Assessment Division, Parks and Natural Areas Division), Department of Tourism, Culture and Recreation (Heritage Division), Service NL and the Forestry Services Branch of the Forestry and Agrifoods Agency. This increased collaboration helped produce more comprehensive inspection results and contributed to valuable knowledge transfer between staff from different departments. This knowledge transfer is extremely valuable given that collaboration is not possible for every site inspection due to resource constraints.

As a result of the initiatives outlined above the department was able to enhance environmental protection and rehabilitation measures incorporated into its exploration approvals. An “exploration approval” is the permit required to conduct specified exploration activity in a particular area of the province. Attached to each approval are a number of terms and conditions, many of which relate to the prevention and rehabilitation of environmental impacts. Information gathered through the department's enhanced approach to site inspections was used to inform and improve the terms and conditions attached to subsequent exploration approvals. The department also began to modify terms and conditions to reflect the practices which will be detailed in the updated environmental guidelines for mineral exploration. For example, where appropriate, a term/condition has been added requiring that drill sites and access trails where natural



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vegetation cover has been disturbed or removed be rehabilitated to a condition conducive to natural re-vegetation.

Energy

As discussed under Objective Indicator 4 above, the department participated in technical working groups with partners toward the development of amendments to the *Canada-Newfoundland Atlantic Accord Implementation Newfoundland and Labrador Act*. The amendments further strengthen incident prevention, response capability, operator accountability and transparency by raising absolute liability to \$1 billion. The changes will further protect the environment by allowing governments to pursue financial compensation for environmental damages, providing the offshore boards with the authority to levy administrative and monetary penalties for non-compliance as well as providing them with the necessary tools to conduct environmental assessments.

Transparency will be strengthened by requiring the public release of environmental and emergency preparedness plans, and new response measures such as the use of spill treating agents will be implemented.



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Issue 3: Renewable Energy

The Muskrat Falls Project is presently the department's main focus in terms of renewable energy initiatives. During 2013-14, as well as the entire planning period, the department worked closely with Nalcor and others on measures to advance the project. The department's efforts have been in support of the Provincial Government's strategic direction of *responsible resource development*, with direct relevance to the focus area *development of clean renewable energy through the Lower Churchill Project*. The strategic direction of a *stable and competitive energy supply for domestic use and export to market* has also been supported. Two of the focus areas related to this strategic direction were reflected in the department's work, namely: *advancement of renewable energy projects and related infrastructure*; and *export of surplus energy*.

Objective

By March 31, 2014 the Department of Natural Resources will have ensured progression of the Lower Churchill project and initiated development of a provincial wind policy.

Measure: Ensured progression of the Lower Churchill project and initiated development of a provincial wind policy

Objective Indicators

- 1. Completed planned 2013-14 components necessary to advance Lower Churchill project milestones including:**
 - **Advancement of legislation and regulations that may be required in support of the project;**
 - **Participation in efforts to ensure the requirements of the Federal Loan Guarantee term sheet are met; and,**
 - **Continue to participate in the development of formal agreements between Nalcor and Hydro.**

Advancement of Legislation/Regulations

During 2013-14, the department conducted ongoing research and analysis to advance further legislation and/or regulations that may be required to support the Muskrat Falls



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project. Given that the entire provincial electricity transmission system will be connected to the North American system and Nalcor will increasingly become an external market participant, research was carried out on North American system operation and reliability standards requirements.

To achieve the proposed financing structure, and to ensure the certainty Nalcor requires for its financing process, Bills 60 and 61 were proclaimed in the House of Assembly during the year. Bill 60 was proclaimed in May 2013 and related regulations were approved in November 2013. Bill 61 was proclaimed in November 2013 and the required exemption and direction orders with respect to cost recovery were also issued in November 2013. Bill 60 outlined the lands-related requirements for the project and addressed issues such as expropriation, easements, and municipal taxation and permitting. Bill 61 included a number of finance-related amendments to existing provincial legislation, including an amendment that gives government the authority to direct the PUB to accept all project-related costs in its rate setting process. Development of both bills was led by Department of Natural Resources earlier in the 2011 -14 planning period, as discussed below.

Additionally, in January 2014, Government announced that it would conduct an independent review of the province's electricity system including ensuring the province has the appropriate governance and structure in place leading up to and following interconnection with the North American bulk electric system. This review will include the completion of up to three separate reports on the following analysis areas: 1) electricity system overview including roles and responsibilities, 2) electricity sector governance, legislation and regulation; and 3) system reliability, operations, performance and accountability. A contract was awarded to Power Advisory LLC and announced in August of 2014.

Participation re: Federal Loan Guarantee Requirements

Subsequent to passage of Bill 61, officials from the department and the Department of Justice worked with Nalcor, Emera, and the Governments of Nova Scotia and Canada towards securing project "financial close" and meeting the various requirements of the federal loan guarantee. Project financial close was successfully concluded in late 2013 and included the Government of Newfoundland and Labrador putting in place the necessary agreements and regulatory framework.



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Participation in Nalcor-Hydro Agreements

Formal commercial agreements between Nalcor Energy and Newfoundland and Labrador Hydro (Hydro) were also concluded in November 2013 that help support the development and financing of Muskrat Falls and the Labrador-Island Transmission Link and will enable Hydro to purchase power generated at the Muskrat Falls facility for resale to electricity customers in the province. Although the Provincial Government is not a signatory to these agreements, during 2013-14, department officials, along with representatives from the Department of Justice, worked with Nalcor and Hydro towards conclusion in order to satisfy the terms of the federal loan guarantee and facilitate project financial close for Muskrat Falls and the Labrador-Island Link.

2. Advanced the implementation of the Labrador Industrial Electricity Rates Policy

The establishment of a single published electricity rate for all industrial customers on the Labrador interconnected system allows existing customers and potential developers to better plan their business. The new rates policy, approved in December 2012, also ensures rates are competitive with other jurisdictions while providing prices that reflect the market value of electricity. In 2013-14, the department performed oversight on the ongoing implementation by Hydro of the Labrador industrial electricity rates policy. In its oversight role, the department confirmed that Hydro used the new rate formula cited in the policy to calculate the new electricity rate and that the new rate was posted online for existing and potential customers to view. Full implementation of the policy is expected in January 2015 following expiration of the Twin Falls arrangements.

The department provided further support for Labrador industrial electricity customers in February 2014 by providing policy support for government's decision to direct Newfoundland and Labrador Hydro to proceed with the construction of a third transmission line between Churchill Falls and Labrador West. The new transmission line will help to supply power for planned new developments, such as the Kami Iron Ore Project, and improve reliability for all customers in the Labrador region.



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Goal

By March 31, 2014 the Department of Natural Resources will have enhanced legislation and/or policy necessary to advance renewable energy in the province.

Measure: Enhanced legislation and/or policy

Goal Indicators

1. Initiated development of provincial wind policy

Recent developments in electricity generation and energy policy have resulted in a delay to the development of a provincial wind policy. Hydroelectric power from Muskrat Falls will meet the province's needs for renewable energy, meaning that other sources of renewable power will not be required domestically in the near to medium term. The new transmission connections to mainland Canada and the northeastern United States will likely open up greater opportunities for the export of both hydro and wind power, and potential for wind exports will be evaluated as the Muskrat Falls project nears completion. Our wind policy will be developed in the context of these new developments. In the interim, the department continues to support the study of alternative and renewable electricity supply options (wind and hydro) to displace existing diesel generation in off-grid coastal Labrador communities.

2. Implemented policy, restructuring, and governance mechanisms necessary to advance the Lower Churchill Project

During the 2011-14 period, the department worked with the Department of Justice to draft enabling legislation for the Muskrat Falls project which resulted in the passing of two bills in the House of Assembly in December 2012. Bill 60, the *Muskrat Falls Project Land Use and Expropriation Act*, outlined the lands-related requirements for the project and addressed issues such as expropriation, easements, and municipal taxation and permitting. Bill 61, which included amendments to the *Energy Corporation Act*, *Hydro Corporation Act, 2007* and *Electrical Power Control Act, 1994*, included a number of finance-related amendments including one that gives government the authority to direct the PUB to accept all project-related costs in its rate setting process. Bill 60 was proclaimed in May 2013 and related regulations were approved in November 2013. Bill



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61 was proclaimed in November 2013 and the required exemption and direction orders with respect to cost recovery were also issued in November 2013.

Along with other officials from the Provincial Government, the Government of Nova Scotia, Nalcor Energy and Emera Inc., the department participated in negotiations with the Federal Government on a loan guarantee for the Muskrat Falls, Labrador-Island Link and Maritime Link projects. As a result, on December 10, 2013, the Government of Canada issued the \$5 billion Federal Loan Guarantee (FLG) for the Muskrat Falls Project which includes the Muskrat Falls Hydroelectric Generation Station, the Labrador-Transmission Assets, and the Labrador-Island Transmission Link. The Federal Loan Guarantee provides a direct, absolute, unconditional and irrevocable, present and continuing, obligation of Canada and will result in projected savings of \$1 billion in interest costs for ratepayers and will contribute to stable electricity rates for consumers in the province. Achieving this milestone provides certainty with respect to how the Lower Churchill Project will be financed and the costs of this financing over the next 40 years.

To support the federal loan guarantee, the department and other Provincial Government representatives worked with the Government of Canada, the Government of Nova Scotia, Nalcor Energy and Emera Incorporated to conclude a number of project agreements. These agreements cover the parties' commitments to invest in, develop and operate the Muskrat Falls generation facility, the Labrador-Island Link and the Maritime Link. The agreements also provide the Nova Scotia block of power to Emera and provide transmission rights to Nalcor in the Maritimes and into the New England market. At year end, the amendments to these agreements were being finalized with an expectation that the agreements would be resigned in the first quarter of the 2014-15 fiscal year.

On June 17, 2013, in accordance with Section 70 of the Labour Relations Act, regulations for three Special Project Orders (SPOs) were issued for the Muskrat Falls Project: 1) Construction of the hydroelectric generation facility at Muskrat Falls; 2) Land clearing to support a water reservoir at Muskrat Falls; and, 3) Construction of transmission line and associated infrastructure running from Churchill Falls to Muskrat Falls in Labrador and from Muskrat Falls to Soldier's Pond on the Avalon Peninsula (includes the Labrador Transmission Assets as well as the Labrador-Island Link pending release from environmental assessment). A special project is an undertaking of construction work designed for the purpose of developing a natural resource or establishing a primary industry and requiring a construction period exceeding two years. An SPO sanctions the unique labour relations regime for a special project. These SPOs are the result of positive collaboration by employers and unions who successfully



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negotiated the collective agreements for the Muskrat Falls Project. The collective agreements referenced in the SPOs outline a hiring protocol that is consistent with the Lower Churchill Construction Projects Benefits Strategy and Lower Churchill Innu Impacts and Benefits Agreement. These agreements outline priority hiring for qualified Labrador Innu, qualified residents of Labrador and qualified residents of the island. In addition, the SPOs confirm commitments from the Benefits Strategy regarding development and implementation of a gender equity and diversity plan. In June 2013, the Labrador-Island Transmission Project was also released from the environmental assessment process by the Government of Newfoundland and Labrador.

To provide oversight of the project and meet Conditions Precedent for the FLG, the Government of Canada, the Government of Newfoundland and Labrador, Nalcor Energy and applicable Lower Churchill Project subsidiaries have established project oversight mechanisms. On March 24, 2014, to further strengthen and formalize the existing oversight for the construction phase of the Muskrat Falls Project, the Government of Newfoundland and Labrador announced establishment of a departmental oversight committee. Representatives from the departments of Natural Resources, Finance and Justice will participate in the committee which will be chaired by the Clerk of the Executive Council. The committee will focus on project costs, scheduling and overall project performance. The committee will review information provided by external auditors, the independent engineer and Nalcor; provide updates and discuss issues with relevant departments; meet regularly with Nalcor officials; report to Cabinet, which will provide direction to appropriate ministers as required; and provide updates to the public on project costs, scheduling, and overall project performance.

3. Initiated implementation of biofuels policy

In September 2010, the Government of Canada published amended *Renewable Fuels Regulations*. The regulations require fuel producers and importers of diesel fuel and heating distillate oil to have an average annual renewable fuel content equal to at least two per cent of the volume of diesel fuel and heating distillate oil that they produce and import. The amendment set a coming-into-force date for this requirement of July 1, 2011.

In preparation for this requirement, the department established a multi-departmental biofuels working group in 2011-12 to develop a biofuels policy for the province. The working group included the Department of Natural Resources (Energy, Forestry, Agrifoods), the Department of Fisheries and Aquaculture, and the Department of Environment and Conservation. A two-phase process was completed during the year where Phase 1 involved an assessment of the biofuel supply sources, known as



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feedstocks, available in the province (e.g., wood, fish oil, etc.) and the technologies required to transform these supplies into biofuel. Under Phase 2, the working group planned to identify the most promising technologies and biofuel production methods for the province's particular feedstocks. In June 2011, Canada's Environment Minister announced that a permanent exemption would be provided for renewable content in diesel fuel and heating distillate oil sold in Newfoundland and Labrador to address the logistical challenges of blending biodiesel in this region. The exemption reduced the immediacy associated with the implementation of a provincial biofuels policy.

Government's 2007 Energy Plan committed to maximize benefits from energy resources and to pursue new generation opportunities when technologically and economically feasible. As such, in 2013-14, the department conducted research and analysis to inform the development of a biogas electricity generation pilot program. Biogas is created through the decomposition of animal waste or organic landfill waste. Biogas, like natural gas, consists primarily of methane, which is a greenhouse gas. Burning it in a generator reduces its GHG impact and produces electricity. At year end, the department was finalizing departmental research and analysis on biogas, with the purpose of seeking approval of a biogas electricity generation pilot program in 2014-15. Approval has since been granted to proceed with the pilot program.



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Issue 4: Outreach for Growth

Effective communication with stakeholders is an integral part of successful industry growth and development. Public knowledge and perceptions of the mining and energy sectors are important factors as the province works to increase development. Better public/community understanding of these and other matters will lead to more informed decisions on participation in resource development projects. With several major projects on the horizon, greater public knowledge about future developments will also help increase interest in careers in the mineral and energy industries. Communicating information about future developments and employment/business opportunities will support increased local community participation in resource development and better enable communities to prepare for economic opportunities associated with resource development.

By placing emphasis on communicating with the public, communities and other stakeholders, the department itself will also become better informed about needs, concerns, opportunities and priorities in the area of natural resource development. A broad understanding of community interests, as well as industry-specific issues, will enhance the department's ability to carry out its planning, regulatory and administrative responsibilities.

During the planning period the department prepared and began implementation of an outreach strategy. The strategy identifies the department's intentions to help inform citizens about the origin of the province's natural resources, their application in our daily lives, the benefits associated with resource development, the role and value of public geoscience initiatives, and the measures in place within government to ensure development is undertaken responsibly.

The department's efforts in this area are in support of the Provincial Government's strategic direction toward *responsible resource development* with particular relevance to the focus area *activities to support Social License¹³ through adequate stakeholder consultation*.

¹³ Social License can be defined as a level of acceptance granted by the community, including Aboriginal groups. It is rooted in the beliefs, perceptions and opinions held by the local population and other stakeholders about a project.



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Objective

By March 31, 2014 the Department of Natural Resources will have implemented priority recommendations of the departmental outreach strategy in support of industry growth.

Measure: Implemented priority recommendations

Objective Indicators

1. Developed an implementation plan and schedule for actions identified in the strategy

An implementation plan for the strategy was developed that includes preliminary action items, resource requirements and timelines for each goal. The strategy identifies the department's intentions to help inform citizens about the origin of the province's natural resources, their application in our daily lives, the benefits associated with resource development, the role and value of public geoscience initiatives, and the measures in place within government to ensure development is undertaken responsibly.

2. Initiated implementation of priority actions, with particular focus on messages and tools that will improve the knowledge of students and youth.

Two of the priority actions identified within the strategy were as follows:

- Collaborate with stakeholders to further promote employment opportunities for women and other under-represented groups within the natural resource sector;
- Increase awareness about the career capacity in the energy and mines resource sector, including enhanced opportunities for career profiles and networking, with a special emphasis on under-represented labour groups such as women, Aboriginal and First Nations, persons with disabilities and visible minorities.

In delivering on these actions, the departmental Outreach Geologist worked with industry partners and stakeholders to increase awareness of students on career opportunities in the natural resource sectors. A key focus during the year was the fifth annual Women in Mining Forum. The event this year, the largest ever, provided both male and female high school students with an opportunity to hear first-hand stories about working in the



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industry. This two-hour event was attended by nearly 500 people including 375 students representing four schools from throughout the Avalon region. This unique forum, moderated by Heather Bruce-Veitch, Director of Human Resources, Iron Ore Company of Canada, included an impressive lineup of panelists representing various facets of the minerals and metals industry.

The five year anniversary of this event was marked by a commitment to develop a *Women in Mining Career Connections* guide as a resource for schools. The guide was designed to introduce students' to the cross section of career opportunities throughout the dynamic mining, minerals and exploration industry and helps raise students' career aspirations and personal goals by illustrating industry role models. The guide features profiles of some of industry's leading female workers – it shares their personal stories of where they began and how they were drawn to a career in mining. During the year, profile templates were distributed to women professionals throughout the province and submissions were compiled and formatted for document development and design. The document is on schedule for distribution in the fall of 2014.

Mining-related educational activities were also delivered throughout the year at various school events, interactive career fairs, and post-secondary institutions. Energy-related career educational initiatives were delivered in association with the Petroleum Industry Human Resources Committee (PIHRC) through an educator's workshop.

Goal

By March 31, 2014 the Department of Natural Resources will have advanced outreach practices to support industry growth.

Measure: Advanced outreach practices

Goal Indicators

- 1. Increased cooperation and networking between stakeholders, including the various government departments that play a role in maximizing benefits to the province**

During the 2011-14 period, the department increased cooperation and networking with stakeholders who play a role in benefits maximization. The department achieved this through participation in a number of committees and working groups:



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- Two representatives from the department became members of the Supplier Diversity Committee, led by the Department of Innovation, Business and Rural Development. The committee also includes representatives from the Atlantic Canada Opportunities Agency, the Newfoundland and Labrador Organization of Women Entrepreneurs (NLOWE) and the Women's Policy Office. The key objective of the committee is to increase supplier diversity in the province, particularly for current and future natural resource based projects. The committee has identified a number of focus areas and work is underway on the foundational component of identifying provincial capacities in this area.
- The department worked more closely with the Department of Advanced Education and Skills (AES) to support workforce development activities in the province. The mines and energy sectors include some of the largest employers in the province and closer collaboration helps maximize program and service alignment. A number of meetings were held over the planning period on various benefit topics including apprenticeship and the Labrador Aboriginal Training Partnership. AES was a key partner in several Energy Plan policy actions and the department is currently working on a more formal information sharing structure to ensure that various mandates are as aligned as possible as we work together to maximize benefits for the province.
- Departmental representatives participated in a Status of Women Roundtable led by the Woman's Policy Office with representation from government departments, the Women in Resource Development Corporation, NLOWE, the Office to Advance Women Apprentices, and the Provincial Advisory Council on the Status of Women. A preliminary focus of this group is supporting economic development activities for women of the province.
- Departmental representatives consulted regularly with Labrador and Aboriginal Affairs and the Office of Immigration and Multiculturalism on the development of Gender Equity and Diversity Plans for projects in the mines and energy sectors.

In addition, the department continued previous collaborative efforts including:

- Regular cooperation with Labrador and Aboriginal Affairs in matters related to mineral development in Labrador;
- Coordination and planning, in cooperation with the Iron Ore Company of Canada and other mining companies/stakeholders, of the annual Women in Mining Forum;
- Close interaction with officials from the Department of Environment and



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Conservation and other government entities on proposed resource development projects undergoing Environmental Assessment (EA). Effective working relationships between the two departments helps ensure the EA process is leveraged appropriately to achieve the maximum socioeconomic benefits possible from such developments.

2. Increased information sharing to inform the public on the economic benefits and environmental impacts/stewardship measures associated with resource development

During the planning period, the department provided more information to the public related to economic benefits and environmental impacts/measures. Department officials presented at numerous public gatherings to relay information about the value of the resource sector to the economy and opportunities that exist for individuals and businesses as a result. An example was a presentation at the Exploration Series event held by NLOWE in September, 2013. This presentation provided an overview of active projects underway and upcoming in the province so that women entrepreneurs are better able to identify business opportunities within the mines and energy sectors.

The department's outreach and promotional activities, including annual participation in provincial Mining Week, helped inform the public about economic opportunities and benefits. Events and information sharing during the week were the result of a partnership amongst the department, the Canadian Institute of Mining-NL branch (CIM-NL), Mining Industry NL and the association of Professional Engineers and Geoscientists of Newfoundland and Labrador. Events during 2013-14 included the delivery of the fifth annual Women in Mining Forum and the CIM-NL Silent Auction. The week also included mineral resource industry promotions through a provincial media campaign that aimed to raise awareness about the benefits and opportunities within the industry.

Department officials also participated in public meetings related to concerns about potential environmental impacts of hydraulic fracturing as a well stimulation technique in petroleum production. The technique is not used in Newfoundland and Labrador at present but has caused controversy in other parts of Canada and the world. Representatives from the department were able to hear concerns voiced by citizens and provide some factual information about hydraulic fracturing and the province's ability to regulate this activity under current legislation/regulations. In addition, the department published a number of dam safety review reports conducted by external consultants on orphaned/abandoned mines in the province. This was in response to the failure at the tailings dam at the former Gullbridge mine in December 2012.



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3. Furthered development of community consultation frameworks

In the development of Gender Equity and Diversity Plans (GEDPs) for natural resource projects the department places specific focus on ensuring that project operators meet with relevant community groups and organizations to support the development and progression of the plans. Over the planning period, a number of new GEDPs have been developed by operators, including for the Muskrat Falls, Maritime Link and Kami iron ore projects. With every new plan developed, the department's expectation for community consultation is reinforced and the growing culture of community consultation in the province is strengthened. Community groups are becoming better informed about projects in their regions, project benefits, GEDP development and how to have input. All of this has contributed to a more advanced community consultation framework with respect to natural resource projects in general and GEDPs in particular.

4. Increased outreach and awareness activities to schools and post-secondary institutions

Mining-related educational activities were delivered throughout the planning period at school events, interactive career fairs, and post-secondary institutions. The department increased outreach efforts targeted at the education system with the addition in 2013-14 of energy-related career educational initiatives. These were delivered in association with PIHRC through an educator's workshop.

5. Provided information to communities regarding sustainability of mineral and energy resources

During the planning period, department officials attended various community meetings to discuss and/or present on industry topics, including issues related to resource sustainability. Included among these was a presentation by a member of the department's Petroleum Geoscience Division at a public lecture organized by the Corner Brook Board of Trade. The talk was followed up by another presentation to the Community Business Development Corporation for Newfoundland's Northern Peninsula (CBDC NORTIP). Another example was a presentation by another member of the department's Energy Branch at a public forum organized by the Port au Port/Bay St. George Fracking Awareness Group. The presentation focused on the regulatory permitting process for onshore petroleum exploration/development activities.



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6. Improved effectiveness and coordination of planning, regulatory and administrative arrangements for mineral and energy resource management.

Over the planning period, the department improved the effectiveness and coordination associated with a number of resource management issues/initiatives. Several examples are provided below.

Mines

As discussed under Issue 2, Goal Indicator 6, the department increased collaboration with representatives of other departments by inviting them to accompany inspections of mineral exploration sites. At different times during the period, department staff were accompanied by personnel from the Department of Environment and Conservation (Environmental Assessment Division, Parks and Natural Areas Division), Department of Tourism, Culture and Recreation (Heritage Division), Service NL and the Forestry Services Branch of the Forestry and Agrifoods Agency. This increased collaboration helped produce more comprehensive inspection results and contributed to valuable knowledge transfer between staff from different departments. This knowledge transfer is extremely valuable given that collaboration is not possible for every site inspection due to resource constraints.

Energy

During the planning period, the department collaborated closely with the C-NLOPB and NRCan to establish and launch a new, Scheduled Land Tenure System. As previously outlined under Issue 1 above, under the new system areas open for bidding are scheduled in advance versus the previous program of annual Calls for Bids. The new system will provide industry with certainty regarding both timing and location of available lands. This will provide all players, new entrants to the province's offshore in particular, with the time necessary to conduct complete geoscience assessments, including the acquisition of new data, in order to prepare an informed bid on parcels of lands.

In addition, the department collaborated with the C-NLOPB and the Department of Environment and Conservation to form a Hydraulic Fracturing Working Group. The working group was established to consider potential regulatory and filing requirements that should be associated with hydraulic fracturing production techniques. Given the importance and complexity of the issue, it was beneficial to bring the three primary regulating parties together to jointly consider the matter.



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Strategic Directions

There was significant progress during the planning period toward the achievement of the department's strategic directions as communicated in its 2011-14 Strategic Plan. While specific accomplishments are outlined in detail in the previous sections of this report, this section summarizes the alignment of these accomplishments with each of the strategic directions. For ease of reference, this section makes specific note of achievements reported under the four issue areas.

Strategic Direction: Resource Exploration and Development

Continued resource exploration and development is critical in order to sustain economic benefits to the province associated with the mines and energy sectors. As such, the department selected *Market Attraction and Exploration* as Issue 1. The goal, objective and associated indicators under this issue area are all focused on encouraging increased mineral and petroleum exploration and development in the province.

Strategic Direction: Responsible Resource Development

The strategic direction "responsible resource development" includes focus areas related to the development of clean, renewable energy through the Lower Churchill Project and the pursuit of activities that support social license through adequate stakeholder consultation. In line with this direction, the department selected *Renewable Energy* as Issue 3. The goal, objective and associated indicators associated with this issue are focused on advancing renewable energy in the province, with considerable focus on the Lower Churchill Project. The department identified *Outreach for Growth* as Issue 4. This issue focused, in part, on sharing information with the public and stakeholder groups about the mines and energy sectors as a whole, as well as specific projects/initiatives of special interest to communities.

Strategic Direction: Strategic Resource Development

This direction is focused on the maximization of benefits to the province through the strategic development of mineral and energy resources. Issue 2, *Sustainable Resource Development*, is heavily focused on benefits maximization with a number of goal and objective indicators dedicated to efforts such as enhancing benefits policies and/or processes. Issue 2 also included efforts toward the completion of the Energy Innovation



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Roadmap initiative the purpose of which is to identify the most promising areas for innovation in the province's energy sector. Issue 2 has a significant regulatory development component as well and work progressed significantly on proposed amendments to the Accord Acts, as well as modernizing the offshore petroleum regime.

Strategic Direction: Stable and Competitive Energy Supply

This strategic direction is focused primarily on alternative energy, electricity rates and the export of surplus energy. The department's strategic plan addresses these focus areas under Issue 3, *Renewable Energy*, which identifies initiatives related to the Lower Churchill Project and other renewable energy initiatives, as discussed above. Specific achievements during the planning period included work towards advancement of the project, as well as continued implementation of the Labrador Industrial Electricity Rate Policy.



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Additional Highlights and Accomplishments

1. Advancements in White Rose Extension Plans

In June, 2013 the Canada-Newfoundland and Labrador Offshore Petroleum Board announced approval of the Development Plan Amendment (DPA) for the South White Rose Extension Tie-Back Project. Approval of the DPA will enable Husky Energy and its partners to move forward with the South White Rose Extension.

In October 2013 the Provincial Government joined Husky Energy and its partners to announce an agreement to advance the development of West White Rose. Amendments to the benefits terms of the 2007 White Rose Expansion Project Framework Agreement allow for the development of West White Rose using a wellhead platform, instead of the subsea development originally planned. The platform will have a stand-alone concrete gravity structure and topsides which will be tied-back to the existing SeaRose Floating Production and Storage Offloading vessel. Using a wellhead platform for this project signals an innovative way of developing smaller satellite developments in Newfoundland and Labrador. This option demonstrates prudent resource development by increasing recoverable oil, extending the field's life, increasing revenue to the province, and increasing the economic benefits associated with the project.

Continued interest from operators in expanding offshore fields will help to support long-term growth and sustainability of the provincial offshore industry. Through development of the White Rose Extension Project, the province will gain an estimated \$3 billion in royalties, return on investment through Nalcor Energy, and corporate income tax.

2. Release from Provincial Environmental Assessment Represents Important Step for Kami Project

In January 2014, the Kami iron ore project in western Labrador was released from the Provincial Government's environmental assessment process. This release represented a major milestone and an important step forward for the project.

The Kami Iron Ore Project is owned by Alderon (75 per cent) and Hebei Iron and Steel Group Company Limited (25 per cent) through the Kami Mine Limited Partnership. The first phase of the project will produce eight million tonnes of concentrate annually and has the potential to expand to 16 million tonnes.



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Shared Commitments

The Department of Natural Resources has legislative oversight for the following public bodies related to the mines and energy sectors:

- Nalcor Energy and its subsidiaries including Hydro, Nalcor Energy – Oil and Gas, Churchill Falls (Labrador) Corporation, Twin Falls Power Corporation, Lower Churchill Development Corporation, Gull Island Power Corporation and Bull Arm Fabrication Site; and,
- the Mineral Rights Adjudication Board.

The department shares management of offshore petroleum resources with the Federal Government and participates in management efforts through the C-NLOPB.

The department works closely with the Department of Environment and Conservation on issues of land use and responsible resource development, the Department of Finance on matters related to the forecasting and monitoring of royalties from offshore oil developments and other departments on numerous other issues core to its mandate.

During the year, the department worked closely with each of these public bodies to advance the strategic directions of government as they pertain to natural resources.



Mines and Energy Branches

Opportunities and Challenges

Opportunities

Resource Potential

Newfoundland and Labrador's rich endowment of mineral and petroleum resources represents one of the province's greatest opportunities. As existing projects progress through their life cycles, new developments will need to come on stream in order to keep resource revenues flowing. For that to happen, new, economically viable resources must be found. Newfoundland and Labrador possesses significant undiscovered and underdeveloped petroleum resources in our offshore area. Similarly, the province's onshore geology is such that the likelihood of discovering new, profitable mineral deposits is high. Continuing with efforts to encourage both existing and new players to explore for new resource deposits remains one of the greatest priorities and focus areas for the department.

Challenges

Global Supply/Demand Fluctuations

Our natural resource industries are highly dependent on global trends of supply and demand. Commodity prices are continuously fluctuating and can experience major changes in a relatively short period of time. Predicting global demand, and the corresponding interest in resource development, is difficult and makes long-term planning and investment challenging. The province will continue to work to ensure that the provincial environment both supports and encourages resource exploration and development. Thus, when commodity prices are favorable, the province will be ready to take advantage of increased opportunities for investment.

Maintaining Momentum

One of the department's primary focus areas is to keep the province's resource industries moving ahead, to keep new discoveries coming, and to maximize the benefits that arise from the resulting development projects/operations. While the department makes every effort to promote the province's resource potential and support continued exploration and development, many factors that influence continued industry activity are



Mines and Energy Branches

out of the department's control. World commodity prices are, perhaps, the biggest of these factors. Prices dictate the commodities for which companies want to explore and produce, based on anticipated profitability. The challenge for the department in this regard is to keep abreast of industry conditions and make timely adjustments to the strategies and tactics it uses to help keep the mineral and petroleum sectors moving in a positive direction.



Forestry and Agrifoods Agency



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Forestry and Agrifoods Agency

Introduction

In the fiscal year of 2013-14, the Forestry and Agrifoods Agency (the agency) continues work in areas to meet its vision and mandate. The Annual Performance Report provides some of the highlights of the work of the agency over this past fiscal year. The agency's offices are located throughout Newfoundland and Labrador and provide programs and services to our forestry, agriculture and agrifoods sectors.

To fulfill the mandate of the agency, \$59.5 million was spent in the 2013-14 fiscal year on programs and services to support the forestry and agriculture resource advancement that provide economic and employment benefits to many regions of the province.

The Forestry and Agrifoods Agency supports economic development, resource sustainability, innovation, diversification and collaborative partnerships that increase opportunities for our forestry and agriculture and agrifoods sectors.

Overview of the Agency

The Forestry and Agrifoods Agency was established under the *Executive Council Act*. It is a category one public body under the *Transparency and Accountability Act*.

The legislation administered by the agency is provided in Appendix II.

Vision

The vision of the Department of Natural Resources is a province that realizes the full benefit from the sustainable development of its natural resources.

Mission Statement

By March 31, 2017, the Forestry and Agrifoods Agency will have supported programs and services to strengthen and sustain forestry, agriculture and agrifoods industry development in an innovative and economically beneficial manner.



Forestry and Agrifoods Agency

Mandate

The mandate of the Forestry and Agrifoods Agency includes the supervision, control and direction of all matters relating to:

- forest resources and utilization (control and direction of cutting, classifying, measuring, manufacturing and inspection of trees and timber products), constructing and maintaining forest access roads, forest protection from fire and insects, silviculture, inventory, conservation, management, preparation of management plans, analysis, mapping and developing of forest resources;
- enforcement and compliance responsibility in the areas of forestry and assisting in enforcement in the areas of motorized snow vehicle and all-terrain vehicle usage;
- agriculture, including, without limitation of the word "agriculture," agrifoods, agronomy, horticulture, animal husbandry, aviculture, the development of forage production and the growing of hay and the products of agriculture, including, without limitation of the word "products," animals, meats, fur, eggs, poultry, wool, dairy products, berries, grains, seeds, fruit, including wild fruit, fruit products, vegetables and vegetable products;
- animal health;
- food technology and marketing; and
- agricultural land and the sustainable utilization, protection, conservation, management, surveying, mapping and development of agricultural land.

For a complete list of all legislative responsibilities that inform the agency's mandate, please refer to Appendix I and/or the House of Assembly website:

<http://www.assembly.nl.ca/Legislation/sr/NaturalResources.htm>.

The agency's responsibilities for supporting natural resource development in the forestry, agriculture and agrifoods sectors are provided through the Forestry Services Branch and the Agrifoods Development Branch. The Policy and Planning Division provides policy support and coordination for both branches within the agency.



Forestry and Agrifoods Agency

Forestry Services Branch

The Forestry Services Branch is responsible for managing and regulating the forest resources of the province. Programs and services are provided through the following divisions within the branch: Forest Ecosystem Management, Forest Engineering and Industry Services, Legislation and Compliance and the Centre for Forest Science and Innovation. District offices operate within three regions – eastern, western and Labrador.

Agrifoods Development Branch

The Agrifoods Development Branch is responsible for promoting the continued development, expansion and diversification of competitive and sustainable primary and value-added agriculture and agrifoods businesses. Programs and services are provided through the following divisions within the branch: Agriculture Business Development, Animal Health, Land Resource Stewardship and Production and Market Development.

Employees

As of March 31, 2014, the Forestry and Agrifoods Agency had 351 staff on payroll. Employees with the agency work in offices located in St. John's, Corner Brook and in district offices and units located throughout the province. The table below provides the breakdown of staff in each branch.

Branch	Female	Male	Total
Agrifoods Development	66	43	109
Forestry Services	48	167	215
Financial Operations (1)	4	6	10
Executive Support (2)	10	4	14
Executive	0	3	3
Total (3)	128	223	351

1. Financial Operations staff are shared with the Mines and Energy Branches and the Department of Fisheries and Aquaculture.
2. A number of employees in Executive Support are shared with the Mines and Energy Branches.
3. This figure does not include 180 seasonal employees employed in the Forestry Service (majority male);

Physical Location



Forestry and Agrifoods Agency

The Forestry and Agrifoods Agency's headquarters is located at the Fortis Building in Corner Brook. The mailing address is as follows:

Fortis Building
P.O. Box 2006
Corner Brook, NL A2H 6J8

In addition to headquarters, the agency has offices located throughout many regions of the province. A detailed listing can be located on the Department of Natural Resources web site, www.gov.nl.ca/nr under the contact listings for the Forestry Services Branch and the Agrifoods Development Branch.

Website

The Department of Natural Resources web site address is www.gov.nl.ca/nr. A link to the department's web site is also provided in the main web site for the Government of Newfoundland and Labrador at www.gov.nl.ca.

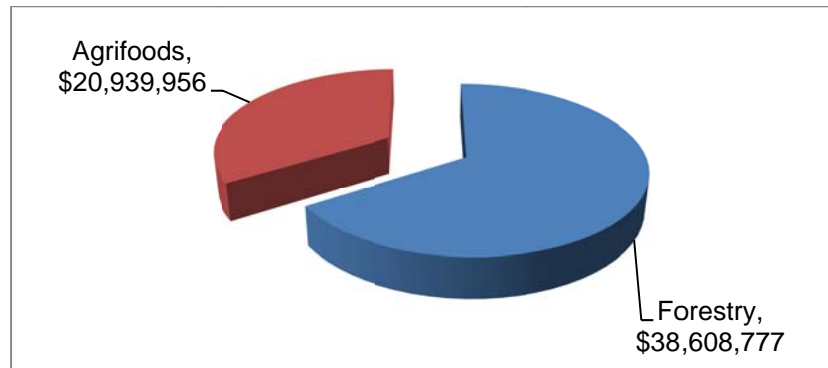
Expenditures

Expenditures for the Forestry and Agrifoods Agency in fiscal year 2013-14 totaled \$59,548,733 million this figure does not include \$6,622,391 related to executive and support services which are shared with the Mines and Energy Branches. The following chart provides a breakdown of expenditures by branch. See Appendix I for additional details.



Forestry and Agrifoods Agency

2013-14 Expenditures by Branch



Lines of Business

Enforcement and Compliance of Legislated Requirements

The agency's responsibility for enforcement as a tool in forestry management is delivered through the regional services structure. In this capacity over 100 Conservation Officers are located at various regional/district offices across the province. In addition to enforcing forestry regulations under the *Forestry Act/Regulations*, Conservation Officers are authorized to enforce provisions of the *Plant Protection Act*, *Motorized Snow Vehicles and All-Terrain Vehicles Act/Regulations* and certain sections of the *Wilderness and Ecological Reserves Act/Regulations*. The agency actively collaborates with other government departments and agencies on enforcement activities. The agency is responsible for monitoring timber harvesting operations as well as patrolling forest areas for compliance with the regulations under the various acts.

The Legislation and Compliance Division is located at headquarters in Corner Brook. In addition to providing support for enforcement and compliance related activities in regions and districts, the division also manages: Environmental Management System coordination; policy development implementation, analysis, and review; special investigations; coordination of training and certification for enforcement related duties including use of force; and enforcement equipment inventory and distribution.



Forestry and Agrifoods Agency

Licensing and Permitting

The agency's regional and district offices issue licenses and permits for: commercial or domestic timber cutting, commercial or domestic sawmilling, burning, operating during the fire season, timber export, the purchase of timber, protection of livestock from wild animals, bear protection, replacement of a big game license, removal of nuisance animals, game export, temporary outdoor identification cards, possession for taxidermy, transport of firearms, and fur bearer export.

Regional Services

The policy and programs associated with sustainable forest management, forest health and public services are implemented through a regional/district structure. Regional services is responsible for the delivery of the silviculture, resource roads, forest fire suppression, and enforcement/compliance programs. In addition, regional services is responsible for public awareness programs (presentations to schools, service clubs, etc.) addressing public concerns on other forest resource management issues and the development of district sustainable forest management plans.

Sustainable Forest Management

The agency works to ensure a balance between environmental, economic and social values, while having forest ecosystems that provide viable populations of native species, and a sustainable forest economy and associated employment. Through the agency's headquarters in Corner Brook, and offices in St. John's, the agency is responsible for policy, legislation, programs and forest management planning that enable the citizens of the province to benefit from the services that the ecosystems provide while ensuring their sustainability and health.

The agency's forest management programs include silviculture, resource roads construction, forest inventory, forest fire suppression, forest insect control, forest management planning, enforcement/compliance, wood measurement and timber royalty, and industry development.

Furthermore, the Centre of Forest Science and Innovation is responsible for the development of forest-related research programs and science capacity in the province consistent with themes of the Provincial Sustainable Forest Management Strategy and other guiding documents.



Forestry and Agrifoods Agency

Research themes under the ecological direction of the Provincial Forest Research Strategy include forest disturbance, climate change, ecosystem dynamics, biodiversity and water. Economic themes are grouped under innovation, industry and markets while social themes include forest based communities, aboriginal participation and forest values.

Animal Health

The agency's animal health services consist of: farm animal veterinary services; supportive laboratory analyses for diagnostic and regulatory programs through the ISO 17025 accredited Animal Health Laboratory; control of food quality at the production or primary processing level under the *Food and Drug Act* (raw milk) and *Meat Inspection Act* (slaughterhouses); monitoring and control of specific animal diseases of either economic interest to the livestock industry or of public health interest to the provincial community under the new *Animal Health and Protection Act*; the oversight, monitoring and support of investigations of cruelty to animals complaints (new *Animal Health and Protection Act*); assistance to wildlife/conservation officials; promotion and control of Heritage Animals (Newfoundland Ponies) under the new *Animal Health and Protection Act*.

Business Development Services

The agency delivers a wide range of programs and services to support business development including: AgrilInsurance, Livestock Insurance; the Provincial Agrifoods Assistance Program, Growing Forward, and the Agriculture and Agrifoods Development Fund; grants and subsidies for the Newfoundland and Labrador Federation of Agriculture, 4-H Program, and the Provincial Training Program; and Professional Advisory Services through eight Agriculture Development Officers and three Farm Management Specialists.

Land Management

The agency offers a number of programs and services in the area of land resource stewardship including the: Environment and Land Use Program, involving the Real Property Tax Exemption Program; Land Consolidation Program; Environmental Farm Planning Program; Agricultural Limestone Program; and Agricultural Access Roads and



Forestry and Agrifoods Agency

Electrical Services. Also included are soils and mapping activities, delivered through the Soil Survey Program; geographic information system development; field mapping and database development; and the Soil Fertility and Laboratory Service Program.

Production and Market Development

The agency offers a wide range of programs and services aimed at maximizing production and market development at the primary and secondary levels. These programs and services include: professional and technical support, pest control training, research and development, market development, market intelligence, on-farm food safety, off-farm food safety, and marketing and promotion.



Forestry and Agrifoods Agency

2013-14 Year in Profile

In 2013-14 the staff of the Forestry and Agrifoods Agency has delivered programs and services that support the sustainability, economic development of our renewable forestry and agrifoods resources. The following sections profile some of the accomplishments of the agency during 2013-14.

1. Growing Forward 2

Growing Forward 2 (GF2) is a federal-provincial 60:40 cost-shared program which provides funding to support innovation, competitiveness, and sustainability in the province's agriculture and agrifoods industry. 2013-14 was the first year of funding for Growing Forward 2 which was released in June 2013. In its first year of the program, \$6.2 million was spent on approximately 150 projects. GF2 is a five-year program with a budget of \$37



4 Bay Greenhouse

million for Newfoundland and Labrador. Three provincially delivered GF2 programs are available to the agriculture industry: Advancing Innovation Program, Agriculture Sustainability Program, and the Agriculture Opportunities Program.

2. Provincial Agrifoods Assistance Program (AAP)

The Provincial Agrifoods Assistance Program (AAP) is an annual program which, in combination with the Fruit and Vegetable Storage Program, has a budget of \$2.25 million. While the priority for AAP is on land development activities, funds may also be allocated to on-farm diversification and commercialization; secondary processing and value-added; technology adoption; and environmental stewardship. In 2013-14 \$2.0 million was expended on approximately 130 projects.



Forestry and Agrifoods Agency

3. Agriculture and Agrifoods Development Fund (AADF)

The Agriculture and Agrifoods Development Fund (AADF) has been established to encourage the development, diversification and expansion of large scale agricultural projects in either the primary or secondary processing sectors within Newfoundland and Labrador and is intended to stimulate and attract large scale investments in the industry. Funding priority is placed on projects that enhance competitive capability, support commercialization, expand market opportunities and create economic growth and employment in the agriculture and agrifoods industry. The budget for AADF in 2013-14 was \$2,550,000 of which \$1,604,333 was spent on three projects in the areas of land development (\$750,000), increasing feed grain storage capacity (\$490,000) and enhancing a waste management system (\$364,333).

4. Busy Forest Fire Season

The Agency recorded 101 fires for 2013. The area affected was 43,066 hectares. Causes have been identified for all 101 fires; 85 were attributed to human causes and 16 were started by lightning. All of the lightning fires occurred in the Labrador region. Although the season had slightly fewer fires than the 10 year average, there were large fires that required considerable resources.



western Labrador experienced one of the most challenging fires for the season. The provincial Incident management Team (IMT) was dispatched to the fire and managed all suppression activities. The Wabush fire in western Labrador was reported on June 23 and burned for 30 days before being declared out. The fire affected 27,000ha and was complex with multiple values at risk.



Forestry and Agrifoods Agency

5. Successful control program against hemlock looper in 2013

In 2013, the province conducted a small control program against hemlock looper and continued annual surveys to monitor populations of other forest pests. The program was very successful in minimizing defoliation and reducing hemlock looper populations in the Daniels Harbour and St. Albans areas. With the exception of some small localized areas on the Avalon (Tors Cove Pond, Marine Drive Park, and Middle 3 Island Pond) populations of this insect are forecast to remain at low levels across Labrador and most of the island in 2014.



In contrast, populations of the spruce budworm remained active in Labrador in 2013 with populations and damage in the Goose Bay area primarily outside of those being actively managed. It may only be a few years before populations reach levels high enough again to cause damage in Newfoundland. The agency is monitoring this major forest pest as 90 per cent of Newfoundland's forests were defoliated by this insect during the last outbreak.

6. Centre for Forest Science and Innovation Research Portfolio Exceeds \$10 Million

The Centre for Forest Science and Innovation (CFSI) strives to provide the knowledge and innovation necessary for forest management in an increasingly challenging environment. Since the Centre's formation in 2010 it has invested over 1.8 million dollars with local, national and international forest scientists that now reached a total research portfolio of 10.2 million



Mobile torrefaction unit under modification at Memorial University



Forestry and Agrifoods Agency

dollars. For the fiscal period 2013-14 CFSI directly invested \$649,047 in provincial forestry research while leveraging a total research value of \$1,522,522.

Through the development of a collaborative research program, CFSI's partnership list has grown to include; Memorial University, Research and Development Corporation of Newfoundland and Labrador (RDC), Corner Brook Pulp and Paper Ltd, Newfoundland and Labrador Lumber Producers Association (NLLPA), College of the North Atlantic, Natural Sciences and Engineering Research Council (NSERC), Natural Resources Canada, Biofuelnet Canada, Concordia University, University of Kansas, Saga University – Japan, New York State Museum, FPIInnovations and SERG-International.



Forestry and Agrifoods Agency

Outcome of Goals and Objectives

This section of the Annual Performance Report details the significant work undertaken and completed by the agency on its objectives during the 2013-14 planning period and progress toward achieving the goals of the agency's 2011-14 Strategic Plan.

Issue 1: Forestry, Agriculture and Agrifoods Resource Sustainability

The sustainability of our renewable resources is a priority for the Forestry and Agrifoods Agency as it has been one of the strategic directions in this planning cycle. Many of our programs and services that we provide to our clients assist in achieving this strategic priority.

In addition to the agency's programs and services, the Forestry Services Branch continues to advance its work in the implementation of an environmental management system on Crown forestry operations for registration under ISO 14001 standard. As well, the agency has developed the Provincial Sustainable Forestry Management Strategy for the next 10 year period. The Agrifoods Development Branch continues its work to sustain the province's agriculture resources. Through the completion of the Foreign Animal Disease Laboratory and upgrades to the Agricultural Soils, Plan and Feed Laboratory equipment and methodology, the Branch has improved its ability to diagnose problems and make better recommendations. This helps in assisting industry in the long term planning of the sector and in sustaining our renewable agricultural resources. Many of the agriculture programs and services offered by the agency such as the Agriculture Sustainability Program under Growing Forward 2 have invested significant funds in the agriculture industry which will assist our province's agriculture and agrifoods sectors.

Objective

By March 31, 2014, the Forestry and Agrifoods Agency will have implemented measures to advance forestry, agriculture and agrifoods industry sustainability in the province.

Measure: Implemented measures to advance forestry, agriculture and agrifoods industry sustainability



Forestry and Agrifoods Agency

Objective Indicators

1. Completion of the review and finalization of the Provincial Sustainable Forestry Management Strategy for 2014-24

The 2014-2024 Provincial Sustainable Forest Management Strategy has been completed and reviewed. This Strategy builds on the strengths of the previous 10 year strategy. It will ensure a vibrant and competitive forest industry, while maintaining market access for products and meeting the local and international expectations for ecosystem-based forest management. This strategy will be released once it has received final approval.

2. Further advancement of the implementation of an Environmental Management System in preparation for introduction of a Forest Certification System in Newfoundland

The agency advanced the implementation of an Environmental Management System on Crown forestry operations for registration under ISO 14001 standard. In 2013-14, the following tasks were completed for the Environmental Management System:

- The Standard Operating Procedures, Inspection templates (harvesting, road building and silviculture), Inspection guidelines, harvesting/road building operators manual are completed;
- Conservation Officer EMS inspector training completed;
- EMS Awareness completed for commercial harvesting and road building contractors (Labrador not included); and,
- EMS Policy signed and adopted by Forestry Services Branch.

3. Completion of Agricultural Soils, Plant and Feed Laboratory equipment and methodology upgrade

Upgrades have been completed to the Agricultural Soils, Plant and Feed Laboratory. As well a new soil extraction methodology (Mehlich 3) was implemented. These lab upgrades greatly increase efficiency of the Soil, Plant and Feed Laboratory which processed 60 per cent more samples in 2013-14 than the previous year. Also, the upgrades improve fertilizer/nutrient recommendations which were built on this new soil extraction methodology.



Forestry and Agrifoods Agency

4. Implementation of the Agriculture Sustainability Program through Growing Forward 2

The Agriculture Sustainability Program has been implemented. The objective of the **Agricultural Sustainability Program** is to enable the agriculture, agri-foods, and agri-products sector to compete in domestic and international markets, enhance its ability to respond to society's demands and to contribute to the well-being of Canadians through three initiatives:

- The Environmental Sustainability Initiative was designed to contribute to solutions to environmental sustainability and climate change challenges. GF2 provided \$1,583,704 in funding to complete 39 environmental sustainability projects in 2013-14. Projects funded include manure spreaders, boom sprayers, compost containment systems, waste water systems, wind turbine and solar panel systems.
- The Food Safety, Biosecurity and Traceability Initiative was designed to address challenges to the safety, biosecurity, traceability and security of our food system. GF2 provided funding in the amount of \$361,194 to complete 7 projects in 2013-14. These projects included funding for third party audits, auxiliary power systems, on-farm water supply, facility upgrades, bulk tank coolers, harvesting equipment, and portable hygiene and washing facilities.
- The Market Development Initiative was designed to access local, domestic, and international markets through investment in products and activities that enable producers to realize market based opportunities. GF2 provided funding in the amount of \$997,562 to complete 13 market development projects in 2013-14. This included projects to address animal care and standards such as mink grower facilities, pasture/liquid gel mats for dairy cow comfort, and shelving for mink pen enrichment. Funding was also provided for website development/digital signage, farm market facilities, the hugely successful Agriculture in the Classroom program, and the 2013 Agrifoods and Garden Show.

5. Completion of the expansion of the disease diagnostic capacity for the agriculture industry at the provincial Agriculture Building.

The Foreign Animal Disease Laboratory was completed in 2013-14. Currently new equipment is being moved in. Testing in support of wild bird avian influenza and rabies



Forestry and Agrifoods Agency

surveillance will start in early 2014-15. ISO 17025 accreditation of this testing will be initiated in 2014-15.

Goal

By March 31, 2014, the Forestry and Agrifoods Agency will have implemented measures to advance forestry, agriculture and agrifoods industry sustainability in the province.

Measure: Implemented measures to advance forestry, agriculture and agrifoods industry sustainability

Goal Indicators

1. Implemented initiatives to monitor the health of managed forests

The Forestry Services Branch implemented forest protection and monitoring initiatives for major forest pests in Newfoundland and Labrador in 2011-12. In July, an aerial control program using the biological insecticide (Btk) was successfully conducted to protect 3,733 ha of forest in central areas of the province from the hemlock looper. Various monitoring surveys were also conducted and indicate that hemlock looper populations have declined in both Labrador and the island while eastern spruce budworm populations remain active in Labrador. Balsam fir sawfly populations also remain active in localized areas on the island. Aerial monitoring of damage also detected two new areas with red pine mortality caused by *Scleroderris* (EU) canker, a serious disease of hard pines. In 2011-12, initiatives also included conducting forest health monitoring in the province's high-value silvicultural (plantations, thinnings) areas. Small-scale trials were also conducted to improve sampling procedures for surveys used to monitor insect development, assess treatment results, and forecast expected populations.

2. Completed renewal of forestry policy structures to support legislative framework

The forestry policy structure received an update in 2013 with the addition of the Sustainable Forest Management Planning regulations. These regulations were prepared to ensure consistency with the *Environmental Assessment Regulations*, to formalize public consultation, and to detail specific sustainable forest management plan



Forestry and Agrifoods Agency

requirements, content and administration. The agency continues to review its forestry policy structure and will continue to advance this initiative.

3. Implemented an Environmental Management System for forest certification

Over this three year period, the agency has advanced the implementation of an Environmental Management System for forest certification. Several tasks have been completed for the Environmental Management System. The agency was unable to fully implement an Environmental Management System within this planning cycle as the agency underestimated the time required to complete the detailed process in order to be registered under ISO 14001 standard.

4. Developed and implemented agribusiness new entrants initiatives

Through the Growing Forward 2 Program, a Future Farms Initiative was designed to attract new entrepreneurs, facilitate the transfer of agri-businesses between generations and enable potential producers to acquire knowledge and skills associated with the agriculture and agri-foods sectors through mentoring programs.

As well, a Legal Land Survey Assistance program was developed which provided financial assistance to eligible new entrants to the agriculture industry towards the cost of a legal land survey for the acquisition of an agriculture crown land lease.

5. Supported and implemented agriculture sustainability initiatives

The Growing Forward 2 Agriculture Sustainability program was implemented through three initiatives, the Environmental Sustainability Initiative, the Food Safety, Biosecurity and Traceability Initiatives and the Market Development Initiative.

6. Improved agrifoods laboratory services

Upgrades have been completed to the Agriculture Soils, Plant and Feed Laboratory. As well a new soil extraction methodology (Mehlich 3) was implemented. These lab upgrades greatly increase efficiency of the Soil, Plant and Feed Laboratory which processed 60 per cent more samples in 2013-14 than the previous year.



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The Foreign Animal Disease Laboratory was completed in 2013-14. Testing in support of wild bird avian influenza and rabies surveillance will start in early 2014-15. ISO 17025 accreditation of this testing will be initiated in 2014-15.



Forestry and Agrifoods Agency

Issue 2: Forestry, Agriculture and Agrifoods Innovation, Development and Promotion

The Forestry and Agrifoods Agency supports opportunities to further develop our forestry and agrifoods sectors. Our staff works diligently to promote the sectors to raise awareness of our renewable resources. We have been very active in promoting the forestry sector through various national forest week initiatives. Creating an awareness of the importance of our forest to the public and our school aged children is an important component in forest education. The Agrifoods Development Branch promoted the agriculture and agrifoods industry through agricultural fairs and events. These initiatives gave us an opportunity to raise awareness of what agricultural products are grown in Newfoundland and Labrador and to highlight the importance of food security in our province.

The agency has supported innovation and development through many of its programs and services. The Centre for Forest Science and Innovation is partnering with others in the research field to build upon the innovative work being done in the province in forestry research. The Agrifoods Development Branch has worked with Agriculture and Agri-Food Canada to negotiate a Growing Forward 2 Program. Programming has been developed to achieve a profitable, sustainable, competitive and innovative agriculture, agrifood and agri-products industry in Newfoundland and Labrador.

Objective

By March 31, 2014, the Forestry and Agrifoods Agency will have supported the expansion and promotion of the forestry, agriculture and agrifoods industries.

Measure: Supported the expansion and promotion of the forestry, agriculture and agrifoods industries.

Objective Indicators

1. Supported and participated in hosting National Annual General meeting of Canadian Institute of Forestry

The agency supported the national annual general meeting of the Canadian Institute of Forestry that took place in Corner Brook from September 15 – 18, 2013. The agency provided financial sponsorship (\$21,600) and in-kind contributions for staff involvement



Forestry and Agrifoods Agency

in the organization of the event. The agency also supported the meeting by sponsoring several staff to attend the conference. The theme of the conference was titled “Uncharted waters revisited – laying a new course for a new forest industry”. The conference had speakers from across Canada presenting on bio-energy, future forest management activities, heavy oils & nano crystals, engineered wood, and innovative marketing. The conference was profiled through local media and was successful in promoting the forest industry.

2. Assessed proposals for new industry development following the call for Expressions of interest in the development of fiber-based industry in Central Newfoundland.

The Forestry and Agrifoods Agency, in consultation with relevant government departments engaged in evaluation of a proposal in response to the call for Expressions of Interest. The project proposal describes a work plan that will lead to the construction and operation of a solid biomass fuel (wood pellets) manufacturing plant. Further assessment is required on project viability prior to moving forward.

3. Assessed proposals for new industry development following the call for Expressions of Interest in the development of fiber-based industry in Labrador

The Expressions of Interest (EOI) were advertised in 2013. The EOI review committee assessed the proposals for new industry development. However neither proposal was suitable based upon the requirements of the EOI.

4. Implementation of the Advancing Innovation Program through Growing Forward 2

The Advancing Innovation Program was implemented in 2013-14. The objective was to increase productivity; reduce costs; enhance innovation and technology adoption; and assist in the development and commercialization of new products, processes and practices to enhance the competitiveness of the agriculture, agri-foods, and agri-products industry through two initiatives.

- The Agriculture Innovation Initiative was designed for the implementation of new or innovative production systems, secondary processing systems and supports information sharing. GF2 provided funding of \$2,157,577 to



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complete 56 innovation projects in 2013-14. Funding supported projects that enhanced production capacity, improved production efficiencies, and reduced input costs for livestock, crop, small fruit and greenhouse operations. A wide variety of projects have been supported under this initiative including crop harvesters, forage production systems, increasing greenhouse capacity for vegetable and nursery production, crop and feed storage facilities, livestock management systems and livestock genomic testing

- The Future Farms Initiative was designed to attract new entrepreneurs, facilitate the transfer of agri-businesses between generations, and enable potential producers to acquire knowledge and skills associated with the agriculture and agri-foods sectors through mentoring programs. Funding of \$29,731 was made available through GF2 for the establishment of three new farming operations for the production of honey and vegetables. Also funded were preliminary farm succession plans.

5. Implementation of the Agricultural Opportunities Program through Growing Forward 2.

The Agricultural Opportunities Program was implemented. Its' objective is to increase industry capacity and encourage the development of an adaptive and resilient agriculture, agri-foods, and agri-products industry through three initiatives.

- The Agriculture Land Development Initiative was designed to enhance the productive capacity and sustainable development of agricultural land resources to address food security, feed self-sufficiency and crop management practices. GF2 provided \$520,257 in funding to complete 25 land development projects in 2013-14. Fifty one (51) acres of new land was developed and 30 acres of existing land was renovated to improve productive capacity. New on-farm roads were developed to enable access to new agricultural land. Twelve (12) projects were funded to assist with the purchase of specialized land development equipment such as lime spreaders, leveling blades, land rollers, rock pickers, root rakes, and power harrows.
- The Human Resource Development Initiative was designed to contribute to the enhancement of the knowledge, skills and tools of participants in the agriculture, agri-foods, and agri-products industry. GF2 provided \$108,763 in funding to complete 12 human resource development projects in 2013-14. These projects supported the transfer of knowledge and development of skills for industry



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participants. Projects funded included exhibition and exchange opportunities, management conferences and information workshops.

- The Business Development Initiative was designed to assist agriculture, agri-foods, and agri-products producers to better understand and manage their financial performance and/or identify and adapt to new and changing market opportunities through business planning, feasibility studies, farm financial assessment and analysis, cost of production analysis and industry/sector strategy development. GF2 provides funding to assist producers with managing their financial performance and identifying new market opportunities. Funding was provided for the development of a business plans for new entrants.

Goal

By March 31, 2014, the Forestry and Agrifoods Agency will have supported the expansion and promotion of the forestry, agriculture and agrifoods industries through innovative initiatives.

Measure: Supported expansion and promotion of the forestry, agriculture and agrifoods industries

Goal Indicators

1. Completed a comprehensive marketing strategy for the forestry sector

A comprehensive marketing strategy for the forestry sector has not been completed during this strategic planning cycle. The outcomes of the on-going expressions of interest for Labrador and Central Newfoundland could have significant impacts on the forest industry in the province. In completing such a strategy, it is important to have all aspects and stakeholders of the forestry sector incorporated including forest industry activities in Labrador and Central Newfoundland. As such, until the expressions of interest are finalized and further analysis has been completed on the forest industry, the agency has decided to defer any further development of a comprehensive marketing strategy.



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2. Supported diversification initiatives in forest-based industry

Through this three year period, the agency has utilized the Expressions of Interest process to support diversification initiatives for Labrador and Central Newfoundland. In 2013-14 the agency has been engaged in the evaluation of a proposal in response to the call for Expressions of Interest. Further assessment is required on project viability prior to moving forward.

3. Developed initiatives to promote forest resource management awareness

Initiatives have been developed to promote forest resource management awareness. Through the National Forest Week activities, educational initiatives to promote awareness of the forest resource management were implemented through a variety of school events such as kids' forestry education day and public events in the majority of all forestry districts throughout the province.

4. Supported increased food security and sector capacity building

The Agricultural Opportunities Program was implemented. Its' objective is to increase industry capacity and encourage the development of an adaptive and resilient agriculture, agri-foods, and agri-products industry through three initiatives (the Agriculture Land Development Initiative, the Human Resource Initiative and the Business Development Initiative).

The Food Safety, Biosecurity and Traceability Initiative was designed to address challenges to the safety, biosecurity, traceability and security of our food system. GF2 provided funding in the amount of \$361,194 to complete 7 projects in 2013-14. These projects included funding for third party audits, auxiliary power systems, on-farm water supply, facility upgrades, bulk tank coolers, harvesting equipment, and portable hygiene and washing facilities.

5. Supported land development activities

An Agricultural Production Land Base has been defined utilizing soils mapping and soil field surveys, identifying those soils in Newfoundland and Labrador that have the capability for agriculture development. Existing agriculture leases underwent increased



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lease compliance checks to ensure development conditions of the leases are met in an effort to fully utilize land that has already been allocated for agriculture production.

The Agriculture Land Development Initiative was designed to enhance the productive capacity and sustainable development of agricultural land resources to address food security, feed self-sufficiency and crop management practices. GF2 provided \$520,257 in funding to complete 25 land development projects in 2013-14. Fifty one (51) acres of new land was developed and 30 acres of existing land was renovated to improve productive capacity. New on-farm roads were developed to enable access to new agricultural land. Twelve (12) projects were funded to assist with the purchase of specialized land development equipment such as lime spreaders, leveling blades, land rollers, rock pickers, root rakes, and power harrows.

6. Supported collaborative research and development to support both agribusiness and forest sector innovation

The Centre for Forest Science and Innovation (CFSI) strives to provide the knowledge and innovation necessary for forest management in an increasingly challenging environment. Since the Centre's formation in 2010 it has invested over 1.8 million dollars with local, national and international forest scientists that now reached a total research portfolio of 10.2 million dollars. For the fiscal period 2013-14 CFSI directly invested \$649,047 in provincial forestry research while leveraging a total research value of \$1,522,522.

In this planning cycle, the Agrifoods Development Branch expanded the Agriculture and Agrifoods Research development Fund (AARD) to include funding the Agriculture and Agri-Food Canada under the Agriflexibility Agreement to create the Agriculture Research Initiative. This initiative was a three year federal/provincial 60:40 cost-share program with a total funding of \$7.5 million or \$2.5 million annually.

7. Improved agribusiness skills and market readiness

The agency improved agribusiness skills and market readiness in this strategic planning cycle through the development of agribusiness modules and market readiness information for the agricultural stakeholders. Agency marketing staff was trained on topics to help in presenting the information to industry and provide ongoing support. Marketing presentations and workshops were completed with industry during this period as well.



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8. Improved promotion of food production and food security information for the general public

Growing Forward provided funding to the Newfoundland and Labrador Federation of Agriculture to promote agriculture awareness initiatives for the province. These initiatives included participation in agriculture fairs and trade shows with interactive displays to promote agriculture and food production to the public.

During this strategic planning cycle, the agency also participated in several trade shows, events and Open Farm Day to improve the promotion of food production and food security information to the general public.



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Strategic Directions

The outcomes achieved by the Forestry and Agrifoods Agency with respect to their objectives for the year are consistent with the minister's strategic directions for the strategic planning period. Many of the successes referenced below are covered in more detail in the Outcomes of Objectives section but are included here to illustrate their strategic importance.

Strategic Direction: Forestry, Agriculture and Agrifoods Resource Sustainability

Resource sustainability is a guiding management principle for the FAA. Without resource sustainability it becomes difficult to provide for the values of the province's citizens. Values such as employment opportunities, recreation, food safety, climate change reduction to name a few would be at risk without a well-managed sustainable resource. The work completed by Agrifoods Development Branch on upgrading soil, plant, and feed laboratory equipment and methodology; and the funding opportunities through the Growing Forward 2 Program for environmental sustainability initiatives have all contributed to managing a resource sustainably for future use. The Forestry Services Branch's (FSB) work on the Provincial Forest Management Strategy demonstrates the agency's commitment to sustainable resource management. The FSB has also advanced considerably the environmental management system implementation during the 2013-14 reporting year and again, shows a high level of commitment to the sustainability of the forest resource.

Strategic Direction: Forestry, Agriculture and Agrifoods Innovation, Promotion and Development

The development, innovation and promotion of the Forestry, Agriculture and Agriculture sector continued with advancements in all sectors. The FSB participated in hosting the National Annual General Meeting of the Canadian Institute of Forestry which promoted and highlighted opportunities in new age forest industries such as bioenergy. Knowing what is possible with innovative ideas will help to develop and diversify the forest industry. The FSB also worked diligently to evaluate options for new industry developments in Central Newfoundland and Labrador regions. The Agrifoods Development Branch with funding through the Growing Forward 2 program contributed to development and innovation of the agriculture and agrifoods sector. The GF2



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Program made funds available for the Agriculture innovation initiative and the Future Farms initiative. These initiatives helped with innovation of production systems and helped to development and attract new entrepreneurs. The GF2 program investments are necessary to help foster innovation and development of the sector.



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Additional Highlights and Accomplishments

The additional highlights in this section also contributed to achievement of the Strategic Plan 2011-14. They were important in assisting sector development and/or diversification or improved sustainable resource development.

Providing information to manage and protect our forest ecosystems

The Inventory and Mapping Program provides vital information needed to manage and protect the province's forest ecosystems. Basic forest inventory information such as tree



species, age, height site quality is extracted from digital aerial images through a process called photo interpretation. Each year approximately one tenth of the Island is re-flown and new digital pictures of the province's forests are captured.

In 2013-14 new digital photography was acquired for the South Coast, along with aerial photography for all of the 2013 major commercial harvested areas on the Island. This information was used to update the province's cutover information and forest inventories. The interpretation of previous years' photography focused primarily on Baie Verte Peninsula and new geographic

databases were finalized for the Northern Peninsula.

In addition to photography work, seven field crews visited approximately 400 different timber stands collecting a wide range of timber and non-timber forest ecosystem information. Without forest inventory information/mapping, sustainable harvest levels could not be calculated, and the planning of silviculture, road building, fire and insect protection activities would be difficult.

Extension Services Supports the Provincial Agriculture Industry

The Agriculture Extension Services section provides professional advisory services to the agriculture industry through six regional offices and eight Agriculture Development Officers (ADO) across the province. The ADOs are the first point of contact for most



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producers and provide advice on production practices, information on various Government programs, business and agronomic expertise, and assistance with the evaluation and development of agriculture business opportunities.

This year, ADOs made 2,137 contacts with individual clients for advisory services. Of those contacts;

- 59 per cent were with commercial farmers,
- 21 per cent were with new or beginning farmers,
- 27 per cent were made for crop, livestock or farm business advisory services, and
- 9 per cent were for land issues.

The Agriculture Extension Services section is active in delivering training opportunities for industry through the organization of commodity specific or regional workshops. In the 2013-14 fiscal year, workshops were organized regionally for Turfgrass or Sod producers, for Dairy producers in the area of Nutrient Management Planning, and a Provincial Greenhouse Conference was held as well.

In addition, staff have been active in collecting data and producing provincial Cost of Production studies for various commodities in Newfoundland and Labrador.

Shared Commitments

The Department of Natural Resources has legislative oversight for the following public bodies related to the forestry, agriculture and agrifoods sectors: Timber Scalpers Board, Forest Land Tax Appeals Board, Chicken Farmers of Newfoundland and Labrador, Wooddale Land Development Advisory Authority, St. John's Urban Region Agricultural Appeal Board, St. John's Land Development Advisory Authority, Agricultural Land Consolidation Review Committee, Farm Industry Review Board, Newfoundland and Labrador Livestock Owners Compensation Board, Newfoundland and Labrador Crop Insurance Agency, and Newfoundland and Labrador Farm Products Corporation. The Forestry and Agrifoods Agency works closely with these public bodies toward fulfillment of the strategic directions of the Minister of Natural Resources.

The Forestry and Agrifoods Agency also works with the federal government through programs such as Growing Forward 2 which enhances the investment in the province's agriculture industry.



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Opportunities and Challenges

As the Forestry and Agrifoods Agency moves forward it will continue to work with the forestry, agriculture and agrifoods sectors to embrace opportunities and seek solutions to the challenges ahead.

The Agriculture and Agrifoods Industry

Our agriculture and agrifoods industry has the opportunity to grow more agriculture products for the local marketplace. The agency will continue to promote and support through our programs and services our agribusinesses in Newfoundland and Labrador. In expanding our industry, the agriculture industry also faces challenges in increasing local agriculture production in an economically and sustainable manner to ensure the optimal benefits to the agricultural community.

The Forest Industry

The forest resource of the province is managed sustainably and therefore it provides opportunities to fulfill multiple values. There is opportunity to develop new industrial users, especially in central Newfoundland and Labrador. With advances in best management practices the agency advances the management of the resource. New research conducted in partnership with the agency into innovative uses of the forest resource, provides opportunities for the future. Of course with opportunities come challenges, which include identifying the best use for the forest resource. As well, industrial users of the resource are impacted by global markets. The Forestry and Agrifoods Agency will continue to work with stakeholders to advance the sector



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Appendix I: Statement of Revenues and Expenditures

Expenditure and revenue figures included in this document are based on public information provided in the Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund for Fiscal Year Ended 31 March 2014.

STATEMENT OF EXPENDITURE AND RELATED REVENUE SUMMARY FOR THE YEAR ENDED 31 MARCH 2014 (Unaudited)

		Actual (\$)	Estimates	
			Amended (\$)	Original (\$)
Executive and Support Services				
1.1.01	Minister's Office	436,632	475,200	404,800
1.2.01	Executive Support	2,581,215	2,644,300	2,405,000
1.2.02	Administrative Support	1,020,960	1,079,700	1,070,200
	Less: Revenue	(1,283)	(10,000)	(10,000)
1.2.03	Administrative Support (Cap)	2,584,867	2,586,200	1,900,000
Total		6,622,391	6775400	5770000
Forest Management and Protection				
Forest Management				
2.1.01	Administration and Program Planning	8,386,220	9,127,500	9,618,300
2.1.02	Operations and Implementation	10,009,730	10,268,400	9,953,600
2.1.03	Silviculture Development	7,629,704	7,845,600	8,415,200
	Less: Revenue	(17,142)	(1,000)	(1,000)
2.1.04	Resource Roads Construction	5,093,929	5,884,700	5,889,800



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			Estimates	
		Actual (\$)	Amended (\$)	Original (\$)
2.1.05	Forest Industry Diversification	84,000	84,000	0
Forest Protection				
2.2.01	Insect Control	1,476,199	1,567,200	1,700,300
2.2.02	Fire Suppression and Communications	5,946,137	5,979,400	4,341,600
Total		38,608,777	40,755,800	39,917,800
Agrifoods Development				
Land Resource Stewardship				
3.1.01	Land Resource Stewardship - Administration	2,022,240	2,060,800	2,017,200
	Less: Revenue	(14,394)	(33,000)	(33,000)
3.1.02	Limestone Sales	411,692	411,800	411,800
	Less: Revenue	(155,887)	(140,000)	(140,000)
3.1.03	Land Development	1,509,881	2,100,000	2,300,000
Production and Market Development				
3.2.01	Production and Market Development - Administration	2,210,133	2,233,700	2,139,600
	Less: Revenue	(2,372)	(454,700)	(454,700)
3.2.02	Marketing Board	153,230	182,000	152,000
Agricultural Business Development				
3.3.01	Agricultural Business Development - Administration	1,916,515	1,943,200	1,936,600
3.3.02	Agriinsurance and Livestock Insurance	364,593	432,000	426,400



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		Estimates		
		Actual (\$)	Amended (\$)	Original (\$)
	Less: Revenue (Federal)	(299,524)	(210,000)	(210,000)
3.3.03	Agricultural Initiatives	2,045,331	2,250,000	2,250,000
3.3.04	Agriculture and Agrifoods Development Fund	1,604,333	2,150,000	2,550,000
3.3.05	Growing Forward Framework	6,434,004	7,155,800	7,139,500
	Less: Revenue (Federal)	(1,352,504)	(3,819,500)	(3,819,500)
	Less: Revenue	0	(10,000)	(10,000)
Animal Health				
3.4.01	Administration and Support Services	3,169,301	3,260,000	3,119,100
	Less: Revenue	(611,178)	(580,000)	(580,000)
3.5.01	Research and Development	2,227,621	2,314,200	2,275,800
	Less: Revenue (Federal)	(693,059)	(1,500,000)	(1,500,000)
Total		20,939,956	19,746,300	19,970,800
Mineral Resource Management				
4.1.01	Geological Survey	5,623,441	5,771,400	5,691,600
	Less: Revenue	(341)	(4,000)	(4,000)
4.1.02	Mineral Lands	1,261,466	1,299,500	1,313,700
4.1.03	Mineral Development	4,110,173	5,338,600	5,780,200



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		Estimates		
		Actual (\$)	Amended (\$)	Original (\$)
Total		10,994,739	12,405,500	12,781,500
Energy Resources and Industrial Benefits Management				
5.1.01	Energy Policy	5,526,885	5,855,100	5,832,000
5.1.02	Petroleum Development	2,020,491	2,262,800	2,362,300
5.1.03	Canada/Newfoundland and Labrador Offshore Petroleum Board	7,650,800	7,650,800	7,650,800
	Less: Revenue	(5,731,878)	(5,738,200)	(5,738,200)
5.1.04	Royalties and Benefits	2,562,684	2,893,700	3,222,600
	Less: Revenue	(66,103)	(81,000)	(81,000)
5.1.06	Energy Initiatives - Capital	531,000,000	531,000,000	531,000,000
	Less: Revenue	(139,020)	0	0
Total		542,823,859	543,843,200	544,248,500
Total Department		619,989,722	623,526,200	622,688,600



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Appendix II: Legislation

Mines and Energy

1. ***Petroleum and Natural Gas Act.*** Defines how the rights to explore for and develop oil and gas properties on land may be obtained and maintained; how areas may be assigned for exploration; the scope with which government may regulate activity and the various royalties that may be due.
2. ***Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act.*** Sets out the mechanism for joint federal-provincial management of the Newfoundland offshore area through the Canada-Newfoundland Offshore Petroleum board; defines the methods of obtaining exploration and production rights; the requirements for safety, resource conservation and environmental protection and the activities that may be regulated. The *Act* is mirrored in federal statutes.
3. ***Hydro Corporation Act.*** Continues the existence of, and sets out the mandate, powers and management structure of the Newfoundland and Labrador Hydro-Electric Corporation as a Crown agency.
4. ***Electrical Power Control Act.*** Sets policy with regard to electric power rates and establishes provisions for the determination of such power rates by the Public Utilities Board.
5. ***Lower Churchill Development Act.*** Authorizes the Minister of Mines and Energy [Natural Resources] to enter into an option agreement with the corporation guaranteeing the Lower Churchill Development Corporation (LCDC) executive water rights, rights to flood land and a sole option to purchase the Gull Island hydro assets.
6. ***Newfoundland and Labrador Power Commission (Water Power) Act.*** Extinguishes certain water power rights held at the time by BRINCO and provides for their assignment to Newfoundland and Labrador Hydro (Power Commission) to facilitate financing of the Bay d'Espoir hydro-electric project.
7. ***Miscellaneous Financial Provisions Act, 1975.*** Removes any restrictions elsewhere in provincial legislation on government assigning to Newfoundland and Labrador Hydro Electric Corporation a right, title or interest in royalties and rentals in



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clauses 1 and 8 of Part II of the lease between government and CF(L) Co.

8. **Mineral Act.** Defines the rights of explorers and developers of mineral properties; the methodology to be used in obtaining such rights and the areas where government may regulate activity.

The Mineral Regulations provide specific details on the methods by which mineral rights may be acquired and the fee payments and reporting schedules required to keep these rights in good standing.

9. **Mineral Holdings Impost Tax Act.** Designed, by imposition of a tax, to encourage holders of mineral properties that do not come under the terms of the *Mineral Act* to either explore their lands or to surrender them so that they become subject to the *Mineral Act*.

The *Mineral Holdings Impost Regulations* set out the level of tax (impost) to be paid and the requirements for offsetting the tax through exploration expenditures.

10. **Quarry Materials Act, 1998.** Defines the rights of explorers and developers of quarry materials; the methods by which such rights may be required, royalties payable; and areas where government may regulate activity.

The *Quarry Materials Regulations* set out the details for obtaining such rights and keeping them in good standing.

11. **Undeveloped Minerals Areas Act.** Enables government to arrange for the exploration of private mineral properties (generally ones which are not covered by the *Mineral Act*) that in its opinion have not been adequately explored. Properties affected by the *Act* have been identified by various orders.

12. **Mining Act.** Regulates the development, operation and closure of mines in the province; outlines requirements for development, operational and rehabilitation and closure plans as well as milling licenses and financial assurance. This Act does not deal with Occupational Health and Safety matters.

13. **Energy Corporation Act.** Establishes the existence of, and sets out the mandate, powers and management structure of the Energy Corporation of Newfoundland and Labrador as a Crown agency



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1. ***Abitibi-Consolidated Rights and Assets Act.*** An act to return to the crown certain rights relating to timber and water use vested in Abitibi-Consolidated and to expropriate assets and lands associated with the generation of electricity enabled by those water use rights.
2. ***Foresters Act.*** An act establishing the Association of Registered Professional Foresters of Newfoundland and Labrador. The act outlines the objectives, structure, operation and membership of the Association.
3. ***Forestry Protection Act.*** An act to provide for the establishment and maintenance of a forest protection association in the province.
4. ***Forestry Act.*** An act respecting the management, harvesting, and protection of the forests of the province.
5. ***Motorized Snow Vehicles and All-Terrain Vehicles Act.*** An act respecting all-terrain vehicles.
6. ***Agrologists Act.*** An act establishing the Newfoundland and Labrador Institute of Agrologists. The act outlines the objectives, structure, operation and membership of the Institute.
7. ***Animal Health and Protection Act.*** An act respecting the health and protection of animals.
8. ***Crop Insurance Act.*** An act respecting the Newfoundland and Labrador Crop Insurance Agency. The Crop Insurance Plan is covered under this act. The plan offers insurance on insurable agricultural crops under the regulations. The act designates the Newfoundland and Labrador Crop Insurance Fund and also the Crop Insurance Agency.
9. ***Farm Practices Protection Act.*** An act respecting the protection of farm practices in the province.
10. ***Farm Products Corporation Act.*** An act respecting the administration of Farm Products Corporation.
11. ***Livestock Insurance Act.*** An act to provide for livestock insurance and



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- respecting the Livestock Owners Compensation Board. The Livestock Insurance Plan is covered under this act. The plan offers insurance on beef, sheep, cattle and goats from predatory attacks by dogs or coyotes. The act designates the Livestock Owners Compensation Fund and the Livestock Owners Compensation Board.
12. **Meat Inspection Act.** An act to provide for animal and meat inspection in slaughterhouses. This act includes Meat Inspection Regulations which provide the details on standards and licensing for animal and meat inspection in slaughterhouses.
 13. **Natural Products Marketing Act.** An act to allow for the creation of commodity boards, and a supervisory board to protect the interests of the general public, and an act to amend the *Natural Products Marketing Act* and the *Farm Practices Protection Act* to create the Farm Industry Review Board.
 14. **Plant Protection Act.** An act respecting the protection of plants and the prevention of the spread of pests and diseases destructive to vegetation.
 15. **Poultry and Poultry Products Act.** An act respecting poultry and poultry products such as chicken and eggs.
 16. **Vegetable Grading Act.** An act respecting the grading of certain products of agriculture in the province.
 17. **Veterinary Medical Act.** An act to revise the law about veterinary medicine.



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Appendix III: Inactive Entities Reporting to the Minister

The following category three public bodies that report to the Minister of Natural Resources were inactive for the period April 1, 2012 to March 31, 2014. In the event that one of these public bodies becomes active, it will prepare, and table in the House of Assembly, an Annual Performance Report.

Mineral Rights Adjudication Board

Section 37 of the *Mineral Act* provides for the appointment of a Mineral Rights Adjudication Board. It is the function of the Board, and the Board has exclusive jurisdiction, to hear and determine a question, dispute or matter arising out of the application of the *Mineral Act* or the *Mining Act* and applicable regulations.

Forest Land Tax Appeals Board

The Forest Land Tax Appeals Board was created pursuant to the *Forestry Act (1990)*. The mandate of the board is to hear appeals from landholders who disagree with the way in which Part III of the *Forestry Act (1990)* is applied. Appeals may concern: the contents of a Certificate of Managed Land issued to the appellant; entries made with respect to the appellant in the Assessment Roll; the amount of tax payable by the appellant; or whether or not the appellant is even liable for taxation under Part III of the act.

Timber Scalers Board

The Timber Scalers Board was created pursuant to the *Forestry Act (1990)*. Under section 124 of the act, the duties of the board are to: examine the ability and knowledge of persons who apply to be certified to scale timber; hear appeals to scaling disputes; and recommend to the minister new scaling methods before they are used.

Newfoundland and Labrador Farm Products Corporation

The Newfoundland and Labrador Farm Products Corporation was created pursuant to the *Farm Products Corporation Act*. The corporation has a mandate to establish abattoirs, cold storage plants, warehouses, packing and processing plants and other buildings and establishments of every kind necessary and suitable for the handling, preparation, processing and storage of farm products of every kind both animal and vegetable for the purpose of facilitating the development of farm products in the province. Associated activities may include: making advances of livestock to farmers and livestock keepers, either for cash or on credit; employing instructors to instruct farmers and livestock keepers; purchasing, storing, processing, packing and selling farm products of every kind; and handling, storing and selling or advancing on credit animal feeding stuffs or every kind.



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The Lieutenant-Governor in Council may appoint not fewer than five or more than nine members to the Newfoundland and Labrador Farm Products Corporation. One person is to be chairperson. The members of the corporation, with the exception of the chairperson, shall be appointed for one year and are eligible for reappointment.

