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Ministry of Energy, Mines and Petroleum Resources

2008/09-2010/11 Service Plan

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Published by the Ministry of Energy, Mines and Petroleum Resources



Message from the Minister and Accountability Statement

Our abundant natural resources play a key role in the economic and social well-being of every British Columbian providing us with revenue that helps pay for many vital services like health care and education. As stewards of this Province, we have a responsibility to manage our natural resources in a

way that ensures they meet our needs today and the needs of our children and grandchildren.

The BC Energy Plan: A Vision for Clean Energy Leadership provides clear direction for clean energy leadership and strong, achievable targets for energy conservation. In the coming year, the Ministry of Energy, Mines and Petroleum Resources will continue to implement the Energy Plan, creating opportunities in the energy sector that will benefit all British Columbians.

The oil and gas industry in British Columbia is thriving and activity levels remain robust. This sector is the largest resource contributor to provincial revenue. The Province realized a 2007 year-end total of over \$1 billion from the sale of oil and gas rights, shattering the previous record of \$647 million set in 2003. The overall average price for 2007 of \$1,758 per hectare also breaks the 2005 record of \$922 per hectare. This bears witness to industry's commitment to our resource potential and speaks to our success in attracting new investment through our innovative infrastructure and royalty programs.

The Ministry will continue to provide targeted oil and gas royalty programs. In particular, the new Net Profit Royalty Program will deliver on the BC Energy Plan's commitment to create a vibrant, competitive oil and gas sector in British Columbia by encouraging the development of oil and gas resources that have higher costs and greater technical complexity.

The resurgence of the mining industry reflects our ability to implement strategies that streamline the regulatory process and attract investment to B.C. Our trade missions to the Asia-Pacific region and resulting exploration activities will further fuel investor confidence, increase revenues and create social and economic benefits for all British Columbians.

B.C. is emerging as a global leader in sustainable development of environmental technologies and innovative energy management. With our abundant renewable energy resources, ground-breaking research, strong, collaborative leadership and competitive business climate, B.C. is a world-class locale for the production of clean, green technologies.

In the year ahead, projects to be funded from the \$25 million Innovative Clean Energy Fund will aid the development of new energy technology solutions including small hydro, biomass, wind, tidal, solar, hydrogen and geothermal energy. Alternative energy sources and ambitious BC Energy Plan conservation targets will help us meet our commitment to electricity self-sufficiency by 2016.

The Ministry of Energy, Mines and Petroleum Resources 2008/09–2010/11 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, 2008 have been considered in preparing the plan and I am accountable for achieving the specific objectives in the plan.

Honourable Richard Neufeld

Meefeld

Minister of Energy, Mines and Petroleum Resources

February 8, 2008



Message from the Minister of State and Accountability Statement

B.C. is one of the richest mineral regions in the world. With record levels of exploration and development, mineral exploration investment reached \$265 million in 2006, a remarkable increase of more than 600 per cent since 2001.

The 2005 BC Mining Plan, now almost fully implemented, has helped achieve our vision for a thriving, globally competitive, safe and environmentally responsible exploration and mining industry. The Ministry of Energy, Mines and Petroleum Resources continues to support the mining industry through a rigorous permitting process. The results are evident. We are working with communities, industry, First Nations and environmental organizations to develop mineral resources in a responsible, sustainable manner.

The resurgence of the mining industry also reflects our ability to implement strategies to streamline the regulatory process and to attract investment to B.C. Geoscience BC's QUEST program, the largest public geoscience project in the history of the province, will help unlock the province's mineral potential and stimulate new economic activity by surveying over 40,000 square kilometres of Central B.C.'s mountain pine beetle infestation area.

Government policies and commodity prices are fuelling investor confidence, increasing revenues and creating jobs to develop these rich resources. The Ministry intends to continue its fall trade missions to the Asia-Pacific region and vigorous promotion of our mineral resources internationally. Exploration activities will further investment, increase revenues and create social and economic benefits for all British Columbians.

We will continue to see the benefits of initiatives like the Reclamation and Prospecting Program at the School of Exploration and Mining in Smithers, which provides students from rural First Nations with the knowledge and skills they need to find entry-level employment in the mineral exploration and mining industry. With an estimated 7,000 new mining jobs available by 2010, we are meeting one of the greatest challenges facing the mining industry today by attracting young people to the industry, and preparing them for success.

Work will continue to ensure the highest standards of worker safety are met, through on-site mine inspections, safety audits, committees, training, competitions and awards. The mining industry remains one of the safest heavy industries in B.C.

We are proud to support the mining industry, and will continue to work to increase investment and exploration in mining, creating jobs and economic benefits for all British Columbians.

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 2008/09:

- Support the continued implementation of the Asia Pacific Initiative with respect to mining in order to:
 - Encourage investment in B.C. exploration and mining projects; and
 - Promote business with the mining services sector (engineering, reclamation, health and safety, transportation, financial and legal consulting services).
- Identify opportunities for streamlining regulations and reducing regulatory overlap between various levels of government in order to reduce the regulatory burden on persons conducting mining exploration and development in B.C.
- Develop and commence implementation of a plan for B.C.'s aggregate industry that includes matters relating to:
 - Aiding the sustainable and responsible management of the resource;
 - Enhancing the safety of workers in this industry;
 - Aiding the effective and streamlined management of this industry; and
 - Enhancing opportunities for the aggregate industry.
- Develop initiatives in order to enhance cross-ministry and cross-agency co-operation in the
 processes established for consultation with and accommodation of First Nations in matters
 that relate to mining.

These

Honourable Kevin Krueger Minister of State for Mining Ministry of Energy, Mines and Petroleum Resources

February 8, 2008

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Purpose of the Ministry

The Ministry of Energy, Mines and Petroleum Resources is tasked with managing 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.

As commodity prices for natural gas, oil, electricity and minerals remain strong, British Columbians can expect to see continued benefits and resource development opportunities. This Service Plan outlines the Ministry's strategies to increase 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 is another important part of the Ministry's mandate, and it 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 25 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. British Columbians are witnessing increased jobs, business opportunities and government revenue from the production and sale of energy, mineral and petroleum resource commodities.

Electricity prices in British Columbia are among the lowest in North America, thanks to continued public ownership of British Columbia'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 BC Utilities Commission's regulation of domestic rates.

The estimated onshore and offshore oil and gas resources of British Columbia are substantial. Onshore oil and gas activity levels remain robust in the British Columbia portion of the Western Canadian Sedimentary Basin. However, growth in exploration activities in some areas is expected to ease in 2008, as areas with known resource potential are secured through Crown sales.

The resurgence of the mining industry in the Province reflects the significant policy improvements made by British Columbia since 2001. Government's focus continues to be on streamlining business in the province, without diminishing the high level of environmental stewardship as well as public and worker safety expected by British Columbians. Stronger mineral prices, largely driven by the emergence of robust Asian economies, provide excellent opportunities for mining in B.C., provided the Province remains competitive.

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 financial markets and commodity prices can have significant impacts on investment levels in the province. Canada has benefited from demand for copper, gold and oil from the U.S. and increasing demand from emerging economies such as India and China. The potential slowdown in the U.S. economy and the high Canadian dollar may reduce U.S. demand for Canadian energy 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 re-emergence 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 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.

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 also a potential new source of investment funds that can be attracted to British Columbia. The Ministry is fully engaged 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. 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. B.C.'s opportunity to supply minerals to the world is unprecedented as mineral prices and demand remain strong. As one of the richest mineral regions in the world, B.C. continues 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 community benefits and increase investment certainty for industry.



Rutherford Creek, Pemberton, B.C.

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 enhance the Oil and Gas Environmental Stewardship Program ensuring sound environmental, land and resource management, maintain effective, 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. Key activities include the Oil and Gas Regulatory Improvement Initiative to create a more effective and efficient results-based oil and gas regulatory framework, enhancement of the oil and gas environmental stewardship program and further implementation of the BC Mining Plan, which commits to developing faster and simpler approaches to multi-agency approvals of exploration and mining.

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 BC Energy Plan

The BC Energy Plan focuses on efficiency and conservation to manage British Columbia's energy use; the use of innovative technology; encourages actions aimed at balanced and responsible development of conventional, new and alternative energy sources; ensures thriving, competitive, safe, and environmentally responsible energy development; ensures adequate domestic electricity supply, returns BC Hydro to a net export position, and maximizes the "value added" potential for energy in British Columbia translating into increased investment, revenue and job creation. The Energy Plan focuses on the following areas: electricity, alternative energy, oil and gas, transportation; and skills development and training.

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

- 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 can also impact investment levels.

- Attract investment by working 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 high 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 and information, and investing in infrastructure.



Spences Bridge, B.C.

Performance Measures 1-3: Annual investment in energy and mining sectors

Performance Measures	2007/08 Forecast	2008/09 Target	2009/10 Target	2010/11 Target
Annual Investment in Oil and Gas Exploration and Development. ¹	\$5.2 Billion	\$4.7 Billion	\$5.0 Billion	\$5.1 Billion
Annual Investment in Electricity Facilities. ²	\$1.5 Billion	\$1.9 Billion	\$2.7 Billion	\$2.7 Billion
Annual Investment in Mineral Exploration and Mines. ³	\$0.830 Billion	\$0.720 Billion	\$0.700 Billion	\$0.680 Billion

¹ **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 is comprised of industry investment in geophysical and geological surveys, exploratory and production wells, pipelines and processing plants. Used domestically for heating and cooking purposes, natural gas also has a wide range of commercial and industrial uses. Increased investment is an indicator of increased production which expands the supply of gas to residential, commercial and industrial consumers. In addition, oil and gas activities provide 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 healthcare.

Annual investment in electricity generation and transmission facilities tracks total investment in the electricity sector in British Columbia, including improvement and replacement to existing infrastructure by the major provincial electrical utilities — BC Hydro, BC Transmission Corporation and Fortis BC — and Independent Power Producers which supply electricity to the utilities. For estimation purposes, total Independent Power Producers' capital expenditures on a project will be attributed to the fiscal year of commercial operation, and be based on a weighted average of capital costs per megawatt of capacity. Capital expenditures in the energy sector help ensure a safe and reliable electricity system to meet household, commercial and industrial needs. The electricity sector employs many British Columbians, and the dividends from electricity Crown corporations, and tax, water rental and other revenues from all electricity market participants contribute to important social programs.

Annual investment in mineral exploration and mines combines exploration expenditure and investment in new and existing mines. Annual mineral exploration expenditures provide jobs for British Columbians throughout the province. If commercially viable deposits are discovered, new

² **Source:** Data analysis by Ministry of Energy, Mines and Petroleum Resources, BC Public Utilities. Estimates provided by fiscal year.

³ **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.

mines may be opened, and exploration dollars are converted into operating mines, with more long term employment opportunities created for rural communities. Capital investment in new or existing mines also provides jobs and builds provincial infrastructure. Mineral taxes and 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 including regional and global demand, interest rates and availability.

Strategies

- Ensure self-sufficiency to meet electricity needs, including extra energy or "reliability insurance", through innovative and 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.

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.

- Review regulatory issues in cooperation with other levels of government to ensure
 British Columbia remains competitive, and monitor the provincial regulatory environment
 for global competitiveness.
- Continue to identify opportunities for appropriate regulatory reductions while ensuring the integrity of environmental, health and safety standards.

- Develop and implement a faster and simplified approach to multi-agency exploration and mining approvals, with the Ministry as the single coordinating agency.
- Expand and improve online service delivery by developing and implementing electronic payment and permitting options. For example, E-bidding as an option for the monthly Crown sales of petroleum and natural gas rights is being reviewed and anticipated to go forward in 2008/09.
- Implement new, targeted royalty and incentive programs to stimulate investment in
 environmental measures and development of oil and gas resource opportunities, and
 review existing programs to ensure that they are still current and relevant.
- Review *Utilities Commission Act* to ensure that utility regulation is consistent with Government's energy and climate change policies and priorities.
- Lead the Province's oversight of the Columbia River Treaty, including Treaty obligations and benefits and all matters that may impact British Columbia's Downstream Power Benefit Entitlement under the Treaty, and manage the agreement with Powerex for the sale of the Downstream Benefit Entitlement.

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.



Princeton, B.C.

• Time and resources are the only real challenges related to raising awareness. The Ministry strives to reach as many communities and First Nations as it can with available staff resources.

- Develop and implement focused promotional programs to inform British Columbians about opportunities in the energy, mining, and petroleum industries.
- Build community and industry relationships by engaging in discussion about the benefits
 and opportunities of resource development, and developing an offshore oil and gas benefits
 sharing model.

- 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 energy partnerships with industry, such as those developed with Independent Power Producers, communities and other levels of government.

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 dangerous
 to workers and the public, and have an impact on the environment if not properly managed.
 Operational practices that safeguard the public, industry employees and the environment will
 contribute to safe and environmentally responsible development and use of these resources.
- The threat of accidents, leakages and spills is always present, so policy development, inspections, education and training are always necessary to ensure these are minimized.

- Develop leading mine health and safety standards and practices in cooperation with labour and industry groups.
- Improve safety compliance through inspections and audits.
- Expand environmentally responsible energy, mineral and petroleum resource development, in partnership with individuals, industry, environmental groups, universities, colleges and other government organizations.
- Improve environmental compliance through inspections and audits at development sites.
- Encourage the development and adoption of clean and renewable technology through the Innovative Clean Energy Fund.

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

Performance	2007/08	2008/09	2009/10	2010/11
Measure	Forecast ²	Target	Target	Target
Short term injury rate at B.C. Mines. ¹	2.2	2.1	2.0	1.8

¹ Source: Ministry of Energy, Mines and Petroleum Resources Staff analysis of WorkSafeBC data for previous years.

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. With several new mines opening in the province, the mining workforce will be larger and have a greater percentage of workers who are new to mining operations. Enhanced health and safety training and inspections will be required to maintain mining as one of B.C.'s safest heavy industries.

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

- Reducing energy use by retrofitting or constructing new energy efficient buildings as well as
 the deployment of alternative energy technology contribute to environmentally responsible
 energy development. Government has a key role in providing information to the public about
 practical conservation initiatives, and encouraging the private sector to develop alternative
 energy sources.
- The up-front expense of retrofitting older buildings to make them conserve energy, as well as the cost of material and equipment to make new buildings more energy efficient will be fully recovered over time through lower energy bills.
- British Columbia has a number of alternative energy options such as solar, tidal, biomass and wind power. These sources of alternative energy are renewable and can complement existing electricity-generating facilities.

- Ensure an active and co-ordinated focus on energy conservation and efficiency by government, communities, electricity producers and utilities across British Columbia.
- Increase the participation of local governments in the Community Action on Energy and Emissions Program and expand the First Nation and Remote Community Clean Energy Program.

² 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 ten year rolling average. The use of a ten year rolling average smooths out statistical anomalies caused by significant single events. 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.

- Encourage the procurement of electricity from clean and renewable sources.
- Advance the development of a hydrogen economy by promoting the hydrogen fuel cells industry and other technology that supports alternative energy.
- Implement the BC Bioenergy Strategy.



Ruskin Dam, Maple Ridge, B.C.

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

Performance	2007/08	2008/09	2009/10	2010/11
Measures	Forecast	Target	Target	Target
Incremental electricity savings achieved each year through utility and provincial conservation policies, programs and regulations. ¹	229 GWh	423 GWh	571 GWh	719 GWh

¹ **Source:** BC Hydro, Fortis BC, Ministry of Energy, Mines and Petroleum Resources Survey.

Discussion

This measure is driven by policy actions one through nine of the BC Energy Plan. Targets represent electricity savings from 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. Savings are also achieved through energy performance codes and standards established for buildings and energy using devices.

Kitasoo-Xaixais First Nations Build First Remote Community EnerGuide 80 Homes and Develop Run-of-River Hydropower Project

With support from the BC First Nation and Remote Community Clean Energy Program, the Kitasoo Band Council designed and built seven new EnerGuide 80 homes, performed EnerGuide audits on 20 existing homes and is increasing the capacity of the hydropower plant to displace diesel generation. To meet the EnerGuide 80 standard, the seven new homes incorporated Energy Star windows, a high efficiency oil hot water heater with a heat recovery ventilator to support both space heating and hot water demands, air sealing and increased wall and attic insulation. This remote community is also increasing the scale of their hydropower plant from 550 kW to 1700 kW to displace diesel generation. The project is expected to be operational in 2008.

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 the benefits that resource development can provide to a community, such as regular
 employment for citizens.
- The principal challenges associated with engagement are sufficient time and resources to
 contact all appropriate communities to discuss opportunities. Communities' and stakeholders'
 time as well as resources are also limited. Not all communities and landowners are convinced
 that resource extraction can take place in an environmentally friendly manner.

- Improve working relationships between industry, local communities and landowners by clarifying and simplifying resource development and management processes, enhancing dispute resolution methods, and offering more support and information.
- Support First Nations in providing cross cultural training to agencies and industry.
- Assist industry with engaging First Nations in development proposals at an early stage.
- Provide information about local development activities to local governments, education and health service providers to inform the development of social infrastructure.
- Examine tenure policies and develop guidelines to address areas that require special consideration.



Brilliant Dam, Castlegar, B.C.

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

- First Nations have limited staffing and financial resources to be fully aware of all resource
 development opportunities in their traditional territories. By engaging First Nations early and
 often, consistent with the spirit of the New Relationship, the Ministry can assist aboriginal
 communities in being better informed about resource development opportunities.
- If First Nations have a better awareness of resource development opportunities and how
 these activities are regulated in an environmentally responsible manner, they may be more
 receptive to such developments. With information and awareness of resource development
 opportunities, First Nations will also be in a better position to consider how they can become
 involved in joint ventures, partnerships or other activities to address employment and
 economic development aspirations in their community.

Strategies

- Engage First Nations to identify opportunities to participate in and benefit from energy, mining and petroleum development.
- Develop partnerships between First Nations, industry and government to fund skills, employment and business development opportunities.
- Negotiate First Nations Agreements which engage First Nations from pre-tenure through to reclamation. Involve First Nations and coastal communities in the development of an offshore oil and gas regulatory and benefit sharing model, and a remote community clean energy program.
- opportunities for the participation of 17 First Nations in oil and gas pipelines through the proposed Energy Trade Corridor between Kitimat and Prince George.

Hupacasath First Nation Builds Energy Efficient Homes and Develops Run-of-River Hydropower Project with MEMPR Support

With support from the BC First Nation and Remote Community Clean Energy Program, the Hupacasath First Nation was able to further implement their Community Energy Plan by building community-designed, energy efficient homes and developing a second run-of-river hydropower project. Six new social home units were built that included energy efficiency components such as Energy Star windows, energy efficient appliances and in-floor radiant heating. Each of the two, three-unit buildings contains one ground floor elder's apartment and two two-storey single family dwellings. The Hupacasath First Nation is also developing the 6.5 MW Corrigan Creek run-of-river hydropower project that will provide electricity to the BC Hydro grid. The project is expected to be operational in 2008.

Performance Measure 6: Working arrangements with First Nations

Performance	2007/08	2008/09	2009/10	2010/11
Measures	Forecast	Target	Target	Target
Number of First Nations with new or renegotiated working arrangements on energy, mineral and petroleum resource development. ¹	55	65	75	80

¹ **Source:** Ministry of Energy, Mines and Petroleum Resources.

Discussion

The Ministry's new or renewed working arrangements include a broad range of initiatives. These arrangements can include Ministry/First Nations information sharing working groups (e.g., Hamatla Treaty Society), Long Term Oil and Gas Agreements (e.g., Blueberry River First Nations), and Mining and Mineral Protocol Agreements (e.g., Upper Similkameen Indian Band). These arrangements are either newly signed with the Ministry, or are existing arrangements that have been renewed. The benefits to aboriginal communities from these arrangements include information sharing, defined steps for the fulfilment 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 from responsible resource development can enhance cooperation among industry, First Nations, communities and the Ministry.
- The Ministry seeks to reach all the 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 North East Energy and Mines Advisory
 Committee is an effective, strategic community engagement forum.

- Develop a targeted regional information and engagement mechanism to address energy and mines related topics on behalf of the Ministry and in collaboration with other provincial ministries, agencies and Crown corporations.
- Continue the annual Sustainable Mining Award (implemented 2006) to recognize the achievements of communities, industry and organizations.

	7 87
	Implement a public information strategy on energy and mining for north east
·	Implement a public information strategy on energy and mining for north east
	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. Review and improve public information currently provided by the Ministry
	to make it more user-friendly.
	to make it more door mending.

Report on Resources

Resource Summary Table

Core Business Areas	2007/08 Restated Estimates ¹	2008/09 Estimates	2009/10 Plan	2010/11 Plan
	Operating Expens	es (\$000)		
Oil and Gas	12,468	12,073	12,174	12,174
Titles and Offshore	5,797	6,202	6,270	6,270
Mining and Minerals	14,180	14,037	14,154	14,154
Electricity and Alternative Energy	2,533	26,486	31,008	30,758
Innovative Clean Energy (ICE) Fund Special Account 2	0	17,400	0	0
Marketing, Aboriginal and Community Relations	5,053	5,156	5,214	5,214
Executive and Support Services	6,197	6,740	6,789	6,809
Contracts and Funding Arrangements	33,560	2,500	2,500	2,500
Total	79,788	90,594	78,109	77,879
F	ull-time Equivalents	(Direct FTEs)		
Oil and Gas	68	69	69	69
Titles and Offshore	45	52	52	52
Mining and Minerals	117	117	117	117
Electricity and Alternative Energy	23	35	35	35
Innovative Clean Energy (ICE) Fund Special Account	0	4	0	0
Marketing, Aboriginal and Community Relations	36	37	37	37
Executive and Support Services	26	28	28	28
Total	315	342	338	338

¹ These amounts have been restated, for comparative pruposes only, to be consistent with the presentation of the upcoming 2008/09 *Estimates*. Schedule A of the 2008/09 *Estimates* will present a detailed reconciliation.

² The Innovative Clean Energy Fund was established on September 1, 2007. Expenses of the fund totalled \$0.2 million in 2007/08. At the end of 2008/09 the ICE Fund will carry a balance of \$7.4 million to be spent in subsequent years.

Core Business Areas	2007/08 Restated Estimates ¹	2008/09 Estimates	2009/10 Plan	2010/11 Plan
Ministry Capital Expend	litures (Energy, Mine	es and Petroleum Re	sources) (\$000)	
Oil and Gas	383	383	383	383
Titles and Offshore	54	54	54	54
Mining and Minerals	813	813	813	813
Electricity and Alternative Energy	7	7	7	7
Innovative Clean Energy (ICE) Fund Special Account	0	0	0	0
Marketing, Aboriginal and Community Relations	0	0	0	0
Executive and Support Services	178	178	178	178
Total	1,435	1,435	1,435	1,435
Ot	her Financing Trans	actions (\$000)		
Oil and Gas Commission Act				
Receipts	31,393	29,000	29,000	30,000
Disbursements	(31,393)	(29,000)	(29,000)	(30,000)
Total Net Cash Source (Requirements)	0	0	0	0

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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