

Ministry of  
Energy, Mines and  
Petroleum Resources

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2006/07  
Annual Service Plan Report

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## Message from the Minister and Accountability Statement

British Columbia's energy sector, from electricity transmission and conservation to oil and gas, plays a vital role in our province's social and economic fabric. Building on over five years of energy leadership, Government announced the "BC Energy Plan: A Vision for Clean Energy Leadership" in February 2007. Our plan positions B.C. as a global leader in sustainable resource development and innovative energy management.

Continued strong revenue from B.C.'s resource sector funds the services we rely on everyday, including education and health care. The Ministry of Energy, Mines and Petroleum Resources carefully manages our resources in close consultation with communities, industry, and citizens, ensuring we maximize our potential today, while protecting our environment and opportunities for future generations of British Columbians.

The oil and gas sector is a key contributor to our provincial economy as we work to be one of the most competitive jurisdictions in North America. British Columbia had record drilling activity and near-record oil and gas rights sales in 2006. Continued growth reflects industry's confidence in British Columbia's potential, and can be linked to Government policies designed to foster new investment. The summer drilling royalty credit program, investments in roads in the Northeast, job fairs to link British Columbians with oil and gas companies, and education and training initiatives have propelled oil and gas activity in British Columbia to record levels. With estimates of the province's natural gas reserves at an all-time high, our Government is committed to continuing to support growth in the oil and gas industry.

Over the past six years, the mining industry in British Columbia has grown significantly, re-invigorating small communities, providing valuable revenue to taxpayers, and creating jobs for thousands of British Columbians. With more than 750 exploration projects currently underway, Government is working hard to ensure the industry continues to grow in a way that creates unprecedented sustainable opportunities for British Columbians. Measures implemented in the BC Mining Plan in 2005 are paying off — earlier this year, the Ministry's 2007 "Report on Progress" detailed how 95 per cent of the policy actions identified in the plan are completed or in progress. The remaining actions are scheduled to begin this year.

We believe that encouraging greater economic activity provides benefits for taxpayers, communities, and First Nations groups alike. The Northeast Energy and Mines Advisory Committee is an invaluable forum for the development of balanced solutions to concerns which may arise from increased resource activity. The continuing input and participation from various stakeholders will provide our Ministry with guidance as we work to stimulate sustainable economic growth.

Throughout the world, British Columbia is recognized as a leading jurisdiction in innovative alternative energy development, and in 2006 we received international accolades for our contributions to the field of alternative energy technology. Building on this strong foundation, we are committed to providing continued clean energy leadership. In the past fiscal year, we have collaborated with communities, First Nations, industry, educational institutions and public associations to develop a wide variety of clean energy projects. Ministry experts have reviewed and assisted a diversity of projects — including run-of-the-river hydro generation, solar rooftop collectors, tidal turbines, bioenergy facilities and hydrogen fuel cell technology. There are even more exciting innovations to look forward to. Today, forestry operations are turning waste wood into electricity to meet the needs not only of their own operations, but also of their host communities. First Nations communities are building microhydro projects to reduce their reliance on diesel. B.C. universities and colleges are partnering with industry to take advantage of our tidal resource. At the same time as we are maximizing the province's renewable energy opportunities, we promote energy efficiency and conservation in buildings, community planning and our daily lives.

Today, British Columbia produces 90 per cent of its electricity from clean or renewable sources. However, in recent years, we have been forced to turn to other jurisdictions to support some of our growing electricity needs. In order to ensure that British Columbia has a safe, reliable, and affordable supply, BC Hydro will work to a target of electricity self-sufficiency by 2016. Achieving this target will require new generation as well as increased conservation. One part of meeting this target is ensuring we maintain control of our existing dams and associated infrastructure. The Energy Plan reaffirms our commitment to ensure public ownership of BC Hydro and the BC Transmission Corporation.

The Ministry of Energy, Mines and Petroleum Resources 2006/07 Annual Service Plan Report compares the actual results to the expected results identified in the Ministry's 2006/07–2008/09 Service Plan. I am accountable for those results as reported.



Honourable Richard Neufeld  
Minister of Energy, Mines and Petroleum Resources

June 20, 2007



## Message from the Minister of State for Mining and Accountability Statement

Looking back over the past six years, I can attest to the tangible contributions our Government has made to the tremendous success of mineral exploration and development. Mining in British Columbia is now a thriving, globally competitive industry. B.C.'s net mining revenues soared to a record \$5.6 billion in 2006. We are benefiting from record levels of investment, and more than 20 new potential Canadian mining projects are within our borders.

In just two years, the Ministry of Energy, Mines and Petroleum Resources has seen over 95 per cent of the Mining Plan actions completed or in progress. We have created a positive investment climate by supporting geoscience, streamlining regulatory requirements and processes, offering competitive tax rates and developing necessary infrastructure.

British Columbia has earned a world-wide reputation as a good place to do business, and we have cultivated further investment by building ties through inter-provincial and international trade missions. Investment in mineral exploration soared to a record-high \$265 million in 2006, a 20 per cent increase from the \$220 million reached in 2005. Strong relationships strengthen the economy, and our government has fostered greater understanding among industry, First Nations and communities through meaningful communication and information sharing. In this fiscal year, we signed a historic mining consultation agreement with the Upper Similkameen Indian Band and a New Relationship agreement with the Taku River Tlingit Nation.

More than 600 exploration projects were underway in 2006, an increase of more than 60 per cent since 2003. The dramatic growth in the exploration and mining industry has created an enormous demand for skilled labour. British Columbia is enjoying its highest employment rates ever, and mining is one of the biggest job generators. To connect local residents with high-paying jobs in mining, our government has partnered with educational institutions, mining companies and employers to hold career fairs in communities across the province. We have created training opportunities in rural and Aboriginal communities to provide young people with the skills to enter the high-tech mining industry.

British Columbia boasts Canada's largest concentration of industry expertise with over 60 per cent of Canadian exploration and mining companies being B.C.-based. Mining has one of the best safety records among heavy industries, and we are continually striving to protect the safety of workers through mine site inspections, safety audits, committees, training, competitions and awards.

In 2006, the international mining community deemed British Columbia's extensive geological databases the best in the world. Use of scientific data, comprehensive exploration guidelines and multi-stakeholder collaboration enable the Ministry to successfully coordinate exploration and

mining with other land uses. Our commitment to integrated land use plans, environmental best practices and world class reclamation are among the sustainability measures that ensure mining activity underway today safeguards the environment for future generations.

Mining has been part of the British Columbia economy for more than 150 years, and I am very proud of the role that this historically significant sector has played in revitalizing our modern economy and will continue to play in the future.

I am accountable for achieving the following results for 2006/07:

- Working with associated ministries and agencies to improve global competitiveness and investment in British Columbia by simplifying the mineral exploration and mining project review and approval process;
- Developing and implementing a mining education network to facilitate training and skills development to address skills shortages in mineral exploration and mining, in conjunction with other agencies, industry, communities, and First Nations; and
- Improving community and First Nations awareness of economic opportunities and social benefits of a thriving mining sector and increasing public awareness of the benefits derived from the mineral exploration and mining industries and their contributions to building prosperous communities across the Province.

The 2006/07 Annual Service Plan Report compares the actual results to the expected results identified in the Ministry's 2006/07–2007/08 Service Plan Update. I am accountable for those results as reported.



Honourable Kevin Krueger  
Minister of State for Mining

June 20, 2007

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## Highlights of the Year

The Province released the new BC Energy Plan: A Vision for Clean Energy Leadership in February 2007. This new plan establishes aggressive targets for zero net greenhouse gas emissions, new investments in innovation, and an ambitious target to acquire 50 per cent of BC Hydro's incremental resource needs through conservation by 2020. The plan balances the economic opportunities available from B.C.'s wide range of natural resources while leading the world in sustainable environmental management.

The Ministry led a Mining Investment Mission to China in November 2006, to introduce B.C. and its investment opportunities to the Chinese through a series of meetings with national and provincial senior level Chinese government officials and businesses. Relationships were initiated at the networking reception attended by 200 international delegates at the China Mining Congress and at the dinner for Shangdong Government officials to highlight B.C.'s economic and regulatory environment and its mining and mineral resources.

The Province concluded a number of agreements with First Nations that establish ways to work together and support economic certainty for the resource industry. The Mining and Minerals Protocol and Long Term Oil and Gas Agreements between the Province and the Blueberry River First Nations, signed in April 2007, ensure that the Blueberry River First Nations will be engaged in resource and economic development in the Northeast region.

Further successes include the Consultation Process Agreements between the Province and the Council of Treaty 8 Chiefs (Fort Nelson First Nation, Prophet River First Nation, Doig River First Nation, Halfway River First Nation, West Moberly First Nations and Sauteau First Nations), signed in November 2006, and the Mining and Minerals Protocol Agreement between the Ministry and the Upper Similkameen Indian Band, signed in July 2006. The negotiating team for this agreement was nominated for the Premier's Award in March 2007.

The Ministry contributed \$2 million in 2006/07, to mining-related education programs. \$1 million of this went towards mining-related education programs designed to expand training for Aboriginal youth in rural communities. These programs are geared towards training Aboriginal students for jobs in the B.C. minerals sector; the Reclamation and Prospecting Program and the Aboriginal Minerals Training and Employment Program. The Ministry contributed \$500,000 to the Reclamation Program and another \$500,000 to the Aboriginal Employment Program to get these innovative programs off the ground.

The Ministry worked with the Environmental Assessment Office, other provincial ministries, First Nations and the Federal government on the harmonized environmental assessment process that resulted in the approval of Nova Gold's \$2.2 billion Galore Creek Project in Northwest B.C. The substantial work of the Ministry's technical experts assured that the project will be economically, environmentally and socially sustainable.

In 2006/07, representatives from farming, ranching, environmental and residents' associations, the oil and gas industry, local and First Nations' governments, and the Ministry have been engaged in exploring, understanding and advising on issues related to petroleum development in Northeast B.C. via the Northeast Energy and Mines Advisory Committee. Since its inception, this Advisory Committee has come forward with solutions to a number of concerns, including an updated standard surface lease document, potential certification or licensing of land agents, improved information resources to assist landowners when negotiating with industry, and measures to prevent erosion of valuable top soil. The Ministry has begun implementing many of the recommendations and is committed to reporting back to Committee members on a regular basis.

In September and October 2006, the Ministry held more of its successful oil and gas job fairs in 16 communities across B.C. At least 52 people were hired by B.C.-based companies, with an additional 400 potential employees being sought since January 2007. In addition, the Northern Society of Oilfield Contractors and Service Firms developed a database containing resumes and contact information for over 1,700 potential employees. This database is available to the Society's 140+ members to assist them with recruitment.

In April 2006, the BC Oil and Gas Education and Training Consortium, made up of representatives from the oil and gas industry, educational institutions, aboriginal groups and government, delivered its report to Government entitled "Oil and Gas Education and Training in British Columbia: Planning for Today and Tomorrow's Prosperity." This report contains recommendations to the ministers of Advanced Education and Energy, Mines and Petroleum Resources. The recommendations outline a comprehensive approach to education and training to meet industry's human resource needs. In response, the BC Energy Plan focuses on four under-represented groups that offer excellent employment potential in the energy sector: Aboriginal people, immigrants, women and youth.

In 2006, the Ministry processed over 5.97 million hectares of new mineral claims, representing an increase of over 500 per cent from 2004 totals. Ministry staff along with the Mineral Titles Online registry handled these transactions while maintaining absolute currency of record and map data and with no increase in resource levels.

In January 2007, the Nisga'a Nation and the Ministry signed a one year extension to the Protocol Respecting Offshore Oil and Gas between the Nisga'a Nation and the Province. Under this Protocol, the Nisga'a Nation and the Province commit to working collaboratively to provide information on the potential benefits and risks of offshore oil and gas development to Nisga'a citizens, to examine options on fiscal and regulatory regimes, and to examine options to identify what baseline data is required and how it can be collected. In fiscal year 2006/07, a Contribution Agreement was signed, providing the Nisga'a Lisims Government with \$283,495 to: organize a workshop on offshore oil and gas for Nisga'a Lisims Government executive, officers and key

employees; conduct workshops in the four Nisga'a communities and for each of the urban locals; conduct a fact finding trip to Cook Inlet, Alaska; and conduct a survey and interviews to obtain views of Nisga'a citizens.

In the 2002 Energy Plan, the Province set out to update and expand its *Energy Efficiency Act* and work with the building industry, governments and others to improve energy efficiency in new and existing buildings. In September 2005, the Ministry released its strategy, "Energy Efficient Buildings: A Plan for BC", along with the creation of a number of new energy efficiency and clean energy programs. The strategy includes energy efficiency targets for new and existing buildings in the year 2010, along with 10 policy and market measures to address barriers, including information, education and capacity building, energy pricing and incentives, voluntary measures, and *Energy Efficiency Act* amendments for building components and equipment. The strategy was instrumental in raising \$15 million from the Federal Opportunities Envelope over two years (until March 31, 2007), leveraged off of \$85 million of utility and industry expenditures and provincial sales tax exemptions, and \$20 million for investments in clean energy projects in First Nation and remote communities.

The Ministry engages provincial non-government organizations with an environmental focus through a quarterly Forum chaired by the Deputy Minister and attended by the Ministry Executive. The purpose of the Forum is to establish a relationship between the Ministry and participants based on two-way dialogue, and to provide opportunities for participants to offer input to the Ministry. The Forum facilitates discussion of the relationship between the Ministry's initiatives and the Government's goals and programs. Engagement with participants also occurs between Forums to focus on mutually agreed upon priorities regarding specific province-wide goals, plans or policies within the scope of the Ministry's legislated authorities.

In 2006/07 sales of Crown oil and gas licences, leases and permits generated revenue of over \$607 million, the second highest total in B.C. history; and only the second time we've exceeded the \$600 million dollar barrier. Average price per hectare paid to acquire rights was \$984.00 — a new all-time best for British Columbia.

## 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 for the benefit of all British Columbians. The Ministry strives to increase jobs, investment and revenue related to these sectors, which support vital public services such as healthcare and education.

At the same time, the Ministry ensures the highest degree of environmentally responsible resource development occurs on the land base from which energy, mineral and petroleum resources are derived, in order to conserve opportunities for future generations and maintain environmental quality.

The Ministry administers 25 statutes pertaining to the energy, mining and petroleum resource sectors. See Appendix A for a hyperlink to the complete list of our statutes. Services to the public are provided via regional offices located throughout the Province. (See Ministry Contact Information on page 28 for a list of our regional offices.)

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.

In addition, the Minister of Energy, Mines and Petroleum Resources is responsible for BC Hydro, the BC Transmission Corporation, and the Columbia Power Corporation. See Appendix A for a hyperlink to the list of the agencies, boards and commissions for which the Minister is responsible.

BC Hydro provides reliable, low cost electricity to 1.8 million customers and serves 95 per cent of the province's population. BC Hydro maintains sufficient energy supply and the capability to ensure safe electricity delivery to customers when it is needed, while balancing environmental and social considerations.

Under the *Transmission Corporation Act*, BC Transmission Corporation is responsible for planning, operating and managing the Province's high-voltage electric transmission system. BC Transmission Corporation is a Government-owned Crown corporation, 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* and reporting to the Minister of Energy, Mines and Petroleum Resources. 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 Arrow Lakes Generating Station and the construction of the Brilliant Project Expansion.

Restated as in its Service Plan, 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.

## Strategic Context

While the mining and oil and gas sectors tend to be driven by business cycles which determine (in part) the demand for the resource and its price, demand for electricity in B.C. is steadily increasing. The Ministry conducts its business and the strategies it employs in a manner which can accommodate the fluctuations inherent in our resource sectors. As demand soars, while maintaining environmental stewardship and conservation, emphasis is placed on maximizing the revenue to the Province that increased demand brings. During downturns in industry activity, the emphasis will shift to providing stimulus to industry in the form of incentives to invest and explore.

Mining activity is at an all time high. Oil and gas activity, while remaining robust, is expected to moderate slightly in 2008. The cycle requires the Ministry to take measures to ensure that industry workers and companies are prepared when market demand decreases. A decline in industrial activity affects the Ministry, as programs need to be adjusted. Conversely, an upswing in activity requires the Ministry to reallocate resources to ensure that programs directed towards the ascendant industry are delivered efficiently and effectively.

It is estimated that demand for electricity in B.C. will grow by up to 45 per cent over the next 20 years. Although B.C. has enjoyed an abundant supply of clean, affordable electric power, our population has grown along with our demand for electricity. We are now dependant upon other jurisdictions for 10 per cent of our electricity needs. Through the BC Energy Plan released in February 2007, B.C. will ensure self sufficiency to meet electricity needs by 2016, recognizing the need for price insulation and extra generation capacity. The Ministry will set policies to guide BC Hydro in producing and acquiring enough electricity in advance of future needs.

During 2006/07, there was a general shortage of skilled labour in B.C. Demographic trends indicate continued growth of an older average population and larger labour retirement as the “baby boomers” reach retirement age. These pressures will likely increase the cost of building projects and maintaining capital assets in all sectors of our economy, and may affect the energy, mining and petroleum resource sectors if skilled workers cannot be attracted and retained. The BC Mining Plan and Energy Plan are implementing an approach to skills training and labour which focuses on attracting, developing and retaining workers, and informing them about the many and varied employment opportunities.

During the last fiscal year, the Ministry focused on identifying the opportunities created by high commodity prices to accelerate responsible and sustainable development. The international banking community ended its cycle of interest rate increases in 2006, which could positively influence spending and investment in some sectors, depending upon perceived return, risk and commodity price futures. As investment dollars move around the globe to the jurisdictions that provide the highest net return, the Ministry continues to monitor changes in British Columbia's competitiveness as compared to other jurisdictions and implements strategies to maintain our competitive position and investment attractiveness.

During 2006/07, China and India continued to be major commodity consumers, influencing demand and prices in a wide range of resource commodity markets. China has emerged as a new source of investment funds that can be attracted to British Columbia. The Ministry is fully engaged in the provincial government's 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 for oil and gas softened while new continental supply opportunities remained high. British Columbia will remain as a significant supplier of natural gas to North American markets.

British Columbia's communities in resource rich areas continue to seek earlier and more comprehensive information from government and industry regarding the potential development of resources in their areas. Through the Northeast Energy and Mines Advisory Committee established 12 months ago, the Ministry has been able to engage communities and First Nations in exploring, understanding and advising on issues related to petroleum development in Northeast B.C.

Many First Nations 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. Recent agreements with First Nations reflect these principles by defining consultation processes relating to decisions in both sectors and outlining opportunities for First Nations to take a greater role in oil and gas and mineral resource development within their traditional territory.

# Report on Performance

## Performance Plan Summary Table

<b>Goal 1: Thriving and competitive energy, mineral and petroleum resource sectors.</b> For greater detail see pages 16 to 19	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
Natural Gas Production.	1.06 trillion cubic feet	1.164 TCF EXCEEDED
Annual mineral exploration expenditure.	\$200 million	\$265 million EXCEEDED
<b>Objective 1.1 Increased long term investment, revenue generation and job creation in energy, mineral and petroleum resource development for the benefit of all British Columbians.</b>		
Capital investment in oil and gas activities.	\$4.2 billion	\$4.7 billion EXCEEDED
Capital investment in new or existing mines.	\$350 million	\$513 million EXCEEDED
<b>Goal 2: Safe and environmentally responsible energy, mineral and petroleum resource development and use.</b> For greater detail see pages 19 to 22	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>Objective 2.1 Operational practices at development sites that protect the public, workers' safety and the environment.</b>		
Per cent reduction in emissions from flaring associated with gas production.	51%	52% EXCEEDED
Lost time accident frequency at mines.	0% increase	0% increase ACHIEVED
<b>Objective 2.2 Increased development and use of alternative energy technology, and energy efficiency and conservation measures.</b>		
Percentage of new electricity generation from "BC Clean" and clean self generation sources.	100%	100% ACHIEVED
Percentage of furnaces installed with Energy Star rating.	45%	47% EXCEEDED
<b>Goal 3: The Ministry, First Nations, communities and industry working cooperatively for the responsible development and use of BC's energy, mineral and petroleum resources.</b> For greater detail see pages 22 to 24	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>Objective 3.2 Increased opportunity for First Nations to share in the benefits of responsible resource development and use.</b>		
Number of First Nations with new or renegotiated working arrangements on energy, mineral and petroleum resource development.	45	48 EXCEEDED



## **Goals, Objectives, Strategies and Performance Results**

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

#### **Objective 1.1: Increased long term investment, revenue generation and job creation in energy, mineral and petroleum resource development for the 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 cost of finance (interest rates) can also impact investment levels.

#### **Strategies**

- a) Develop a new, contemporary Energy Plan to guide future planning and growth.
- b) Undertake policies and marketing activities to increase investment in mineral, electricity, alternative energy, energy efficiency, and oil and gas resource opportunities throughout B.C.
- c) Work with industry, communities, First Nations to conduct new mineral, oil and gas geosciences surveys to attract investment to B.C.
- d) Enhance the certainty, clarity and predictability of access for oil and gas exploration and development through such initiatives as road infrastructure development.
- e) Maximize the area of Crown subsurface resources available for tenure by working with First Nations and communities to address land and community issues.
- f) Address barriers facing Independent Power Producers, private sector investors, and improve access to regional markets.

#### **Objective 1.2: Efficient and effective fiscal, legislative and regulatory frameworks and services that reflect the public interest**

- 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 of regulatory reform, fees and license reviews, and policy development.



## Strategies

- a) Introduce new, targeted royalty and incentive programs to stimulate development of oil and gas resource opportunities.
- b) Review legislation, regulations, policies and programs, and develop a streamlined results based regulatory framework that considers best practices and/or harmonization with other jurisdictions.
- c) Streamline the “one-window” regulatory regime through the Oil and Gas Regulatory Improvement Initiative.
- d) Promote the use of e-business for government transactions.

### **Objective 1.3: Greater community awareness of the benefits of energy, mineral and petroleum resource opportunities**

- Increased awareness of these benefits provides the necessary social license for industry to move forward. The energy and mining industries contribute significant revenues to government which are used to fund public services such as health and education.
- 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.

## Strategies

- a) Revise policy and regulations where necessary to implement new federal-provincial initiatives.
- b) Build community and industry relationships by engaging them in discussion about the benefits and opportunities of resource development, and developing an offshore oil and gas benefits sharing model.
- c) Increase provincial awareness of energy opportunities by engaging schools in a discussion of responsible energy, mineral and petroleum resource development.
- d) Pursue financial and cooperative energy partnerships with industry, such as those developed with Independent Power Producers, communities and other levels of government.
- e) Manage Columbia River Treaty and Downstream Benefit Entitlement matters.

## Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Natural gas production <sup>1</sup>	1.136 trillion cubic feet	1.02 trillion cubic feet	1.06 trillion cubic feet	1.164 trillion cubic feet EXCEEDED
Annual mineral exploration expenditure <sup>2</sup>	\$130 million	\$220 million	\$200 million	\$265 million EXCEEDED
Capital investment in oil and gas activities <sup>3</sup>	\$4.5 billion	\$4.9 billion	\$4.2 billion	\$4.7 billion EXCEEDED
Capital investment in new or existing mines <sup>4</sup>	\$200 million	\$345 million	\$350 million	\$513 million EXCEEDED

<sup>1</sup> **Data Source:** British Columbia Ministry of Energy, Mines and Petroleum Resources. Raw natural gas production by calendar year.

<sup>2</sup> **Data Source:** British Columbia Ministry of Energy, Mines and Petroleum Resources, based on annual surveys conducted by the Ministry in collaboration with Natural Resources Canada and Statistics Canada (calendar year).

<sup>3</sup> **Data Source:** Canadian Association of Petroleum Producers. This remains an estimate and is provided only by calendar year.

<sup>4</sup> **Data Source:** Based on Ministry of Energy, Mines and Petroleum Resources staff using data from annual surveys by PricewaterhouseCoopers and Natural Resources Canada, adjusted to reflect non-surveyed activities and post-survey developments (calendar year).

## Discussion of Results

Used domestically for heating and cooking purposes, natural gas also has many commercial and industrial uses. Increased production not only expands the supply of gas to the consumer, but also generates provincial revenue which supports the provision of social programs such as education and health care. The target set in our 2006/07 Service Plan was exceeded, and is slightly higher than preceding years' output, as demand for natural gas in North America remains strong.

Annual mineral exploration expenditures provide jobs for British Columbians throughout the province. If commercially viable deposits are discovered, new mines could be opened, providing more long term employment opportunities for rural communities. The target for mineral exploration expenditure was substantially exceeded and outstripped all previous years' performance as demand for minerals remains strong, driven by surging economies in Asia.

Capital investment in oil and gas activities not only provides jobs for British Columbians, but helps to build provincial infrastructure. The Province derives significant revenues from oil and gas activities, helping to fund important government programs. The capital investment target was substantially exceeded in the northeast even in the context of softening oil and gas demand in North American markets.

Capital investment in new or existing mines also provides jobs and builds provincial infrastructure. Mining and mineral tenure sales provide revenue to the Crown. The target for mining capital investment was substantially exceeded as mining remains robust in the Province fueled by strong economies in China and Japan.

### **Ministry Response**

None of the Ministry's targets that support Goal One have changed since the last Service Plan, and all have been exceeded, most by a substantial amount. As these targets are measures of healthy, thriving and competitive industries that are expanding with positive impacts on jobs and revenue, none of our strategies will be scaled back. The Ministry remains committed to promoting sustainable stewardship of provincial resources.

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

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

- Operations at electricity generation and distribution sites, mines, 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.

### **Strategies**

- a) Review best practices in place in other jurisdictions and adapt them to B.C.'s circumstances where appropriate.
- b) Promote and implement initiatives to enhance environmental stewardship in B.C.'s oil and gas and mining sectors.

Performance Measure	2004/05 Actual	2005/06 Baseline	2006/07 Target	2006/07 Actual
Per cent reduction in emissions from flaring associated with gas production <sup>1</sup>	N/A	50%	51%	52% EXCEEDED
Lost time accident frequency at mines <sup>2</sup>	2.5 days per 100 workers or less	2.5 days per 100 workers	0 % increase	0% increase ACHIEVED

<sup>1</sup> Data Source: British Columbia Ministry of Energy, Mines and Petroleum Resources and the Oil and Gas Commission (calendar year).

<sup>2</sup> Data Source: Industry Report: "Comparative Statistics for Mines in B.C.", WorkSafe BC data and Ministry staff statistics.

## Discussion of Results

When natural gas is removed from the ground, some is flared to reduce the combustion risk of unburned fuel in the atmosphere and to prevent harm from exposure to a gas cloud. As flaring wastes a valuable energy resource and produces environmental effects, a flaring reduction strategy is being implemented which has resulted in a 50 per cent reduction in flaring from 1998 to 2005, which is why 2005 was selected as the baseline. This measure has not changed since the Service Plan was published, although it is being recorded as an index in 2007/08, to simplify reporting. The target was exceeded and compares favorably with the benchmark of 50 per cent in the light of increasing natural gas production.

Lost time accident frequency refers to the time lost at mine sites due to worker injury. It is expected that with several new mines in operation with new employees, the numbers of lost days will be maintained at the benchmark of 2.5 as long as proper training and tools are available for these new workers. The target of 0 per cent increase in lost time was achieved, and is meaningful against a background of an expanded industry. The target compares favourably with past performance and has not changed since the Service Plan was published.

## Ministry Response

The Ministry's two targets for Objective 2.1 were met. As the flaring and mine lost time performance measures are an indication of both health and safety, the Ministry is not planning any changes. However, the flaring measure has been indexed at 100 for 2007/08 in order to simplify reporting and to be consistent with the new Energy Plan's interim objective of a 50 per cent reduction in flaring at oil and gas production facilities by 2011 and elimination of all routine flaring from such facilities by 2016.

## Objective 2.2: Increased development and use of alternative energy technology, and energy efficiency and conservation measures

- Conservation of energy by retrofitting or constructing new energy efficient buildings and the deployment of alternative energy technology contribute to environmentally responsible energy development and use. Government has a key role in educating the public about practical conservation initiatives, and encouraging the private sector to develop alternative energy sources.

- Alternative energy developments such as solar, tidal and wind power are more costly to produce than hydroelectric power and suffer from reliability and siting challenges. For example; wind turbines must be near windy areas which may be far from the power grid, and a certain wind level is necessary for them to generate power. Retrofitting older buildings to make them conserve energy is expensive, as is the material to make new buildings more energy efficient. These expenses will be recovered over time, but require an up-front investment.

## Strategies

- Continue to implement “Energy Efficient Buildings: A Plan for BC”.
- Pursue strategic alliances with the federal government to further develop the hydrogen fuel cells industry and other technology that supports alternative energy.

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Percentage of new electricity generation from “BC Clean” and clean self generation sources <sup>1</sup>	N/A <sup>3</sup>	N/A <sup>3</sup>	100%	100% ACHIEVED
Percentage of furnaces installed with Energy Star rating <sup>2</sup>	30%	40%	45%	47% EXCEEDED

<sup>1</sup> Data Source: British Columbia Ministry of Energy, Mines and Petroleum Resources and electricity utilities.

<sup>2</sup> Data Source: Heating, Refrigeration and Air Conditioning Institute.

<sup>3</sup> This was a new measure for 2006/07 so data for previous years was not recorded.

## Discussion of Results

The “BC Clean Electricity Guidelines” define what qualifies as “BC Clean” as electricity that is either purchased or generated by BC Hydro and other utility distributors. As electricity from self generation and load displacement projects is not sold, it is technically not “BC Clean”, even though it otherwise qualifies as clean electricity. This measure has been dropped from the Ministry’s current Service Plan and replaced with a more easily defined measure. The target was achieved, however, as it was new for 2006/07, no comparisons to past performance can be made.

The ENERGY STAR symbol of energy efficiency helps consumers quickly and easily identify home appliances and other energy-using equipment that save energy. By being high efficiency performers in their category. The ENERGY STAR symbol, which is placed on the product and/or incorporated in its literature, indicates that the product meets a premium level of energy efficiency making it easy for consumers to choose the most energy-efficient products sold in the Canadian marketplace. This measure has not been changed since the service plan, and the target was slightly exceeded. The Ministry is pleased to note the public’s steadily increased selection of ENERGY STAR products.

## **Ministry Response**

The Ministry's two targets for Objective 2.2 were met; one slightly exceeded. The Ministry has replaced the BC Clean electricity measure with a new measure for 2007/08, which is "Cumulative gigawatt/hours of electricity saved through the PowerSmart and PowerSense conservation programs." The ENERGY STAR measure has been retained, and as the public's purchases of these appliances are steadily increasing according to our targets, no change in strategy is contemplated.

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

### **Objective 3.1: Increased and timely engagement of communities, First Nations and stakeholders in resource development opportunities**

- If First Nations, local governments, landowners and non governmental organizations are informed and participate in responsible resource development, they will become more aware of the benefits that such development can provide for a community, such as regular employment for citizens and a steady source of revenue for local government.
- The principle challenges associated with engagement are sufficient time and resources to contact all appropriate communities to discuss opportunities. Communities' and stakeholders' time and resources are also limited. Not all communities and landowners are convinced that resource extraction can take place in an environmentally friendly manner.

### **Strategies**

- a) Initiate a community engagement process on resource development benefits, opportunities and challenges to provide information to communities, receive advice, and encourage dialogue on key matters.
- b) Develop tools to help landowners become more aware of development implications and work to address the needs of communities, First Nations, stakeholders and industry.
- c) Negotiate consultation agreements with First Nations in areas of energy, mineral and petroleum resource development, and encourage partnerships between First Nations and industry.
- d) Develop education and training projects in partnership with industry to sustain and grow a locally-based skilled workforce.

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

- If First Nations have the ability to benefit from responsible resource development in their area through revenue sharing arrangements, or participate in the industry through partnerships, Band members will be more receptive to such developments as they see the results: more jobs in the community or more local infrastructure projects developed from increased Band revenue.
- First Nations do not always have the capacity (human and financial resources) to actively participate in partnerships with energy companies. Along with some other communities and landowners, First Nations do not always wish to see development in their area.

#### Strategies

- a) Develop a new relationship with First Nations based on early, sustained engagement that promotes economic certainty and creates opportunity for all British Columbians.
- b) Negotiate First Nations Agreements which engage First Nations from pre-tenure through to reclamation and develop real opportunities.
- c) 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.
- d) Explore mechanisms available to promote First Nation benefits from resource development and use.

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of First Nations with new or renegotiated working arrangements on energy, mineral and petroleum resource development <sup>1</sup>	N/A	37	45	48 EXCEEDED

<sup>1</sup> Data Source: British Columbia Ministry of Energy, Mines and Petroleum Resources staff.

#### Discussion of Results

The Ministry's new or renegotiated working arrangements include a broad range of initiatives, from on-reserve oil and gas revenue sharing to formalized consultation processes. The benefits to Aboriginal communities from these arrangements include: revenues, formalized information sharing, defined steps for the fulfillment of consultation obligations, ability for communities to prioritize the use of their limited lands and resource staff, opportunities to discuss and participate in policy development, and access to training in the processes and systems used by the Ministry related to mining and oil and gas development. The measure has not changed since the Service Plan was published. The target was slightly exceeded, and the Ministry is pleased

with the steady increase in the number of cooperative arrangements with First Nations. As this is a relatively new measure, no benchmark for 2004/05 is available; however the Ministry's performance advances the aims of the New Relationship with First Nations.

### **Ministry Response**

The Ministry slightly exceeded its target, and given that these arrangements are of material benefit to First Nations and facilitate energy, mineral and petroleum resource developments in the interior, no changes to the strategy or measure are contemplated.

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

- If the public becomes more aware of the employment and business opportunities from responsible resource development, cooperation would be enhanced among industry, First Nations, communities and the Ministry.
- The main challenge associated with achieving this objective is the ability of the Ministry to reach out to the public at large, or each community in which development is proposed, in a timely manner. Community forums such as the North East Energy and Mines Advisory Committee are effective, but cannot reach all citizens of B.C.

### **Strategies**

- a) Review and improve all points of access to information currently provided by the Ministry to make more user friendly, and evaluate and improve the existing public information strategy.
- b) Provide information to the public on energy conservation opportunities and the use of alternative energy.



# Report on Resources

## Resource Summary Table

	Estimated	Other Authorizations	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
Oil and Gas.....	10,591	674	11,265	10,505	(759)
Offshore Oil and Gas .....	4,277		4,277	1,867	(2,410)
Mining and Minerals .....	14,807		14,807	17,158	2,351
Electricity and Alternative Energy .....	3,691		3,691	4,091	400
Marketing, Aboriginal and Community Relations .....	6,629		6,629	6,164	(465)
Executive and Support Services ...	3,679	468	4,147	5,030	883
Contracts and Funding Arrangements .....	33,560		33,560	33,236	(324)
<b>Subtotal – Operating Expenses</b>	<b>77,234</b>	<b>1,142</b>	<b>78,376</b>	<b>78,051</b>	<b>(324)</b>
Adjustments of Prior Years' Accruals .....				(2,828)	(2,828)
<b>Total .....</b>	<b>77,234</b>	<b>1,142</b>	<b>78,376</b>	<b>75,223</b>	<b>(3,152)</b>
<b>Full-time Equivalents (FTEs)</b>					
Oil and Gas .....	78		78	58	(20)
Offshore Oil and Gas .....	12		12	11	(1)
Mining and Minerals .....	111		111	112	1
Electricity and Alternative Energy	15		15	25	10
Marketing, Aboriginal and Community Relations .....	40		40	34	(6)
Executive and Support Services ...	15		15	24	9
<b>Total .....</b>	<b>271</b>	<b>0</b>	<b>271</b>	<b>264</b>	<b>7</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>					
Oil and Gas .....	566		566	55	511
Offshore Oil and Gas .....					
Mining and Minerals .....	1,051		1,051	881	170
Electricity and Alternative Energy					
Marketing, Aboriginal and Community Relations .....					
Executive and Support Services ...	182		182	49	133
<b>Total .....</b>	<b>1,799</b>	<b>0</b>	<b>1,799</b>	<b>985</b>	<b>814</b>

	Estimated	Other Authorizations	Total Estimated	Actual	Variance
<b>Other Financing Transactions (\$000)</b>					
<i>Oil and Gas Commission Act</i>					
Receipts .....	(32,602)		(32,602)	(31,021)	1,581
Disbursements .....	32,602		32,602	31,021	(1,581)
<b>Net Cash Source (Requirements) .....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Definitions of each core business area:

**Oil and Gas** manages the province's natural gas and petroleum resources, including selling, issuing and administering petroleum and natural gas tenures; facilitating infrastructure development to improve access to oil and gas resources; undertaking economic, environmental and financial analysis to develop policies and programs; identifying, stimulating and facilitating development opportunities; providing information to the public; streamlining provincial regulations that apply to the oil and gas sector; representing the province's interests before energy regulatory tribunals and developing and maintaining petroleum geology databases.

**Mining and Minerals** manages the province's mining resources and the regulation of the industries that explore for and develop these resources by regulating the mineral, coal, industrial mineral and aggregate industries for health and safety and environmental responsibility; promoting the mineral exploration and mining industry; issuing and administering mineral and coal exploration and mining tenures; maintaining a tenure registry; permitting exploration and mining operations; enforcing provincial legislation and regulations; reviewing and developing legislation, regulations and policies; providing a regulatory framework to protect the public interest; consulting with communities, First Nations, non-governmental organizations and other governments; providing education and information to the public; developing and delivering geoscience databases and surveys; working with industry and providing financial assistance to other organizations to collect and publish baseline geoscience information; providing assistance and advice to prospectors and exploration companies; and undertaking economic and financial analyses to provide measures to enhance exploration and mining investment attractiveness.

**Electricity and Alternative Energy** develops legislation, policies and programs to support all forms of electrical power generation and transmission, alternative energy sources, energy conservation and efficiency measures and leading edge technologies; providing policy advice or direction to electrical utilities and the regulator, the British Columbia Utilities Commission; fostering private sector investment in new electricity resources; providing operational policy support for independent power producers and receiving funds from the federal government.

**Marketing, Community and Aboriginal Relations** provides programs related to the Ministry's corporate services and leading the Ministry's First Nations initiatives and community engagement strategy. Activities include: corporate policy, strategic planning, legislation, intergovernmental relations and administration of the Mediation and Arbitration Board; advancing the

New Relationship with First Nations and increasing their participation in the energy, mineral and petroleum resource sectors through consultation and accommodation initiatives; and working with communities in the development of energy, mineral and petroleum resources throughout the Province.

**Offshore Oil and Gas** develops policies and programs to identify, stimulate, market and facilitate British Columbia's offshore oil and gas development opportunities. The division consults with First Nations and other stakeholders and provides information to the public. The division negotiates and implements agreements with other governments, First Nations and non-governmental organizations regarding the fiscal, regulatory, scientific, health, safety, environmental, socio-economic and financial aspects of offshore oil and gas development and ocean management.

**Executive and Support Services** supports the offices of the Minister and the Minister of State including salaries, benefits, allowances and operating expenses for the Ministers and their staff; executive support including the Deputy Minister's office; strategic human resources; and administration. Under an agreement, the Ministry of Economic Development provides some administrative support services to the Ministry.

## Structural Change

During this fiscal year, the Offshore Oil and Gas Division was merged administratively with the Titles Division to form the Titles and Offshore Division. The new Division assumed responsibility for Land Use matters as they affect the Ministry's strategies and programs. The report on resources and core business area definition sections that follow do not reflect this new structure in order to comply with the 2006/07 public accounts reporting.

## Variance Explanations:

- **Expenditures:** The Oil and Gas business area had a surplus primarily due to recruitment lag and project evaluation. The Offshore Oil and Gas business area had funds reallocated internally to cover emerging priorities in other core business areas. The Mining and Minerals business area had funding allocated internally to cover emerging priority projects. The Marketing, Aboriginal and Community Relations business area had a surplus primarily due to an internal reorganization — the transfer of staff to Executive and Support Services. Executive and Support Services were in deficit primarily due to the transfer of staff from Marketing, and increased expenditures for central government chargebacks.
- **Full-time Equivalents:** Oil and Gas business area had a surplus due primarily to recruitment lag and project/process evaluation. Electricity and Alternative Energy business area went over primarily due to the Energy Plan Renewal project. Marketing, Aboriginal and Community Relations were in surplus primarily due to an internal reorganization, namely the transfer of staff to Executive and Support Services. Executive and Support Services were then in variance primarily due to the transfer of staff from Marketing.
- **Capital:** The Ministry was in a surplus primarily due to some systems projects not being completed by year-end and these were carried over into the new fiscal year.

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# Annual Service Plan Report Appendix

## Appendix A

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

<http://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: <http://www.em.gov.bc.ca/crowns>

