## BUDGET 2009

## Ministry of Energy, Mines and Petroleum Resources

# 2009/10-2011/12 Service Plan

February 2009



For more information on the British Columbia Ministry of Energy, Mines and Petroleum Resources see Ministry Contact Information on Page 26 or contact:

Deputy Minister's Office PO BOX 9319 STN PROV GOVT VICTORIA, BC V8W 9N3

or visit our website at www.gov.bc.ca/empr

Published by the Ministry of Energy, Mines and Petroleum Resources

# Message from the Minister and Accountability Statement



British Columbia is blessed with abundant natural resources. The Ministry of Energy, Mines and Petroleum Resources is charged with managing these resources in a socially and environmentally responsible manner that provides family supporting jobs, products, and economic benefits for all British Columbians.

Working with industry, First Nations and communities, we are laying a strong foundation for delivering innovative, sustainable solutions for developing B.C.'s energy resources.

Since 2001, the oil and gas industry in B.C. has seen unprecedented growth and investment. 2008 was a banner year, with oil and gas right sales totaling \$2.66 billion - more than double the previous record of \$1 billion set in 2007. The Province will continue to introduce programs to attract new investment into north-eastern B.C. and its rich natural gas plays, including incentives to companies that drill outside the traditional winter drilling season, and a commitment to maintain current royalty structures

Working with First Nations across the province, we are forging new relationships based on mutual respect, recognition and reconciliation, and ensuring First Nations participation in the province's economic and social progress. We are the first province in Canada to include resource revenue sharing with First Nations on new mine developments. Revenue sharing is one of the key elements of the New Relationship and will help to build a more inclusive and prosperous future for all British Columbians.

First Nations consultation and continuing the Environmental Assessment process is also backstopping our commitment to developing the Province's infrastructure by building the Northwest Transmission Line through partnership with private industry. According to the Mining Association of British Columbia, the Northwest Transmission Line could attract \$15 billion in investment as well as reduce greenhouse gas emissions by decreasing the reliance on diesel-electric power for industry and communities in that region.

Clean energy remains at the forefront. We are actively working to meet our ambitious target of acquiring 50 per cent of BC Hydro's incremental resource needs through conservation by 2020. We are seeing the development of an industry that produces clean, green energy sources including run-of-river small hydro, wind, solar, geothermal, biomass and ocean energy, and the services needed to support that industry. At the same time, we are upgrading our existing hydro system and we will see consultations continue around the potential of Site C, a large scale hydro project.

Through initiatives such as the LiveSmart BC: Efficiency Incentive Program and the \$25 million BC Bioenergy Strategy, we will continue to implement proactive strategies that encourage British Columbians to make smart choices in their energy usage in order to achieve our commitment of being energy self-sufficient by 2016.

With abundant renewable energy resources, a competitive business climate, innovative ideas and a motivated, skilled workforce, B.C. is at the forefront of environmental and economic leadership. We remain committed to the vision outlined in the BC Energy Plan, and will continue to respond to challenges and opportunities by delivering innovative, sustainable ways to develop B.C.'s energy resources.

The Ministry of Energy, Mines and Petroleum Resources 2009/10 - 2011/12 Service Plan was prepared under my direction in accordance with the *Budget Transparency and Accountability Act*. I am accountable for the basis on which the plan has been prepared. All material fiscal assumptions and policy decisions as of February 8, 2009 have been considered in preparing the plan and I am accountable for achieving the specific objectives in the plan.

Honourable Blair Lekstrom

Ela Sahl

Minister of Energy, Mines and Petroleum Resources

February 8, 2009

# Message from the Minister of State and Accountability Statement



Mining is an integral part of our economy. Gold was discovered in British Columbia 150 years ago. Thousands flocked to B.C. in hopes of striking it rich. This spawned an industry that now stands at the forefront as one of the world's most prominent mining regions.

We laid the foundation for growth of the B.C. minerals industry with the 2005 B.C. Mining Plan and, moving forward, our policies and initiatives will remain focused on building and maintaining the B.C. mining sector as one of the safest and most productive resource industries in the province.

Stimulating investment to maintain our competitive advantage in today's uncertain global economy is a priority. We are working with our federal counterparts to harmonize the permitting process in order to attract more investment into the province. With the development of the Northwest Transmission Line, the Mining Association of British Columbia estimates that potentially \$15 billion in investment could be realized, with the possibility for up to 11,000 family supporting jobs.

Asia-Pacific investors will play a key role in the development and continued prosperity of B.C.'s minerals sector. We will build and expand our international relationships to enhance B.C.'s competitive advantage and reinforce our reputation as a leading mining region.

The recently formed Minister's Council on Mineral Exploration and Mining will focus on ensuring that the mining and minerals sector has every opportunity to grow responsibly. By identifying and addressing key challenges and opportunities for communities, industry, First Nations and the Province, we can be certain that we are moving forward in an environmentally and socially responsible manner,

We are proud to be the first jurisdiction in North America to engage in resource revenue sharing with First Nations. This is an important step as we continue to build our new relationship with First Nations founded on mutual respect, recognition and reconciliation.

The safety of our workers is a top priority, and the B.C. mining industry is a leader in workplace health and safety. An updated Health, Safety and Reclamation Code for Mines in British Columbia will be introduced this year, reflecting recent safety amendments. Through ongoing safety audits, inspections, training and awards, we are committed to meeting the highest standards of workplace safety.

The mining industry is an integral part of the B.C. Advantage – and it plays a prominent role in why B.C. is such an attractive place to invest. By sharing ideas and building partnerships, the B.C. mining industry will continue to be a success story into the future.

I am the Minister of State for Mining and under the *Balanced Budget and Ministerial Accountability Act*, I am accountable for achieving the following results for 2009/10:

- (a) lead the work of the Minister's Council on Mineral Exploration and Mining in the identification of key issues and opportunities facing the mineral exploration and mining industry in British Columbia, and support the implementation of initiatives that contribute to a globally competitive and sustainable sector.
- (b) on new mining projects, initiate discussions with First Nations to identify revenue-sharing opportunities.
- (c) support the ongoing implementation of the Asia Pacific Initiative with respect to mining in order to:
  - (i) encourage investment in British Columbia exploration and mining projects; and
  - (ii) promote business with the British Columbia mining services sector.
- (d) work with the federal Major Projects Management Office to maximize regulatory efficiency on major mining projects in British Columbia.

Honourable Gordon Hogg Minister of State for Mining

February 8, 2009

## **Table of Contents**

Message from the Minister and Accountability Statement	3
Message from the Minister of State and Accountability Statement	5
Purpose of the Ministry	8
Strategic Context	9
Goals, Objectives, Strategies and Performance Measures	11
Resource Summary	24
Ministry Contact Information	26
Hyperlinks to Additional Information	27

### **Purpose of the Ministry**

The Ministry of Energy, Mines and Petroleum Resources manages the responsible development of British Columbia's energy, mining and petroleum resource sectors. Through the promotion of teamwork and positive working relationships with our clients, we facilitate a climate for thriving, safe, environmentally responsible and competitive energy, mining and petroleum resource sectors. It is through these initiatives that the Ministry will continue to contribute to the economic growth and development of communities throughout British Columbia.

British Columbians can expect to see continued benefits from resource development opportunities. This Service Plan outlines the Ministry's strategies to increase family supporting jobs, investment and revenue related to these sectors, while ensuring the highest degree of environmentally responsible resource development occurs on the land base from which energy, mineral and petroleum resources are derived.

In pursuit of its mandate, the Ministry is responsible for a wide range of policies and programs related to mineral exploration and mining, including permitting, mine inspections and safety, geoscience, skills training and educational programs. The Ministry develops and implements British Columbia's policies with regard to electrical power generation and transmission, including oversight of BC Hydro, the BC Transmission Corporation and Columbia Power Corporation. It is responsible for initiatives to promote new energy technologies, energy conservation and alternative energy sources, such as bio-energy and renewables, including wind and solar power generation. Regulatory policy for the oil and gas industry, another important part of the Ministry's mandate, ensures the orderly and timely extraction of British Columbia's oil and gas resources. Examples of the Ministry's oil and gas related services include participation in job fairs, trade shows and service sector promotion, the provision of geoscience information and the development of royalty policy and incentives.

The Ministry also manages the rights to Crown subsurface resources. Monthly oil and gas rights auctions are held and coal, underground gas storage and geothermal applications, mineral claims and mining leases are processed. The Ministry continues to explore potential frameworks for offshore oil and gas development for British Columbia as well as develop strategies and policies in the areas of land use, marketing, and Aboriginal and community relations. In developing its policies, legislation and guidelines, the Ministry consults with its clients in the oil and gas, mining, electricity and alternative energy industries, as well as communities, First Nations, and environmental and industry associations.

The Ministry administers 27 statutes pertaining to the energy, mining and petroleum resource sectors. In addition, the Minister of Energy, Mines and Petroleum Resources is responsible for the Assayers Certification Board of Examiners, the British Columbia Hydro and Power Authority, the BC Transmission Corporation, the Columbia Power Corporation, the Mediation and Arbitration Board and the Oil and Gas Commission. The Ministry retains responsibility for the policy direction provided to the Oil and Gas Commission, which regulates the oil and gas industry throughout British Columbia.

### **Strategic Context**

British Columbia is in the fortunate position of having abundant opportunities for energy, mineral and petroleum resource development. The Ministry is committed to working with communities, industry, First Nations and environmental organizations to ensure that the continued economic growth and development of these sectors is socially and environmentally responsible. Business opportunities, family supporting jobs and government revenue from the production and sale of energy, mineral and petroleum resource commodities continue to be important components of the B.C. economy.

British Columbia's electricity prices are among the lowest in North America, thanks to: the Province's heritage assets, which include historic electricity facilities such as those on the Peace and Columbia Rivers; the Government's establishment of the Heritage Contract that ensures British Columbia ratepayers continue to benefit from the low cost electricity from these assets; and the B.C. Utilities Commission's regulation of domestic rates.

British Columbia's estimated oil and gas resources are substantial; the Province is the only North American jurisdiction that is increasing natural gas reserves faster than production. Onshore oil and gas activity levels remain robust in the British Columbia portion of the Western Canadian Sedimentary Basin; however the industry is highly susceptible to global economic factors. It is expected that industry growth in 2009 will come from significant investment and development in the Province's large shale gas deposits.

With the increased volatility of energy prices, and heightened awareness of the need to address climate change, consumers are focused on reducing their consumption, improving energy efficiency, and supporting cleaner energy supply options.

The resurgence that British Columbia's mineral exploration and mining industry enjoyed for the better part of this decade is, in part, due to the significant policy improvements made by the Province since 2001. Stronger mineral prices, largely driven by the emergence of robust Asian economies, have afforded excellent opportunities for B.C. mining. Government is continuing to focus on streamlining provincial regulations without diminishing B.C.'s high standards for environmental protection and protecting the health and safety of industry workers and the public. Major mine developments and expansions are scheduled to occur, which will help the industry remain strong over the longer term in this province, particularly during the current downturn in the global economy.

The Ministry assesses its risks and opportunities annually as part of its strategic planning process. Once risks/opportunities have been identified, they are addressed through strategies that result in the successful implementation of Ministry goals and objectives for that given period. The following is a discussion of the Ministry's external risks and opportunities.

#### **External Risks**

Financial — Volatility in world financial markets and commodity prices can have significant impacts on investment levels in the province. In recent years, Canada has benefited from demand for copper, gold, oil and gas from the U.S. and increasing demand from emerging economies such as India and

China. B.C., in particular, has a wealth of these products. The Ministry is monitoring the current slowdown in economic activity to gauge the demand for B.C. energy and mineral exports.

Competition — Investment dollars move readily around the globe to the jurisdictions that provide the highest net return for given levels of risk. The Ministry monitors changes in British Columbia's competitiveness as compared to other jurisdictions and implements strategies to maintain our competitive position and investment attractiveness. For example, the Ministry continues to streamline and update legislative and policy frameworks to minimize the regulatory burden while increasing British Columbia's competitiveness.

Skilled Workers — The resurgence of our mining sector and the rapid expansion of our energy sector has resulted in a growing number of permanent, well-paying employment opportunities for British Columbians. One of the challenges facing resource-based industries today is attracting young people into their workforces as the supply of older workers declines with the aging population. The British Columbia Mineral Exploration and Mining Industry Human Resources Strategy 2008 – 2012 (released in June 2008 by the B.C. Mineral Exploration and Mining Labour Shortage Task Force) estimates that there will be approximately 15,000 job openings in B.C.'s minerals sector in the next decade. The BC Mining Plan and Energy Plan are implementing an approach to skills training and labour which focuses on attracting, developing, retaining, and informing workers about employment opportunities in the province's resource sectors.

#### **External Opportunities**

Global Supply/Demand — The emergence of China and India as major commodity consumers continues to influence demand and prices in a wide range of resource commodity markets. China is a potential new source of investment funds for British Columbia. The Ministry is continuing its engagement in the provincial Asia Pacific Initiative, aimed at positioning British Columbia as the preferred economic and cultural gateway between North America and the Asia-Pacific region. The Ministry continues to promote opportunities in British Columbia through trade missions and by hosting overseas delegations. North American demand in the oil and gas markets continues to increase while new supply opportunities are limited. British Columbia will remain as a significant supplier of natural gas to North American markets. The Ministry works to promote exploration for new sources of unconventional gas, for example shale and tight gas. As one of the richest mineral regions in the world, B.C. can continue to access international opportunities through targeted overseas marketing.

New Relationship with First Nations and Community Consultation — British Columbia's communities in resource rich areas continue to seek earlier and more comprehensive information from government regarding the development of resources in their areas. Many First Nations and communities are actively looking at the opportunities open to them to engage in proactive energy planning — ranging from energy conservation programs to economic and resource development. The Ministry is actively working with First Nations and will continue to work to enhance public confidence, identify ways to provide greater First Nation and community benefits and increase investment certainty for industry.

# Goals, Objectives, Strategies and Performance Measures

A wide range of Ministry strategies are being implemented in support of Government Goal 5 to "Create more jobs per capita than anywhere else in Canada." Some of these strategies include implementation of the BC Energy Plan, expanding opportunities for job training and placement, facilitating First Nation involvement, engaging communities and stakeholders, as well as ensuring a secure, reliable supply of low cost electricity for British Columbians.

The Ministry has many initiatives to support Government Goal 4 to "Lead the world in sustainable environmental management with the best air and water quality, and the best fisheries management, bar none." The Ministry will maintain effective and efficient regulation of mines and mineral exploration sites aimed at health, safety and environmental best practices, and promote development and use of alternative energy technology and energy efficiency measures. The regulatory framework supporting the *Oil and Gas Activities Act* introduces new requirements that will ensure exploration and development activities throughout the oil and gas sector are both planned and implemented in a manner that safeguards environmental values. Improving the effectiveness and timeliness of multiagency federal and provincial approvals for energy and mining projects is a high priority for British Columbia. The Ministry is working with the new federal Major Projects Management Office to develop faster, simpler and more effective processes for major project reviews.

Through the BC Mining Plan, we are achieving our vision of a thriving, globally competitive, safe and environmentally responsible exploration and mining industry. The plan has four cornerstones: focus on communities and First Nations; protecting workers and the environment; global competitiveness; and access to land. We are working with local governments, industry and community members to maintain British Columbia's mining reputation as a world leader in social responsibility and environmental protection.

The Ministry is leading the promotion of energy efficiency measures to reduce the need for new energy supply, while delivering a healthier living and work environment for British Columbians. The BC Energy Plan provides a made-in-B.C. solution to the common global challenge of fostering the development of new, sustainable energy technology industries. This will ensure more comprehensive and proactive approaches to energy issues in British Columbia for the next 20 years, and supports the continuing evolution of the energy sector and a secure, reliable supply of affordable electricity produced in an environmentally responsible way, which supports job creation and economic growth.

# Goal 1: Thriving and competitive energy, mineral and petroleum resource sectors.

Objective 1.1: Increased investment, revenue generation and job creation in energy, mineral and petroleum resource development for the long term benefit of all British Columbians.



Coal train near Spences Bridge, B.C.

- Long term investment in the energy, mineral and petroleum resource sectors contributes to stability and predictability, allowing the industries to grow and prosper.
- Demand for energy, mineral and petroleum resources can be cyclical, affecting the price of these resources, and thus the level of investment in the sectors. The financial costs (interest rates) and currency fluctuations also impact investment levels.

- Attract investment by continuing to work with industry to develop and implement focused marketing and investment programs to showcase British Columbia as a centre of excellence for energy, mining, and oil and gas development.
- Further establish British Columbia as a recognized centre for innovation and technology research, education and demonstration, in collaboration with industry, post-secondary institutions, the federal government and provincial agency partners.
- Improve British Columbia's competitiveness in energy, mineral and petroleum development by providing leadership, information, and investing in infrastructure.

• Support the work of the newly formed Minister's Council on Mineral Exploration and Mining. The Council aims to provide input and make recommendations for a revised mining sector strategy, which will build on the successes of the BC Mining Plan.



Sierra Yoyo Desan bridge and resource road, Fort Nelson, B.C.

# Performance Measures 1–3: Annual investment in the energy and minerals sectors.

Performance Measures	2008/09 Forecast	2009/10 Target	2010/11 Target	2011/12 Target
Annual Investment in Oil and Gas Exploration and Development <sup>1</sup>	\$4.7 Billion	\$5.0 Billion	\$5.1 Billion	\$5.5 Billion
Annual Investment in Electricity Facilities <sup>2</sup>	\$1.9 Billion	\$2.8 Billion	\$2.9 Billion	\$2.3 Billion
Annual Investment in Mineral Exploration and Mines <sup>3</sup>	\$0.720 Billion	\$0.700 Billion	\$0.680 Billion	\$0.580 Billion

<sup>&</sup>lt;sup>1</sup> Source: Data analysis by Ministry of Energy, Mines and Petroleum Resources based on Canadian Association of Petroleum Producers data for previous years. Estimates provided by calendar year.

#### Discussion

Annual investment in oil and gas exploration and development consists of industry investment in geophysical and geological surveys, exploratory and production wells, pipelines and processing

Source: Data analysis by Ministry of Energy, Mines and Petroleum Resources, BC Public Utilities. Estimates provided by fiscal year.

Source: Data analysis by the Ministry of Energy, Mines and Petroleum Resources based on calendar year survey results from Natural Resources Canada, Statistics Canada and PriceWaterhouseCoopers.

plants. Used domestically for heating and cooking purposes, natural gas also has a wide range of commercial and industrial uses. In addition, oil and gas activities provide family supporting jobs for British Columbians, build provincial infrastructure, and provide significant revenue to the Province which supports the provision of social programs such as education and health care.

Annual investment in electricity generation and transmission facilities measures the total investment in the electricity sector in British Columbia, including improvement and replacement to existing infrastructure by the major provincial electrical utilities and Crown corporations — BC Hydro, BC Transmission Corporation, Columbia Power Corporation and Fortis BC — and Independent Power Producers which supply electricity to the utilities. Capital expenditures in the electricity sector help ensure a safe and reliable electricity system to meet household, commercial and industrial needs. This investment supports the clean electricity goals in the BC Energy Plan. The electricity sector employs many British Columbians, and the dividends from electricity Crown corporations, tax, water rental and other revenues from all electricity market participants contribute to important social programs.

Annual mineral exploration expenditures translate into family supporting jobs for British Columbians throughout the province. If commercially viable deposits are discovered, new mines may be opened, which can in turn provide long term employment opportunities for people living in rural communities. Capital investment in new or existing mines also leads to job creation and improvements to provincial infrastructure. Mineral taxes, together with tenure fees and rentals, provide revenue to the Crown.

# Objective 1.2: An increasingly secure, reliable supply of energy for the long term benefit of all British Columbians.

- A secure and reliable supply of energy contributes to economic growth and stability for British Columbians.
- Energy supply is influenced by a number of factors outside the Province's control, including world economic growth cycles, regional and global demand and supply, international prices, interest rates, and exchange rates.

- Work with BC Hydro and the BC Transmission Corporation to upgrade the Province's heritage electricity assets and transmission infrastructure.
- Ensure self-sufficiency to meet electricity needs, including extra energy or "reliability insurance", through innovative, aggressive conservation, and electricity procurement programs and BC Hydro's own projects.
- Diversify British Columbia's fuel supply, including biodiesel and fuels developed from biomass.
- Work with stakeholders and industry to promote the responsible exploration and development of undeveloped onshore basins.

# Objective 1.3: Efficient and effective fiscal, legislative and regulatory frameworks and services that reflect the public interest, and enhanced social and economic benefits for all British Columbians.

- An efficient and effective tax and policy framework for industry enhances competition and encourages the investment necessary to prosper.
- Competition with other jurisdictions for investment requires ongoing progress in regulatory reform, fees and licence reviews, and policy development.
- Maintaining the balance between the interests of local residents and resource developers is a shared objective of residents, regulators, provincial ministries and industry.

- In cooperation with other levels of government and the B.C. Environmental Assessment Office, continue regulatory review to ensure British Columbia remains competitive, while maintaining the integrity of environmental, health and safety standards.
- Identify the relative global positioning of B.C.'s exploration and mining sector compared with other significant mineral producing jurisdictions worldwide (countries, states, provinces, etc.).
- Develop and implement a faster and simplified approach to multi-agency approval for exploration and mining activities through FrontCounter BC.
- Expand and improve online service delivery by developing and implementing electronic payment and permitting options.
- Manage the oversight of the Columbia River Treaty to ensure the value of downstream benefits continues to be realized.
- Develop and implement new regulations for renewable fuels under the *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act.*
- Work with First Nations, communities, industry and other government agencies to understand the effects of resource development and how through collaboration and progressive public policy, approaches can be developed and implemented to balance the interests and needs of local residents and resource developers.

# Objective 1.4: Greater community awareness of the benefits of energy, mineral and petroleum resource opportunities.

- Increased awareness of these benefits is one element that contributes to the social licence for industry to move forward. The energy and mining industries contribute significant revenues to government which are used to fund public services such as healthcare and education.
- Limited time and resources are challenges to raising community awareness. The Ministry strives to reach as many communities and First Nations as it can with available staff resources.



Wood residue power plant in Williams Lake, B.C.

- Develop and implement focused promotional programs to inform British Columbians about opportunities in the energy, mining and petroleum industries.
- Provide information to, and foster engagement with, community stakeholders, industry and other government partners about the benefits of environmentally responsible resource development and opportunities for energy conservation.
- Increase provincial awareness of opportunities by working cooperatively with other ministries and partners to engage school students in a discussion of responsible energy, mineral and petroleum resource development.
- Pursue financial and cooperative renewable energy partnerships with industry, such as those with Independent Power Producers, communities and other levels of government.
- Negotiate revenue sharing agreements with First Nations on new mining projects.
- Continue to implement the Energy Council working group with the First Nations Leadership Council to raise awareness and enhance understanding of energy and climate issues in First Nations communities.

• Build community and industry relationships by developing offshore oil and gas benefits sharing models and options.

# Goal 2: Safe and environmentally responsible energy, mineral and petroleum resource development and use.

# Objective 2.1: Operational practices at work sites that protect the public, workers' safety and the environment.

- Operations at mines, quarries, and gas or oil extraction or distribution sites can be hazardous, and can have an impact on the environment if not properly managed. Operational practices that safeguard the public, industry employees and the environment contribute to safe and environmentally responsible development and use of these resources.
- The threat of accidents, leakages and spills is always present, so ongoing policy development, inspections, education and training are necessary to ensure these are minimized.

- In cooperation with industry, enhance collaboration to improve environmental and safety compliance through inspections and audits.
- Explore further opportunities to expand environmentally responsible energy, mineral and petroleum resource development, in partnership with industry, communities, First Nations, environmental groups, universities, colleges and other government organizations.
- Meet with mine managers to ensure mine health and safety standards and practices are applied consistently.
- Hold an annual mine rescue competition in collaboration with the Mining Association of British Columbia to recognize and improve emergency response capability.
- In collaboration with the Ministry of Education, Ministry of Advanced Education and Labour Market Development, and the B.C. Industry Training Authority, support education and training initiatives for the enhancement of a skilled mineral exploration and mining workforce, such as the Canada-B.C. Labour Market Agreement to support the creation of a productive, mobile and inclusive workforce.

#### Performance Measure 4: Short term injury rate at B.C. mines.

Performance Measure	2008/09	2009/10	2010/11	2011/12
	Forecast	Target	Target	Target
Short term injury rate at B.C. Mines <sup>1</sup>	2.1	2.0	1.9	1.8

¹ Data Source: Ministry of Energy, Mines and Petroleum Resources Staff analysis of WorkSafeBC data for previous years. The forecast and targets are calculated by dividing the number of accident claims (as reported by WorkSafeBC) by 100 person years to result in the rate of short term injury per year. A person year is the amount of time an employee works in one year — using 2,000 hours as the average number of hours. Forecasts and targets are expressed by calendar year and are based on the calculation of a 10 year rolling average. The measure captures open pit coal and metal mines, quarries and underground mines. As a result, the measure and targets are an accurate representation of the accident rate for the sector.

#### Discussion

The targets reflect the anticipated average number of accident claims per year at B.C. mines, including open pit coal and metal mines, quarries and underground mines per 100 person years. B.C.'s mining workforce is constantly evolving and is expected to have a greater percentage of workers who are new to mining operations in the next decade. Enhanced health and safety training and inspections are required to ensure that mining remains one of B.C.'s safest heavy industries.



Ruskin Dam, Maple Ridge, B.C.

# Objective 2.2: Increased energy conservation and use of alternative, clean energy and efficient technologies.

• Retrofitting or constructing new energy efficient buildings, and promoting the deployment of alternative energy technology, contributes to environmentally responsible energy development and use. Government plays a key role in providing information to the public about practical conservation initiatives, establishing new standards through the BC Building Code and *Energy Efficiency Act* and encouraging the private sector to develop alternative energy sources.

- The up-front expense of retrofitting existing homes and buildings to conserve energy, as well as the expense of material and equipment for energy efficient new buildings, will be fully recovered over time through lower energy bills.
- British Columbia has a number of alternative energy options such as solar, tidal, biomass, wave, geothermal and wind power. These sources of alternative energy are renewable and can complement existing electricity generating facilities and heating and transportation fuels.

#### **Strategies**

- Support energy utilities with the implementation of cost effective demand side management measures.
- Work with the Climate Action Secretariat, other government ministries and agencies, Crown Corporations, communities, electricity producers and utilities across British Columbia to implement a coordinated and focused approach to energy conservation and efficiency measures and support deployment of alternative energy options to meet the province's energy needs.
- Continue to support increased energy efficiency in homes and buildings through the LiveSmartBC: Efficiency Incentive Program, including rebates for home energy assessments and energy efficiency retrofits.
- Implement the 2008 Energy Efficient Buildings Strategy: More Action, Less Energy which has among the most aggressive energy efficiency targets in Canada.
- Introduce a new, industrial energy efficiency strategy and program.
- Ensure the procurement of clean and renewable electricity continues to account for at least 90 per cent of total generation.
- Continue to advance the development of a hydrogen economy by promoting the hydrogen fuel cell industry and other technology that supports alternative energy.
- Continue to implement the BC Bioenergy Strategy to take advantage of B.C.'s abundant sources of beetle-killed timber, wood wastes and agricultural residues.
- Work with the Ministry of Finance to develop proposals to broaden provincial sales tax exemptions on energy efficient equipment and materials.
- Improve energy efficiency in

#### Green Choices through LiveSmart BC

LiveSmart BC helps British Columbians make green choices that save money at home, at work and on the road. During a LiveSmart BC Home Energy Assessment, a certified energy advisor will show you areas in your home that you can upgrade so they are more energy efficient. LiveSmart BC ambassadors will be visiting malls and community centres throughout British Columbia, providing local residents with information about energy-efficient choices that will save hundreds and even thousands of dollars.

homes, buildings and industry by implementing new standards under the *Energy Efficiency Act* to increase the minimum performance levels for manufactured building components and equipment.

# Performance Measure 5: Electricity savings achieved through conservation policies, programs and regulations.

Performance Measure	2008/09	2009/10	2010/11	2011/12
	Forecast	Target	Target	Target
Incremental electricity savings achieved each year through utility and provincial conservation policies, programs and regulations <sup>1</sup>	462 GWh	851 GWh	777 GWh	2,280 GWh

**Data Source:** BC Hydro and Fortis BC, Natural Resources Canada, Ministry of Energy, Mines and Petroleum Resources. Estimates provided by calendar year.

#### Discussion

This measure is driven by policy actions one through nine of the BC Energy Plan. Targets represent electricity savings from the LiveSmart BC: Efficiency Incentive Program, regulated standards under the *Energy Efficiency Act*, BC Hydro's PowerSmart and Fortis BC's PowerSense demand side management programs and conservation/stepped rate participants. Both of these utilities design and direct their energy efficiency programs to three main market sectors — residential, commercial and industrial.

# Goal 3: The Ministry, communities, First Nations and industry working cooperatively for the responsible development and use of British Columbia's energy, mineral and petroleum resources.

# Objective 3.1: A strengthened commitment to environmental and social responsibility through increased, appropriate and timely engagement of communities, First Nations and stakeholders in resource development.

• If First Nations, local governments, landowners and non-governmental organizations are informed and participate in responsible resource development, they will have an opportunity to help identify and contribute constructively to the resolution of issues and become more aware of

<sup>1</sup> Savings from new initiatives in the specific year, not including recurring annual savings from initiatives in previous years.

the benefits that resource development can provide to a community, such as regular employment for citizens.

 Allocating sufficient time and resources to engage with communities and stakeholders to discuss resource development policies, regulations and opportunities is imperative. Communities' and stakeholders' time and resources are also limited. Communities and landowners require information to understand that resource extraction can take place in an environmentally friendly manner.



Drill rig at Cutbank Ridge, Northeast B.C.

#### **Strategies**

- Foster working relationships between industry, local communities, First Nations and landowners by clarifying and simplifying resource development and management processes, enhancing dispute resolution methods, and offering more support and information.
- Facilitate and support collaboration on energy developments between industry and First Nations, and encourage and assist industry to engage First Nations early in development proposals.
- Examine tenure policies and legislation, and develop regulations to address areas of new opportunity.
- Work with First Nations, industry and communities to manage the development of the Horn River Basin shale gas play in a manner that establishes leading North American standards for unconventional gas resources.

# Objective 3.2: Increased opportunity for First Nations to share in the benefits of responsible resource development and use.

• Some First Nations may have limited staffing and financial resources to actively engage in resource development opportunities in their traditional territories. The Ministry can assist Aboriginal communities in being better informed about resource development opportunities by encouraging early involvement in the development process.

- It is important to advise First Nations on how resource opportunities are developed and regulated in an environmentally responsible manner.
- Information and awareness of resource development opportunities assist First Nations in determining how they can become involved in joint ventures, partnerships or other activities to address employment and economic development within their community.

#### **Strategies**

- Work with First Nations on opportunities to participate in energy, mining and petroleum development.
- Facilitate and strengthen partnerships between First Nations, industry and government to fund skills, employment and business development opportunities.
- Negotiate revenue sharing agreements with First Nations on new mining projects.
- Facilitate involvement by local First Nations in oil and gas pipelines through the proposed Northern Energy Corridor between Kitimat and Prince George.

#### Performance Measure 6: Working arrangements with First Nations.

Performance Measure	2008/09	2009/10	2010/11	2011/12
	Forecast	Target	Target	Target
Number of new or renegotiated working arrangements with First Nations related to energy, mineral and petroleum resource development.	65	75	80	85

Data Source: Ministry of Energy, Mines and Petroleum Resources.

#### Discussion

The Ministry's new and renewed working arrangements include a broad range of initiatives. These arrangements can include Ministry/First Nations information sharing working groups (e.g., Ktunaxa Nation Council), Long Term Oil and Gas Agreements (e.g., Blueberry River First Nations), Mining and Mineral Accord Agreements (e.g. Tahltan Territory Restoration Plan), and Energy Initiatives (e.g. BC/First Nations Leadership Council Energy Working Group). These arrangements are either newly signed with the Ministry, or are existing arrangements that have been renewed. The benefits of these arrangements to Aboriginal communities include information sharing, defined steps for the fulfillment of consultation obligations, support for community capacity, training in Ministry processes and systems related to mineral and oil and gas development, and opportunities to provide input on policy development.

# Objective 3.3: Enhanced public awareness of resource opportunities and the benefits of their responsible development and use.

- Increased public awareness of the employment and business opportunities resulting from responsible resource development can enhance cooperation among industry, First Nations, communities and the Ministry.
- The Ministry seeks to reach all appropriate stakeholders and the broader public in key regions, while making the most efficient use of Ministry resources by implementing strategic information and engagement efforts. For example, the Northeast Energy and Mines Advisory Committee is an effective, strategic community engagement forum.

- Continue to collaborate with other ministries, agencies and Crown corporations to provide information and engage communities and First Nations in exploration and development of resources.
- Continue support for the annual Mining and Sustainability Award (implemented in 2006) to recognize the achievements of communities, industry, organizations and individuals.
- Continue to implement the Northeast Energy and Mines Advisory Committee and a public information strategy on energy and mining in northeast British Columbia, which is the province's major oil and gas producing area, and the location of significant coal mining and mineral resources as well as wind power opportunities.

## **Resource Summary**

Core Business Area	2008/09 Restated Estimates <sup>1</sup>	2009/10 Estimates	2010/11 Plan	2011/12 Plan
	Operating Expe	enses (\$000)		
Oil and Gas	12,450	12,064	11,638	11,276
Titles	5,340	4,839	4,693	4,497
Mining and Minerals	14,037	11,905	11,400	10,808
Electricity and Alternative Energy	26,486	30,998	9,366	15,810
Marketing, Aboriginal and Community Relations	5,641	5,367	5,165	4,946
Executive and Support Services	6,758	5,975	6,058	5,994
Contracts and Funding Arrangements	2,500	1,875	1,875	1,875
Total	73,212	73,023	50,195	55,206
	Full-time Equivalen	ts (Direct FTEs)		
Oil and Gas	72	74	75	75
Titles	45	45	45	45
Mining and Minerals	117	112	112	112
Electricity and Alternative Energy	35	36	36	36
Marketing, Aboriginal and Community Relations	41	46	46	46
Executive and Support Services	28	28	28	28
Total	338	341	342	342

Core Business Area	2008/09 Restated Estimates <sup>1</sup>	2009/10 2010/11 Estimates Plan		2011/12 Plan
Ministry Ca	apital Expenditures (Cons	colidated Revenue Fund)	(\$000)	
Oil and Gas	383	21,000	86,000	64,000
Titles	54			
Mining and Minerals	813			
Electricity and Alternative Energy	7			
Marketing, Aboriginal and Community Relations				
Executive and Support Services	178	273	219	397
Total	1,435	21,273	86,219	64,397
Other Financing Transactions (\$000)				
Oil and Gas Commission Act				
Receipts	29,000	32,901	34,220	35,597
Disbursements	(29,000)	(32,901)	(34,220)	(35,597)
Total Net Cash Source (Requirements)	0,000	0,000	0,000	0,000

<sup>&</sup>lt;sup>1</sup>. These amounts have been restated, for comparative purposes only, to be consistent with the presentation of the 2009/10 Estimates. Schedule A of the 2009/10 Estimates presents a detailed reconciliation.

### **Ministry Contact Information**

#### **Deputy Minister's Office:**

Eighth Floor , 1810 Blanshard Street PO Box 9319 Stn Prov Govt Victoria V8W 9N3

Phone: 250 952-0241

Website: www.gov.bc.ca/empr

#### **Regional Offices:**

#### **Northwest:**

PO Box 5000 3726 Alfred Avenue

Smithers V0J 2N0

Phone: 250 847-7383

#### **Central/Northeast:**

350 - 1011 – 4th Avenue Prince George V2L 3H9

Phone: 250 565-4240

#### **South Central:**

160 Oriole Road

Kamloops V2C 4N7

Phone: 250 371-6069

#### **Southeast:**

Second Floor, 42 – 8th Avenue South

Cranbrook V1C 2K3

Phone: 250 426-1557

#### **Southwest:**

PO Box 9320 Stn Prov Govt Suite 340 – 1675 Douglas Street

Victoria V8W 9N3

Phone: 250 952-0492

## **Hyperlinks to Additional Information**

A list of Legislation Administered by the Ministry can be found at:

www.em.gov.bc.ca/legislation

A list of Crowns, Agencies, Boards and Commissions reporting to the Minister of Energy, Mines and Petroleum Resources can be found at: www.em.gov.bc.ca/crowns

The BC Energy Plan can be found at: www.energyplan.gov.bc.ca/

The BC Mining Plan can be found at: www.gov.bc.ca/empr/popt/mining plan.htm