

Ministry of
Energy, Mines and Petroleum Resources

2008/09
Annual Service Plan Report



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Message from the Minister and Accountability Statement



It has been both an exciting and challenging year in British Columbia. The global economic downturn and the cyclical nature of the resource industry have created concerns that did not exist a year ago. However, B.C. is resilient, and we are confident that by continuing on the course set out in the BC Energy Plan and BC Mining Plan, we are laying the foundation necessary to keep B.C. strong.

Since 2001 the oil and gas industry has experienced unprecedented growth, with record petroleum and natural gas rights sales in fiscal 2008/09 generating \$2.4 billion in revenues for British Columbia.

We will continue to introduce programs to attract new investment into northeastern B.C. and its rich natural gas plays, including incentives to companies that drill outside the traditional winter drilling season, new tenure issuance requirements for geothermal and other unconventional resources, and a commitment to maintain current royalty structures.

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. And the Province has also moved closer to its goal of electricity self-sufficiency by 2016, which is creating jobs and opportunities for British Columbians.

BC Hydro's Clean Power Call encourages the development of clean or renewable energy alternatives from larger projects using proven technologies such as hydro and wind. The Clean Power Call complements the Standing Offer Program for smaller clean projects that generate up to 10 megawatts of power, and the two phase Bioenergy Call for Power.

We continue to explore alternative sources of clean energy, including wind, biomass, gasification, run-of-river, tidal, hydrogen, and solar. Independent power projects are providing essential jobs in rural B.C., bringing more than \$4 billion in investment and economic benefits to the regions.

We are the first province in Canada to include resource revenue sharing with First Nations on new and expanded 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.

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.

Ministry of Energy, Mines and Petroleum Resources

The *Ministry of Energy, Mines and Petroleum Resources 2008/09 Annual Service Plan Report* compares the actual results to the expected results identified in the Ministry's *2008/09 - 2010/11 Service Plan*. I am accountable for those results as reported.

A handwritten signature in black ink, appearing to read 'Blair Lekstrom', with a stylized, flowing script.

Honourable Blair Lekstrom
Minister of Energy, Mines and Petroleum Resources

July 24, 2009

Message from the Minister of State



The mining industry is an integral part of the B.C. Advantage and it plays a prominent role in why British Columbia is such an attractive place to work and invest.

Recent volatility in the global financial markets has affected all sectors, including the mining industry. While British Columbia is not immune to the effects of this global economic situation, the foundation laid for growth of the B.C. minerals industry with the B.C. Mining Plan will help B.C. weather the storm.

There are many reasons why this is one of the top jurisdictions in the world for mining. We have one of the most competitive tax and regulatory systems. We are ranked among the best in the world for the quality of our geological database, and we have a growing inventory of more than 12,000 mineral occurrences.

The Minister's Council on Mineral Exploration and Mining has ensured that industry and First Nations are informed and involved in the formation of public policy. The Council's work has produced results, including Resource Revenue Sharing with First Nations on new and expanded mining projects – a first in Canada.

The Province has provided funding for the environmental assessment of the electrification of the Northwest Transmission Line. According to the Mining Association of BC, with the development of this transmission line, potentially \$15 billion in investment could be realized, with the possibility for 11,000 jobs and \$300 million in annual government revenues.

A trade mission to Asia in 2008 built on the successes of two previous missions, helping to build and strengthen our international relationships and reinforce our reputation as a leading mining region. We know that China will continue to urbanize and that the demand for minerals will grow – the B.C. mining industry is well positioned to respond to that demand.

The 2008 mineral exploration expenditures tallied in at an impressive \$367 million, the second-highest total for exploration spending ever. As well, two new significant mineral discoveries near Williams Lake are attracting new mineral exploration and encouraging further investments in the mining sector.

Ministry of Energy, Mines and Petroleum Resources

I look forward to future success throughout the province for the mining industry as we move through the current market volatility.

A handwritten signature in dark ink, appearing to read 'Randy Hawes', with a large, stylized initial 'R'.

Honourable Randy Hawes
Minister of State for Mining

July 24, 2009

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Highlights of the Year

Oil and gas rights sales in 2008/09 of \$2.4 billion more than doubled last fiscal year's record setting pace. This total trumped the previous record breaking year by \$1.2 billion, and broke every past record for oil and gas rights sales in the province. Significant industry interest in B.C.'s shale gas opportunities continued in 2008/09, as evidenced by unprecedented gas rights sales activity in the Montney formation and Horn River Basin. This strong interest has been facilitated by an effective regulatory framework, the new Net Profit Royalty Program and the continued provision of geological information at conferences, trade shows and directly to companies. In February 2009, improvements were made to the Deep Well Royalty Program, aimed at increasing competitiveness and generating incremental activity in B.C.'s natural gas industry. These royalty initiatives are in addition to an entire suite of targeted royalty programs for the development of B.C.'s deep, marginal and ultramarginal resources and to encourage summer drilling activity.

In May 2008, LiveSmart BC: Efficiency Incentive Program and the new Energy Efficient Buildings Strategy: More Action, Less Energy, were unveiled, leveraging \$9 to \$10 of private investment by participants, plus \$1.36 of partner investments for every \$1 of provincial investment. The LiveSmartBC Program provides rebates to help British Columbians reduce their energy costs and carbon footprint through household energy upgrades. In the past year, over 23,000 homes have been assessed and 7,300 participants have received grants averaging \$1,200 per home. More than 19,600 tonnes of greenhouse gas emissions per year were reduced and participants saved, on average, 31 per cent on their home energy use. Provincial Sales Tax exemptions for energy conservation equipment were extended.

In February 2009, the \$25 million provincially funded BC Bioenergy Network awarded almost \$5 million in funding to two biomass pilot projects. By converting wood waste into clean energy, these projects will ensure that we meet our province's future energy demands while at the same time supporting economic growth and job creation.

Funding was also given to a number of communities, such as Hartley Bay and Atlin, to reduce environmental impacts and energy costs, support regional economic development and develop innovative energy solutions. The development of the new Hartley Bay hydroelectric project will replace diesel generated electricity with clean power, saving the community over \$2.65 million over 20 years. The Ministry provided funding to extend the Community Action on Energy and Emissions program to more communities and First Nations to help them set and achieve efficiency targets.

Over the past five years, the Heartlands Oil and Gas Road Rehabilitation Strategy has opened B.C.'s northeast roads to year-round use by oil and gas companies. More than 430 kilometres of critical oil and gas roads have been improved, in addition to resurfacing, first time hard surfacing, widening, strengthening and bridge rehabilitation. In the past four years the strategy has resulted in \$158 million in net new incremental royalties, with \$237 million forecast by the

end of 2009/10. Improved roads also benefit the local communities in terms of enhanced public safety, and improvements for other industrial users, including the forestry, agriculture, mining, and tourism sectors. The collaborative efforts of the Ministry of Energy, Mines and Petroleum Resources and the Ministry of Transportation and Infrastructure, and their contributions to both industry and the local community, were recognized with a gold Premier's Award for Cross Government Integration for the northern region in 2008/09.

The Ministry successfully led an initiative that resulted in a milestone Pacific Trail Pipelines Limited Benefits Agreement with First Nations to develop the Northern Energy Corridor. The Benefits Agreement is integral to the viability of the Pacific Trail Pipelines Ltd's Kitimat Summit Lake natural gas pipeline project, a \$1.2 billion, 463 kilometer pipeline from Summit Lake to Kitimat. The pipeline will benefit British Columbia's oil and gas industry by providing transportation of natural gas to a liquefaction facility near Kitimat, opening up new markets for British Columbia's resources. Arriving at this milestone agreement involved collaboration with and between First Nations as well as other ministries and agencies, and in particular, the collaborative approach adopted by the multiple First Nations who worked together as one group.

In March 2009, the Ministry led the completion of the Tse Keh Nay – BC Protocol Agreement for Reclamation, Remediation and Monitoring of Mines Sites. This Agreement is consistent with the principles of the New Relationship, and provides a cooperation framework whereby the Parties will develop and implement a plan to address historic and current mining sites within the asserted territories of the Takla Lake, Kwadacha, and Tsay Key Dene First Nations.

Over 2007/08 and 2008/09, nearly 100 First Nations students participated in the mining Reclamation and Prospecting Program, a unique training opportunity which included field education in bush safety, basic prospecting and environmental evaluation. The Program, which was nominated for a Premier's Award, was delivered as a pilot project by Northwest Community College's School of Exploration and Mining in partnership with Smithers Exploration Group, the Province of British Columbia (the Ministry of Energy, Mines and Petroleum Resources, the Ministry of Advanced Education and Labour Market Development and the Ministry of Agriculture and Lands) and Human Resources and Social Development Canada.

In November 2008, the Ministry undertook a successful mining trade mission to Japan, Korea and China which included representatives from 12 mining companies and associations. Although the global recession was just starting to have an impact, investors abroad were still shopping for sound long-term opportunities to invest and B.C. companies on the mission signed one investment partnership agreement and came away with more than 65 investment leads.

The Ministry's award winning subsurface title registry, Mineral Titles Online, continued to process new claim registrations at record levels. Over four million hectares of mineral claims were issued in 2008/09. In addition, ePayments has been implemented to facilitate online payments for annual rentals associated with oil and gas tenures.

Purpose of 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 continues to contribute to the economic growth and development of communities throughout British Columbia.

In pursuit of its mandate, the Ministry administers 27 statutes and is responsible for a wide range of policies and programs both specific to a particular sector and applicable across the energy, mining and petroleum resource sectors. Ministry responsibilities related to the mineral exploration and mining sector include permitting, mine inspections and safety, geoscience, skills training and educational programs. The Ministry undertakes initiatives to promote new energy technologies, energy conservation and alternative energy sources, such as bio-energy and wind and solar power generation. It develops and implements British Columbia's policies with regard to electrical power generation and transmission. 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 initiatives include participation in job fairs, trade shows and service sector promotion, the provision of geoscience information and the development of royalty policy, regulations and incentives.

The Ministry 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 is responsible for the administration of the Mediation and Arbitration Board, which resolves disputes between landowners, and developers of subsurface resources. The Minister of Energy, Mines and Petroleum Resources is responsible for this Board, the Assayers Certification Board of Examiners and four Crown corporations: the Oil and Gas Commission; BC Hydro; the BC Transmission Corporation; and Columbia Power Corporation. See Appendix B for a hyperlink to the list of the agencies, boards and commissions for which the Minister is responsible.

The Ministry is responsible for providing policy direction to the Oil and Gas Commission, which regulates the oil and gas industry in British Columbia. The Oil and Gas Commission is a single

window regulatory agency with responsibilities for overseeing oil and gas operations including exploration, development, pipeline transportation and reclamation.

BC Hydro's mandate is to generate, purchase, distribute and sell electricity. BC Hydro maintains sufficient energy supply and the capability to ensure safe and reliable electricity delivery to customers when it is needed, while balancing environmental and social considerations.

Under the *Transmission Corporation Act*, the BC Transmission Corporation is responsible for planning, operating and managing the Province's high voltage electric transmission system. Both BC Hydro and BC Transmission Corporation are Government owned Crown corporations, regulated by the BC Utilities Commission.

Columbia Power Corporation is a Crown corporation wholly owned and controlled by the Province, existing under the *Business Corporations Act*. Columbia Power Corporation develops and operates power projects in the Columbia Basin on a joint venture basis with the Columbia Basin Trust. Columbia Power Corporation oversees the operations of the Brilliant power plant and Brilliant Expansion, and Arrow Lakes Generating Station and is developing the Waneta Expansion Project.

The Ministry conducts its business in a manner consistent with Government's core values as identified in the Province of British Columbia's Strategic Plan.

Minister's Council on Mineral Exploration and Mining

The Minister's Council on Mineral Exploration and Mining was formed in September, 2008 to ensure that industry and First Nations are involved in the formation of public policy, to help identify the conditions necessary for the long term success of B.C. exploration and mining, and to provide input and make recommendations for a revised mining sector strategy to build on the success of the British Columbia Mining Plan. The first meeting of the Minister's Council, which included representatives from industry, First Nations and government, was held on September 3, 2008. The Minister's Council has produced tangible results, including Resource Revenue Sharing with First Nations on new mining projects and expansions to existing mines; funding for the environmental assessment of the electrification of Highway 37; and, the establishment of the British Columbia Mining Economic Task Force to help B.C.'s mining industry mitigate the effects of the worldwide economic downturn. The Mining Economic Task Force Report was submitted to the Council on January 29, 2009.

Ministry of Energy, Mines and Petroleum Resources.

Strategic Context

During the first half of 2008/09, British Columbians witnessed high levels of employment, increased business opportunities and higher government revenue generated from the Province's growing energy, mineral and petroleum resources. The latter half of 2008/09 saw a significant decline in worldwide economic activity, resulting in falling demand for mined products, oil and gas.

The natural gas industry in North America was challenged by pronounced reductions in the natural gas price due to a combination of increased supply and lower demand. Despite this, British Columbia was able to maintain – and even increase – its competitive position. In the long term, unconventional production from shale, tight sands, and coalbed gas is expected to become a significant source of natural gas supply in North America. British Columbia's potential for tight gas and shale gas production was a primary driver of the record petroleum and natural gas rights sales revenue set in 2008/09. The significant increase in annual investment in oil and gas exploration and development from the Ministry's target is mainly attributable to these strong sales of oil and gas subsurface rights. Drilling and investment remained strong in fiscal 2008/09 with drilling levels in the last quarter showing similar levels to 2006/07 and 2007/08. There is a risk that the pace of drilling and investment may be curbed if industry believes the current low commodity prices for natural gas will extend for a prolonged period of time.

In 2008/09, volatile energy prices, particularly for gasoline, diesel, home heating oil and jet fuel, drew attention to energy efficiency and conservation. While natural gas prices declined, electricity rates rose. With the focus on climate change, there was a closer examination of B.C.'s potential to produce clean and renewable energy. Many British Columbians and communities expressed a desire to reduce their energy costs and carbon footprint. As interest rates and material costs declined in the latter half of 2008/09, homeowners pursued capital upgrades to their homes. The Ministry's target for incremental electricity savings achieved each year through utility and provincial conservation policies, programs and regulations was significantly exceeded due to demand side management programs surpassing expectations. As this result supports the BC Energy Plan and represents a net benefit to British Columbians, the Ministry will not be adjusting its strategies.

Lower industrial activity and lower industry demand for energy created challenges for energy efficiency improvements in this sector. Many industries were hesitant to invest in energy efficiency because of the uncertainty in the market place and limited access to capital. Annual investment in B.C.'s electricity generation and transmission facilities was affected because almost all the construction expenditures on the expansion of the Waneta hydroelectric project in the Columbia region have been delayed until the Fall 2009, pushing this investment into the current fiscal year.

The worldwide economic downturn in the latter half of 2008/09 affected the global and B.C. mining industry in a number of ways. The lending freeze made it difficult for exploration and

mining companies to secure capital to finance growth or strengthen balance sheets. Commodity prices fell and a slowdown in exploration activity began in mid-2008, as this sector struggled to raise financing. Mining operations, while more resistant to market instability, implemented significant restraint. Mines were scaled back, planned mine expansions and new projects were deferred or cancelled, and investment in processing facilities was postponed or stretched out over longer periods. The Ministry's target for annual investment in mineral exploration and mines was exceeded by 77 per cent due to exploration spending retaining its momentum from the previous fiscal year (2007/08) during the 2008 summer field season. Similarly, mine developments and expansions moved forward as capital costs escalated during the first half of 2008/09, prior to the significant financial tightening in the Fall. As commodity prices, economic activity and credit conditions underwent a significant correction in the latter half of fiscal 2008/09 and remain challenging, the Ministry is not planning to significantly adjust its strategies.

Demand from communities, First Nations and stakeholders for earlier and more comprehensive information about energy and mining proposals continued through 2008/09. Many First Nations and communities continue to actively look at the opportunities open to them to engage in proactive energy planning, ranging from energy conservation programs to resource and other economic developments, but there is a lack of capacity in some First Nations communities to participate in industry and government led initiatives.

The public and stakeholders are making increased use of the internet for doing business and obtaining information. The Ministry's clients have changing information needs and expectations that require alternative methods of service delivery. Steady growth in the oil and gas industry in northeast British Columbia resulted in greater pressure on rural residential areas for well drilling access. Landowners and rural residents expressed a desire to be informed when the Ministry offers the oil and gas rights under their property for competitive bidding to industry.



The 120 megawatt Brilliant expansion powerhouse is an addition to the 145 megawatt hydroelectric Brilliant dam on the Kootenay River near Castlegar, B.C.

Report on Performance

In the Ministry's 2008/09 Service Plan, performance measures were streamlined to better align with the priorities of the Ministry. This year's report reflects these new measures.

A notable change in this year's report is that it includes annual investment in each of the three key sectors in the Ministry's mandate: 1) electricity facilities, 2) oil and gas exploration and development, and 3) mineral exploration and mining. The annual investment in each of the three key sectors can be added together to provide an estimate of the total annual investment in B.C. by the energy, mining and petroleum resource sectors. This total can be compared to the magnitude of investment in other sectors of the provincial economy and it reflects the employment and other business opportunities generated for British Columbians.

This report also includes the Ministry's improved mining safety measure: the short term injury rate at B.C. mines from WorkSafeBC. This calendar year measure is a comprehensive and accurate representation of the accident rate for the mining sector, and includes data for all mines in B.C., including open pit coal and metal mines, quarries and underground mines. The data are released by WorkSafeBC every summer for the preceding calendar year .

The Ministry's new electricity conservation measure: incremental electricity savings achieved each year through utility and provincial conservation policies, programs and regulations, is driven by policy actions one through nine of the BC Energy Plan. Targets represent electricity savings from BC Hydro's Power Smart demand side management program and conservation/stepped rate participants. BC Hydro designs and directs 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.

The Ministry's sixth measure, the number of new or renegotiated working arrangements with First Nations related to energy, mineral and petroleum resource development, continues from the previous service plan. 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). The measure is continued because it is a meaningful indicator of social license for the energy and mining sectors.

Performance Plan Summary Table

| Goal 1 Thriving and competitive energy, mineral and petroleum resource sectors For greater detail see pages 16 to 20 | 2008/09 Target | 2008/09 Actual |
|--|------------------------------------|---|
| Annual Investment in Oil and Gas Exploration and Development | \$4.7 Billion | \$8 Billion EXCEEDED |
| Annual Investment in Electricity Facilities | \$1.9 Billion | \$1 .631 BILLION SUBSTANTIALLY ACHIEVED |
| Annual Investment in Mineral Exploration and Mines | \$0.720 Billion | \$1.276 Billion EXCEEDED |
| Goal 2: Safe and environmentally responsible energy, mineral and petroleum resource development and use. For greater detail see pages 20 to 23 | 2008/09 Target | 2008/09 Actual |
| 2.1 Operational practices at work sites that protect the public, workers' safety and the environment | | |
| Short term injury rate at B.C. Mines | 2.1 claims per 100 person years | DATA NOT AVAILABLE (SUMMER 2009) |
| 2.2 Increased energy conservation and use of alternative, clean energy and efficient technologies. | | |
| Incremental electricity savings achieved each year through utility and provincial conservation policies, programs and regulations | 423 GWh | 552 GWh EXCEEDED |
| Goal 3: The Ministry, communities, First Nations and industry working cooperatively for the responsible development and use of B.C.'s energy, mineral and petroleum resources. For greater detail see pages 23 to 25 | 2008/09 Target | 2008/09 Actual |
| 3.2 Increased opportunity for First Nations to share in the benefits of responsible resource development and use. | | |
| Number of First Nations with new or renegotiated working arrangements on energy, mineral and petroleum resource development | 65 | 65 ACHIEVED |

Goals, Objectives, Strategies and Performance Results

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

Strategies

Key strategies for this objective include:

- 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, 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

Record Breaking Revenues

The 2008/09 revenues from the sale of petroleum and natural gas rights were \$2.4 billion.

The \$2.4 billion fiscal year total trumped the previous record breaking year by \$1.2 billion, and broke every tracked record for oil and gas rights sales in B.C.

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

Strategies

Key strategies for this objective include:

- 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

New Legislation and Regulations to promote Energy Efficiency and Conservation

The 2008 amendments to the Utilities Commission Act support the implementation of Government's 2007 Energy Plan, including requirements for the British Columbia Utilities Commission to consider Government's energy objectives such as reducing greenhouse gas emissions, encouraging clean or renewable electricity and pursuing energy efficiency and conservation. The new Demand-side Measures Regulation sets out rules the British Columbia Utilities Commission must use when assessing proposed demand-side measures from utilities.

The 2008 Amendments to the Environmental Management Act create a legislative framework for implementing the Government's policy that coal fired electricity generation must have zero greenhouse gas emissions, all new electricity generation must have zero net greenhouse gas emissions, and existing thermal generators have zero net greenhouse gas emissions by 2016.

New regulations under the Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act require an annual provincial pool average of five per cent renewable content in gasoline and diesel fuel in 2010. This flexible market-based regulation reduces the environmental impact of transportation fuels.

Strategies

Key strategies for this objective include:

- 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 the *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.

Oil and Gas Activities Act

The passage of the Oil and Gas Activities Act in April 2008 represents a shift in the Province's regulatory approach. The new Act focuses on outcomes rather than prescriptive requirements. It strengthens government oversight on environmental matters and engagement on oil and gas development with communities and other land users. The Oil and Gas Activities Act supports key commitments of the BC Energy Plan by consolidating oil and gas regulatory requirements, improving permitting processes, creating a new process for appealing decisions of the Oil and Gas Commission (OGC), and enhancing the powers of the OGC with respect to compliance and enforcement and responding to stakeholders.

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

Strategies

Key strategies for this objective include:

- 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.

Performance Results

| Performance Measure | 2006/07 Actual | 2007/08 Actual | 2008/09 Target | 2008/09 Actual |
|---|-----------------|-----------------|-----------------|--|
| Annual Investment in Oil and Gas Exploration and Development ¹ | \$4.7 Billion | \$4.5 Billion | \$4.7 Billion | \$8 Billion EXCEEDED |
| Annual Investment in Electricity Facilities ² | N/A | N/A | \$1.9 Billion | \$1.631 Billion SUBSTANTIALLY ACHIEVED |
| Annual Investment in Mineral Exploration and Mines ³ | \$0.778 Billion | \$0.816 Billion | \$0.720 Billion | \$1.276 Billion EXCEEDED |

Data Sources:

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.

² Source: Data analysis by Ministry of Energy, Mines and Petroleum Resources and 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

Discussion of Results

Annual investment in oil and gas exploration and development comprises 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 social programs such as education and healthcare. This measure has been used in past years and continues in the 2009/10 Ministry Service Plan. The target was significantly exceeded in 2008/09.

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. 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. This measure was new for 2008/09, so no historical data are presented in the

performance table. The measure continues in the 2009/10 Ministry Service Plan. The target was substantially met.

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 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. This measure is the combination of two measures used in the past and continues in the 2009/10 Ministry Service Plan. The target was exceeded.



Sand and gravel operation near Port McNeill, Vancouver Island.

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

Strategies:

Key strategies for this objective include:

- 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 Results

| Performance Measure | 2006/07 Actual | 2007/08 Actual | 2008/09 Target ¹ | 2008/09 Actual |
|--------------------------------------|----------------|----------------|---------------------------------|--------------------|
| Short term injury rate at B.C. Mines | N/A | 2.3 | 2.1 claims per 100 person years | N/A SUMMER 2009 |

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 use of a 10 year rolling average smoothes 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.

Discussion of Results

The target reflects 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. As new mines open 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. This measure was new for 2008/09, so no data prior to 2007/08 are presented in the performance table. The measure continues in the 2009/10 Ministry Service Plan.

The figure of 2.3 claims per 100 person years for 2007 was released July 2008 and is slightly higher than the 2.1 forecast that appears in the 2008/09 Service Plan. It is predicted that the 2008/09 target of 2.1 claims per 100 person years will be met, but final numbers will not be available until the summer of 2009.

Health, Safety and Reclamation Code Updated

The Health, Safety and Reclamation Code for Mines in British Columbia is administered and enforced by the Ministry of Energy, Mines and Petroleum Resources. The Code is reviewed on an ongoing basis by a Code Review Committee, comprising representatives from labour, industry and government. The Chief Inspector of Mines chairs the Committee and ensures the Code remains current as new technology, mining practices and health and safety concerns emerge. The Code, based on the recommendations of the Committee, was updated in 2008 and distributed to all mine sites in 2009 to incorporate confined space guidelines and enhanced health and safety protection for workers and the public regarding uranium and thorium activities.

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

Strategies:

Key strategies for this objective include:

- Ensure an active and coordinated 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.
- 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.

Performance Results

| Performance Measure | 2006/07 Actual | 2007/08 Actual | 2008/09 Target | 2008/09 Actual |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Incremental electricity savings achieved each year through utility and provincial conservation policies, programs and regulations | N/A | N/A | 423 GWh | 552 GWh EXCEEDED |

Data Sources: BC Hydro, Ministry of Energy, Mines and Petroleum Resources Survey.

Discussion of Results

This measure is driven by policy actions one through nine of the BC Energy Plan. The target represents electricity savings from BC Hydro's PowerSmart demand side management programs and conservation/stepped rate participants. BC Hydro designs and directs 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. This measure was new for 2008/09, so no historical data are presented in the performance table. The measure continues in the 2009/10 Ministry Service Plan. The target was significantly exceeded.

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

Strategies:

Key strategies for this objective include:

- 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.

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

Strategies:

Key strategies for this objective include:

- 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.
- Investigate opportunities for the participation of 17 First Nations in oil and gas pipelines through the proposed Energy Trade Corridor between Kitimat and Prince George

Performance Results

| Performance Measure | 2006/07 Actual | 2007/08 Actual | 2008/09 Target | 2008/09 Actual |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Number of First Nations with new or renegotiated working arrangements on energy, mineral and petroleum resource development | 45 | 55 | 65 | 65 ACHIEVED |

Data Sources: Ministry of Energy, Mines and Petroleum Resources staff analysis.

Discussion of Results

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, Long Term Oil and Gas Agreements and Mining and Mineral Protocol Agreements. 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. The target was met, and the Ministry is pleased with the steady increase in the number of cooperative arrangements with First Nations as reflected in the historical data. The measure continues in the 2009/10 Ministry Service Plan.

Revenue Sharing with First Nations

In October 2008, the Ministry announced revenue sharing with First Nations on new mining projects -- and now also includes mine expansions. This landmark announcement made British Columbia the first province in Canada to share direct revenue generated from mining. The process for development of revenue sharing will be decided on a project-by-project basis. Revenue sharing on new and expanded mining projects will place a strong focus on community development to assist First Nations in achieving their social and economic goals. This announcement is consistent with the revenue sharing principles articulated in the New Relationship.

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

Strategies:

Key strategies for this objective include:

- 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.
- 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.



Gas Drilling Rig, Northeast BC

Resource Summary Table

| Core Business Areas | Estimated | Other Authorizations | Total Estimated | Actual | Variance |
|---|---------------|----------------------|-----------------|---------------|-----------------|
| Operating Expenses (\$000) | | | | | |
| Oil and Gas | 12,073 | 2,261 | 14,334 | 13,272 | (1,062) |
| Titles | 6,202 | - | 6,202 | 6,605 | 403 |
| Mining and Minerals | 14,037 | - | 14,037 | 15,036 | 999 |
| Electricity and Alternative Energy | 26,486 | 2,167 | 28,653 | 27,270 | (1,383) |
| Innovative Clean Energy Fund Special Account | 17,400 | (17,400) | - | - | - |
| Marketing, Aboriginal and Community Relations | 5,156 | - | 5,156 | 4,676 | (480) |
| Executive and Support Services | 6,740 | - | 6,740 | 8,264 | 1,524 |
| Contracts and Funding Arrangements | 2,500 | - | 2,500 | 2,315 | (185) |
| Subtotal – Operating Expenses | 90,594 | (12,972) | 77,622 | 77,438 | (184) |
| Statutory Appropriation – Mines Act | - | 105 | 105 | 105 | - |
| Adjustments of Prior Years' Accruals | - | - | - | (23,316) | (23,316) |
| Total | 90,594 | (12,867) | 77,727 | 54,227 | (23,500) |
| Full-time Equivalents (FTEs) | | | | | |
| Oil and Gas | 69 | - | 69 | 65 | (4) |
| Titles | 52 | - | 52 | 54 | 2 |
| Mining and Minerals | 117 | - | 117 | 117 | - |
| Electricity and Alternative Energy | 35 | - | 35 | 37 | 2 |
| Innovative Clean Energy Fund Special Account | 4 | (4) | - | - | - |
| Marketing, Aboriginal and Community Relations | 37 | - | 37 | 38 | 1 |
| Executive and Support Services | 28 | - | 28 | 24 | (4) |
| Total | 342 | (4) | 338 | 335 | (3) |

Ministry of Energy, Mines and Petroleum Resources

| Core Business Areas | Estimated | Other Authorizations | Total Estimated | Actual | Variance |
|--|--------------|----------------------|-----------------|---------------|----------|
| Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000) | | | | | |
| Oil and Gas | 383 | 15,318 | 15,701 | 15,999 | 298 |
| Titles | 54 | - | 54 | - | (54) |
| Mining and Minerals | 813 | - | 813 | - | (813) |
| Electricity and Alternative Energy | 7 | - | 7 | - | (7) |
| Innovative Clean Energy Fund Special Account | - | - | - | - | - |
| Marketing, Aboriginal and Community Relations | - | - | - | - | - |
| Executive and Support Services | 178 | - | 178 | 754 | 575 |
| Total | 1,435 | 15,318 | 16,753 | 16,753 | 0 |
| Other Financing Transactions (\$000) | | | | | |
| Oil and Gas Commission Act | | | | | |
| Receipts | 29,000 | 2,897 | 31,897 | 31,897 | - |
| Disbursements | 29,000 | 2,897 | 31,897 | 31,897 | - |
| Net Cash Source (Requirements) | 0 | 0 | 0 | 0 | 0 |

"Other Authorizations" include Supplementary Estimates, Statutory Appropriations and Contingencies. Amounts in this column are not related to the "estimated amount" under sections 5(1) and 6(1) of the *Balanced Budget and Ministerial Accountability Act* for ministerial accountability for operating expenses under the Act.

Adjustment of prior years' accruals. Amounts reflect adjustment of prior years' expense accruals which were credited to Ministry expense and not available for the Ministry to spend.

Appendix A: 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
3793 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 9395 Stn Prov Govt
Suite 340 – 1675 Douglas Street
Victoria V8W 9N3
Phone: 250 387-4825

Appendix B: Links to Additional Resources

A list of legislation administered by the Ministry can be found at:

www.empr.gov.bc.ca/OG/legislation/Pages/default.aspx

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

A link to the BC Energy Plan can be found at www.energyplan.gov.bc.ca/

A link to the BC Mining Plan can be found at:

www.gov.bc.ca/empr/popt/reports/down/bc_mining_plan_02_2007.pdf