# MINISTRY OF ENERGY AND MINES

Information Binder June 2013

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## Ministry of Energy and Mines

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## Corporate Initiatives Branch

## 1. Purpose

The Corporate Initiatives Branch (CIB) is responsible for delivering on behalf of the Ministry a unified, corporate approach on policies, processes and services for those issues and needs that transect the Ministry's core businesses. CIB is responsible for managing policy issues that are cross-Ministry, cross-government and intergovernmental; ministry planning and reporting including the annual service plans and reports for the Ministry and its Crown corporations; coordination of Ministry responses to proposed treaty settlements; advice to the Minister on intergovernmental relations; as well as working with the Ministry's Divisions to develop the Ministry's legislative program and leading specific legislative projects. On behalf of the Ministry, CIB manages corporate services which include internal communications, correspondence, public service events, and records management, including FOI requests.

Related Legislation: None.

## 2. Context

There is a continuing legal and policy requirement for the Ministry to deliver corporate products and services, as well as an increasing emphasis on cross-ministry integration and coordination to better and more efficiently provide public services. In particular, the Natural Resource Sector (NRS), of which the Ministry is a part, is transforming its processes, technology and human resources with the vision of "one land manager". CIB staff has expertise in leading and coordinating across the Ministry's divisions and within government to advance government's objectives for its intra/inter-Ministry and inter-governmental strategies.

## 3. Key Functions

- Communications: internet and intranet updating and graphic design;
- Correspondence: responses to Minister and Deputy Minister correspondence;
- Corporate services: assignments, reporting, corporate statistics,
- Public service events: Premier's Awards, Public Service Week, Long Service Awards, Provincial Employees Community Services Fund, etc.

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- Records management and FOIPPA requests;
- Coordination and production of corporate briefing products such as the briefing binders for government transition and the annual budget estimates;
- Specific Ministry and cross-ministry legislative and regulatory development/amendments, such as the Oil and Gas Activities Act and the Natural Resource Roads Act;
- Working with the Ministry's Divisions to develop the Ministry's three-year legislative program;
- Leading policy development that transects multiple lines of Ministry business, such as the Dominion Coal Blocks issue, which is an intergovernmental issue related to both oil and gas and coal, and the NRS Integrated Decision Making Project;
- Strategic planning and reporting, including the management of the service planning and annual reporting requirements of the Ministry and it's Crown Corporations;
- Advocating for the Ministry's position in various trade agreements such as Trade, Investment and Labour Mobility Agreement with Alberta and the New West Partnership;
- Leading cross ministry work on specific intergovernmental files or events such as the Energy and Mines Ministers' Conference and the annual Union of BC Municipalities Convention.
- Coordinating the Ministry's interests with respect to offers of treaty settlement lands to First Nations.

## 4. Division Organization Chart, Budget and FTE's

Budget: S17

Full Time Equivalents (FTEs): 14

#### **Corporate Initiatives Branch Org Chart**



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## ISSUE: Canadian Energy Strategy

## KEY MESSAGES:

- When Canada's Premiers met in July 2012 in Halifax, Nova Scotia for the annual meeting of The Council of the Federation (COF), they decided to renew the 2007 COF Energy Strategy, A Shared Vision for Energy in Canada. This initiative is being called the Canadian Energy Strategy.
- At the COF meeting, British Columbia announced that it would not participate in the process at this time. British Columbia officials requested to be kept aware of progress through intergovernmental relations channels.
- The goal is to have the Canadian Energy Strategy available for public release in early 2014. In preparation for the July 2013 annual COF meeting, a status report on the development of the Canadian Energy Strategy will be provided from energy Ministers to Premiers.

#### **BACKGROUND:**

- The Strategy is in the early stages of development and the process is being co-chaired by the Premiers of Alberta, Mathematical And Newfoundland and Labrador.
- Energy ministries are leading the development of the strategy with support from intergovernmental affairs officials as required. Under the guidance of Deputy Ministers of energy, a team of senior officials from the co-lead energy ministries has been formed to coordinate the development of the Strategy.
- The three Premiers of the co-chair provinces and all of Canada's energy Ministers, except for British Columbia, met on April 19, 2013 in Toronto to review progress on the development of the Strategy.
- The co-chair provinces are the leads on three main working themes: 1) Sustainability and Conservation; 2) Technology and Innovation; and 3) Delivering Energy to People.
- These three working themes are being addressed by ten sub-working groups (see attachment), comprised of officials from provinces/territories that volunteer, depending on their level of interest, for each respective group.
- Stakeholder engagement is a key component of the Canadian Energy Strategy. A draft stakeholder plan identifying potential opportunities for engagement is under development. A range of stakeholders have expressed a strong interest in providing feedback into the development of the Canadian Energy Strategy. To enable this, preliminary planning is underway for a spring stakeholder workshop.

#### ATTACHMENT:

Canadian Energy Strategy Action Areas

CONTACT: Karen Koncohrada, ED

Corporate Initiatives Branch

## Canadian Energy Strategy Action Areas

#### Sustainability and Conservation - Lead Manitoba

- 1. Promote energy efficiency and conservation.
- 2. Transition to a lower carbon economy.
- 3. Enhance energy information and awareness.

#### Technology and Innovation – Lead Newfoundland and Labrador

- Accelerate the development and deployment of energy research and technologies that advance more efficient production, transmission and use of clean and conventional energy sources.
- 5. Develop and implement strategies to meet energy-sector human resource needs now and well into the 21<sup>st</sup> century.
- 6. Facilitate the development of renewable, green, and/or cleaner energy sources to meet future demand and contribute to environmental goals and priorities.

#### Delivering Energy to People – Lead Alberta

- Develop and enhance a modern, reliable, environmentally safe, and efficient series of transmission and transportation networks for domestic and export/import sources of energy.
- Improve the timeliness and certainty of regulatory approval decision-making processes while maintaining rigorous protection of the environment and public interest.
- 9. Promote market diversification.
- 10. Pursue formalized participation of provinces and territories in international discussions and negotiations on energy.

## ISSUE: Cumulative Effects Assessment Framework (CEAF)

## KEY MESSAGES:

- The Ministry of Environment (MOE) and the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) are jointly managing an interagency initiative develop a Cumulative Effects Assessment Framework (CEAF).
- The CEAF will provide a consistent, comprehensive approach to assessing economic, social and environmental values in natural resource decision-making.

#### BACKGROUND:

- British Columbia continues to experience natural resource sector growth, with overlapping and competing interests on the land-base. First Nations, communities and industry have identified an increasing need to address cumulative effects.
- The Ministry of Environment (MOE) and the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) are jointly managing an interagency initiative develop a Cumulative Effects Framework (CEAF) to guide decision making.
- For the purpose of this project, cumulative effects have been defined to be the combined effect of past, present and reasonably foreseeable actions or events on social, economic and environmental values which are of primary importance to British Columbians.
- The Ministry of Energy, Mines and Natural Gas is represented by Electricity and Alternative Energy (EAED) staff in this initiative.
- The project aims to develop greater capacity in the natural resource sector to assess and consider cumulative effects when making decisions by:
  - 1) developing consistent approaches to assessing cumulative effects; and,
  - 2) determining what information is needed for regional decision makers to make informed and transparent decisions around cumulative effects.
- The CEAF is also expected to help streamline decision-making, reduce demands on government staff and support a shift to a results-based land management.
- The initiative has just completed the application of the CEAF in a number of demonstration projects.
- The projects's next step will be to develop an action plan outlining the steps and resources necessary to implement the CEAF in natural resource decision processes.

## ISSUE: Dominion Coal Blocks

## KEY MESSAGES:

- The Federal Government owns the coal and surface rights in the two Dominion Coal Blocks which are located in the East Kootenay region.
- The Province owns the rights to all other minerals, including oil and gas, in the Dominion Coal Blocks.
- The Dominion Coal Blocks lie within the traditional territory of the Ktunaxa Nation (Ktunaxa).
- The Ministry of Energy, Mines and Natural Gas (Ministry) has been in discussions with Natural Resources Canada (NRCan) to resolve issues related to the ownership and management of the Dominion Coal Blocks and their resources.

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## BACKGROUND:

- The Dominion Coal Blocks (DCB) are two parcels of land located in the East Kootenay in which the land surface and coal are owned by the Federal Government. In 1899, the DCB were carved out of two extensive land parcels held by the BC Southern Railway Company. The DCB were created through operation of the federal *Crows Nest Pass Act 1897*, which required the railway to give the Federal Government 20,000 hectares of coal lands, out of coal lands previously granted by the Province of British Columbia (the Province). The federal Act required the transfer in order to prevent the Canadian Pacific Railway and its affiliates from acquiring a monopoly over coal.
- The Province owns all other minerals and the petroleum and natural gas in the DCB, but is unable to issue resource tenures or development approvals due to federal ownership of the land surface. The provincial Chief Gold Commissioner has established provincial mineral and placer reserves over the DCB. Similarly, the petroleum and natural gas rights in the DCB are withheld from posting through a no disposition order.
- No development of the DCB coal resources has ever taken place because the Federal Government has no mechanism to permit or regulate coal mining in a province.
- The larger (18,212 hectares) southern DCB (Parcel 82) is surrounded by a mix of provincial Crown and private land, and the coal deposits are deep and unexplored. About one-third of DCB Parcel 82 lies within the Flathead Valley (Flathead) and the

remainder is in the Elk Valley. Pursuant to the 2011 *Flathead Watershed Area Conservation Act*, coal falling under provincial jurisdiction in the Flathead cannot be tenured or mined.

- The smaller (2,024 hectares) northern DCB (Parcel 73) is located in the Elk Valley and is surrounded by private coal land owned by Teck. Although better data on the coal quality and location are required, the coal resources in DCB Parcel 73 are believed to be economic and surface mineable with a low strip ratio.
- The DCB lie within the traditional territory asserted by the Ktunaxa.
- On January 29, 2013, the Province and the Ktunaxa entered into an Economic and Community Development Agreement (2013 ECDA) which provides the Ktunaxa with a share in provincial revenues from any new coal mine projects in the Elk Valley. In 2010, the parties also concluded a Strategic Engagement Agreement (2010 SEA) to guide government to government discussions on natural resource decisions.

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 Coal companies, s21 may also be interested in the development opportunities of those portions of the DCB in the Elk Valley. Enquiries about the availability of the DCB have been fielded by both levels of government over the years. June 2013

• Being large areas of relatively undeveloped federal Crown land, both DCB have been of interest to the environmental community for protection or management as wildlife corridors.

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ATTACHMENT: Dominion Coal Blocks Map



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115°0'0"W

## ISSUE: Energy and Mines Ministers' Conference 2013

## KEY MESSAGES:

- Each year federal, provincial and territorial (F/P/T) Ministers of energy and mines meet to discuss the challenges and opportunities of the sectors, and meet with invited industry stakeholders.
- This year's Energy and Mines Ministers' Conference (EMMC) is scheduled for August 24 – 27, 2013 in Yellowknife, Northwest Territories. Typically the Minister and Deputy Minister attend for each jurisdiction with support from staff as required.
- EMMC is co-chaired by the federal Minister of Natural Resources Canada and the Minister of the host province or territory for that year.
- Media is present at the end of the conference to interview the co-chairs.
- The agenda includes both open sessions with stakeholders and confidential government-only meetings.

## BACKGROUND:

- The priority work areas for EMMC 2013 include:
  - Labour Markets: Assessing future rkforce needs of the energy and mining sectors and compiling best practices by government, industry and other organizations to improve labour mobility, attract and retain skilled labour, and increase participation by Aboriginal peoples.
  - Unconventional Energy Technologies: Reviewing Canadian shale oil and gas resource potential, knowledge gaps, best practices and innovative solutions currently being pursued, including public engagement.
  - Regulatory Reform: Developing early warning systems for challenges in the environmental review process, ways to improve federal-provincial coordination of Aboriginal consultation, mapping of environmental review processes and strengthening environmental project reviews.
  - Mining: Examining regulatory barriers to the adoption of green mining technologies, producing a 2013 Mining Sector Performance Report and developing communications and stakeholder engagement strategies.
- Ministerial discussions at EMMC are supported by a Deputy Ministers' Committee that tasks working groups comprised of F/P/T energy officials to provide advice on priority and emerging issues such as: energy efficiency; electricity reliability; new markets and international trade; mining; unconventional oil and gas technologies; regulatory reform; and labour market challenges.

## ATTACHMENTS:

- 1. 2013 EMMC Agenda
- 2. 2013 EMMC Committee Structure

June 2013

## Attachment 1

## 2013 EMMC Agenda

SATURDAY, AUGUST 24, 2013			
Time	Ministers	Deputy Ministers	Delegates
1:00-6:00	Ministers     Deputy Ministers       Avalon's Nechalacho Rare Earth Element Project Tour     8		9-hole golf tournament (subject to cancellation – dependent on registration)
7:00-10:00	at Blachf	ord Lake Lodge	Meet-and-Greet (Black Knight)

	SUNDA	Y, AUGUST 25, 2013	
Time	Ministers	Deputy Ministers	Delegates
9:00-10:00	Return from Blachford Lodge		
10:00-11:00			
11:00-12:00			Great Slave Lake Tour
12:00 -1:00			& Shore Lunch
1:00-2:00			
2:00-3:00	Diavik Diamond M		
3:00-4:00			Cameron Falls
4:00-5:00			Hiking Tour
5:00-6:00			
6:00-7:30	Private Dinner		
7:00-10:00		<b>Opening Reception</b> Tent (Explorer)	

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	MON	DAY, AUGUST 26, 2013		
Time	Ministers Deputy Ministers Delegates			
7:30-9:00		Keynote Speaker/Breakfa Tent (Explorer)	ast	
9:00-9:30		Travel to Panel Discussions (5 minu	ute walk)	
9:30-11:30	CONFERENCE PANEL DISCUSSIONS Museum and Legislative Assembly			
11:30-12:00		Walk back for Lunch		
12:00-1:30	The Hone	Keynote Speaker & Lund ourable Joe Oliver, Minister of N Tent (Explorer)	:h atural Resources	
1:45-3:30	Joi	EMMC OPEN SESSION int Energy and Mines Minister Katimavik B-C (Explorer)	s' Meeting	
3:30-3:40	• • • • • • • • • • • • • • • • • • •	Health Break		
3:40-4:50	Joi	EMMC OPEN SESSION (cont nt Energy and Mines Minister Katimavik B-C (Explorer)	nued) s' Meeting	
5:00-5:30		Media Availability Janvier Room		
6:00-11:00	Trad	itional Northern Dinner/Ent (Buffalo Air Hangar)	ertainment	

TUESDAY, AUGUST 27, 2013				
Time	Ministers	Deputy Ministers Delegates		egates
7:30-9:00	Breakfast/ Photo Session Legislative Assembly	Brea Tent (E	<b>ikfast</b> Explorer)	
9:00-10:30	Mines I	Ministers' Meeting (Closed) Katimavik B-C		Mine Heritage & Giant Mine
10:30-11:00	Health Break Explorer			Tour
11:00-12:30		Energy Ministers' Meeting ( Katimavik B-C	Closed)	
12:00-1:30		Lunch Tent (Explorer)		
1:30-2:00		Press Conference Janvier Room		
2:00-4:00		Giant Mine Remediation T	our (AANDC	
7:00 - 10:00		Closing Event Northern Show Black Knight		

## Attachment 2





Energy

Major Projects Management Office

## ISSUE: Environmental Assessment Process for Energy and Mining Projects

## **KEY MESSAGES:**

- British Columbia has been pursuing a more efficient environmental assessment process with the Federal Government for a number of years. Improvements to the process have now been enabled through the recently amended *Canadian Environmental Assessment Act 2012*.
- The British Columbia Environmental Assessment Office (EAO) entered into a Memorandum of Understanding (MOU) on the Substitution of Environmental Assessments (EA) with the Canadian Environmental Assessment Agency (Agency).
- As of April 23, 2013, the federal Minister of the Environment has approved EAO's substitution requests for the environmental assessments of the proposed Carbon Creek Coal Mine near Hudson's Hope, BC, and the proposed Sukunka Coal Project near Chetwynd, BC.
- Substitution means that where both federal and provincial environmental assessments are triggered, there would be one assessment process (the provincial one) and two decisions (federal and provincial Ministers).

## BACKGROUND:

#### Additional Substitution Requests:

- In addition to the approved substitution requests for the proposed Carbon Creek and Sukunka projects, EAO has requested substitution for the:
  - o Echo Hill Coal Project, located 44 km north of Tumbler Ridge;
  - o LNG Canada Export Terminal, located in Kitimat; and
  - o Arctos Anthracite Coal Mine, located 160 km NE of Stewart
- The decisions on these requests are anticipated in late May 2013. The Agency is conducting 20-day public comment periods on each request, following which, the federal Minister of the Environment will make individual decisions on these requests.
- EAO is conducting ongoing analysis to identify future substitution requests, and anticipates requesting substitution regularly.

## Responses to Substitution and EAO Outreach:

- Various environmental non-governmental organizations and First Nations are opposed to the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) in general, and some are concerned about substitution and equivalency specifically.
- A number of proponents have requested that EAO seek substitution from the Federal Government. EAO has communicated that it will consider the views of proponents; however, decisions about whether to pursue substitution will be based on a range of factors, which may include likelihood of trans-boundary effects, proximity to federal

lands, number of federal authorizations likely to be required post-EA, and the Aboriginal consultation context.

- During March/April 2013, EAO conducted outreach with key stakeholders on a range of issues, including the substitution MOU. These stakeholders included the BC Business Council, Union of BC Municipalities, West Coast Environmental Law, West Coast Environmental Law, and the Canadian Association of Petroleum Producers.
- EAO is meeting with a number of First Nations with an interest in substitution, including those who live near the proposed Carbon Creek and Sukunka projects.

## Meeting the Conditions for Substitution:

- A key principle behind substitution is that it must support and encourage the rigour of federal and provincial environmental assessments.
- Substitution does not change the purpose of environmental assessment, which is to
  examine proposed major projects for potentially adverse effects that may occur during
  the project's life cycle and develop strategies to avoid or minimize those impacts.
- CEAA 2012 contains a number of conditions that must be met in order for a
  jurisdiction to pursue substitution. These conditions include consideration of specific
  environmental factors (e.g. impacts to fish and fish habitat, migratory birds, aquatic
  species) and an opportunity for public participation.
- In addition, the federal Minister of the Environment has established additional conditions for substitution, including the invitation of federal technical experts to participate in substituted EAs, the provision of Aboriginal capacity funding, and meeting federal 365-day timelines.
- The MOU includes a number of specific EAO commitments that demonstrate how British Columbia meets these conditions for substitution.

## Key Details about the MOU:

- The focus of the MOU is on substitution, both on a project basis and for classes of projects, and states that the parties will explore equivalency at a later date.
- Aboriginal consultation is largely dealt with in an annex, which sets out the procedural delegation of Aboriginal consultation to BC for purposes of substitution.
- The Agency has agreed to continue to provide funding for Aboriginal groups participating in substituted EAs. The details of the funding mechanism are being determined, but it has been agreed that EAO will administer the distribution of federal funding on behalf of the Agency.
- The MOU creates the role of an Agency Liaison to work with EAO Project Leads managing substituted EAs to ensure the federal government is aware of key issues with respect to the environmental assessment and Aboriginal consultation.
- The Agency commits to timelines in considering substitution requests from BC.
- A joint implementation steering committee will develop operational procedures, monitor implementation and address key issues.

## ISSUE: Environmental Mitigation Policy (EMP)

## KEY MESSAGES:

- The BC Ministry of Environment (MOE), with support from the Environmental Assessment Office (EAO) and other natural resource ministries, is developing a policy to establish a consistent approach to mitigating adverse environmental impacts casued by development.
- The goal is to establish policy direction for avoiding, minimizing, restoring and offsetting environmental impacts across the province, and to provide guidance on financial offsetting. The proposed policy will clarify requirements, decision making roles and responsibilities for environmental mitigation. It will also improve efficiency in identifying appropriate environmental mitigation measures, and negotiating environmental mitigation plans and environmental offsetting agreements.

## BACKGROUND:

- The goal of the proposed EMP is to help government staff provide consistent, efficient and relevant advice to statutory decision makers when authorizing development projects and activities, by providing a province wide approach to identifying and addressing potential environmental impacts.
- The EMP will standardize environmental assessment processes, negotiations of environmental mitigation agreements, and expectations for environmental offsetting.
- The policy will provide internal policy guidance that supports existing provincial and federal legislation.
- The EMP Interagency Policy Advisory Committee includes representatives from two divisions (Electricity and Alternative Energy Division and the Mines and Mineral Resources Division) of the Ministry of Energy, Mines and Natural Gas.

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- The trial application phase of the project is expected to conclude in Spring 2013, and the project will then move into the implementation phase.
- The goal of the implementation phase is to have the EMP used as a targeted tool right across the natural resource sector. To achieve this, an implementation plan will be developed, including training for government staff and proponents.

- Stakeholder and First Nation engagement in February 2012 highlighted specific concerns:
  - 1) there may be an absence of clear guidance on where and when the EMP should be used; and,
  - 2) having the EMP as a voluntary tool may lead to inconsistent uptake and application by natural resource sector staff and decision makers.
- The implementation plan will address these concerns and include guiding principles for where and when the EMP should be used.

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## ISSUE: Integrated Decision Making Regulatory Initiative

## **KEY MESSAGES:**

- As stated in the Natural Resource Sector (NRS) Transformation Plan, a key goal of the sector is to achieve the vision of "one land manager". One of the major ways to do this is through integrated decision making.
- The Integrated Decision Making (IDM) regulatory initiative, led by Ministry of Forests, Lands and Natural Resource Operations (FLNRO), will coordinate decision making processes for projects that require decisions under multiple statutes.
- The IDM regulatory initiative is to be implemented through phased legislative changes.

#### BACKGROUND:

- FLNRO is leading NRS ministries in a number of initiatives to improve efficiencies and decisions for government, proponents and the public, which collectively aim to achieve the goal of one land manager. The major initiative of these is IDM. The Ministry of Energy, Mines and Natural Gas is involved in this initiative through the Corporate Initiatives Branch and the Mines and Mineral Resources Division.
- The IDM Regulatory Initiative will initially develop consistent application processes and requirements for the multiple approvals required for a single project.
- The intent is to develop an 'umbrella' statute in phases.
- For a project that requires approvals across multiple statutes, phase 1 will establish a single standard for public review and coordinate the terms of approvals/tenures, renewals, processes, payments (e.g. royalties, fees and rents) and securities.
- Subsequent phases will establish environmental resource management objectives, standards and practices applicable to all sectors, rather than the current ones that are applied on a sector specific basis and only to certain sectors.

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#### ATTACHMENTS:

- 1. IDM Initiatives Overview
- 2. IDM Potential Model for Regulatory Harmonization

#### CONTACT: Karen Koncohrada, ED

Corporate Initiatives Branch



		Outcomes		
Increased client satisfaction	Lower service delivery costs	Improved utilization of resources	Lower risks to government	More timely, efficient and durable decisions



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## Potential Model for Regulatory Harmonization



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## ISSUE: International Energy and Mining Relations

## KEY MESSAGES:

- British Columbia attracts significant international interest in investment in its oil and gas, mineral exploration and mining, electricity and alternative energy sectors, which together are worth more than \$15 billion annually.
- This interest is global and results in frequent visits by foreign delegations and requests for meetings with the Minister from Ambassadors and others representing countries in the regions of the Asia-Pacific, Middle East, Europe, South America and North America.
- In 2012, British Columbia exported almost \$11.4 billion worth of energy and minerals, including coal, natural gas, electricity, copper and other mineral commodities. The top destination markets were the United States, Japan, China and South Korea.
- In recent years, British Columbia's mines Minister and/or officials have attended the annual China Mining conference in November and combined this travel to Asia with events in Japan, South Korea and other Southeast Asian countries. In addition, several outgoing Premier's trade missions to Asian countries have taken place in recent years attended by certain Ministers and officials.
- The Government of Canada has signed, or is currently negotiating, various international trade and investment agreements with countries from these regions. These agreements typically seek to cover market access, investment and trade in energy and mineral resources over which British Columbia has constitutional jurisdiction and provincial officials work closely with their federal counterparts to include British Columbia's interests.

## BACKGROUND:

- Investment opportunities in British Columbia's Liquefied Natural Gas (LNG) industry have attracted global interest. Since 2012, over \$6 billion in investments have been made to acquire upstream natural gas assets and execute strategic corporate acquisitions, including joint ventures that would anchor the development of pipelines and LNG plants in British Columbia. It is estimated that up to \$1 billion has already been spent to prepare for the construction of LNG infrastructure.
- The 2012 production value of mining in British Columbia was \$8.3 billion and exploration spending was \$680 million.

- British Columbia is internationally recognized as a centre of expertise in mining and related fields, such as metallurgy, environmental engineering, mine safety and the geosciences. Vancouver is the base of operations for more than 800 global mining and mineral firms, including two of the world's largest mining companies.
- British Columbia has a world-class service industry for the thousands of oil, gas and mining companies that make British Columbia their destination or home. In Vancouver there are more than 400 service suppliers to exploration, development and production companies worldwide. This expertise is augmented by universities and research centres that keep information and technology flowing.
- British Columbia houses immense renewable resource potential with \$100 billion in investment opportunities and 37,000 MW of renewable power ready to be tapped.
- The Government of British Columbia often receives requests of the Minister or Premier to negotiate Memorandums of Understanding (MOUs) with other governments covering a variety of topics, including energy and mining. Typically such MOUs seek cooperation and exchanges of staff for the purposes of sharing technical expertise, best practices and knowledge, and to foster better relations between the two jurisdictions. The approach to negotiating such MOUs is to determine if there are areas of joint benefit for both parties and to take small steps in building the relationship. If the MOUs are broader in scope than this Ministry's mandate, then the Intergovernmental Relations Secretariat (IGRS) takes the coordinating lead.
- The Government of Canada's foreign policy priorities for 2013-2014 include ambitious economic and trade agreements with India, Japan, South Korea and Southeast Asia. The mandate also includes promoting Canada as a reliable and responsible supplier of resources to global markets.
- The Trade Initiatives Branch in the Ministry of Jobs, Tourism and Skills Training (JTST) participates in various international trade negotiations in which the Government of Canada is engaged. This ensures that British Columbia's interests and areas over which the Province has constitutional jurisdiction, including natural resources, are safeguarded. The Ministry of Energy, Mines and Natural Gas (EMNG) works with JTST to provide input into these trade agreement negotiations.
- EMNG also provides input into JTST's overseas mission planning department when provincial delegations travel overseas (e.g., China, Japan, South Korea, India, etc.) and in preparation for the frequent foreign delegations that visit British Columbia.

## ATTACHMENT:

Status of Canada's Trade Negotiations and Agreements

#### Status of Canada's Trade Negotiations and Agreements

**Canada-European Union Comprehensive Economic and Trade Agreement (CETA):** The negotiations include energy and British Columbia has provided input to ensure its specific energy interests are safeguarded. The ninth and last official round of negotiations, was completed in October 2011. Negotiators continue to work to conclude negotiations in 2013 through focussed FPT meetings on an issue-by-issue basis.

**Trans-Pacific Partnership (TPP)** (Australia, Brunei, Chile, Canada, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam): The 17th round of negotiations will take place in Lima, Peru from May 15-24. Members are aiming to conclude negotiations by the end of 2013, but this timeline may be compromised with the likely addition of Japan to the negotiations.

**South Korea:** Canada and South Korea launched FTA negotiations in 2005. Negotiations stalled in March 2008 over auto, beef and pork issues. In 2012 and 2013, Canadian and Korean officials have been re-engaging in FTA negotiations.

**Japan:** Canada and Japan held their second round of bilateral negotiations towards an Economic Partnership Agreement from April 22-26 in Ottawa.

**India:** The second part of the 7th round of negotiations was held in India in late March 2013. The Canada-India Foreign Investment Promotion and Protection Agreement (FIPA), concluded in 2007, has not yet been ratified (India wants it re-negotiated).

In addition to being a Member of the World Trade Organization (WTO), Canada has concluded Free Trade Agreements (FTAs) with the following countries:

Canada - Panama - Brought into force: 01-April-2013

Canada - Jordan - Brought into force: 01-October-2012

Canada - Colombia - Brought into force: 15-August-2011

Canada - Peru - Brought into force: 1-August-2009

Canada - European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) - Brought into force: 01-July-2009

Canada - Costa Rica - Brought into force: 01-November-2002

Canada - Chile - Brought into force: 05-July-1997

Canada - Israel - Brought into force: 01-January-1997

North American Free Trade Agreement (NAFTA) - Brought into force: 01-January-1994

## ISSUE: The Natural Resource Road Act (NRRA) Project

## KEY MESSAGES:

- The current legislative framework for regulating resource roads in British Columbia includes thirteen separate acts, many providing a unique suite of rights, obligations, standards, fees and terms.
- For road users and government administrators, understanding which rules apply to which roads and who holds accountability for what obligations, is challenging and conducting business under such a regime is inefficient and ineffective.
- The proposed NRRA will establish a consistent suite of rights, obligations and enforcement practices across all resource roads in the Province, thereby supporting business and government efficiency, as well as safer and more environmentally sound use of resource roads.

#### BACKGROUND:

- The resource road infrastructure is critical in supporting economic activity and the social well being of British Columbians.
- The vast majority of resource roads in the Province are built and maintained by the forest, oil and gas and mining sectors, but are widely used by commercial enterprises and the public.
- There are an estimated 205,000 kilometres of permitted resource roads, and 250,000 km of non-permitted roads, of unknown condition and use in BC.
- The current legislative framework for regulating resource roads in British Columbia includes thirteen separate acts, many providing a unique suite of rights, obligations, standards, fees and terms, and administered by a variety of government entities.
- For both road users and government administrators, understanding which rules apply to which roads, and who holds accountability for what obligations, is challenging. Conducting business under such a regime is inefficient and ineffective.
- The Ministry of Forests, Lands and Natural Resource Operations and Ministry of Energy, Mines and Natural Gas are leading a team in developing a new Natural Resource Road Act to establish a consistent suite of rights, obligations and enforcement practices across all resource roads in the Province. The intent is to support business and government efficiency, as well as the safer and more environmentally sound use of resource roads.
- EMNG is being represented in the NRRA project by members of the Corporate Initiatives Branch, the Oil and Gas Division, and the Mines and Mineral Resources Divsion. Representatives of the Oil and Gas Commission are also participating.

- There has been broad engagement of stakeholders and First Nations. Policy development is being informed by an advisory team consisting of representatives from all major stakeholder groups, including mining, oil and gas, forestry, utilities, tourism, outdoor recreation and local government.
- While there is broad support for the NRRA, there has been also some stakeholder and First Nation resistance. This is based primarily on misunderstandings of what the legislation may contain. Steps continue to be taken to manage these concerns.

## ISSUE: Natural Resource Sector Appeal Tribunals

## KEY MESSAGES:

- There are three distinct administrative tribunals which hear appeals to various decisions made by government under the statutes that govern the natural resource sector: the Environmental Appeal Board, the Forest Appeals Commission and the Oil and Gas Appeal Tribunal.
- The three tribunals currently share a common chair, members and administrative support. The tribunal authorities, powers and rights of appeal however differ between the tribunals and across the statutes.

S13, S14

#### BACKGROUND:

- The Environmental Appeal Board (EAB), Forest Appeals Commision (FAC), and Oil and Gas Appeal Tribunal (OGAT) are independent, quasi-judicial administrative tribunals that hear appeals to decisions in the natural resource sector. Although being separate boards with different authorities, the Chair and members are cross-appointed to each of the three boards. The three boards also share administrative resources and an office in Victoria.
- The EAB, established in 1981 under the *Environment Management Act* and continued under the 2003 *Environmental Management Act*, hears appeals of specific decisions under the *Drinking Water Protection Act*, *Environmental Management Act*, *Integrated Pest Management Act*, *Greenhouse Gas Reduction (Cap and Trade) Act*, *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act*, *Greenhouse Gas Reduction (Vehicle Emission Standards) Act* [not in force], *Water Act*, and *Wildlife Act*.
- The FAC, established in 1995 under the Forest Practices Code of British Columbia Act, hears appeals of decisions under the Forest Act, Forest Practices Code of British Columbia Act, the Forest and Range Practices Act, the Private Managed Forest Land Act, the Range Act, and the Wildfire Act.
- The OGAT, established in 2010 under the *Oil and Gas Activities Act*, hears appeals of decisions under the *Oil and Gas Activities Act*.
- The staggered development of appeal rights in the natural resource management sector has resulted in the establishment of three tribunals with jurisdiction under 14 statutes, different authorities and powers, inconsistent procedures and application of the Administrative Tribunals Act, lack of clarity for the users, and some duplication of the administration and infrastructure necessary to support the tribunals.

S13, S14

• The Ministry of Energy, Mines and Natural Gas is involved in this project through the Corporate Initiatives Branch.

## ISSUE: New West Partnership

## KEY MESSAGES:

- The New West Partnership (NWP) Energy Memorandum of Understanding (MOU) was established as a way for British Columbia, Alberta and Saskatchewan to work together to strengthen and expand the region's energy sector.
- The three provinces continue to collaborate on an Asia energy export and marketing strategy and environmental regulation in the energy sector, while previous work focused on hydraulic fracturing and related best practices.

#### BACKGROUND:

- The NWP is an economic partnership between British Columbia, Alberta and Saskatchewan establishing Canada's largest open market and creating a framework for ongoing cooperation to strengthen the western economy.
- The NWP, signed by the three Premiers on April 30, 2010, came into effect on July 1, 2010 and contains four separate agreements:
  - New West Partnership Trade Agreement;
  - International Cooperation;
  - o Innovation; and
  - o Procurement
- On December 16, 2010, an Energy MOU under the NWP was signed by the Provinces' Energy Ministers establishing a collaborative framework to strengthen and expand the region's energy sector.
- Under this MOU, the Provinces undertake to work in collaboration to:
  - o exchange information on regulatory streamlining and process improvements;
  - o promote energy technology development and deployment in the energy sector;
  - o promote energy infrastructure of mutual interest;
  - coordinate on strategies for increased market access and market diversification of energy goods;
  - continue to work together to pursue a commercial arrangement for the adoption and implementation of the Petroleum Registry within British Columbia; and
  - exchange information on energy efficiency and alternative energy and promote responsible energy development and use.
- A Deputy Minister-level Steering Committee, assisted by a Secretariat, has been established to coordinate Energy MOU related work. The Steering Committee chairperson rotates between the Provinces. Saskatchewan assumed the chair position from Alberta on December 16, 2012.

S13, S16

- Additional work recently completed or near completion under the NWP Energy MOU includes:
  - the production of an oil and gas fiscal regimes report that summarizes the petroleum fiscal regimes for the western provinces and territories;
  - an evaluation of industry issues to discuss and resolve matters of concern raised by industry, and;
  - greater collaboration on information and knowledge sharing and the development of Best Practices related to hydraulic fracturing along with FracFocus.
- British Columbia was the first province in Canada to regulate the public disclosure of additives used for hydraulic fracturing. FracFocus.ca is the registry which provides a transparent accounting of hydraulic fracturing operations and includes a database of the ingredients used to support natural gas extraction and extensive content about the regulations and safety procedures governing industry activity.
- On January 1, 2012, public disclosure for hydraulic fracturing fluid became mandatory in British Columbia. By law, a list of ingredients used must be uploaded to the registry within 30 days of finishing completion operations, the point in time when a well is able to produce gas.
- On December 31, 2012 Alberta joined British Columbia in requiring the disclosure of hydraulic fracturing fluids on FracFocus.ca

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#### **BRIEFING NOTE**

## ISSUE: Qualified Persons (QPs) in the Natural Resource Sector

## **KEY MESSAGES:**

 The Qualified Persons (QP) project is a government Natural Resource Sector (NRS) initiative led by the Ministry of Forests, Lands and Natural Resource Operation (FLNRO) to improve the understanding of how QPs can add value to the resource administration process, and when it is appropriate to rely on the work of QPs to inform or support administrative and technical functions.

S13

#### BACKGROUND:

• A wide variety of QPs work in the NRS in a wide range of capacities. They provide information and expertise to support both decision-making and operational activities.

S13

## ISSUE: Service Plan 2013/14-2015/16 for the Ministry of Energy, Mines and Natural Gas (EMNG) and Minister Responsible for Housing

## KEY MESSAGES:

- The Service Plan for the Ministry of Energy, Mines and Natural Gas (EMNG) and Minister Responsible for Housing, and Liquor and Gaming, was prepared in accordance with government-wide guidelines and presented as part of the February 19, 2013 provincial budget.
- Under the direction of the Natural Resources Board, resource management ministries continue to implement a sectoral approach that promotes streamlined authorization processes and enhanced access to public services across the Province. The Ministry's 2013/2014 Service Plan contains strategies that support this approach.
- At the time of writing, the Minister of Energy, Mines and Natural Gas has responsibility for housing, and liquor distribution and gaming. Accordingly, the Ministry's 2013/2014 Service Plan incorporates goals, strategies and performance measures for each of these program areas.

## BACKGROUND:

- The Service Plan includes revised strategies and performance measures that support Ministry's 2012 Mineral Exploration and Mining Strategy, Natural Gas Strategy and Liquefied Natural Gas Strategy.
- The Ministry regularly assesses resources against business objectives, and undertakes a comprehensive review of current resources in conjunction with the development of its Service Plan. This allows the Ministry to direct resources towards programs designed to achieve the Service Plan objectives.
- For this fiscal year, EMNG staff factored in ongoing developments in the world economy, particularly slower growth in Asia and the impact this will have on demand for provincial exports; improvements in the markets for some resource commodities produced in British Columbia; continuing low interest rates; and greater demand for housing assistance during times of fiscal restraint. EMNG considered the impact these will have on its Service Plan targets and the nature of the services to be delivered by the Ministry.
- The complete 2013/14 Service Plan is attached, together with a logic model showing the Service Plan goals and objectives.

#### ATTACHMENT:

Service Plan Logic Model
# Service Plan Logic Model

Ministry Goal 1						
Internationally competitive energy, mining and natural gas sectors that contribute to jobs and the economy						
Objectives		2013/14 Strategies		2012/13 Performance		
anna an	-			Measures		
1.1 New energy and mineral resource projects that support the creation of family-supporting jobs in B.C.		<ul> <li>Work with proponents of liquefied natural gas projects and other ministries to have at least three terminals and associated pipelines in operation by 2020.</li> </ul>				
	>	<ul> <li>Work with First Nations, communities and Canada to ensure best practices are in place to guide marine traffic and the safe shipment of liquefied natural gas to export markets.</li> </ul>	•	1.Number of new mines in operation		
		<ul> <li>Support the development of pipelines, roads and electricity infrastructure required for new mines, mine expansions and liquefied natural gas facilities including the development of industrial land use plans for the Douglas Channel, Kitimat and Prince Rupert areas.</li> </ul>	•	2. Number of expansions to existing mines		
		<ul> <li>Work with BC Hydro to ensure an adequate supply of clean electricity is available to support new investments in liquefied natural gas, upstream oil and gas, and mines.</li> </ul>				
		<ul> <li>Continue to develop a coordinated, transparent permitting and approval process with clear timelines for all industrial projects, including natural resource development projects.</li> </ul>				
		<ul> <li>Continuously improve geological and resource assessments for natural gas, geothermal, storage reservoirs, coal, minerals and aggregate through collaboration with industry, industry associations, and academic and research institutes.</li> </ul>				
		Work closely with the Ministry of Jobs, Tourism and Skills Training to ensure that skills gaps in the workforces of the oil and gas, and mineral exploration and mining sectors are identified and filled.				
		<ul> <li>Contribute to trade missions and marketing initiatives led by the Ministry of Jobs, Tourism and Skills Training to attract investment in B.C. energy and mineral projects and business opportunities.</li> </ul>	<b>→</b>	3. Annual Investment in Oil		
1.2 B.C. is positioned as an attractive jurisdiction for investment in the energy and	-	• Further establish B.C. as a recognized centre of excellence for energy and mining expertise, innovation and technology in collaboration with industry, post-secondary institutions, the federal government and provincial agency partners.		and Gas Exploration and Development		
mining sectors and related businesses		• Improve the competitiveness of B.C.'s energy and mining sectors by providing leadership, information, investing in infrastructure, and developing new policies, regulations and programs.	<b>→</b>	4. Annual Investment in Mineral Exploration and		
		• Maintain B.C.'s competitiveness for investment in upstream natural gas development, and related liquefied natural gas export opportunities, by modernizing petroleum and natural gas tenure legislation, ensuring royalty programs remain highly competitive, supporting infrastructure development and facilitating efficient and timely regulatory review of proposed developments.		Mines		
		Conduct energy and mining related geoscience research and technical assessments to promote industry investment.				
		<ul> <li>Work with the Ministry of Forests, Lands and Natural Resource Operations towards an average 60-day turnaround time for processing Notice of Work permit applications for mineral and coal exploration activities.</li> </ul>				
		<ul> <li>The Province will continue to work with the federal government to develop a single, effective environmental review process, maintaining the highest standards while eliminating costly and time-consuming duplication.</li> </ul>				
	1		1	1		

Ministry Goal 1 Internationally competitive energy, mining and natural gas sectors that contribute to jobs and the economy					
Ministry Objectives		2013/14 Strategies		2012/13 Performance Measures	
1.3. Optimal revenue from the development of B.C.'s energy and mineral resources	•	<ul> <li>Provide the government services needed to respond to increasing economic activity, in particular delivering sound, timely decisions on mining, oil and gas, liquefied natural gas, and related water, Crown land and other permits, authorizations and tenures.</li> <li>Monitor and evaluate the performance of B.C.'s energy and mining policies and programs to fully maximize the financial benefit of resource development and use for British Columbians.</li> <li>Implement revenue collection mechanisms to address B.C.'s specific challenges that might otherwise slow or hinder the development of oil, gas, coal and mineral resources.</li> <li>Continue to hold 12 monthly Crown oil and gas rights sales per year.</li> </ul>	>	5. Direct government revenue from mining, and oil and gas	
1.4. A secure, reliable supply of energy for the long-term benefit of all British Columbians	>	<ul> <li>Work with BC Hydro to upgrade the Province's heritage generation, transmission and distribution assets to meet future demand.</li> <li>Develop and implement policies to keep electricity rates affordable for B.C. families and respond to B.C.'s other energy objectives.</li> <li>Ensure reliable electricity supply through innovative, aggressive conservation, ongoing competitive power procurement programs, and BC Hydro funded projects.</li> <li>Expand the use of natural gas as a transportation fuel.</li> <li>Conduct regional studies and resource assessments to enhance understanding of the geological framework that hosts B.C.'s oil and gas resources, improve the province's resource estimates, and encourage exploration.</li> </ul>			
1.5. Efficient and effective energy and mining policy, legislation and regulation in the public interest of British Columbians	•	<ul> <li>In cooperation with other levels of government, continue to review legislation and regulations to ensure B.C. remains competitive, while enhancing the integrity of environmental, health and safety standards.</li> <li>Modernize the Ministry's oil and gas tenure administration processes.</li> <li>Complete the development of a Carbon Capture and Storage Regulatory Framework.</li> <li>Manage the review of the Columbia River Treaty to ensure benefits for British Columbia continue to be realized.</li> <li>In consultation with other ministries and stakeholders, develop and implement new acts and regulations that support the responsible development and use of energy and mineral resources.</li> </ul>			

Ministry Goal 2 Safe and environmentally responsible energy and mineral resource development and use				
Ministry Objectives	2013/14 Strategies		2012/13 Performance Measures	
2.1. Standards that protect the public and the environment	<ul> <li>Work with industry and other natural resource sector agencies to improve environmental and safety regulation compliance at mine sites through inspections and audits.</li> <li>Collaborate with other government ministries on the Ministry of Health's study into the potential human health effects of the oil and gas industry.</li> <li>Work with industry to identify disposal zones for carbon dioxide sequestration projects and opportunities for carbon dioxide use in enhanced oil recovery.</li> <li>Continue to support the annual British Columbia Mine Reclamation Awards to recognize outstanding achievements in mine reclamation in this province.</li> <li>Support mine rescue competitions and the annual Mines Safety Awards.</li> </ul>	>	6. WorkSafeBC injury rate at B.C. mines	
2.2. Clean energy resources, fuels and related technologies complemented by energy efficiency and conservation efforts across all sectors of the economy.	<ul> <li>Support energy utilities with the implementation of cost effective demand side management measures.</li> <li>Participate in and support long-term clean energy planning initiatives at the regional and provincial level, including the Western Renewable Energy Zones initiative and BC Hydro's Integrated Resource Plan.</li> <li>Work with the Climate Action Secretariat (Ministry of Environment), other government ministries and agencies, Crown corporations, the public, electricity producers and utilities across B.C. to implement a coordinated approach to energy conservation and efficiency measures and support the deployment of alternative energy options to meet the province's energy needs.</li> <li>Continue to support energy efficiency in homes and buildings by monitoring on-bill financing pilots for British Columbians to inform the evolution of the successful LiveSmart BC: Energy Efficiency Program.</li> <li>Ensure the procurement of clean and renewable electricity continues to account for at least 93 per cent of total generation, excluding power required for liquefied natural gas projects.</li> <li>Continue to implement the BC Bioenergy Strategy to take advantage of B.C.'s abundant sources of Mountain Pine Beetle timber, wood wastes and agricultural residues.</li> <li>Through the Innovative Clean Energy Fund, support projects that solve real, everyday energy and environmental issues and create economic benefits for all British Columbians.</li> <li>Reduce the carbon intensity of the energy used by British Columbians by implementing a low carbon fuel requirement and increasing the supply of clean electricity for transportation.</li> </ul>	•	7. Total energy savings achieved each year through utility and provincial conservation policies, programs, and regulations.	

Ministry Goal 2				
Safe and environmentally responsible energy and mineral				
Ministry Objectives		2013/14 Strategies		2012/13 Performance Measures
2.3. The Ministry, stakeholders, First Nations and industry are engaged and working cooperatively for the responsible development and use of British Columbia's energy and mineral resources		<ul> <li>Develop and implement an effective community and stakeholder engagement model to respond to increased unconventional gas exploration and development in Northeast B.C.</li> </ul>		
		<ul> <li>Seek support for the Farmers Advocacy Office in Dawson Creek to assist land owners in engaging the oil and gas sector.</li> </ul>		
		<ul> <li>Foster working relationships among industry, the public, First Nations and landowners by clarifying and simplifying resource exploration and development management processes, enhancing dispute resolution methods, and offering more support and information.</li> </ul>		
		<ul> <li>Continue to collaborate with other ministries, agencies and Crown corporations to provide information to promote greater public understanding of the exploration and development of resources.</li> </ul>		
		Support the development and continuous improvement of Strategic Engagement Agreements     with First Nations to make consultation processes more predictable.		
		Support the development of Revenue Sharing Agreements that provide First Nations communities with economic benefits based on energy and mining activities in their traditional territories.		
		<ul> <li>Continue to work with the Ministry of Aboriginal Relations and Reconciliation to build effective business development relationships with First Nations.</li> </ul>		
		• Continue to support the annual Mining and Sustainability Award to recognize the diverse companies, communities, First Nations, non-governmental organizations, government agencies and individuals committed to advancing and promoting sustainable development in B.C. mining.		
	<del>2</del> 3.	Continue to support the Remote Community Energy Network (BC Hydro, Aboriginal Affairs and Northern Development Canada, the First Nations Technology Council and the Ministry) including energy education and training, community energy planning, utility service provision, clean energy development, energy efficiency and energy monitoring.		

Pages 41 through 42 redacted for the following reasons: Not Responsive

# ISSUE: Surface Rights Board

# KEY MESSAGES:

- The Surface Rights Board (Board), is an independent, quasi-judicial tribunal that resolves conflicts between land owners and companies that are seeking access to private land to explore for, and develop subsurface resources including oil and natural gas, minerals, coal and geothermal resources.
- The Board shares a chair with the Property Assessment Appeal Board (PAAB) and the Civil Resolution Tribunal. The Board receives administrative services from the PAAB which is located in Richmond.

# BACKGROUND:

- Under common law, subsurface rights holders have a right to access their subsurface mineral, coal, oil and gas rights through the property of a surface landowner. Legislation modifies this right by entitling the landowner to receive compensation for the access and/or loss of use or damage.
- The mandate and authorities of the Board are established through Part 17 of the *Petroleum and Natural Gas Act (P&NG Act)* and provisions of the *Adminstrative Tribunals Act (ATA)*. The Board assists parties in resolving disputes related to access when the parties cannot agree on the level of compensation or damage to be paid or to other terms of entry to land. The Board has jurisdiction to hear disputes under the *P&NG Act, Mineral Tenure Act, Coal Act, Geothermal Resources Act* and *Mining Right of Way Act*.
- The Board may have up to nine members, two of which are Chair and Vice-Chair. Members are appointed following a merit-based process in accordance with the *Administrative Tribunals Act* (*ATA*). Currently, there are seven members on the Board.
- The Board operates within the Government's conflict of interest guidelines, guidelines established under the *ATA*, the principles of administrative law and natural justice, and Board procedures.
- The Board is funded through the Ministry of Energy, Mines and Natural Gas (EMNG).
- A Memorandum of Understanding exists between the Chair and the Minister of EMNG to clarify the respective roles of the Minister and Chair, and the administrative and communication processes.
- The Board is part-time and receives administrative support from the full-time PAAB. The Board Chair (Cheryl Vickers) and Vice-Chair are also Chair and one of the Vice-Chairs of PAAB. The second Vice-Chair of PAAB is a member of the Board.
- Cheryl Vickers is also the Chair of the new Civil Resolution Tribunal currently under development by the Ministry of Justice as an online dispute resolution tool for strata property issues and small claims matters.

• The Annual Reports of the Board are available on the Board website. The Chair reports to the Minister quarterly on the number of applications filed, hearings held and decisions made by the Board.

Name	Location	Background	Date of First Appointment	Expiry date of Appointment
Cheryl Vickers (Chair) [PAAB Chair]	Vancouver	Lawyer	July 22, 2007	December 31, 2013
Simmi Sandhu (Vice chair) [PAAB Vice-chair]	Vancouver	Lawyer	July 22, 2007	July 31, 2014
Valli Chettiar [PAAB Vice-chair]	Vancouver	Lawyer	June 22, 2012	July 31, 2014
Brian Sharp	Victoria	Real estate professional	November 23, 2012	December 31, 2015
Bill Oppen	Fort St. John	Retired government official	December 8, 2008	December 31, 2013
Viggo Pedersen	Fort St. John	Retired Dairy Farmer	March 5, 2009	July 31, 2013
Rob Fraser (temporary extension)	Victoria	Real estate professional	July 22, 2007	July 31, 2013

CONTACT: Karen Koncohrada, ED

# ISSUE: Trade, Investment and Labour Mobility Agreement (TILMA) between British Columbia and Alberta

# **KEY MESSAGES:**

- Under the TILMA, Alberta committed to remove residency and agency requirements from its oil, gas and coal regulations that require BC companies undertaking these activities in Alberta to maintain an office or agent in Alberta.
- These requirements were to have been removed by October 1, 2008, but that has not occurred.

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• The practical effect of Alberta's measures is that companies in the oil, gas and coal sectors that operate inter-provincially establish their head office in Alberta rather than in British Columbia.

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### BACKGROUND:

- The TILMA is an agreement between British Columbia and Alberta to remove economic barriers between the two provinces.
- TILMA was approved at a British Columbia and Alberta joint Cabinet meeting on April 28, 2006. The agreement came into force on April 1, 2007 and was fully implemented by British Columbia before April 1, 2009.
- On July 1, 2010, TILMA was expanded to include Saskatchewan under the New West Partnership Trade Agreement (NWPTA). TILMA will continue to be in force alongside the NWPTA until Alberta fully complies with its TILMA obligations relating to residency and agency in its oil, gas and coal regulations.
- Part V of TILMA lists the exceptions to the Agreement. With respect to energy and minerals, measures related to tenuring, exploration, development, management or conservation of energy or mineral resources are excepted from TILMA as long as they are non-discriminatory.
- Part VI of TILMA identifies transitional measures which must be addressed by one or both of the parties. Alberta's residency and agency requirements in the *Coal Conservation Act*, *Oil and Gas Conservation Act*, *Oil Sands Conservation Act* and *Pipeline Act* and the supporting regulations were required to be TILMA-compliant by October 1, 2008.
- British Columbia does not have similar residency or agency requirements in any of its energy or mineral statutes.

CONTACT: Karen Koncohrada, ED

# ISSUE: Water Sustainability Act Initiative

# KEY MESSAGES:

- The Ministry of Environment (MOE) is leading the development of the *Water Sustainability Act* (*WSA*) to replace the current *Water Act* with a modernized regulatory scheme that will be applicable to all water use in the Province.
- Key elements that will be new to water regulation in the Province include the regulation of groundwater, authorities to restrict and re-prioritize water usage during drought and the introduction of stream flow requirements into water use decisions.

### BACKGROUND:

- MOE is leading the development of a new WSA to replace the Water Act in the management of BC's water resources. Ministry of Energy, Mines and Natural Gas staff from the Corporate Initiatives Branch, Electricity and Alternative Energy Division, Mines and Minerals Resources Division and Oil and Gas Division participated in a Directors Committee set up for interagency consultations about the WSA project.
- The key goals of the proposed WSA are to ensure:
  - Watersheds are healthy and proted (=);
  - Users, communities and industries have secure and equitable access to water; and
  - o Water management is sustainable, efficient and adaptive.
- Under the WSA, many of the existing provisions of the Water Act will be retained. Changed or new policies will include measures to:
  - o Protect stream health;
  - Regulate groundwater;
  - o Address water use during times of scarcity;
  - Create Provincial Water Objectives for water quality, water quantity and aquatic ecosystem health;
  - Introduce requirements for decision makers to consider the quantity and timing of stream flow required to sustain freshwater ecosystems (environmental flow needs) when considering applications for surface or groundwater use; and
  - Create authority for the Water Comptroller to regulate existing water use when stream flow falls below a threshold at which significant or irreversible harm to the ecosystem may occur (critical environmental flow).
- The proposed WSA will maintain the existing priority date system for surface water licences (i.e., FITFIR) and introduce a priority date system for groundwater use. Existing groundwater uses will be assigned priority dates based upon well drilling records or other evidence of historic use and will be integrated into the existing priority date system.

- The proposed WSA will require large users (e.g., those using 250m<sup>3</sup>/day of water or more) to measure, record and report actual water use and related information on a more comprehensive and consistent basis than currently required under the Water Act. This will capture use by the oil and gas sector but is not expected to create new requirements as oil and gas operators already have to meet reporting requirements for water use under the Oil and Gas Activities Act.
- The proposed WSA will include requirements to conserve and use water efficiently (i.e. no wasteful use). Authority will be created to require water licensees to undertake water conservation audits; and establish levels of efficiency and conservation targets.
- Important elements of the WSA for the energy and mining sectors include:
  - Authority to exempt the use of deep, saline groundwater from regulation. The depth and saline thresholds are to be set through regulation. Deep, saline aquifers, which are believed to have minimal hydraulic connection with shallower groundwater, are of interest for use by the oil and gas industry.
  - Authority to exempt groundwater extracted from geothermal wells otherwise regulated under the *Geothermal Resources Act* from licensing under the WSA. At this time, geothermal wells are rare and the extraction is non-consumptive.
  - Continuation of the 40-year term as the maximum term for operations under a power purpose licence. However, the WSA will enable the creation of an additional term to be added to a licence to allow for the period of project development prior to the commencement of the operation. This should provide consistency and harmonization with other tenures held (e.g., *Land Act* tenures) as part of the power project.

CONTACT: Karen Koncohrada, ED

# Electricity and Alternative Energy Division

# 1. Purpose of the Division

The Division facilitates thriving, competitive, reliable, efficient and environmentally responsible electricity, alternative energy and energy efficiency sectors for the benefit of British Columbians.

The Division is responsible for:

- Legislation, policies and programs to support all forms of electrical power generation and transmission;
- Energy conservation and efficiency policies, programs, market transformation measures and regulations;
- Zero carbon fuel switching policies;
- Alternative energy development;
- Renewable and Low Carbon Fuels;
- Policy advice and direction to electrical utilities, including implementation of the BC Hydro Review;
- Policy advice and direction to the electricity and natural gas utility regulator, the British Columbia Utilities Commission;
- Fostering private sector investment in new electricity resources and energy efficiency technologies;
- Community Energy Solutions including remote community regulation and projects;
- Operational policy support for clean and renewable power producers;
- The LiveSmart BC: Efficiency Incentive Program;
- The LiveSmart BC: Small Business Program;
- The Innovative Clean Energy(ICE) Fund;
- The Columbia River Treaty Review; and
- Support the Minister in Implementing the governance relationship with power-related Crown Corporations, BC Hydro and Columbia Power Corporation, on the Government's letter of expectations, service plan, annual report, budget and related mining, natural gas and liquefied natural gas (LNG) strategies.

The Division supports electricity and alternative energy aspects of the BC Jobs Plan, including maintaining competitively priced clean power, facilitating clean electricity supply and

transmission expansion to support LNG and new mines, and helping to advance the clean tech sector. The Division leads the implementation of electricity, energy efficiency and alternative energy components of the BC Energy Plan and *Clean Energy Act*, along with the Energy Efficient Building Strategy and the BC Bioenergy Strategy. The Division supports the achievement of the Government Strategic Plan and the Ministry Service Plan.

**Related Legislation:** *BC Hydro Public Power Legacy and Heritage Contract Act, Clean Energy Act, Energy Efficiency Act, Geothermal Resources Act, Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act, Hydro and Power Authority Act, Hydro Power Measures Act, Power for Jobs Development Act, Special Accounts Appropriation and Control Act (Sections 9.5[ICE Fund]), West Kootenay Power and Light Company Act.* 

# 2. Context

### **External Factors**

- The Ministry of Finance forecasts British Columbia's real GDP to grow by 2.0 percent in 2012, 1.8 percent in 2013 and about 2.4 percent per year in the medium-term.
- The forecast for relatively slow near-term growth in the British Columbia economy is mainly due to continued weakness in Europe, the sluggish US recovery and the potential for further slowing of global economic activity.
- Despite the sluggish near-term forecast, LNG development in the province continues to gain momentum. Five LNG export facilities and three pipelines have been proposed for Northwest British Columbia representing a potential capital investment (including upstream development) of \$278 billion by 2020. As part of the BC Jobs Plan, British Columbia has a goal of three LNG facilities in operation by 2020.
- The British Columbia government amended the *Clean Energy Act* in the summer of 2012 to exclude LNG export facilities, and the electricity generation used to power them, from the Act's 93 percent clean and renewable energy requirement. Government remains committed to supplying a portion of the potential LNG load with BC Hydro clean and renewable electricity.
- BC Hydro is grappling with considerable uncertainty regarding future electricity needs. This uncertainty is driven primarily by potential LNG loads. If BC Hydro serves a significant portion of the new LNG load then BC Hydro could require significant new supply. However to the extent BC Hydro has a minor role in serving new LNG then BC Hydro will likely not need significant new supply and could be in surplus into the midterm.

- In the spring of 2012, the BC Legislature amended the *Clean Energy Act* definition of self-sufficiency such that BC Hydro is required to meet customer demand on an average water year. The amendment eliminates the requirement for BC Hydro to acquire an extra 3,000 GWh hours per year of insurance energy by 2020.
- Electricity rates in BC rose by 7.1 percent on April 1, 2012 and will increase marginally by 1.44 percent next April 2013. Depending on a number of factors, including government policy, rates are expected to increase on average between 5 percent and 9 percent over the following three years.
- Energy efficiency is a leading market response to increasing energy costs for businesses and families, with economic stimulus, job creation and emissions reduction co-benefits.
- In 2011/2012, BC utilities invested \$211 million in demand-side management and are expected to maintain that level of spending in 2012/2013.
- Natural Resources Canada eliminated the ecoENERGY Retrofit Homes incentives in March 2012. Reduced federal incentives are expected to significantly impact program uptake for LiveSmart BC in 2012/2013.
- The price of natural gas in the Province and the North American market is expected to remain low for an extended time period.
- Fortis BC predicts that the demand for natural gas in BC is expected to increase between 25 and 45 percent in the next 20 years.
- In 2012, the National Energy Board stated that transportation energy use is projected to grow at an average annual rate of 1.4 percent.

### **Internal Factors:**

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- The Division currently has 40 FTE's for 2012/2013. There are 45 people working in the Division as several positions are funded from external agencies. A new Branch was formed in 2011/12 to undertake a review of the Columbia River Treaty.
- Some positions in the Division remain vacant due to the need to hold back 1.5 percent of salary dollars to address cooperative gains and fiscal constraints.
- Government instituted spending reductions and a hiring freeze across the public service in September 2012 in part to counterbalance the effect of reduced natural gas resource revenues. Accordingly, the Division will continue its efforts to streamline its operations and leverage cross-Branch resources to meet its policy, program and process priorities.

For example, cross-Branch teams have been formed to develop proposals for new standards under the *Energy Efficiency Act* and administer the Renewable and Low Carbon Fuel Requirements Regulation.

# **3 Division Priorities**

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### **Programs:**

- LiveSmart Residential Program
- LiveSmart Small Business Program
- ICE Fund
- Clean Energy Vehicle Program
- Community Energy Programs (Remote Community Implementation Program, Community Energy Mentorship Program)

### **Processes:**

- Ministerial servicing (referrals, briefing notes, media requests, new issues, etc.)
- Drafting and implementation of regulations as directed by Cabinet and/or Minister
- Financial forecasting/reporting
- Crown oversight and issues management of BC Hydro and Columbia Power Corp
- Oversight of utility regulatory framework (*Clean Energy Act* and *Utilities Commission Act*)
- Cross-government policy development (land use, Water Act, building code, Environmental Assessment Act, BC/AB Water Management Bilateral Negotiations, Mitigation Policy Cross Ministry Working Group; Cumulative Effects)
- Participating in environmental assessment of energy projects
- Supporting the Minister in his role as the strategic lead for clean and renewable policy development
- Participation in the Clean Energy Association of British Columbia strategic policy forum
- Tracking relevant BCUC proceedings
- Stakeholder engagement
- First Nations energy development issues management
- Remote Community Regulation & RCE MOU
- Fortis Natural Gas Vehicle program oversight (section 18 prescribed undertaking)
- Stakeholder Working Groups (ICES, Off-grid, QUEST, Plug-In BC)
- RLCFRR Administration (annual fuel supplier audits under RLCFRR, validation of carbon intensities, carbon intensity audits, negotiation and approval of Part 3 agreements under the RLCFRR, annual report acceptance)
- Utility DSM support
- Energy Efficiency Act and EESR implementation and enforcement
- Pacific Coast Collaborative

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### Programs:

• MARR First Nations Clean Energy Business Fund – advisory services

### **Processes:**

- Intergovernmental processes (WGA, WIEB, WECC, WIRAB, WREZ, Alberta Bilaterals, Pacific Coast Collaborative, NRCan Steering Committee on Energy Efficiency, EMMC, COF, FPT Working Group, ASCEE, etc.)
- Crown corporation business cycle oversight (SLE, Service Plans, Quarterly and Annual Reports)
- Community Energy Funding Guide
- First Nation energy efficient housing
- Support BC Building Code updates
- Government point of contact for FortisBC Electric
- · Government point of contact for non-utility generators
- Professional development (conferences, training, journal articles)

### Bike Rack (Parking lot):

- Energy Efficient Buildings Strategy 3.0
- Clean Energy Act, Section 18 Electric Transportation Prescribed Undertaking
- Heat pump water heater R&D project
- Energy Efficiency Financing with First Nations
- Natural gas energy efficiency in First Nations communities
- Coastal First Nations Clean Energy Action Plan
- Golden Carrot program for smart charging
- Energy performance disclosure for houses (including time of sale)

- BOMA energy performance benchmarking
- On-bill financing for MURBs and institutional buildings
- Energy efficiency curriculum development for schools
- Renewable energy and clean technology policy (thermal)
- 100,000 solar roofs
- Water and Land Act pricing policy review for IPPs
- Wind turbine acoustic policy

# 4. Branch/Work Unit Descriptions

# 4.1 Electricity Policy Branch (EPB)

### **Key Functions:**

- The Electricity Group provides advice to the Minister and Cabinet on current and emerging electricity policy issues. The EPG is divided in to the Generation and Regulation Branch (GRB) and the Transmission and Industrial Electricity Branch (TIEB).
- The GRB addresses policy issues related to electricity generation, legislation and regulation governing British Columbia's electricity sector as well as policy for Clean and Renewable Producers and building relationships with related stakeholders. GRB is responsible for oversight of the electricity Crown corporations (Columbia Power Corporation and BC Hydro). The Branch contributes to BC Hydro Site C Development, provides guidance to BC Hydro on Integrated Resource Plan Development and is implementing the BC Hydro Review (water rentals and storage fees, definition of Net Income/Dividend Policy, and PowerTech Industries Sale). The Branch works on crossgovernment initiatives led by other ministries or agencies such as the *Water Act* Modernization Cross Ministry Working Group, BC/AB Water Management Bilateral Negotiations, Mitigation Policy Cross Ministry Working Group, Mountain Caribou Recovery Strategy Cross-Ministry Working Group, Williston Water Withdrawal for Fracking Policy, Cumulative Effects, Run of river compliance, and projects in the Environmental Assessment process.
- The TIEB is responsible for transmission policy and legislative analysis/development including representing provincial interests in inter-jurisdictional settings. It also is responsible for working with BC Hydro on industrial electricity initiatives that support provincial economic development objectives, such as the industrial electricity rates review. TIEB manages issues related to the Northwest Transmission Line (NTL) Project, the Iskut Extension, the Yellowhead Mine Interconnection, Robson Valley and rural and

First Nations transmission expansion in support of economic development. The Branch is responsible for the BCUC Mandatory Reliability Standards Review, providing advice to natural resource agencies on operational clean and renewable power production policies, and to non-utility generators (i.e. Rio Tinto Alcan, Teck Resources and Plutonic Power) and FortisBC Electric with respect to regulatory and policy issues.

# 4.2 Efficiency and Clean Energy Policy

### Key Functions:

- Strategic planning to support broad market transformation to energy efficiency and clean energy supplies.
- Public and industry outreach and on energy efficiency and clean energy measures.
- Energy performance regulations for manufactured building components and equipment (*Energy Efficiency Act*).
- Oversight of the government regulatory framework for demand-side management, onbill efficiency financing and clean energy programs of energy utilities (DSM regulation under the *Utilities Commission Act* and Improvement Financing and Greenhouse Gas Reduction measures under the *Clean Energy Act*).
- Development of a BC Energy Efficiency Network to promote improved productivity of British Columbia's industrial sector through the efficiency use of natural gas (Natural Gas Strategy) and other fuels and to implement the ISO50001 energy management systems standard.
- Energy efficiency policy initiatives (e.g., promotion of clothes lines for energy conservation, support for the BC Building Code).
- Ministry leadership measures on energy efficiency and carbon neutral government.

# 4.3 Energy Efficiency Programs (LiveSmart BC)

### **Key Functions:**

- Distribute incentives funds through the LiveSmart Small Business and Residential incentive programs.
- Maintain and develop partnerships with Utility Partners.
- Coordinate with Energy Efficiency programs with Policies to further the impact of both.
- Adapt and expand existing Energy Efficiency programs.

# 4.4 Innovative Clean Energy (ICE) Fund

### **Key Functions:**

- Provide project oversight and manage funding commitments for approved projects.
- Administer project Contribution Agreements to ensure alignment with ICE Fund objectives, government financial policy and risk management policy.
- Provide ongoing program analysis to advise Government regarding recommended changes to ICE Fund priorities, program amendments or financial management.
- Liaise with stakeholders, current project proponents and potential applicants to address program enquiries and/or administrative issues.
- Develop proposals for new Calls for Applications or use of ICE Funding for consideration by the Minister/Cabinet.

# 4.5 Communities and Transportation

### **Key Functions:**

The Communities and Transportation team is responsible for policy and programs related to community energy solutions and transportation energy.

In the area of transportation energy specifically, the team is responsible for:

- The development and implementation of the Greenhouse Gas Reduction (Clean Energy) Regulation, including developing and defining prescribed undertakings for utilities to reduce emissions in the transportation sector, and managing ongoing reporting and performance,
- The delivery of the infrastructure components of the Clean Energy Vehicle Program, including project design and management for the 1000-Charging Point Project, hydrogen fuelling infrastructure and natural gas fuelling infrastructure, and
- Ongoing policy and program development to promote and manage the use of clean energy in the transportation sector.

June 2013

In the area of community energy, the team is responsible for:

- Amendments to the Remote Communities Regulation, including policy oversight for BC Hydro's Remote Community Electrification Program,
- Program development and implementation supporting community leadership in energy planning, energy efficiency and clean energy, including, the following projects or programs:
  - First Nations Energy Efficient Buildings Project
  - o Remote Community Implementation Program
  - o Mentorship Program
- Providing technical, project management, and policy expertise and advice to community energy initiatives, including the Coastal First Nations Clean Energy Action Plan and other similar initiatives, and
- Ongoing policy and program development and R&D activities (in partnership with the federal government) to support community energy solutions.

# 4.6 Renewable and Low Carbon Fuels

### Key Functions:

- Implementation and ongoing administration of the Renewable and Low Carbon Fuel Requirements Regulation (RLCFRR).
- Process fuel supplier annual reports and compile reports.
- Monitor compliance and work with fuel suppliers to ensure that they understand the requirements of the RLCFRR.
- Review applications for carbon intensity approvals under the RLCFRR. Analyze fuel lifecycle reports to ensure that accurate carbon intensity values are approved.
- Implement an ongoing inspection regime to ensure compliance with the Act, including the development of an inspection program and training of auditors.
- Develop an electronic reporting system to ensure timely and accurate reporting and to enable the banking and exchange of credits.
- Work with stakeholders to understand industry concerns regarding compliance opportunities.
- Develop a program for entering into agreements with suppliers to issue compliance credits for actions which accelerate the transition to low carbon transportation fuels.
- Monitor developments in the understanding of emerging issues regarding new fuels, such as sustainability, food for fuel, and indirect land use change. Advise Government as necessary regarding appropriate responses to these complex issues.

# 4.7 Columbia River Treaty Review Team

### **Key Functions:**

The purpose of the Columbia River Treaty (CRT) Review is to recommend to Cabinet by September 2013 whether to terminate the Columbia River Treaty, as well as what the Province's position should be in discussions with the United States on any new arrangements within the CRT, amendments to the CRT, or negotiation of new commercial flood control and/or power generation arrangements outside of the CRT. The work of the CRT team includes:

- Undertaking Economic, environmental, social, financial, legal and hydrological analyses.
- Identifying federal and provincial interests related to the CRT and developing a collaborative approach to address them.
- Analyzing US economic, environmental, financial, legal and technical interests to understand the US position on termination or revision of the CRT post-2024 and developing provincial positions on discussions with US parties.
- Meeting the Province's legal obligations to consult, and if necessary accommodate, First Nations potentially impacted by any decision on the CRT.
- Consulting Columbia Basin residents on decision options and identifying regional concerns, interests, and expectations.
- Providing a recommendation to Cabinet as to what the Province's position should be in regard to future negotiations with the Un EStates.

# 5. Division Organization Chart, Budget and FTE's

Budget

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Full Time Equivalents (FTEs): 37

June 2013

Ministry Information Binder



Electricity and Alternative Energy Division

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# ISSUE: Geothermal Tenure Issuance and Management

### **KEY MESSAGES:**

- A request for a geothermal permit is currently being reviewed. It is expected to be posted for a competitive bid process between July and September 2013.
- The Province held one geothermal tenure disposition in 2011 where three geothermal permits at Canoe Reach on Kinbasket Reservoir were disposed. Two dispositions were held in 2010 where four geothermal permits were disposed.
- British Columbia has several promising geothermal energy prospects.
   Potential project sizes may vary from 200+ megawatts (MW) in the Coast Mountains, to approximately 5 -15 MW for interior projects.
- In northeastern British Columbia, Sedimentary Basin Geothermal could provide many projects, each in the range of 3-6 MW.
- Electricity generated from geothermal resources could provide a significant source of clean and renewable power for British Columbia.

### BACKGROUND:

- Under the *Geothermal Resources Act* (*GRA*) of 1982, geothermal resources are regulated in British Columbia when the water temperature is greater than 80°C at surface.
- The GRA and regulations vest ownership of all geothermal resources in British Columbia with the Crown, sets out a framework for the disposition of geothermal resources based on the bid system used for petroleum and natural gas, and regulates exploration for, and the development and use of, these resources through permits and leases.
- Geothermal Permits confer the subsurface rights to the tenure holder for the purposes
  of exploration. Geothermal Permits are one year in length and may be renewed up to
  seven times. If a permit holder discovers through the drilling of a geothermal well a
  developable geothermal field, they may apply for a Geothermal Lease which allows
  development and production of the resource.
- The National Geothermal Energy Program (between 1976 and 1986) identified many potential geothermal sites in British Columbia.
- Several wells were drilled under the National Geothermal Program at Meager Creek (near Pemberton) where a 290°C resource was discovered. Although there has been no commercial development in the Province, a 20 kilowatt demonstration plant was operated at Meager Creek in the early 1980s. Ram Power holds the only geothermal lease in the Province located at Meager Creek.
- There are six active geothermal permits in British Columbia. Three are at Canoe Reach of the Kinbasket Reservoir, approximately 25 km south of Valemount. The

remaining three permits are adjacent to the Meager Creek Geothermal Lease and are often referred to as North Meager or the Upper Lillooet.

- A request for a geothermal permit near Lakelse Lake (south of Terrace) was received in late 2012. The permit is currently in the referral process.
- Depending on the outcome of the referral process, it is expected that the permit will be posted for competitive sale between July and September 2013. The sale will use a bid system that requires proponents to submit an exploration plan. Bids will be scored on the plan and the proponents' experience with geothermal exploration.
- There has been interest in sedimentary basin geothermal prospects across Western Canada with potential projects announced in Saskatchewan and the North West Territories. Geothermal energy prospects from sedimentary basin aquifers are considered lower risk due to the existing oil and gas exploration data sets, however, resources are modest with potential developments being 3-6 MW in size.
- Barriers to the exploration and development of geothermal energy in British Columbia include the high cost and risk profile of exploration, length of exploration and development timelines, and the lack of a geothermal call for power.
- A royalty scheme for geothermal is not in place. The Canadian Geothermal Energy Association has recommended that geothermal companies be subject to corporate income taxes and that no royalties should be levied on geothermal energy.

CONTACT: Les MacLaren, ADM

# ISSUE: Clean Energy Vehicle (CEV) Program

# KEY MESSAGES:

- British Columbia is a leading jurisdiction in adopting clean transportation technology.
- The 201 Budget and Throne Speech announced the \$100 million Climate Action and Clean Energy (CACE) Fund in part to support clean transportation and clean energy.
- From the CACE Fund, \$18.8 million is being used for investment in clean transportation initiatives:
  - \$14.3 million for a new British Columbia CEV Program;
  - \$2.5 million for enhancements to the SCRAP-IT Program; and
  - \$2 million in funding for the Carbon Offset Aggregation Cooperative.
- The CEV Program, announced November 5, 2011, was extended by one year to March 31, 2014 (extended from March 31, 2013) includes:
  - funding for hydrogen fuelling infrastructure and electric vehicle charging infrastructure;
  - point-of-sale incentives for "clean energy vehicles" (i.e., hydrogen fuel cell vehicles, plug-in electric vehicles, and natural gas vehicles); and
  - o rebates for residential electric vehicle charging stations.
- CEV Program partners include the New Car Dealers Association of BC, the Canadian Hydrogen and Fuel Cells Association, BC Hydro, major automakers (Nissan, Mitsubishi, General Motors, and Toyota), other industry, Green Fleets BC, communities and academic institutions.
- Investments under the CEV Program will lead to new economic opportunities for British Columbia businesses in providing infrastructure and services for the clean transportation sector.

# BACKGROUND:

- The CEV for BC<sup>™</sup> Point of Sale Incentive Program (administered through the New Car Dealers Association of BC) provides up to \$5,000 off the pre-tax sticker price per eligible vehicle. As of March 2013, 431 incentives have been issued.
- The Residential Electric Vehicle Charging Station Rebate Program is delivered as a LiveSmart BC program and provides up to \$500 for home charging stations. As of March 2013, 111 incentives have been provided. \$650,000 has also been provided to the Building Owners and Managers Association to run a Multi-Unit Residential Building charging infrastructure program.
- The Charging Infrastructure Project has invested \$6.5 million of the \$14.3 million CEV Program and is deploying up to 1,000 charging points that have two-way

communication with the grid. These include 30 DC Fast Chargers (DCFC)—13 by spring 2013—that charge within ~30 minutes.

- The Charging Infrastructure Project was designed in partnership with Plug-In BC, a multi-stakeholder working group that collaborated to support market transformation towards electric transportation in the light duty vehicle sector and helped develop a Green Highway. It utilizes the expertise and resources of a comprehensive list of collaborators, including the federal, provincial and local governments, international jurisdictions, electric utilities, industry (automakers, charging technology and service providers), academia, not-for-profit organizations, and codes and standards bodies.
- The delivery of the CEV Program includes significant efforts to increase awareness and understanding, conduct analyses, and engage with communities, industry and academic institutions to support an overall market transformation to clean energy vehicles.
- In April 2012, the Fraser Basin Council was selected by the Ministry of Environment to deliver charging infrastructure grants to communities, business and institutions under the Community Charging Infrastructure Fund. \$2.7 million of the \$6.5 million Charging Infrastructure Program was allocated to install approximately 500 publicly available charging points throughout the Province by summer 2013. Successful applicants received funding for 75 percent of eligible costs of a station, to a maximum of \$4,000 per station.
- In October 2012, BC Hydro and Natural Resources Canada provided \$4.4 million for the Charging Infrastructure Project under the ecoEnergy Innovation Initiative Demonstration Project Fund. With matched funding from the Province (\$2.2 million under the Charging Infrastructure Project) and BC Hydro (\$2.2 million), the \$8.8 million Demonstration Project will deploy smart grid DCFC and Level 2 (240 volt) charging infrastructure during 2012-2016. A public announcement is pending.
- British Columbia has a growing, globally-recognized presence in natural gas vehicle technology and hydrogen fuel cell technology, and has a nascent sector in electric vehicle components and integration. British Columbia also has strong research, testing and development expertise in the clean transportation sector. Under the CEV Program, \$600,000 was provided to 10 different academic and trade school projects across the Province.
- The Province has enacted the Greenhouse Gas Reduction (Clean Energy) Regulation under Sections 18 and 35 of the *Clean Energy Act* that allows utilities to provide incentives for natural gas vehicles in the heavy duty sector and to invest in fuelling infrastructure. The incentive program has stimulated private sector and utility development of natural gas fuelling infrastructure in British Columbia.
- The Renewable & Low Carbon Fuel Requirements Regulation, under the purview of the Ministry of Energy, Mines and Natural Gas, will reduce overall carbon intensity of transportation fuels by 10 percent by 2020. Compliance obligations with intensity reductions have been revised to begin in mid-year 2013.

### **CROSS-REFERENCE:**

Information Note: 4 Green Highway

CONTACT: Les MacLaren, ADM

# ISSUE: Hydrogen and Fuel Cells Strategy

# KEY MESSAGES:

- British Columbia is a recognized world centre for hydrogen and fuel cell technology. British Columbia is home to 35 hydrogen and fuel cell companies that employ 1,200 skilled workers.
- Since 2002, industry has invested more than \$1 billion in Canada's hydrogen and fuel cell sector. The majority of this investment has been in British Columbia.
- Since 2005, the Province has invested approximately \$4 million in the sector to support industry growth, hydrogen fuelling stations and early demonstration projects.
- As a result of British Columbia's leadership, the fuel cell Centre of Excellence for Daimler and Ford is located in British Columbia, and Mercedes Benz's manufacturing centre for fuel cells will be located in British Columbia.
- British Columbia is also home to the world's first waste hydrogen capture, collection, distribution and dispensing system: the Integrated Waste Hydrogen Utilization Project. An expanded project, the North Vancouver Liquefaction Project, will be capable of supplying locally sourced, clean hydrogen to fuel cell projects and other general hydrogen markets along the west coast of North America.
- In 2010, with combined provincial, federal and BC Transit funding of \$89 million, BC Transit deployed a fleet of 20 fuel cell buses in Whistler. This is the world's largest fuel cell fleet operating in revenue service in a single location, and has attracted significant international and industry attention.
- British Columbia's leadership in hydrogen and fuel cell technology has led to significant private sector investment, translating to increased jobs and economic opportunities for businesses in this emerging clean technology sector.

### BACKGROUND:

- The Hydrogen & Fuel Cell Strategy (Strategy), updated in 2008, is an industry initiative which seeks to accelerate the demonstration, deployment and commercialization of hydrogen and fuel cell technologies.
- Immediate commercial opportunities for fuel cell products exist in the areas of fuel cell forklift trucks, fuel cell back-up power systems, and stationary fuel cell plants.

- BC Transit's fuel cell bus project demonstrates leadership in sustainable transportation and is helping to create the market-pull necessary to attract additional private sector investment in fuel cell drive systems, bus platforms, and hydrogen-fueling infrastructure in British Columbia. This fleet demonstration has initiated additional international sales for British Columbia companies.
- The budget for the bus project includes funding for re-powering the buses in 2014, following a performance review of the fleet.
- BC Transit anticipates completing a review of the fleet's performance in June 2013, and presenting recommendations on the continuation of the fuel cell buses to its board in July 2013. Government direction on the fuel cell buses will likely be sought in July 2013.
- The North Vancouver Liquefaction Project would allow British Columbia to source local, green hydrogen for the BC Transit bus project (as opposed to shipping the hydrogen from Quebec). In addition, it will attract major auto manufacturer deployments in British Columbia, support other hydrogen and fuel cell projects in the Province, and provide a made-in-BC hydrogen source to markets along the west coast of North America.
- In March 2011, the Province, with funding from the Climate Action and Clean Energy Fund, provided \$450,000 in funding to support the ongoing operation and maintenance of hydrogen fuelling stations to March 2013.
- There are currently six hydrogen fuelling stations in British Columbia including: the Whistler fuelling station; the Surrey Powertech Labs Station; two stations at two Surrey City Works yards; the Vancouver Pacific Spirit NRC-IFCI Station; and the Burnaby Ballard Station. In addition, Powertech Labs operates a mobile re-fuelling station that will soon be located permanently within the Metro Vancouver area. The only currently operating stations are the Whistler, Ballard and Powertech stations.
- The Canadian Hydrogen and Fuel Cell Association will be approaching government in the summer or fall of 2013 with an updated strategy and recommendation.

CONTACT: Les MacLaren, ADM

# ISSUE: Green Highway

# KEY MESSAGES:

- British Columbia is working with the Pacific Coast states (Washington, Oregon and California) to develop a network of fuelling locations that support clean, energy efficient vehicles. This network is referred to as the West Coast Green Highway.
- The Green Highway will build on British Columbia's leading Hydrogen Highway to include hydrogen supply, plug-in electric vehicle charging, and natural gas fuelling to support reduced transportation emissions and development of a low carbon economy.
- Green Highway stations will support implementation of British Columbia's Natural Gas Strategy, Clean Energy Vehicle Program and Low Carbon Fuel Requirement Regulation.
- Since 2010, the Province has invested approximately \$6.3 million in Green Highway activities, including \$2 million towards new hydrogen fuelling infrastructure and stations and the operation and maintenance of existing hydrogen fuelling stations, and \$4.3 million towards public charging infrastructure.
- Projects that received funding include the North Vancouver Hydrogen Liquefaction Project, a new Green Highway station yet to be located permanently in Metro Vancouver, a Vancouver Airport hydrogen station, 13 DC Fast Chargers throughout the Province, and the Community Charging Infrastructure Fund that will result in the deployment of approximately 500 public Level 2 (240 volt) charging stations in communities and at businesses throughout the Province.
- The Greenhouse Gas Reduction (Clean Energy) Regulation, announced in May 2012, allows utilities to offer incentives for natural gas vehicles and building natural gas fuelling infrastructure. This Regulation is intended to promote utility and private sector investments in natural gas fuelling infrastructure.
- British Columbia's leadership in clean energy vehicles and supporting fuelling and charging infrastructure will translate to increased jobs and economic opportunities for British Columbia businesses in this emerging clean technology sector.

### BACKGROUND:

- The Hydrogen Highway vision has now expanded to a "Green Highway". The Province originally committed to work with California and other Pacific states to complete a hydrogen highway that runs from Whistler to San Diego by 2010. The newly envisioned Green Highway is a commitment under the February 2010 Pacific Coast Collaborative Memorandum on Action.
- There are currently six hydrogen fuelling stations in British Columbia including: the Whistler fuelling station; the Surrey Powertech Labs Station; two stations at Surrey City Works yards; the Vancouver Pacific Spirit NRC-IFCI Station; and the Burnaby Ballard Station. In addition, Powertech Labs operates a mobile re-fuelling station that will soon be located permanently in the Metro Vancouver area. The only currently operating stations are the Whistler, Ballard and Powertech stations.
- The British Columbia portion of the Green Highway is being expanded with the purchase and installation of 30 DC Fast Charging stations. The first 13 stations will be located in Saanich, Duncan, Nanaimo, Vancouver (Science World), North Vancouver (2), Surrey, Langley, Squamish, Whistler, Hope, Merritt and Kamloops in 2013, with funding under the Clean Energy Vehicle Program. The remaining 17 stations will be located throughout the Province

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• The North Vancouver Liquefaction Project will allow British Columbia to source local, green hydrogen for the BC Transit bus project (as opposed to shipping the hydrogen from Quebec). In addition, it will attract major auto manufacturer deployments in British Columbia, and support other hydrogen and fuel cell projects in the Province.

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 British Columbia has a growing, globally-recognized presence in hydrogen fuel cell technology, hydrogen fuelling infrastructure, hydrogen fuel cell vehicle testing, and natural gas vehicle technology, and has a nascent sector in electric vehicle components and integration. British Columbia also has strong research, testing and development expertise in the clean transportation sector. Ongoing investments in these clean transportation sectors in British Columbia will lead to increased market presence for this sector both locally and internationally.

### CROSS-REFERENCE:

Information Note: 2 Clean Energy Vehicle Program

CONTACT: Les MacLaren, ADM

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# ISSUE: Renewable and Low Carbon Fuel Requirements Regulation

# KEY MESSAGES:

- The Renewable and Low Carbon Fuel Requirements Regulation (Regulation) requires:
  - a provincial annual average of five percent renewable content in gasoline sold in British Columbia;
  - a provincial annual average of four per cent renewable content in diesel sold in British Columbia; and
  - a 10 percent reduction in the carbon intensity of transportation fuels by 2020.
- Amendments to the Act and Regulation will come into force on July 1, 2013 to address many of industry's concerns while maintaining British Columbia's leadership in reducing greenhouse gas emissions.

### BACKGROUND:

- The Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act (Act) received Royal Assent on May 1, 2008. The Regulation came into force on January 1, 2010.
- The Regulation defines market-based performance standards that allow trading of credits between fuel suppliers, and fuel suppliers are complying by securing renewable fuel supplies and investing in the necessary infrastructure.
- All fuel suppliers have complied with the renewable requirements. The compliance periods up to June 30, 2013 have been, effectively, reporting-only years for the low carbon requirements.
- The Ministry of Energy, Mines and Natural Gas (Ministry) is adapting California's reporting and credit banking tool for use in British Columbia. It is anticipated that fuel suppliers will be able to use the reporting tool starting in the fall of 2013.
- Procedures are being developed to allow the Director appointed under the Act to enter into agreements with suppliers to issue credits for actions that the Director believes will accelerate the adoption of low carbon fuels.
- Ministry staff have outlined an Inspection Program that describes audit objectives, audit risk areas and detailed audit procedures for inspections under the Regulation. Options being investigated for implementing regular inspections include utilizing existing audit capabilities within Government and contracting with external qualified service providers for inspection services.
- Ministry staff are creating a small technical working group to explore technical details and provide advice regarding issues that could impact the successful implementation of the Regulation. The initial task for this group will be to identify issues of concern to industry in achieving the ten per cent reductions and making recommendations for better understanding and for addressing these issues.

- California also has a Low Carbon Fuel Standard requiring a ten per cent reduction in the carbon intensity of transportation fuels by 2020.
- Oregon has set requirements for reporting the carbon intensity of transportation fuels, and is currently deciding whether to proceed with requirements to reduce the carbon intensity.
- The Government of Canada has implemented a renewable fuel standard requiring a national average of five per cent renewable content in Canada's gasoline supply, and a national average of two per cent renewable content in all diesel and home heating oil supplies.
- Alberta, Saskatchewan, Manitoba and Ontario have renewable fuel requirements.
- The European Union has set targets for renewable energy and requires national action plans that establish pathways for the development of renewable energy sources.

CONTACT: Les MacLaren, ADM

# ISSUE: Waste to Energy Under Clean or Renewable Electricity Guidelines

# **KEY MESSAGES:**

- Electricity generated from municipal organic waste used to fuel a waste-to-energy (WTE) facility is considered to be clean or renewable.
- Electricity generated from the non-organic waste, such as plastics, would not be considered clean or renewable. It would also require the purchase of carbon offsets consistent with provincial climate policy.
- Waste-to-energy facilities must meet provincial air emission and environmental protection standards.
- Local governments in the province are considering WTE facilities as a more sustainable alternative to landfills.

# BACKGROUND:

- The Province has maintained guidelines defining "green" electricity since 2002.
- The Clean or Renewable (CRE) Guidelines were developed following the release of the 2007 Energy Plan and BC Hydro has since focused its power procurement on resources that are considered to be clean or renewable.
- Under the CRE Guidelines, electricity produced by a WTE facility using municipal solid waste (MSW) as fuel was clean or renewable if it were designated as such by the Minister of Energy, Mines and Natural Gas (Minister).

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- In February 2010, as a policy, electricity produced from the biogenic component of mixed municipal solid waste used to fuel WTE projects was designated as clean or renewable, allowing BC Hydro to purchase the non-biogenic output of WTE projects with a requirement for greenhouse gas emission offsets.
- The *Clean Energy Act* (*Act*) moved the Province's definitions of clean or renewable energy resources from policy guidelines into legislation.
- Under the *Act*, "clean or renewable resource" means biomass, biogas, geothermal heat, hydro, solar, ocean, wind or any other resource prescribed through regulation.
- In October 2010 the Clean or Renewable Resources Regulation was enacted under the Act which designated "Biogenic Waste" as a clean or renewable resource.

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s13, S21 that, in line with the *Act* and the Clean or Renewable Resources Regulation, electricity generation attributable to biogenic waste would be
considered clean or renewable while the balance of the facility's output would require carbon offsets.

- To date MEMNG has not provided direction to BC Hydro regarding the treatment of WTE under its power acquisitions processes, as no WTE projects have proceeded.
- On July 25, 2011 the Minister of Environment approved Metro Vancouver's Solid Waste Management Plan, including approval to pursue WTE as an option for managing waste. Metro Vancouver was directed by the Minister of Environment to undertake a competitive process for any new or upgraded WTE facilities that considers options both inside and outside of the Metro Vancouver Region.
- Metro Vancouver is continuing development of a proposed 370,000 tonne WTE project with a target in service date of 2018. A request for qualifications (RFQ) process closed February 2013. Metro Vancouver received 19 proposals from firms interested in building and/or owning operating the WTE facility. Metro Vancouver continues to assess the submissions and S13, S16

S13, S16

s13, S16 BC Hydro is aware of the proposed energy and power that could be acquired from the project.

• Two key variables in the economics of WTE facilities are the tipping fees paid by the jurisdiction with the waste, and the price of power sales. s13, S17, S16

S13, S16, S17

CONTACT: Les MacLaren, ADM

Sec.

# ISSUE: British Columbia Electricity Market Structure

# KEY MESSAGES:

- Electricity rates in British Columbia are set by the British Columbia Utilities Commission (BCUC).
- While BC Hydro is the largest utility and generator in British Columbia, other utilities, industrial generators, and Independent Power Producers also operate in the market.

## BACKGROUND:

## Regulation

- The British Columbia electricity market is a cost-based system, where rates that consumers pay are based on the cost of electricity generation and procurement (plus a return to utility shareholders) rather than the price set in a competitive market.
- The BCUC regulates BC Hydro and other electrical utilities to ensure a low cost, reliable electricity supply. Municipal utilities are exempt from BCUC regulation.

## Supply

- British Columbia has more than 17,000 megawatts (MW) of installed generation capacity:
  - BC Hydro (69 percent) ~12,040 MW, 43 facilities
  - Industrial Self-Generators/Independent Generators (14 percent) ~2,406 MW, 37 facilities:
    - Alcan (5 percent) ~896 MW, 1 facility
    - Teck (3 percent) ~480 MW, 1 facility
    - Other (6 percent) ~1,030 MW, 35 facilities
  - IPPs (13 percent) ~2,294 MW, 75 facilities
  - Columbia Power Corporation/Columbia Basin Trust (3 percent) ~453 MW, 3 facilities and
  - FortisBC (1 percent) ~200 MW, 4 facilities.
- BC Hydro's total capacity is comprised of:
  - o 46 percent from projects in the Columbia basin
  - o 30 percent from projects in the Peace basin
  - o 14 percent from Vancouver Island/coastal mainland hydroelectric projects and
  - 10 percent from Burrard Thermal Generating Station and other small thermal plants.
- Based on Statistics Canada figures for 2008, 93 percent of electricity generated in British Columbia comes from clean or renewable sources. Reliable data for subsequent years is not available, but it is likely that current figures are higher, as only clean or renewable generation has come online since 2008.

## Demand

- Utility shares, by sales of energy in 2011, are:
  - o BC Hydro: 93.2 percent;
  - FortisBC: 4.2 percent;
  - o All municipally-owned utilities: 2.6 percent; and
  - o Other investor-owned utilities: 0.03 percent.
- BC Hydro's electricity sales by Customer type in 2011/2012:
  - o 35 percent for Residential (1,671,412 customers);
  - o 34 percent for Light Industrial/Commercial (197,821 customers);
  - o 26 percent for Large Industrial (168 customers); and
  - 4 percent for other (3,490 customers).

## Trade

- Electricity trade enhances reliability, and revenues from trade help to keep electricity rates low. BC Hydro reported \$975 million in trade revenues in fiscal 2012.
- Powerex, BC Hydro's trading subsidiary, is able to sell power to the United States and Alberta markets at peak times when prices are high, and buy power during off peak times when prices are low.
- In recent years, low market prices have become a challenge.
- BC Hydro has been a net purchaser of electricity in three of the last five years, but has shifted to a significant surplus position. From fiscal 2008-2012, BC Hydro had an average of 1,482 GWh per year in net purchases. In fiscal 2012, a high water year, BC Hydro's net sales to market were 3,888 GWh.

CONTACT: Les MacLaren, ADM

# ISSUE: BC Hydro Competitive Electricity Rates

# KEY MESSAGES:

- BC Hydro has completed its fifth annual rate comparison report, based on electricity rates for fiscal 2013.
- While the report shows BC Hydro's rates increasing, they remain within the lowest quartile of utilities surveyed.

## BACKGROUND:

- One of the energy objectives in section 2 of the *Clean Energy Act* (*CEA*) is to ensure that BC Hydro's rates remain among the most competitive of rates charged by public utilities in North America.
- Under section 8(4) of the CEA, BC Hydro is required to produce a rate comparison report which:
  - includes the rates of at least one public utility from each of more than 15 jurisdictions in North America, specifying the inclusion of key jurisdictions – Alberta, Quebec, Ontario, Manitoba, Washington State, Oregon and California
  - compares BC Hydro's rates for the various rate classes i.e., residential, commercial, and industrial customers – to the selected public utilities' rates and
  - o provides BC Hydro's own previous five years of ratepayer classes' rates.
- BC Hydro currently uses a Quebec Hydro report, "Comparison of Electricity Prices in Major North American Cities", which compares 22 North American utilities' rates, to compile its rate comparison report findings.
- BC Hydro completed its fifth annual rate comparison report in December 2012.
- The previous rate comparison report showed that BC Hydro residential ratepayers
  pay the third to sixth lowest rates among utilities surveyed, commercial ratepayers
  pay the third to seventh lowest rates, and large industrial customers pay the third to
  fifth lowest rates.
- The relative competitiveness of BC Hydro rates depends on a number of factors, including rate design and the level of consumption.
- The new rate comparison report showed that BC Hydro residential and commercial ratepayers pay the fourth to seventh lowest rates among utilities surveyed, while large industrial customers pay the third to sixth lowest rates.

## ATTACHMENT:

8A - BC Hydro Rate Comparison Report

CONTACT: Les MacLaren, ADM

# BChydro @

FOR GENERATIONS

Janet Fraser Chief Regulatory Officer Phone: 604-623-4046 Fax: 604-623-4407 bchydroregulatorygroup@bchydro.com

December 17, 2012

Hon. Rich Coleman Minister of Energy, Mines and Natural Gas PO Box 9060 Stn Prov Govt Victoria BC V8W 9E3

Via email: EMH.minister@gov.bc.ca

Dear Minister Coleman:

### RE: Electricity Rate Comparison Report - Fifth Annual Report

BC Hydro writes to the Minister to file its Electricity Rate Comparison Annual Report (the **Report**) which provides a comparison of BC Hydro's monthly bills and average prices for residential, commercial and industrial customers with other North American utilities as of April 1, 2012 (**Attachment A**). The report is prepared in response to *Clean Energy Act* section 8 (4), which states that:

"The authority must provide to the minister, in accordance with the regulations, an annual report comparing the electricity rates charged by the authority with electricity rates charged by public utilities in other jurisdictions in North America, including an assessment of the extent to which the authority's electricity rates continue to be competitive with those other rates."

BC Hydro has adhered to the Province of British Columbia's Rate Comparison Regulation (Ministerial Order No. M167) (**Attachment B**). The Rate Comparison Regulation requires that the Report provide a comparison of BC Hydro's monthly electricity bills with at least one public utility in each of at least 15 other North American jurisdictions, including all of the following: the provinces of Alberta, Quebec, Ontario and Manitoba; and the states of Washington, Oregon and California. The comparison concerns the previous year's applicable rates for residential, commercial and industrial customers in Canadian funds. Additionally, BC Hydro is to provide its previous five years of applicable rates.

For efficiency and consistency in reported data, the Report consists of information taken from a Hydro-Quebec rate survey report titled "Comparison of Electricity Prices in Major North American Cities" in which BC Hydro participates. The Hydro-Quebec report is prepared each year. Monthly bills and average prices are calculated and submitted to Hydro-Quebec by the participating utilities using the rates that are in place as of April 1 of that current year. As such, some of the rates used may be interim rates that are

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approved and in effect at that time. The Hydro-Quebec report is typically available in the fall of the same year.

The Report indicates that BC Hydro's monthly bills and average prices remain generally within the first (i.e., lowest rate) quartile of the public utilities surveyed.

For further information, please contact the undersigned.

Yours sincerely,

andraw

Janet Fraser Chief Regulatory Officer

dr/rh

Enclosure

Copy to: British Columbia Utilities Commission Attention: Ms. Erica Hamilton Commission Secretary Commission.secretary@bcuc.com Ministry of Energy Deputy Minister's Office Electricity & Alternative Energy Division Attention: Steve Carr Deputy Minister Steve.Carr@gov.bc.ca

Ministry of Energy Electricity & Alternative Energy Division Attention: Les MacLaren Assistant Deputy Minister Les.MacLaren@gov.bc.ca

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Attachment A

**Electricity Rate Comparison Annual Report** 

April 1, 2012 Rates

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Attachment A

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# Monthly Bills and Average Prices as of April 1, 2012

This is the fifth Electricity Rate Comparison Annual Report (**Report**) prepared by BC Hydro in response to the Rate Comparison Regulation, issued by Ministerial Order No. M167, under the *Utilities Commission Act*, on March 30, 2009. The Report provides a comparison of BC Hydro's monthly bills and average prices for residential, commercial and industrial customers with other North American utilities, including those in Alberta, Quebec, Ontario, Manitoba, Washington, Oregon and California.<sup>1</sup>

Each year BC Hydro participates in a Hydro-Quebec comparison survey, submitting bill calculations based on electricity prices that are in place as of April 1 of the current year, and which may reflect approved interim rate increases. Hydro-Quebec compiles the information and provides the monthly bills and average prices for 12 Canadian utilities and 10 American utilities in an annual report. The BC Hydro Report provides survey information taken from the Hydro-Quebec report: Comparison of Electricity Prices in Major North American Cities.<sup>2</sup>

The Hydro-Quebec report provides the monthly bills, excluding taxes and non-utility levies, calculated for specific consumption points for four different customer segments: residential, small power, medium power and large power. The average price is also calculated, for each customer segment and specific consumption point, by dividing the monthly bill by the amount of monthly energy consumption. For example, if an electric bill for 1,000 kWh was calculated to be a monthly amount of \$50, the average price would be \$50 divided by 1,000 kWh, or 5 cents/kWh.

The monthly bills for customers are presented in <u>Table 1</u>, <u>Table 2</u>, <u>Table 3</u> and <u>Table 4</u>. The average prices for customers are presented in <u>Table 5</u>, <u>Table 6</u>, <u>Table 7</u> and <u>Table 8</u>. BC Hydro's monthly bills and average prices over the past five years are summarized in <u>Table 9</u> and <u>Table 10</u>.

<sup>&</sup>lt;sup>1</sup> Monthly bills and average prices for American utilities have been converted to Canadian dollars using the exchange rate as at 12 PM Eastern on April 2, 2012 of CDN \$0.9917 per US \$1.

<sup>&</sup>lt;sup>2</sup> http://www.hydroquebec.com/publications/en/comparison\_prices/index.html.

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The Hydro-Quebec residential segment includes calculations for BC Hydro's residential customers. The Hydro-Quebec small power segment includes calculations for both BC Hydro's general service under 35 kW customers and general service 35 kW and over customers, while the medium power segment includes calculations for BC Hydro's general service 35 kW and over customers. Lastly, the Hydro-Quebec large power segment includes calculations for BC Hydro's general service 35 kW and over customers. <u>Lastly</u>, the Hydro-Quebec large power segment includes calculations for BC Hydro's general service 35 kW and over customers and transmission service customers. <u>Table 11</u> shows the specific BC Hydro rate schedules that have been included in each Hydro Quebec segment. <u>Table 12</u> summarizes BC Hydro's relative rankings in each rate class since the first year of participation in the survey in 2008.

Based on the data from the Hydro-Quebec survey, BC Hydro's monthly bills and average prices for all customer segments are generally within the first (i.e., lowest rate) quartile of utilities, with low rates providing a competitive advantage to customers in British Columbia. The rankings of the top five participating utilities with the lowest monthly bills and average prices are noted in the tables. Out of the 22 utilities providing data, BC Hydro's monthly bills and average price rankings against the Hydro-Quebec report for April 1, 2012 data are as follows:

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Rate Class & Usage	April 1, 2012
Residential - 625 kWh	4 <sup>th</sup>
Residential - 750 kWh	4 <sup>th</sup>
Residential - 1,000 kWh	4 <sup>th</sup>
Residential - 2,000 kWh	7 <sup>th</sup>
Residential - 3,000 kWh	7 <sup>th</sup>
Small Power - 750 kWh/6 kW	6 <sup>th</sup>
Small Power - 2,000 kWh/14 kW	5 <sup>th</sup>
Small Power - 10,000 kWh/40 kW	7 <sup>th</sup>
Small Power - 14,000 kWh/100 kW	5 <sup>th</sup>
Small Power - 25,000 kWh/100 kW	4 <sup>th</sup>
Medium Power - 100,000 kWh/500 kW	5 <sup>th</sup>
Medium Power - 200,000 kWh/500 kW	5 <sup>th</sup>
Medium Power - 200,000 kWh/1,000 kW	5 <sup>th</sup>
Medium Power - 400,000 kWh/1,000 kW	4 <sup>th</sup>
Medium Power - 1,170,000 kWh/2,500 kW	5 <sup>th</sup>
Large Power - 2,340 MWh/5,000 kW/25 kV	6 <sup>th</sup>
Large Power - 3,060 MWh/5,000 kW/25 kV	6 <sup>th</sup>
Large Power - 5,760 MWh/10,000 kW/120 kV	3 <sup>rd</sup>
Large Power - 17,520 MWh//30,000 kW/120 kV	4 <sup>th</sup>
Large Power - 23,400 MWh/50,000 kW/120 kV	4 <sup>th</sup>
Large Power - 30,600 MWh/50,000 kW /120 kV	4 <sup>th</sup>

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Hydro-Quebec Electricity Pr	ices Comparison Repo	ort – Re	sidential								
CDN S/Month	2012										
Utility	City	625	5 kWh	75	0 kWh	1,0	00 kWh	2,0	00 kWh	3,0	00 kWh
Hydro-Quebec	Montreal, QC	(2nd)	45.44	(1st)	52.09	(1st)	67.58	(2nd)	142.68	(2nd)	217.78
Manitoba Hydro	Winnipeg, MB	(3rd)	49.16	(3rd)	57.63	(2nd)	74.55	(1st)	142.25	(1st)	209.95
Seattle City Light	Seattle, WA	(1st)	45.00	(2nd)	57.24	(3rd)	81.72	(5th)	179.60	(5th)	277.48
CenterPoint Energy <sup>2</sup>	Houston, TX		71.42		81.84		92.81	(4th)	176.15	(4th)	259.49
BC Hydro	Vancouver, BC	(4th)	49.43	(4th)	61.03	(4th)	87.77	(7th)	194.77	(7th)	301.76
Commonwealth Edison <sup>2</sup>	Chicago, IL		82.16		95.20		121.27	(3rd)	168.68	(3rd)	241.60
Florida Power and Light <sup>2</sup>	Miami, FL	(5th)	59.37	(5th)	70.08	(5th)	91.48		196.95		302.42
Nashville Electric Service	Nashville, TN		68.70		80.09		102.88		194.02		285.16
Pacific Power and Light	Portland, OR		67.99		79.58		102.76		220.63		338.50
NB Power	Moncton, NB		81.29		93.61		118.23		216.73		315.23
Newfoundland Power <sup>1</sup>	St. John's, NL		79.54		92.35		117.98		220.49		323.00
SaskPower	Regina, SK		85.59		98.86		125.38		231.48		337.58
EPCOR Energy	Edmonton, AB		88.80		102.21		129.04		236.36		343.68
Hydro Ottawa	Ottawa, ON		83.78		98.72		131.43		263.38	2.000	395.33
Enmax	Calgary, AB		93.80		108.82		138.85		258.99		379.12
Toronto Hydro	Toronto, ON		90.68	1	105.62		135.72		261.46		387.21
Maritime Electric	Charlottetown, PE		99.88		114.95		145.07		265.57		357.57
Nova Scotia Power	Halifax, NS		97.85		115.25	0.0000	150.06		289.29		428.52
Detroit Edison <sup>2</sup>	Detroit, MI		94.71		113.23		150.26		298.40		446.54
Boston Edison	Boston, MA	5 	105.20		124.97		164.48		322.59		480.70
Consolidated Edison <sup>2</sup>	New York, NY		146.87		173.13		225.65		435.74		645.83
Pacific Gas and Electric <sup>2</sup>	San Francisco, CA		137.09		179.17		222.61		559.03		895.62

Table 1

### Residential Monthly Bills

1) Newfoundland Power rates.

2) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: Bill calculations exclude taxes and levies. BC Hydro's bill calculation includes the rate rider. The top five participating utilities with the lowest monthly bills are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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Attachment A

Table 2	Small	Power	Monthly	Bills
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Hydro-Quebec Electricity Pr	ices Comparison Repo	ort – Sn	nall Powe	r					0.000			
Monthly Bills as of April 1, 2	2012											
CDN \$/Month							121 0 0 10					
		6 kW		14 kW			40 kW		100 kW		100 kW	
1141114	Cha	75	0 kWh	2000 kWh		10,	000 kWh	14,000 kWh		25,	25,000 kWh	
Other	Lity	(1st)	oad factor	20%1	oad factor	35%	toad factor	19%	load factor	(1st)	load factor	
Seattle City Light	Seattle, WA	(2+4)	51.32	(2nd)	135.85	(2nd)	684.27	12-0	941.12	(2nd)	1,582.75	
Manitoba Hydro	Winnipeg, MB	(510)	71.80	(200)	160.55	(2.10)	728.55	(5:0)	1,456.49	(2110)	1,907.49	
CenterPoint Energy <sup>2</sup>	Houston, TX	(2nd)	63.88		230.08	(3rd)	793.14	(2nd)	1,405.26	(3ra)	1,927.64	
Pacific Power and Light	Portland, OR		92.76	L	215.52		946.66	(4th)	1,552.04		2,328.39	
BC Hydro	Vancouver, BC	(6th)	78.20	(5th)	198.30	(7th)	972.62	(5th)	1,644.83	(4th)	2,244.97	
Hydro-Quebec	Montreal, QC	(Sth)	77.81	(3rd)	186.93	(4th)	885.33		1,667.40		2,446.50	
Florida Power and Light <sup>2</sup>	Miami, FL	(4th)	77.10	(4th)	194.20	(5th)	940.77	0	1,748.64	(5th)	2,327.46	
Commonwealth Edison <sup>2</sup>	Chicago, IL		96.70		230.96		1,076.16		1,721.59		2,653.63	
Enmax	Calgary, AB		119.54		262.59		1,124.23		1,758.53		2,584.99	
SaskPower	Regina, SK		99.84		225.70		1,031.22		1,986.75		2,724.60	
Nashville Electric Service	Nashville, TN		102.31		230.88		1,053.73		2,188.09		2,897.87	
Detroit Edison <sup>2</sup>	Detroit, MI		109.75		274.42		1,267.19		1,763.58		3,128.64	
EPCOR Energy	Edmonton, AB		106.43		259.78		1,241.22		2,012.07		3,029.02	
Newfoundland Power <sup>1</sup>	St. John's, NL		107.76		317.17		1,183.18		2,133.47		2,979.55	
NB Power	Moncton, NB		111.46		262.33		1,245.63		2,167.63		3,109.23	
Toronto Hydro	Toronto, ON		116.41		281.95		1,341.18		2,228.84		3,249.75	
Hydro Ottawa	Ottawa, ON		110.40		270.39		1,294.32		2,311.00		3,377.46	
Nova Scotia Power	Halifax, NS		117.95		288.09		1,424.76		2,483.82		3,561.90	
Maritime Electric	Charlottetown, PE		138.42		328.17		1,517.67		2,695.87		3,719.97	
Pacific Gas and Electric <sup>2</sup>	San Francisco, CA		140.18		357.51		1,690.20		2,700.63		4,020.24	
Boston Edison	Boston, MA		132.43		340.02		1,760.22		3,410.25		4,641.36	
Consolidated Edison <sup>2</sup>	New York, NY		185.01		583.33		2,129.18		3,979.72		5,285.58	

1) Newfoundland Power rates.

2) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: Bill calculations exclude taxes and levies. BC Hydro's bill calculation includes the rate rider. The top five participating utilities with the lowest monthly bills are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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### Medium Power Monthly Bills

Hydro-Quebec Electricity Prices Comparison Report – Medium Power											
Monthly Bills as of April 1, 2	2012										
CDN \$/Month	·····										6
		500 kW		5	DO KW	1000 kW		1000 kW		2500 kW <sup>1</sup>	
11.00.0		100,0	000 kWh	200,000 kWh		200,000 kWh		400,000 kWh		1,170,000 kWh	
Utility	City	28%10	bad factor	56%1	oad factor	28%1	oad factor	56%1	oad factor	65%1	oad factor
Manitoba Hydro	Winnipeg, MB	(2nd)	8,073	(1st)	11,333	(2nd)	15,962	(1st)	22,482	(151)	55,587
Seattle City Light	Seattle, WA	(1st)	6,456	(2nd)	12,287	(1st)	12,567	(2nd)	24,172	(2nd)	70,294
CenterPoint Energy <sup>4</sup>	Houston, TX	(3rd)	9,122	(4th)	13,871		19,257	(5th)	28,755	(4th)	72,827
Commonwealth Edison <sup>4</sup>	Chicago, IL	(4th)	9,159	(3rd)	13,759	(4th)	18,779	(3rd)	28,010		77,123
BC Hydro	Vancouver, BC	(5th)	9,371	(5th)	14,106	(5th)	18,831	(4th)	28,302	(5th)	77,100
Hydro-Quebec	Montreal, QC		11,055		15,540		22,110		28,762	(3rd)	70,795
Pacific Power and Light	Portland, OR		9,737		15,662	(3rd)	18,000		29,207		78,384
Florida Power and Light <sup>4</sup>	Miami, FL		10,627		15,408		21,205		30,767		82,723
SaskPower	Regina, SK		12,213		18,160		24,432		36,326		87,066
Newfoundland Power <sup>3</sup>	St. John's, NL		11,490		18,608		22,057		36,217		100,405
Enmax	Calgary, AB		11,916		19,290		23,373		38,122		101,249
Nashville Electric Service	Nashville, TN		12,190		18,259		24,185		36,323		103,988
Detroit Edison <sup>4</sup>	Detroit, MI		12,436		19,727		24,846	1	38,956		100,988
NB Power	Moncton, NB		13,393		21,953		26,783		43,903		124,305
EPCOR Energy <sup>2</sup>	Edmonton, AB		14,189		23,062		26,552		44,299		123,093
Toronto Hydro	Toronto, ON		13,792		23,111		27,273		45,712		128,800
Nova Scotia Power	Halifax, NS		15,755		23,975		31,509		47,949		119,849
Hydro Ottawa	Ottawa, ON		13,293		22,988		26,293		45,683		133,867
Pacific Gas and Electric <sup>4</sup>	San Francisco, CA		19,008		27,342		37,417		53,739		112,134
Boston Edison	Boston, MA		18,060		25,142		35,954		50,118		135,601
Maritime Electric	Charlottetown, PE		16,074		25,384		32,099		50,719		142,551
Consolidated Edison <sup>4</sup>	New York, NY		23,174		35,045		46,276		70,019		147,492

1) Supply voltage of 25 kV.

2) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

3) Newfoundland Power rates.

4) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: Bill calculations exclude taxes and levies. BC Hydro's bill calculation includes the rate rider. The top five participating utilities with the lowest monthly bills are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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### Table 4 Large Power Monthly Bills

Hydro-Quebec Electricity Prices Comparison Report – Large Power Monthly Bills as of April 1, 2012

CDN \$000/Month

Utility	City	5,000 kW         5,000 kW         10,000 kW         30,000 kW           2,340,000 kWh         3,060,000 kWh         5,760,000 kWh         17,520,000           25 kV         25 kV         120 kV         kWh           65% load factor         85% load factor         80% load factor         120 kV		000 kW 520,000 kWh 20 kV	50,000 kW 23,400,000 kWh 120 kV		50,000 kW 30,600,000 kWh 120 kV						
Manitoba Hydro	Winnipeg, MB	(15t)	109.1	(1st)	131.2	(1st)	215.8	(1st)	654.1	(1st)	930.1	(1st)	1,128.8
Newfoundland Power <sup>2</sup>	St. John's, NL		198.3		249.9		468.0	(2nd)	706.9	(2nd)	1,010.5	(2nd)	1,218.6
Hydro-Quebec	Montreal, QC	(2nd)	124.5	(2nd)	145.8	(2nd)	265.1	(3rd)	802.4	(3rd)	1,166.3	(3rd)	1,378.7
BC Hydro	Vancouver, BC	(6th)	154.3	(6th)	187.9	(3rd)	291.2	(4th)	883.0	(4th)	1,248.1	(4th)	1,525.6
Commonwealth Edison <sup>3</sup>	Chicago, IL	(5th)	153.7	(5th)	187.0		327.7	(5th)	939.9	(5th)	1,298.3	(5th)	1,630.6
Seattle City Light	Seattle, WA	(3rd)	140.6	(4th)	182.4	(4th)	323.1		982.2		1,321.5		1,713.2
CenterPoint Energy <sup>3</sup>	Houston, TX	(4th)	144.2	(3rd)	178.3	(Sth)	323.8		979.8		1,356.7		1,698.5
SaskPower	Regina, SK		166.7		204.4		335.6		1,005.1		1,401.1		1,736.0
Pacific Power and Light	Portland, OR		155.9		194.1		355.8		1,049.8		1,465.3		1,817.0
Florida Power and Light <sup>3</sup>	Miami, FL		165.3	Serie -	198.6		358.4		1,082.7		1,556.4		1,863.2
NB Power	Moncton, NB		185.4		220.2		402.8		1,219.8		1,757.5		2,099.5
EPCOR Energy <sup>1</sup>	Edmonton, AB		237.7		299.3		412.2		1,233.8		1,687.3		2,133.1
Nashville Electric Service	Nashville, TN		209.1		252.6		416.2		1,246.2		1,856.4		2,128.6
Detroit Edison <sup>3</sup>	Detroit, Ml		201.5		241.8		451.0		1,365.4		1,953.1		2,353.0
Enmax	Calgary, AB		200.5		253.8		480.4		1,457.9		1,999.9		2,533.1
Maritime Electric	Charlottetown, PE		212.7		255.8		490.0		1,484.4		2,126.7		2,557.9
Pacific Gas and Electric <sup>3</sup>	San Francisco, CA		221.7		272.1		517.1		1,564.2		2,199.7		2,703.7
Nova Scotia Power	Halifax, NS		223.6		275.4		524.9		1,592.0		2,235.8		2,754.2
Boston Edison	Boston, MA		260.3		310.2		595.3		1,802.0		2,601.1		3,100.2
Toronto Hydro	Toronto, ON		255.9		324.3		613.1		1,845.4		2,544.2		3,201.1
Hydro Ottawa	Ottawa, ON		268.9		336.9		625.1		1,868.5		2,556.6		3,236.6
Consolidated Edison <sup>3</sup>	New York, NY		294.9		353.4		677.4		2,051.6		2,948.4		3,532.9

1) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate. 2) Newfoundland Power and Labrador Hydro rates for customers with a power demand of 30,000 kW or more; Newfoundland Power rates for all other customer categories.

3) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: Bill calculations exclude taxes and levies. BC Hydro's bill calculation includes the rate rider. The top five participating utilities with the lowest monthly bills are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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Hydro-Quebec Electricity Pr	ices Comparison Repo	ort – Residential					
Average Prices as of April 1	, 2012						
CDN ¢/kWh							
Utility	City	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh	
Hydro-Quebec	Montreal, QC	(2nd) 7.27	(1st) 6.95	(1st) 6.76	(2nd) 7.13	(2nd) 7.26	
Manitoba Hydro	Winnipeg, MB	(3rd) 7.87	(3rd) 7.68	(2nd) 7.46	(1st) 7.11	(1st) 7.00	
Seattle City Light	Seattle, WA	(1st) 7.20	(2nd) 7.63	(3rd) 8.17	(5th) 8.98	(5th) 9.25	
BC Hydro	Vancouver, BC	(4th) 7.91	(4th) 8.14	(4th) 8.78	(7th) 9.74	(7th) 10.06	
Florida Power and Light <sup>2</sup>	Miami, FL	(5th) 9.50	(5th) 9.34	(Sth) 9.15	9.85	10.08	
CenterPoint Energy <sup>2</sup>	Houston, TX	11.43	10.91	9.28	(4th) 8.81	(4th) 8.65	
Nashville Electric Service	Nashville, TN	10.99	10.68	10.29	9.70	9.51	
Pacific Power and Light	Portland, OR	10.88	10.61	10.28	11.03	11.28	
Commonwealth Edison <sup>2</sup>	Chicago, IL	13.15	12.69	12.13	(3rd) 8.43	(3rd) 8.05	
Newfoundland Power <sup>1</sup>	St. John's, NL	12.73	12.31	11.80	11.02	10.77	
NB Power	Moncton, NB	13.01	12.48	11.82	10.84	10.51	
SaskPower	Regina, SK	13.69	13.18	12.54	11.57	11.25	
EPCOR Energy	Edmonton, AB	14.21	13.63	12.90	11.82	11.46	
Hydro Ottawa	Ottawa, ON	13.40	13.16	13.14	13.17	13.18	
Toronto Hydro	Toronto, ON	14.51	14.08	13.57	13.07	12.91	
Enmax	Calgary, AB	15.01	14.51	13.89	12.95	12.64	
Maritime Electric	Charlottetown, PE	15.98	15.33	14.51	13.28	11.92	
Nova Scotia Power	Halifax, NS	15.66	15.37	15.01	14.46	14.28	
Detroit Edison <sup>2</sup>	Detroit, MI	15.15	15.10	15.03	14.92	14.88	
Boston Edison	Boston, MA	16.83	16.66	16.45	16.13	16.02	
Consolidated Edison <sup>2</sup>	New York, NY	23.50	23.08	22.57	21.79	21.53	
Pacific Gas and Flootric <sup>2</sup>	San Francisco CA	21.02	22.80	22.26	27.05	20.85	

Table 5

### Residential Average Prices

1) Newfoundland Power rates.

2) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: The top five participating utilities with the lowest average prices are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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Table 6	Small Power A	verage Prices
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Hydro-Quebec Electricity Prices Comparison Report – Small Power												
Average Prices as of April 1,	2012											
CDN ¢/kWh												
		6 kW 14 kW		4	40 kW		100 kW		100 kW			
1000000		75	0 kWh	200	2000 kWh		10,000 kWh		14,000 kWh		25,000 kWh	
Utility	City	17% 10	oad factor	20% 10	ad factor	35%	oad factor	19% load factor		35% load factor		
Seattle City Light	Seattle, WA	(1st)	6.84	(1st)	6.84	(1st)	6.84	(1st)	6.72	(1st)	6.33	
Manitoba Hydro	Winnipeg, MB	(3rd)	9.57	(2nd)	8.03	(2nd)	7.29	(3rd)	10.40	(2nd)	7.63	
CenterPoint Energy <sup>2</sup>	Houston, TX	(2nd)	8.52		11.50	(3rd)	7.93	(2nd)	10.04	(3rd)	7.71	
Hydro-Quebec	Montreal, QC	(5th)	10.37	(3rd)	9.35	(4th)	8.85		11.91		9.79	
BC Hydro	Vancouver, BC	(6th)	10.43	(5th)	9.92	(7th)	9.73	(5th)	11.75	(4th)	8.98	
Florida Power and Light <sup>2</sup>	Miami, FL	(4th)	10.28	(4th)	9.71	(5th)	9.41		12.49	(5th)	9.31	
Pacific Power and Light	Portland, OR		12.37		10.78		9.47	(4th)	11.09		9.31	
Commonwealth Edison <sup>2</sup>	Chicago, IL		12.89		11.55		10.76		12.30		10.61	
SaskPower	Regina, SK		13.31		11.29		10.31		14.19		10.90	
Nashville Electric Service	Nashville, TN		13.64		11.54		10.54		15.63		11.59	
Enmax	Calgary, AB		15.94		13.13		11.24		12.56		10.34	
EPCOR Energy	Edmonton, AB		14.19		12.99		12.41		14.37		12.12	
Detroit Edison <sup>2</sup>	Detroit, MI		14.63		13.72		12.67		12.60		12.51	
NB Power	Moncton, NB		14.86		13.12		12.46		15.48		12.44	
Newfoundland Power <sup>1</sup>	St. John's, NL		14.37		15.86		11.83		15.24		11.92	
Hydro Ottawa	Ottawa, ON		14.72		13.52		12.94		16.51		13.51	
Toronto Hydro	Toronto, ON		15.52		14.10		13.41		15.92		13.00	
Nova Scotia Power	Halifax, NS		15.73		14.40		14.25		17.74		14.25	
Maritime Electric	Charlottetown, PE		18.46		16.41		15.18		19.26		14.88	
Pacific Gas and Electric <sup>2</sup>	San Francisco, CA		18.69		17.88		16.90		19.29		16.08	
Boston Edison	Boston, MA	2.578	17.66		17.00		17.60		24.36		18.57	
Consolidated Edison <sup>2</sup>	New York, NY		24.67		29.17		21.29		28.43		21.14	

1) Newfoundland Power rates.

2) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: The top five participating utilities with the lowest average prices are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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### Medium Power Average Prices

Hydro-Quebec Electricity Prices Comparison Report – Medium Power											
Average Prices as of April 1, 2012											
CDN ¢/kWh							2				12
		500 kW 500 kW		1000 kW		1000 kW		2500 kW <sup>1</sup>			
11.111	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	100,000 k	Wh	200,000 kWh		200,000 kWh		400,000 kWh		1,170,000 kWh	
Utility	City	28% load ta	ctor	101361 8601 % 0C		28% load factor		(2nd)		(2nd)	
Seattle City Light	Seattle, WA	(151) 6	.46	(2110)	6.14	(151)	6.28	(2110)	6.04		6.01
Manitoba Hydro	Winnipeg, MB	(2nd) 8	.07	(1st)	5.67	(2nd)	7.98	(1st)	5.62	(1st)	4.75
Commonwealth Edison <sup>4</sup>	Chicago, IL	(4th) 9	.16	(3rd)	6.88	(4th)	9.39	(3rd)	7.00		6.59
CenterPoint Energy <sup>4</sup>	Houston, TX	(3rd) g	.12	(4th)	6.94		9.63	(5th)	7.19	(4th)	6.22
BC Hydro	Vancouver, BC	(5th) 9	.37	(5th)	7.05	(5th)	9.42	(4th)	7.08	(5th)	6.59
Pacific Power and Light	Portland, OR	9	.74		7.83	(3rd)	9.00		7.30		6.70
Hydro-Quebec	Montreal, QC	11	.06		7.77		11.06		7.19	(3rd)	6.05
Florida Power and Light <sup>4</sup>	Miami, FL	10	.63		7.70		10.60		7.69		7.07
Newfoundland Power <sup>3</sup>	St. John's, NL	11	.49		9.30		11.03		9.05		8.58
SaskPower	Regina, SK	12	.21		9.08		12.22		9.08		7.44
Nashville Electric Service	Nashville, TN	12	.19		9.13		12.09		9.08		8.89
Enmax	Calgary, AB	11	.92		9.65		11.69		9.53		8.65
Detroit Edison <sup>4</sup>	Detroit, MI	12	.44		9.86		12.42		9,74		8.63
NB Power	Moncton, NB	13	.39		10.98		13.39		10.98		10.62
EPCOR Energy <sup>2</sup>	Edmonton, AB	14	.19		11.53		13.28		11.07		10.52
Hydro Ottawa	Ottawa, ON	13	.29		11.49		13.15		11.42		11.44
Toronto Hydro	Toronto, ON	13	79		11.56		13.64		11.43		11.01
Nova Scotia Power	Halifax, NS	15.	.75		11.99		15.75		11.99		10.24
Maritime Electric	Charlottetown, PE	16	07	<i>in</i>	12.69		16.05		12.68		12.18
Boston Edison	Boston, MA	18.	06		12.57		17.98		12.53		11.59
Pacific Gas and Electric <sup>4</sup>	San Francisco, CA	19.	01		13.67		18.71		13.43		9.58
Consolidated Edison <sup>4</sup>	New York, NY	23.	17		17.52		23.14		17.50		12.61

1) Supply voltage of 25 kV.

2) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

3) Newfoundland Power rates.

4) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: The top five participating utilities with the lowest average prices are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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Table 8

### Large Power Average Prices

Hydro-Quebec Electricit Average Prices as of Ap CDN ¢/kWħ	ty Prices Compariso ril 1, 2012	in Report	t – Large	Power									1.02)
Utility City		5,000 kW 2,340,000 kWh 25 kV 65% load factor		5,000 kW 3,060,000 kWh 25 kV 85% load factor		10,000 kW 5,760,000 kWh 120 kV 80% load factor		30,000 kW 17,520,000 kWh 120 kV		50,000 kW 23,400,000 kWh 120 kV		50,000 kW 30,600,000 kWh 120 kV	
Manitoba Hydro	Winnipeg, MB	(1st)	4.66	(1st)	4.29	(1st)	3.75	(1st)	3.73	(1st)	3.97	(1st)	3.69
Hydro-Quebec	Montreal, QC	(2nd)	5.32	(2nd)	4.76	(2nd)	4.60	(3rd)	4.58	(3rd)	4.98	(3rd)	4.51
BC Hydro	Vancouver, BC	(6th)	6.59	(6th)	6.14	(3rd)	5.06	(4th)	5.04	(4th)	5.33	(4th)	4.99
Seattle City Light	Seattle, WA	(3rd)	6.01	(4th)	5.96	(4th)	5.61		5.61		5.65		5.60
CenterPoint Energy <sup>3</sup>	Houston, TX	(4th)	6.16	(3rd)	5.83	(5th)	5.62		5.59		5.80		5.55
Commonwealth Edison <sup>3</sup>	Chicago, IL	(5th)	6.57	(5th)	6.11		5.69	(5th)	5.36	(5th)	5.55	(5th)	5.33
SaskPower	Regina, SK		7.12		6.68		5.83		5.74		5.99		5.67
Newfoundland Power <sup>2</sup>	St. John's, NL		8.48		8.17		8.12	(2nd)	4.03	(2nd)	4.32	(2nd)	3.98
Pacific Power and Light	Portland, OR		6.66		6.34		6.18		5.99		6.26		5.94
Florida Power and Light <sup>3</sup>	Miami, FL		7.06		6.49		6.22		6.18		6.65		6.09
NB Power	Moncton, NB		7.92		7.19		6.99		6.96		7.51		6.86
Nashville Electric Service	Nashville, TN		8.94		8.26		7.23		7.11		7.93		6.96
Detroit Edison <sup>3</sup>	Detroit, MI		8.61		7.90		7.83		7.79		8.35		7.69
EPCOR Energy <sup>1</sup>	Edmonton, AB		10.16		9.78		7.16		7.04		7.21		6.97
Enmax	Calgary, AB		8.57		8.29		8.34		8.32		8.55		8.28
Maritime Electric	Charlottetown, PE		9.09		8.36		8.51		8.47		9.09		8.36
Pacific Gas and Electric <sup>3</sup>	San Francisco, CA		9.48		8.89		8.98	C 1	8.93		9.40		8.84
Nova Scotia Power	Halifax, NS		9.55		9.00		9.11		9.09		9.55		9.00
Boston Edison	Boston, MA		11.12		10.14		10.33		10.29		11.12		10.13
Toronto Hydro	Toronto, ON		10.94	- 280	10.60		10.64		10.53		10.87		10.46
Hydro Ottawa	Ottawa, ON		11.49		11.01		10.85		10.67		10.93		10.58
Consolidated Edison <sup>3</sup>	New York, NY		12.60		11.55		11.76		11.71		12.60		11.55

1) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate. 2) Newfoundland Power and Labrador Hydro rates for customers with a power demand of 30,000 kW or more; Newfoundland Power rates for all other customer categories.

3) These bills have been estimated by Hydro-Québec and may differ from actual bills.

Note: The top five participating utilities with the lowest average prices are ranked in the table above, from lowest to highest. The sort order indicates the utility's overall ranking in the category.

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Table 9 BC Hydro Monthly Bills Summary

BC Hydro Monthly Bills Summary for th CDN\$/Month	e Previous Five Y	'ears			
Vancouver, BC	April 1, 2008 <sup>1</sup>	April 1, 2009 <sup>2</sup>	April 1, 2010 <sup>3</sup>	May 1, 2011 <sup>4</sup>	April 1, 2012 5
Residential					
625 kWh	45.09	41.19	45.00	47.24	49.43
750 kWh	53.32	50.44	55.11	58.06	61.03
1,000 kWh	69.78	71.32	77.93	82.71	87.77
2,000 kWh	136	155	169	181	195
3,000 kWh	201	238	261	280	302
Small Power					
750 kWh/6 kW	60.21	63.22	69.08	73.50	78.20
2,000 kWh/14 kW	153	160	175	186	198
10,000 kWh/40 kW	763	802	876	923	973
14,000 kWh/100 kW	1,287	1,351	1,476	1,558	1,645
25,000 kWh/100 kW	1,709	1,794	1,961	2,093	2,245
Medium Power					
100,000 kWh/500 kW	7,109	7,468	8,163	8,707	9,371
200,000 kWh/500 kW	10,667	11,205	12,250	13,073	14,106
200,000 kWh/1,000 kW	14,300	15,023	16,421	17,512	18,831
400,000 kWh/1,000 kW	21,416	22,497	24,595	26,245	28,302
1,170,000 kWh/2,500 kW	58,185	61,153	66,899	71,443	77,100
Large Power					
2,340 MWh/5,000 kW/25 kV	116,451	122,392	133,891	142,983	154,289
3,060 MWh/5,000 kW/25 kV	141,682	148,895	162,877	173,950	187,873
5,760 MWh/10,000 kW/120 kV	224,148	235,277	257,041	273,626	291,237
17,520 MWh//30,000 kW/120 kV	679,568	713,310	779,294	829,577	882,967
23,400 MWh/50,000 kW/120 kV	960,555	1,008,249	1,101,519	1,172,581	1,248,056
30,600 MWh/50,000 kW /120 kV	1,174,147	1,232,445	1,346,452	1,433,332	1,525,576

1) Rates used reflect a 6.56 per cent approved interim increase effective April 1, 2008.

2) Rates used reflect an 8.74 per cent approved increase effective April 1, 2009.

3) Rates used reflect a 6.11 per cent approved increase effective April 1, 2010.

4) Rates used reflect an 8.00 per cent approved increase effective May 1, 2011.

5) Rates used reflect a 3.91 per cent approved increase effective April 1, 2012.

Note: Bill calculations exclude taxes and levies and include the rate rider.

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BC Hydro Average Prices Summary for the Previous Five Years CDN¢/kWh								
Vancouver, BC	April 1, 2008 1	April 1, 2009 2	April 1, 2010 <sup>3</sup>	May 1, 2011 <sup>4</sup>	April 1, 2012 <sup>5</sup>			
Residential								
625 kWh	7.21	6.59	7.20	7.56	7.91			
750 kWh	7.11	6.73	7.35	7.74	8.14			
1,000 kWh	6.98	7.13	7.79	8.27	8.78			
2,000 kWh	6.78	7.74	8.46	9.07	9.74			
3,000 kWh	6.71	7.95	8.69	9.33	10.06			
Small Power								
750 kWh/6 kW	8.04	8.43	9.21	9.80	10.43			
2,000 kWh/14 kW	7.64	8.02	8.76	9.32	9.92			
10,000 kWh/40 kW	7.63	8.02	8.76	9.23	9.73			
14,000 kWh/100 kW	9.19	9.65	10.54	11.13	11.75			
25,000 kWh/100 kW	6.83	7.18	7.84	8.37	8.98			
Medium Power								
100,000 kWh/500 kW	7.11	7.47	8.16	8.71	9.37			
200,000 kWh/500 kW	5.33	5.60	6.13	6.54	7.05			
200,000 kWh/1,000 kW	7.15	7.51	8.21	8.76	9.42			
400,000 kWh/1,000 kW	5.35	5.62	6.15	6.56	7.08			
1,170,000 kWh/2,500 kW	4.97	5.23	5.72	6.11	6.59			
Large Power								
2,340 MWh/5,000 kW/25 kV	4.98	5.23	5.72	6.11	6.59			
3,060 MWh/5,000 kW/25 kV	4.63	4.87	5.32	5.68	6.14			
5,760 MWh/10,000 kW/120 kV	3.89	4.08	4.46	4.75	5.06			
17,520 MWh//30,000 kW/120 kV	3.88	4.07	4.45	4.74	5.04			
23,400 MWh/50,000 kW/120 kV	4.10	4.31	4.71	5.01	5.33			
30,600 MWh/50,000 kW /120 kV	3.84	4.03	4.40	4.68	4.99			

Table 10 BC Hydro Average Prices Summary

1) Rates used reflect a 6.56 per cent approved interim increase effective April 1, 2008.

2) Rates used reflect an 8.74 per cent approved increase effective April 1, 2009.

3) Rates used reflect a 6.11 per cent approved increase effective April 1, 2010.

4) Rates used reflect an 8.00 per cent interim approved increase effective May 1, 2011.

5) Rates used reflect a 3.91 per cent approved increase effective April 1, 2012.

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Hydro Quebec Segment	Corresponding BC Hydro Rate Schedule
Residential	
625 kWh	RS 1101
750 kWh	RS 1101
1,000 kWh	RS 1101
2,000 kWh	RS 1101
3,000 kWh	RS 1101
Small Power	
750 kWh/6 kW	RS 1300
2,000 kWh/14 kW	RS 1300
10,000 kWh/40 kW	RS 1500
14,000 kWh/100 kW	RS 1500
25,000 kWh/100 kW	RS 1500
Medium Power	
100,000 kWh/500 kW	RS 1600
200,000 kWh/500 kW	RS 1600
200,000 kWh/1,000 kW	RS 1600
400,000 kWh/1,000 kW	RS 1600
1,170,000 kWh/2,500 kW	RS 1611
Large Power	
2,340,000 kWh/5,000 kW/25 kV	RS 1611
3,060,000 kWh/5,000 kW/25 kV	RS 1611
5,760,000 kWh/10,000 kW/120 kV	RS 1823
17,520,000 kWh/30,000 kW/120 kV	RS 1823
23,400,000 kWh/50,000 kW/120 kV	RS 1823
30,600,000 kWh/50,000 kW/120 kV	RS 1823

# Table 11Corresponding BC Hydro Rate Schedules<br/>included in each Segment of the Hydro<br/>Quebec Rate Survey

# BChydro @

Vancouver, BC	April 1, 2008	April 1, 2009	April 1, 2010	May 1, 2011	April 1, 2012
Residential				2012년 - 1285 - 1385	
625 kWh	3	1	2	3	4
750 kWh	4	1	4	4	4
1,000 kWh	4	3	4	4	4
2,000 kWh	2	3	5	5	7
3,000 kWh	2	3	4	6	7
Small Power					
750 kWh/6 kW	2	3	4	4	6
2,000 kWh/14 kW	3	3	3	3	5
10,000 kWh/40 kW	4	4	7	7	7
14,000 kWh/100 kW	3	3	7	7	5
25,000 kWh/100 kW	3	3	5	4	4
Medium Power					
100,000 kWh/500 kW	2	2	5	3	5
200,000 kWh/500 kW	3	2	4	3	5
200,000 kWh/1,000 kW	3	2	6	4	5
400,000 kWh/1,000 kW	3	2	5	3	4
1,170,000 kWh/2,500 kW	4	2	6	5	5
Large Power					
2,340 MWh/5,000 kW/25 kV	4	2	7	5	6
3,060 MWh/5,000 kW/25 kV	3	3	6	4	6
5,760 MWh/10,000 kW/120 kV	2	2	3	3	3
17,520 MWh//30,000 kW/120 kV	2	3	4	4	4
23,400 MWh/50,000 kW/120 kV	2	2	4	4	4
30.600 MWh/50.000 kW /120 kV	2	3	4	4	4

# Table 12 BC Hydro Rankings Summary in Hydro Quebec Rate Surveys, Out of 22 Utilities Surveyed

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**Electricity Rate Comparison Annual Report** 

April 1, 2012 Rates

# BChydro

Attachment B

**Ministerial Order No. M167** 

### PROVINCE OF BRITISH COLUMBIA

### REGULATION OF THE MINISTER OF ENERGY AND MINES AND MINISTER RESPONSIBLE FOR HOUSING

### Clean Energy Act

Ministerial Order No.

I, Rich Coleman, Minister of Energy and Mines and Minister Responsible for Housing, order that the Rate Comparison Regulation, B.C. Reg. 140/2009, is repealed, and the following Rate Comparison Regulation is made.

### RATE COMPARISON REGULATION

#### Definition

2

#### 1 In this regulation:

"Act" means the Clean Energy Act;

"applicable rates" means, with respect to a public utility's electricity rates, the average monthly bill for electricity, but not any other terms and conditions of those rates.

#### Report requirements

In a report to be provided to the minister under section 8 (4) of the Act, the authority must do all of the following:

 (a) include a comparison with at least one public utility in each of at least fifteen other jurisdictions in North America, including all of the following:

- (i) the provinces of Alberta, Quebec, Ontario and Manitoba;
- (ii) the states of Washington, Oregon and California;
- (b) compare the previous year's applicable rates for residential, commercial and industrial customers with similar rates of the public utilities referred to in paragraph (a);
- (c) express the monetary comparisons in Canadian currency;
- (d) provide the authority's previous 5 years of applicable rates.

DEPOSITED JUN 2 8 2011 B.C. REG. 119/ 201

Minister of Energy and Mines and Minister Responsible for Housing

67

Date

(This part is far administrative purposes only and is not part of the Orden)

Authority under which Order is made:

Act and section: Clean Energy Act, S.B.C, 2010, c. 22, s. 37 (f)

JUN 2 0 2011

Other: Utilities Commission Act, R.S.B.C. 1996, c. 473, s. 125.1 (4) (c); M114/2009

June 9, 2011

page 1 of 1

Resub R/77/2011/27

# ISSUE: BC Hydro Revenue Requirements Application

# KEY MESSAGES:

- BC Hydro submitted a Revenue Requirements Application to the British Columbia Utilities Commission (BCUC) in March 2011 for the 2012-2014 fiscal years.
- The 2011 Deputy Ministers' Review of BC Hydro identified substantial cost reductions and led to BC Hydro filing a revised BCUC application in November 2011, reducing the rate increase it had previously applied for by about one-half.
- The Government expressed concerns about power rates, and in May 2012 directed rate levels over the three years to be consistent with the Deputy Ministers' Review and BC Hydro's revised application.
- The total rate increase over the three years covered by BC Hydro's application is approximately 17 percent with rate increases of 8 percent in 2011/12, 7.1 percent in 2012/13 and 1.44 percent in 2013/14.
- The Direction also allows for rate changes that may result from BC Hydro's Demand-Side Management Revenue Expenditures Application expected in September/October this year.
- BC Hydro is required to bring forward a new Revenue Requirements Application for the period starting April 1, 2014. It is expected that BC Hydro will request approval for an interim rate for fiscal 2014/15 with a BCUC hearing on BC Hydro's application likely to commence spring/summer 2014.

## BACKGROUND/STATUS:

- On March 1, 2011, BC Hydro filed a three-year rate application with the BCUC seeking increases of 9.73 percent effective April 1 in <u>each</u> of fiscal 2012, 2013 and 2014.
- The cumulative impact of this increase was 32 percent over three years. Combined with a 7.29 percent approved increase in 2010/11 and an anticipated seven percent in 2014/15, the impact was projected to be 50 percent over five years.
- Government announced a review of BC Hydro on April 7, 2011 to find ways of minimizing rate increases while maximizing benefits to the Province, taxpayers and ratepayers. The Deputy Ministers' Review of BC Hydro identified substantial cost savings.
- BC Hydro amended its Revenue Requirements Application to the BCUC seeking a rate increase of eight per cent in 2011, 3.91 percent on April 1, 2012 and 1.44 percent on April 1, 2013.

- On February 15, 2012, the BCUC issued a decision confirming an interim 3.91 percent rate increase for the next fiscal year as applied for by BC Hydro. The decision also ordered an interim increase to BC Hydro's current rate rider of 2.5 percent to 5 percent. With compounding, the net annual bill impact for customers was a 7.07 percent increase. These changes have been reflected on bills since April 1, 2012.
- On March 30, 2012, the BCUC denied BC Hydro's request to resolve the revenue requirements application through a negotiated settlement process and ordered an oral hearing to begin in June.
- Proceeding by way of oral hearing would have very likely resulted in higher rate increases than what BC Hydro applied for and would have continued rate uncertainty until the end of 2012.
- Accordingly, the Government decided to direct the BCUC to set rates so that the total 3 year effect on customer bills is the same as what BC Hydro applied for. The Direction was released on May 22, 2012.
- The rates set by the Direction are subject to BC Hydro filing an application for fiscal 2013/14 demand-side management expenditures to the BCUC. BC Hydro intends to file an application following the submission and approval by government of the Integrated Resource Plan (IRP) due August 3, 2013. Assuming that the government accepts the IRP, it is anticipated that BC Hydro will be ready to file the application in September or October 2013. It is not anticipated that BC Hydro will apply for a rate increase.
- BC Hydro is required to submit a new Revenue Requirements Application that will set rates for 2014/15. It is expected that BC Hydro will apply, in January or February 2014, for an interim rate that will take effect April 1, 2014, with a BCUC hearing process likely to commence spring/summer 2014 to determine if the application is in the public's interest.

CONTACT: Les MacLaren, ADM

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# ISSUE: BC Hydro Regulatory and Deferral Accounts

# KEY MESSAGES:

- BC Hydro's deferral accounts have a current balance of approximately \$4.3 billion.
- This is forecasted to increase to \$5.3 billion in 2019, and decline thereafter.
- Three of the largest deferral accounts are those matching the timing of costs and benefits for Demand Side Management programs, Site C, and Smart Metering & Infrastructure.
- The two largest other accounts are for the transition to International Financial Reporting Standards.

## BACKGROUND:

- BC Hydro has been using regulatory accounts since the early 1980s.
- As of March 31, 2012 there were 27 regulatory accounts with a net balance owing from future ratepayers of \$2.7 billion.
- In November 2012 BC Hydro calculated that the net balance on regulatory accounts would increase to \$4.3 billion by the end of fiscal 2013 due to a change to International Financial Reporting Standards (IFRS). The IFRS accounts do not create new costs or financial risks, but change the timing of recognition of costs and revenues as income.
- There are three primary types of regulatory accounts:
  - Forecast variance accounts capture variations (above and below) for volatile items such as reservoir inflows and market prices (which drives import costs and trade income). These accounts should average out over time. If large amounts accumulate, a rate rider has been established to pay down amounts owing from future customers. There is currently a 5 percent rate rider in effect that reduces balances by about \$200 million per year. As of March 31, 2012, the total for forecast variance accounts was \$774 million. This was forecast to rise to \$1,047 million in fiscal 2013, mainly due to an increase of \$297 million in non-current pension costs.
  - Capital-like accounts are established to match the costs of programs and investments with the beneficiaries of those investments. Power Smart program costs are recovered over 10 to 15 years. Costs to develop Site C and smart metering and infrastructure will be brought into rates when those assets come into service. The March 31, 2012 balance for capital-like accounts was \$1,055 million. This was forecast to rise to \$1,476 million in fiscal 2013, due to increases in demand side management, Site C, smart metering and Infrastructure deferral accounts.

- Offsets and provisions accounts are mostly non-cash items such as First Nations Settlement Costs and environmental provisions. For these accounts, a future liability is recognized and the account is drawn down over time as payments are made. The March 31, 2012 balance for these types of accounts was \$625 million, and they were forecast to rise to \$703 million in fiscal 2013.
- In addition to these regulatory account categories, BC Hydro has an additional account category for its transition to IFRS. These accounts totalled \$222 million on March 31, 2012 and are projected to increase to \$1,168 million in fiscal 2013.
- The IFRS deferral accounts are intended to spread out the rate impact of transitioning to IFRS. Without them, the immediate rate impact of transitioning to IFRS would be much larger.
- After fiscal 2013, the rate of increase in deferral account balances is expected to moderate, with balances peaking at approximately \$5.3 billion in 2019 and decreasing beyond that.
- In spring 2010, the *Budget Measures Implementation Act* included the ability for Treasury Board, by regulation, to establish accounting standards that differ from those of other standards bodies.
- In 2011, Treasury Board adopted a portion of US Generally Accepted Accounting Principles that allows for rate regulated accounting and deferral accounts.

s.13

CONTACT: Les MacLaren, ADM

# ISSUE: BC Hydro Review and Implementation

# KEY MESSAGES:

- In spring 2011, the Province appointed a panel to review BC Hydro and develop options to reduce the impact of rate increases.
- The June 2011 review report included 56 recommendations on how BC Hydro could reduce costs.
- BC Hydro has established a team to oversee and implement the recommendations.
- BC Hydro expects to implement the recommendations that apply to it by the end of 2013/14.
- In early February, the Province announced changes to the electricity self-sufficiency policy, which will reduce forecast rate increases by up to eight percent in 2016 and 20 percent in 2020.
- In July, the Province changed the self-sufficiency regulation to require BC Hydro to plan for average water conditions, and to remove the requirement for 3,000 gigawatts per year of insurance by 2020.

s.13, s.17

# BACKGROUND:

- On March 1, 2011, BC Hydro applied to the BCUC for a 9.73 percent rate increase in each of the next three years.
- Government announced a review of BC Hydro on April 7, 2011 to try to find ways to minimize rate increases while maximizing benefits to the Province, taxpayers and ratepayers.
- The panel examined BC Hydro's financial performance, including:
  - operating costs;
  - cost containment strategies;
  - capital planning and spending;
  - BC Hydro's forecasting system;
  - o procurement processes; and
  - o rate structures.
- The Government review does not replace the more detailed examination of BC Hydro's Revenue Requirements Application conducted by the BCUC.
- On May 22, 2012, the BCUC was directed to set rates so that the total three-year effect on customer bills is the same as what BC Hydro applied for. On June 20, 2012, the BCUC approved the 1.44 percent increase for 2013.

• BC Hydro has established a Project Management Office to implement the panel's recommendations by following up with detailed actions with specific timelines and continues to report quarterly to Government on its progress.

## **CROSS-REFERENCE:**

9 - BC Hydro Revenue Requirements Application 10 - BC Hydro Deferral Accounts

CONTACT: Les MacLaren, ADM

# ISSUE: BC Hydro Smart Meter and Smart Grid Programs

# KEY MESSAGES:

- BC Hydro's Smart Meter and Smart Grid Projects are intended to modernize the BC Hydro grid by improving reliability, operating efficiencies and service, reducing electricity theft, helping facilitate energy conservation, and increasing worker and public safety.
- Under the Smart Meter Initiative (SMI), BC Hydro is installing digital meters along with a telecommunications system that supports two-way communications between the meters and BC Hydro.
- The Smart Grid Project includes technology for theft detection, enabling SCADA (supervisory control and data acquisition), infrastructure upgrades, and new telecommunications and information systems to make the distribution network more intelligent and to allow for future technologies such as distributed generation and electric vehicles.
- BC Hydro's SMI business case indicates that SMI would not create added costs for BC Hydro's customers. Accordingly, smart meters would pay for themselves by delivering \$1.6 billion in total benefits for a net benefit of \$520 million over 20 years after all costs are deducted.
- While there is some public concern primarily about health and privacy impacts, BC Hydro considers smart meters safe. BC Hydro reports that 20 years of exposure to a smart meter is equal to exposure during a single 30 minute cell phone call.
- The B.C. Privacy Commissioner found that BC Hydro is taking reasonable steps to protect its customers' private information.
- BC Hydro has installed 93 percent (1.73 million of 1.87 million) smart meters, and has been directed by Government to complete the remaining installations by December 31, 2013.
- BC Hydro is working with customers who still have concerns with smart meters. Currently, BC Hydro will not install a new meter without the customer's agreement. After contacting the customers on the "on hold" list, BC Hydro will be in a better position to provide some idea of what alternatives to a regular smart meter installation may be considered.

## BACKGROUND:

• More than 150 jurisdictions around the world, including 116 in North America, are moving to install smart meters and put smart grid components in place.

- The 2010 Clean Energy Act (CEA) required BC Hydro to install and activate smart meters by December 31, 2012. The CEA requires the British Columbia Utilities Commission (BCUC) to set BC Hydro's rates to allow for recovery of smart meter and smart grid costs. The Smart Meters and Smart Grid Regulation (Minister's Regulation) sets requirements for BC Hydro, specifying the equipment capabilities and where the meters must be installed.
- The *CEA* exempts BC Hydro from BCUC approval for complying with the obligations imposed by the Minister's Regulation. BC Hydro or its agents may enter property, other than private dwellings, without the owner's consent for purposes relating to BC Hydro's smart meters and its smart grid.
- The BCUC must consider the Government's goal of having smart meters and a smart grid in use for customers of other utilities when considering similar applications.
- In December 2012, the Minister's Regulation was amended to, in effect, remove BC Hydro's obligation to complete the smart meter installation program by December 31, 2012. The Minister's Regulation recognized that of the approximately 1.8 million meter installations required by the statutory deadline of December 31, 2012, approximately 85,000 installations had been deferred due to customer objections and were not scheduled to be completed by the end of 2012. An additional 45,000 meters would not have been installed in time for practical reasons. The Minister of Energy, Mines and Natural Gas directed BC Hydro to complete all remaining installations no later than December 31, 2013, and to provide quarterly updates to the Ministry.
- The most recent update indicates that about 40 per cent of the time, installation crews visited customers' premises when the customer was not home. In March 2013, BC Hydro staff projected that by May 2013 approximately 25,000 to 50,000 smart meters will remain to be installed out of the 130,000 outstanding installations at the end of 2012. A significant proportion is expected to be customers who were placed on the deferred list and who are continuing to refuse a smart meter despite additional one-on-one customer communications. By April 2013, all customers on the deferred list will have been visited and a better estimate of the options will be available then.
- In addition, a BCUC proceeding related to FortisBC's July 2012 application to seek approval for the utility's Advanced Meter Initiative (AMI) is ongoing. A BCUC decision is expected by June 2013. It is possible that the BCUC will approve the AMI program subject to FortisBC offering an "opt-out" program to FortisBC customers who prefer having a "radio-off" smart meter installed and operated at the customer's own cost.
- Such an outcome would reflect the regulator's approach in Quebec and some U.S. jurisdictions, and could be considered for BC Hydro.

# CONTACT: Les MacLaren, ADM

# ISSUE: Dawson Creek/Chetwynd Area Transmission Project

# KEY MESSAGES:

- Power demand is expected to increase in British Columbia's northeast due to population growth and increased economic activity.
- The proposed Dawson Creek/Chetwynd Area Transmission Project will supply clean, grid power to residential and industrial ratepayers.
- The transmission reinforcement will improve reliability as well as enable industrial development and job creation in the region. It will also support the Province's climate action objectives.

## BACKGROUND:

- The proposed Dawson Creek/Chetwynd Area Transmission (DCAT) project would increase the voltage of existing lines from 138 kilovolts (kV) to 230 kV, as well as add a new substation and upgrade two others.
- BC Hydro proposed this project due to large forecast residential and gas production/processing load growth in the Dawson Creek area.
- The projected cost of DCAT is between \$150 million and \$250 million.
- BC Hydro submitted the DCAT proposal to the British Columbia Utilities Commission (BCUC) for a Certificate of Public Convenience and Necessity (CPCN) review on July 11, 2011.
- BC Hydro felt DCAT did not need regulatory support from Government to obtain a CPCN given the projected load growth in the region. BC Hydro also received letters of credit from companies to mitigate ratepayer risk.
- The BCUC panel and interveners, particularly the Association of Major Power Consumers, raised several broad policy questions that BC Hydro could not answer without first obtaining Government direction. Consequently, BC Hydro requested and obtained a suspension to the proceeding, and sought Government input.
- The Ministry of Energy, Mines and Natural Gas (EMNG) staff believed that the CPCN proceeding was not the appropriate venue to discuss broad industrial electricity policy issues. Accordingly, EMNG submitted a letter to the BCUC requesting late intervener status and committed to holding a public process to address outstanding industrial electricity policy issues outside the CPCN process.
- EMNG's intervention (in conjunction with private sector interveners) enabled BC Hydro to persuade the BCUC panel to limit the scope of the CPCN to the merits of DCAT only. The BCUC issued a final decision approving the CPCN for DCAT on October 10, 2012. However, approval was subject to BC Hydro completing additional consultations with affected First Nations.
- BC Hydro indicates that supplementary First Nations consultation is complete.
   BC Hydro expects to complete its procurement procedure over the summer of 2013 and begin construction in fall 2013.



• On January 13, 2013, EMNG announced the Industrial Electricity Policy Review and appointed a task force to carry it out. More information is included in the Industrial Electricity Policy Review Information Note.

## CROSS-REFERENCE:

Information Note: 15 - Industrial Electricity Policy Review

CONTACT: Les MacLaren, ADM

Terrar 1

# ISSUE: Burrard Thermal Generating Station

# **KEY MESSAGES:**

- Phasing out of Burrard Thermal (Burrard) is part of the Province's commitment to reduce greenhouse gas emissions and become a clean energy powerhouse.
- Burrard can still be maintained as an important 'back up' facility when needed.
- On November 5, 2010, the Province issued a regulation under the *Clean Energy Act* limiting BC Hydro's use of this facility.
- The "Authorization for Burrard Thermal Electricity Regulation" (Regulation) allows BC Hydro to rely on Burrard, as required, until completion of Mica 5 and 6, the Interior to Mainland Transmission line and upgrading of the Meridian Substation.
- The March 8, 2013 Ministerial Order No. 059 amends the Regulation to enable BC Hydro to operate Burrard Thermal to produce steam for sale to Imperial Oil's adjacent asphalt plant in accordance with BC Hydro's Electric Tariff Supplement No. 56.
- The Burrard phase out commitment was made in 2001 and reinforced through the Energy Plan, the August 2009 Throne Speech and by direction to the British Columbia Utilities Commission (BCUC) under section 3 of the *Utilities Commission Act* in October 2009.

# BACKGROUND:

- The BCUC's July 2009 Decision on BC Hydro's Long Term Acquisition Plan directed BC Hydro to rely on 5,000 gigawatt-hours (GWh) from Burrard annually, for planning purposes. This decision was at odds with Government policy to phase out Burrard. The Government restated its policy intentions in the August 2009 Throne Speech, stating that "Phasing out Burrard Thermal is a critical component of British Columbia's greenhouse gas reduction strategy".
- On October 29, 2009, the Government issued Direction No. 2 to the BCUC under section 3 of the Utilities Commission Act, directing that BC Hydro should no longer plan to rely on Burrard for firm energy.
- The direction does provide flexibility for BC Hydro to rely on Burrard for capacity, or 'back up' purposes, for up to 900 megawatts of capacity.
- The *Clean Energy Act* restated Government's position on Burrard being phased out for energy purposes. Section 12 (3) of the Act directs that BC Hydro must not operate Burrard except:
  - (a) in case of emergency
  - (b) to provide transmission support services or
  - (c) as authorized by regulation.
- The Province clarified its intention to BC Hydro's use of Burrard through the November 5, 2010 Regulation, limiting the use of this facility.
- The Regulation allows BC Hydro to rely on Burrard, as required, until completion of Mica 5 and 6, the Interior to Mainland Transmission line and upgrading of the Meridian Substation, with all projects on track and to be operational by the end of 2015.
- With respect to Burrard providing steam to Imperial Oil, sales are generally through the use of an auxiliary non-generating boiler. Ministerial Order No. 59 makes it clear that BC Hydro may run one of Burrard's generating boilers when necessary to meet its steam commitments to Imperial Oil, should auxiliary boiler steam be unavailable.

## ISSUE: Industrial Electricity Rate Policy Review

## KEY MESSAGES:

- Several ad hoc industrial electricity policy issues arose during the British Columbia Utilities Commission (Commission) hearing on the Dawson Creek-Chetwynd Area Transmission (DCAT) Reinforcement Project.
- Government committed to launching a public process to address the issues raised in the hearing as well as other outstanding industrial electricity policy issues.
- Government announced the Industrial Electricity Policy Review on January 13, 2013. It appointed a task force consisting of Messrs. Chris Trumpy, Peter Ostergaard and Tim Newton to review the industrial electricity policy and regulatory framework.
- The task force has conducted two rounds of oral and written consultations and is scheduled to issue its Draft Task Force Report by May 31, 2013 and its final report by July 31, 2013 (subject to Ministerial direction).

- BC Hydro's current industrial tariff governing how new industrial customers connect to the provincial grid was implemented in 1991. It does not reflect the changed circumstances for both industrial customers and BC Hydro.
- The British Columbia Utilities Commission (Commission) issued a review of BC Hydro's Transmission Service Rate (TSR) for industrial customers in December 2009, but Government has not taken any action on the recommendations to date.
- Government's current electricity policy framework contains multiple objectives that compete, and at times conflict, with each other. This complicated the Commission decision-making process for DCAT.
- Ratepayer groups have consistently warned Government and BC Hydro on the economic risks associated with rapidly rising electricity costs. The impact is particularly acute on industrial customers given how much electricity they consume and the fact they are generally trade-exposed price-takers.
- The Ministry issued a Terms of Reference (ToR) for the Industrial Electricity Policy Review and appointed a task force to oversee the Review in January 2013.
- The task force consists of Chris Trumpy, former Deputy Minister, Peter Ostergaard, former Assistant Deputy Minister and Chair of the Commission, and Tim Newton, former Vice President of Powerex, a BC Hydro subsidiary.
- The purpose of the review is to examine the existing policy and legislative framework governing provincial industrial electricity policy and report to the Minister of Energy, Mines and Natural Gas in July 2013.

- The primary focus of the review is to identify how industrial electricity policy links to economic development, electricity conservation and meeting Government's greenhouse gas reduction targets. The task force was also asked to identify potential conflicts and "trade-offs" between these areas.
- Between January and May 2013 the task force met with key industrial, electricity and environmental stakeholders with interests in the outcome of the Review.
- The task force issued a Draft Consultation Summary compiling the input it received from all stakeholders on May 1, 2013. It expects to receive comments from stakeholders by May 15, 2013.
- The task force intends to release a draft task force report to stakeholders on May 31, 2013. It will not include definitive recommendations. Stakeholders would be given two weeks to provide comments on the report and/or meet with the task force to discuss report contents.
- The final task force report will be developed based on input from the draft. s.13 s.13 The Ministry will set up a task force briefing for the incoming minister early in his or her tenure.
- The ToR requires the task force to release a final report publicly by July 31, 2013.

S13

 The Commission indicated it would launch its own review of BC Hydro's industrial tariff and the TSR if Government did not follow through on its commitment in DCAT. This would place the process and potentite commendations beyond Government's reach.

## ISSUE: BC Hydro Integrated Resource Plan

## **KEY MESSAGES:**

- BC Hydro has completed consultation on its 2013 Integrated Resource Plan (IRP). The IRP will set out how it proposes to meet future electricity demand, which is expected to grow by 40 percent over the next 20 years.
- BC Hydro will submit its IRP to Government by August 3, 2013.
- The IRP will include options for managing an anticipated surplus of electricity.
- Government may choose whether or not to approve the IRP at that time.

- BC Hydro is required by the *Clean Energy Act* (*Act*) to prepare and submit for Government review, an IRP that sets out its long-term plan for acquiring the electricity resources to meet its customers' needs for the next 20 years.
- In accordance with the Act, the IRP is to include:
  - A description of BC Hydro's 20-year load forecasts of energy and capacity requirements to achieve electricity self-sufficiency;
  - A description of how the IRP responde to British Columbia's other energy objectives, including the objective to sure that its rates remain among the most competitive of rates charged by public utilities in North America;
  - BC Hydro's plans for demand-side management, construction or expansion of its facilities, and acquisition of electricity from private energy producers;
  - BC Hydro's consultations with the public and First Nations;
  - o An assessment of export market potential; and
  - An assessment of transmission infrastructure requirements over the next 30 years.
- BC Hydro initiated the IRP process in December 2010 and conducted an initial set of consultations with the public and First Nations in March and April 2011.
- BC Hydro established a Technical Advisory Committee to provide technical advice to BC Hydro during the development of the IRP. This Committee included many of the regular intervenors at British Columbia Utilities Commission hearings and met six times. The Ministry of Energy, Mines and Natural Gas sat on this Committee.
- BC Hydro suspended the IRP process in April 2011 following the Government's announcement of the review of BC Hydro.
- The IRP process remained suspended following release of the review of BC Hydro in August 2011, as the report included a recommendation that Government undertake an evaluation of its electricity self-sufficiency policy.

- On February 3, 2012, as part of the Government's announcement of its Liquefied Natural Gas (LNG) Strategy, the Premier and Minister of Energy, Mines and Natural Gas (Minister), announced that the self-sufficiency policy would be amended to require BC Hydro to meet customer demand based on an average water year, instead of the previous critical water definition. This change, which has the effect of reducing the need for new firm energy by about 4,500 gigawatt-hours per year, will ensure BC Hydro customers continue to pay some of the lowest prices for electricity in North America.
- A second phase of consultation took place in May and June 2012 following the release of the draft IRP.
- Following these consultations, BC Hydro was to make revisions, as appropriate, to the IRP and submit it to the Minister by December 3, 2012 for Government review. However, it was granted an extension to August 3, 2013 to incorporate more information about LNG demand.
- More recent information suggests that BC Hydro's final IRP will report a substantial energy surplus, eliminating the need for large-scale procurement until the early 2020's.

#### S13, S17

 Much of the projected surplus is driven by planned energy conservation actions, and BC Hydro proposes to reduce expenditure on these to limit costs associated with the surplus.

## ISSUE: Revenue to Government from the Electricity Sector

## KEY MESSAGES:

• The electricity sector in British Columbia is a significant contributor to provincial revenue and the provincial economy.

## BACKGROUND:

- The electricity sector in British Columbia is a significant contributor to provincial revenue and the provincial economy.
  - Direct tax revenues, royalties and dividend payments from electricity sector activities (e.g. water rentals, school taxes, social services taxes, etc.);
  - The electricity sector also provides employment, related taxes and economic activity;
  - Sales of the provincially-owned Canadian Entitlement to the Columbia River Treaty Downstream Benefits (DSB) Entitlement;
  - Commercial Crown Corporation net income, which is included in Government revenues in the Province's Summary Accounts; and
  - Facilitating economic activity through the competitive electricity rates enjoyed by British Columbia businesses.
- The major contributors to the Province's Summary Account income statement and the associated 2011/2012 actual revenues are:
  - \$558 million BC Hydro's net income;
  - o \$15 million net income from Columbia Power Corporation;
  - o \$(1 million) Columbia Basin Trust net loss;
  - \$346 million BC Hydro water rental;
  - \$90 million DSB Entitlement forecasted for 2012/2013; and
  - \$184 million school taxes and other local taxes paid by BC Hydro to the Province and local Governments.
- Crown corporations also pay grants-in-lieu of taxes to local Governments.
- New annual data for the parameters above will be available in the 2012/13 Public Accounts.

# ISSUE: Site C Clean Energy Project

## **KEY MESSAGES:**

- BC Hydro intends to complete the Site C Clean Energy Project by 2022, subject to the current approval and construction schedule, at a capital cost of about \$7.9 billion (nominal). Site C would provide 1,100 megawatts (MW) of capacity and produce about 5,100 gigawatt-hours (GWh) of electricity annually about eight percent of BC Hydro's current electricity needs, providing enough electricity to power more than 450,000 homes.
- On January 28, 2013, BC Hydro submitted the Site C Clean Energy Project Environmental Impact Statement (EIS) to the Canadian Environmental Assessment Office and the British Columbia Environmental Assessment Office for review.
- The provincial and federal governments are undertaking an independent, harmonized environmental review of Site C led by the Canadian Environmental Assessment Agency and the BC Environmental Assessment Office. This includes a Joint Review Panel process.
- The EIS indicates BC Hydro anticipates the following areas of significant impact: 1) fish and fish habitat 2) habitat for certain migratory birds including species considered "species at risk" and species considered to be of provincial concern, and 3) unique terrestrial habitat including fragmentation and impacts to two red-listed rare plant species.
- Site C would create an estimated 7,000 person-years of direct construction employment, and up to 35,000 direct and indirect jobs through all stages of development and construction. Site C would also help facilitate the integration of additional clean and renewable projects — such as wind, run-of-river hydro and solar — by providing reliable backup to these intermittent resources.

## BACKGROUND/STATUS:

- The Site C Clean Energy Project (Project) is a proposal to build the third dam and hydroelectric generating station on the Peace River, seven kilometers southwest of Fort St. John.
- Large hydro projects, such as Site C, have the ability to provide a reliable supply of both dependable capacity and energy without ongoing cost volatility. As well, hydroelectric projects are a renewable and clean source of energy with a long life of more than 100 years.

- The Project need is based on BC Hydro's evaluation of forecast customer demand, existing and committed supply-side resources and conservation and efficiency initiatives. Without the Project, BC Hydro forecasts the current energy and capacity surplus will turn to an energy deficit by 2024 and a capacity deficit by 2025 (this does not factor in potential future electricity demand from liquefied natural gas projects in British Columbia, but includes meeting the current demand-side management target of 7,800 GWh /year energy savings and associated capacity savings of 1,400 MWh by Fiscal 2021 and completing the Revelstoke Unit 6 project).
- BC Hydro estimates an adjusted unit energy cost of \$110/MWh for Site C (\$2013), whereas the alternative portfolios of clean energy projects with natural gas generation and without natural gas generation would be between \$156-181/MWh (i.e., portfolios including wind, run-of-river, hydro, biomass, pumped storage, geothermal and upgrades to existing generation facilities, keeping electricity generation within the 93 percent clean or renewable resources objective stated in the *Clean Energy Act*).
- Under the *Clean Energy Act*, BC Hydro is exempted from the requirement to seek approval of the Project from the British Columbia Utilities Commission (BCUC). The Project requires environmental approval and other regulatory permits and approvals before proceeding to construction. In addition, the Crown has a duty to consult and, where appropriate, accommodate First Nation groups.
- The environmental assessment (EA) is a joint process between the Canadian Environmental Assessment Agency and the British Columbia Environmental Assessment Office, guided by the February 13, 2012 three-stage "Agreement to Conduct a Cooperative Environmental Assessment, Including an Agreement to Establish a Joint Review Panel of the Site C Clean Energy Project" signed between Canada and British Columbia. The complete process, including a Joint Review Panel, is anticipated to last three years.
- Stage 1 of the EA review is a pre-panel technical review expected to take 24 months (August 2013 completion target). A Working Group composed of federal and provincial, local government and First Nations representatives was recently established, and will be responsible for reviewing the EIS. The Ministry of Forests, Lands and Natural Resource Operations (FLNRO) provided consolidated comments on the EIS from all natural resource ministries.
- The EIS identifies and assesses potential project effects and opportunities to provide lasting benefits for the region including First Nation groups. Where adverse effects are unavoidable, BC Hydro will evaluate options for mitigation, and identify where significant impacts from the Project cannot be mitigated.
- In stage 2, following the pre-panel technical review of the EIS, a three-person Joint Review Panel, jointly-appointed by the federal and provincial governments, will review the EIS for sufficiency (April 2014 target). This stage will also provide for public hearings, including submissions by First Nation groups. In stage 3, the Panel's report will be reviewed, and followed by joint preparation of a referral package for final decision by Provincial and Federal Ministers (September 2014 target).
- During the EA-related consultations, BC Hydro will also explore benefit agreements with First Nation groups and regional communities.

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- Assuming Environmental Certification, Stage 4 of the Project review process allows for a prudency review of the project design and construction planning to determine whether Site C should proceed to construction. This review would be based on the final project definition as approved by environmental regulators.
- Stage 5 of the Project review process is construction of the project. If Site C is approved, construction would take about seven years.
- The Minister of Energy, Mines and Natural Gas, as the Minister responsible for BC Hydro, is not a designated decision-maker in the EA process, in order to avoid the perception of conflict. The federal and provincial environment ministers will be making appointments to the Joint Review Panel in the latter part of July 2013.

# ISSUE: British Columbia Utilities Commission: Role and Responsibilities

## KEY MESSAGES:

- The British Columbia Utilities Commission (BCUC) is an independent, public tribunal that is not bound by government policy except through legislation, Cabinet direction issued by regulation, or through Ministerial regulations.
- The *Utilities Commission Act (UCA)* was amended in spring 2010 to implement many elements of the Province's clean energy strategy.
- The purpose of the amendments in the *Clean Energy Act* (*CEA*) was to ensure that the clean energy objectives, how utilities deliver on these objectives, and how the BCUC regulates utilities, are all in alignment.

- The BCUC is an independent regulatory tribunal. The Minister of Justice is responsible for administering most aspects of the UCA which establishes the authority of the BCUC.
- The primary role of the BCUC has traditionally been to protect the interests of ratepayers while allowing utility shareholders an opportunity to earn a fair return on their invested capital.
- Prior to 1980, BC Hydro rates and other activities were approved by Cabinet. The *UCA*, first proclaimed in 1980, expanded utility regulation which previously existed for only investor owned utilities to include BC Hydro.
- In the 1990s, a number of Minister's Exemption Orders and Special Directions were issued to limit the BCUC's authority with respect to the regulation of BC Hydro. Legislation was also passed to limit the BCUC's authority to approve changes to BC Hydro's electricity rates. The *Tax and Consumer Rate Freeze Act* of 1996, the *British Columbia Hydro and Power Authority Rate Freeze and Profit Sharing Act* of 1998 and the *Budget Measures Implementation Act* of 2000, froze BC Hydro's rates at 1994 levels until 2001.
- The 2002 Energy Plan confirmed a commitment to restore "an independent BC Utilities Commission" and to return BC Hydro to full BCUC regulation.
- The UCA was amended in the spring of 2008 to implement many elements of the 2007 Energy Plan and again in the spring of 2010 to advance the Province's Clean Energy Strategy.
- The amendments address the Province's goals relating to electricity self-sufficiency, an increased emphasis on energy conservation and efficiency, and the goal of continuing to generate at least 93 percent of electricity in British Columbia from clean and renewable resources.
- The *CEA* introduced a new requirement for the BCUC to ensure that BC Hydro ratepayers do not pay for expenditures for export.

- The CEA also exempted certain key/strategic investments and procurement processes from BCUC review, although the BCUC retains the power to examine the prudency of expenditures on these investments when setting BC Hydro's rates.
- The *CEA* and the changes to the *UCA* modified the legal framework within which the BCUC regulates the plans, programs, projects and contracts of utilities. It is the responsibility of the BCUC to balance ratepayer and utility shareholder interests within the modified legal framework.

## ISSUE: Clean Energy Act Implementation

## KEY MESSAGES:

- The Clean Energy Act (Act), enacted in June 2010, sets out 16 provincial energy objectives, including electricity self-sufficiency; conservation; greenhouse gas reduction; fostering jobs and opportunities for rural communities and First Nations.
- The Act commits British Columbia to having at least 93 percent of electricity generated in British Columbia from clean or renewable resources.
- Nine new regulations have been enacted to implement the Act.
- BC Hydro is now developing its first Integrated Resource Plan under the new regulatory framework established by the *Act*. It is to be submitted by August 3, 2013.

- In the August 2009 Throne Speech, the Government announced that green energy will be a cornerstone of British Columbia's climate action plan.
- In the February 2010 Throne Speech, the Government committed to build on the contributions of the Green Energy Advisory Task Force and launch a comprehensive Clean Energy Strategy to put British Columbia at the forefront of clean energy development.
- The Act helps implement the strategy by:
  - setting out British Columbia's energy objectives to guide both BC Hydro's resource planning and the British Columbia Utilities Commission's (BCUC) decisions;
  - moving the Province to self-sufficiency and laying the foundation for a low-carbon economy;
  - exempting a number of strategic energy investments, such as the Northwest Transmission Line, Site C and capacity additions at Mica and Revelstoke, from review by the BCUC (projects will remain subject to environmental assessment), while maintaining BCUC review with respect to rate setting;
  - creating a framework for BC Hydro to pursue electricity exports, including transmission capacity, while protecting BC Hydro ratepayers;
  - strengthening BC Hydro by reintegrating British Columbia Transmission Corporation; and
  - o continuing the commitment to installing smart meters and a smart grid.
- Since the Act was enacted, regulations governing clean or renewable resources, the exempt projects and programs, self-sufficiency, Burrard Thermal, BC Hydro's Standing Offer Program, smart meters and smart grid, and the First Nations Clean Energy Business Fund have been enacted.

• A Regulation under section 18 of the *Act*, encouraging the adoption of natural gas as a transportation fuel for heavy duty fleet vehicles and marine vessels, was issued on May 16, 2012.

## ISSUE: Feed-In Tariff Regulation

## KEY MESSAGES:

• The *Clean Energy Act* provides for the introduction of a Feed-In Tariff (FIT) to support clean electricity production from specified technologies.

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## BACKGROUND:

- Sections 16 and 35(m) of the Clean Energy Act allow for the creation of a FIT in British Columbia.
- FITs have been implemented in jurisdictions such as Ontario and Germany to support rapid, widespread development of small-scale renewable energy projects and displace coal-based electricity generation.
- In British Columbia, where power generation is already more than 93 percent clean and renewable, the British Columbia FIT would take a different approach than those in other jurisdictions – supporting the early deployment of emerging technologies and seeking to displace diesel-based electricity generation in remote communities.
- In August 2010, the Ministry of Energy, Mines and Natural Gas (EMNG) released a Consultation Paper proposing details of a FIT program to be implemented by BC Hydro.
- The Consultation Paper received more than 100 comments from industry organizations, clean energy companies, non-government organizations and members of the public.

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## ISSUE: Greenhouse Gas Reduction (Clean Energy) Regulation

## KEY MESSAGES:

- Sections 18 and 35 of the *Clean Energy Act* (*Act*) give Cabinet the power to approve, through regulations, utility prescribed undertakings that reduce emissions.
- The Greenhouse Gas Reduction (Clean Energy) Regulation, announced in May 2012, and enabled under the Act, allows utilities to offer incentives for natural gas vehicles and to build natural gas vehicle fuelling infrastructure.
- The Regulation allows utilities to make these investments over a time-limited period with caps on expenditures to kick-start the natural gas vehicle market while providing room for a competitive market to develop.
- Following the issuance of the Regulation, FortisBC launched its Natural Gas for Transportation Incentive Program (NGV Program) on June 15, 2012 to support natural gas use in medium and heavy-duty vehicles and ferries.
- The Program has been highly successful in the first round of funding, providing incentives to more than 400 vehicles and one marine ferry.

- The Regulation defines three prescribed undertakings: grants for vehicles and safety upgrades, compressed natural gas (CNG) fuelling stations, and liquefied natural gas (LNG) fuelling stations.
- The Regulation expires on April 1, 2017, and permits a utility to spend no more than \$62 million on vehicle and safety upgrade incentives, \$12 million on CNG fuelling stations and \$30.5 million on LNG fuelling stations. There are also limits on program administration and marketing.
- If a utility chooses to pursue measures identified in the Regulation, the Act provides that the British Columbia Utilities Commission (BCUC) must allow a utility to collect sufficient revenue in each fiscal year to enable it to recover its costs. The Act does not require utilities to engage in the measures.
- The Program is providing incentives for the purchase of new natural gas vehicles, and incentives to support fleets in upgrading their maintenance areas to be natural gas-safe. The Program is anticipated to support 1,400 – 1,500 natural gas vehicles, representing approximately one percent of the market. Pacific Northern Gas is now also considering developing a complementary program for its service territory.
- During stakeholder consultations in 2011 and 2012, while the Regulation was under development, Shell, Ferus and Clean Energy Fuels raised concerns that the Regulation creates a non-level playing field for non-regulated entities and could impact non-regulated companies' ability to enter the CNG or LNG for transportation markets in British Columbia.

- The vehicle fuelling infrastructure market for both CNG and LNG is not yet a competitive market and requires market stimulation. The Regulation, designed with the time and expenditure limits, ensures market stimulation of natural gas in the transportation sector, while also setting limits on regulated utilities' involvement in the market to allow for a competitive market to develop.
- The Regulation includes the ability for utilities to offer zero-interest loans for the purchase of a natural gas vehicle, in a pay-as-you-save type of model where the loan would be repaid through savings on the cost of natural gas versus gasoline or diesel fuel. Although the market is not yet sufficiently developed to move to this type of support mechanism, Ministry staff and utilities will continue to monitor the market and may work with stakeholders to explore this concept further.
- During development of the Regulation, FortisBC requested that the Regulation permit utilities to invest in developing LNG supply. However, the Regulation does not include LNG supply development or new LNG production capability, as the LNG supply market is already a competitive market. As such, if FortisBC is interested in developing new LNG supply, this would need to go to the BCUC for approval.
- In December 2012, the BCUC issued an Alternative Energy Services Decision that included directions and principles related to CNG and LNG fuelling service offerings. The Decision requires FortisBC to establish separate classes of service for its CNG/LNG fuelling service offerings, but FortisBC is still able to recover costs for the activities under the Regulation across all ratepayers, up to the limits specified in the Regulation.
- FortisBC's August 2012 application to the BCUC for rate treatment of its expenditures on incentives, fuelling stations, and past incentives, issued prior to the Regulation and previously denied by the BCUC, is currently in process with the BCUC, with decisions expected in late spring/summer 2013.

CONTACT: Les MacLaren, ADM

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# ISSUE: Columbia River Treaty 2014 Review

# KEY MESSAGES:

- The Columbia River Treaty (CRT) has provided significant benefits to both Canada and the United States (U.S.), and it is the standard against which other international water coordination agreements are compared.
- The Province is leading the review of the CRT in Canada in advance of September 16, 2014, which is the latest date either Canada or the U.S. can give the required 10 years notice to unilaterally terminate the Treaty on the earliest possible date in 2024.
- The Province has initiated a CRT Review process to evaluate future decision options, including possible continuation, amendment or termination of the Treaty. The Ministry of Energy, Mines and Natural Gas is the coordinating agency for the Review and has established a CRT Review Team to provide recommendations to Cabinet in late 2013.
- The Province is committed to conducting a thorough public and First Nations engagement process on options for future decisions regarding the Treaty.

- The CRT is a trans-boundary water management agreement between the U.S. and Canada signed in 1961 and ratified in 1964.
- Although the CRT has no specified end date, either Canada or the U.S. can unilaterally terminate most of the agreement provisions as early as September 16, 2024, provided that at least 10 years notice is given (on or before September 16, 2014). Currently, the Treaty returns approximately \$100-300 million each year to the Province's Consolidated Revenue Fund through the sale of Canada's share of the U.S.'s downstream power benefits.
- Although international treaties like the CRT are within the jurisdiction of the executive branch of the Federal Government, the Canada-British Columbia Agreement (1963) transferred most treaty rights and obligations to the Province, and also requires Canada to obtain the agreement of the Province before terminating or amending the Treaty.
- The primary purposes of the CRT are to provide flood control in Canada and the U.S., and increase the power generating potential of the Columbia River by capturing spring run-off and releasing water at other times during the year when it is more valuable.
- Under the CRT, Canada agreed to build 15.5 million acre feet of storage in three dams – Duncan, Arrow and Mica.

- The CRT also gave the U.S the option, which it exercised, to construct a dam near Libby, Montana that floods the Kootenay River valley 68 km (Koocanusa Reservoir) back into Canada almost as far as Cranbrook.
- Canada (British Columbia) received an upfront \$64M one-time payment for 60 years of flood control in 1964.
- Canada's (British Columbia's) share of U.S. downstream benefits were sold to the U.S. for the first 30 years for \$254 million to help finance the construction of the Treaty dams.
- In Canada, BC Hydro is designated to have the responsibility to implement the Treaty on behalf of the Province and Canada. The Province of British Columbia has been designated as the Canadian Entity for the purposes of disposing of the Canadian Entitlement. In the U.S., the Treaty is entirely the responsibility of the Federal government which has jointly designated the Bonneville Power Administration and the US Army Corps of Engineers as the U.S. Entity responsible for implementation.

## CRT REVIEW:

- The Province is undertaking a CRT Review process to evaluate future decision options, including possible continuation, amendment or termination of the Treaty.
- The Ministry of Energy, Mines and Natural Gas is leading the Review and has established a CRT Review Team to provide recommendations to Cabinet by the fall of 2013.
- The Province and the federal government are working together to ensure a coordinated and comprehensive approach to the CRT Review including First Nations consultation.
- The CRT Review team has completed the major portion of the public consultation and has delivered two rounds of eight community events, an all-day technical conference, and public sessions in three additional communities. More than 1,000 Basin residents attended the events.
- Basin residents will be able to provide feedback on a draft public consultation report and are encouraged to continue to share their views until August 2013 through email, blog posts and Facebook.
- The CRT Review Team has achieved agreement with participant First Nations on respective consultation plans and has largely completed interest scoping discussions.
- The CRT Review Team is now engaging in consultation related to decision scenarios, including a preliminary assessment of potential impacts on aboriginal interests. This engagement will occur through the spring and summer of 2013. First Nations will also have the opportunity to provide input and review the Crown's First Nation consultation reports. It is anticipated this process will be completed by fall 2013.

June 2013

• CRT Review Team will be providing a recommendation to Cabinet, informed by the public and First Nations consultations, in late 2013.

## ISSUE: Community Energy Solutions

## **KEY MESSAGES:**

- The Province is providing resources, support and tools for communities to develop community energy plans, and implement clean energy and energy efficiency policies and projects in their communities.
- The Community Action on Energy and Emissions (CAEE) initiative is a successful partnership between the Province, utilities, First Nations and local governments to leverage and support community energy solutions.
- To date, more than 70 British Columbia communities have participated in CAEE, 24 communities have received additional mentorship, and 35 communities have received Energy Savings Kits.
- The CAEE initiative is leveraging over \$40 million in additional federal and private sector investment.
- The Province is partnering with BC Hydro to deliver a First Nations Energy Efficiency Building Policy (FNEEBP) project with communities to support the development of energy efficiency standards and measures in new and existing housing on-reserve
- The Province is a member of the Quality Urban Energy Systems of Tomorrow BC (QUEST BC) caucus which supports British Columbia communities to lead in the development of Integrated Community Energy Solutions (ICES). In April 2013, the Province commissioned a new report on the status of ICES progress in British Columbia which will be released later this spring.
- These innovative community energy projects are creating jobs, supporting regional, economic and social development opportunities, reducing greenhouse gas emissions, reducing energy costs, and improving energy conservation and overall community sustainability.

## BACKGROUND:

 Since 2006, the Province has contributed approximately \$10 million in funding support for energy efficiency and clean energy development in First Nation and remote communities.

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June 2013

The Ministry of Energy and Mines Information Binder

 CAEE is currently administered on behalf of the Province by the Fraser Basin Council. The current CAEE offering is a Remote Community Implementation (RCI) Program and Community Mentorship initiative funded through a grant of \$1.65 million from the 2008/2009 budget.

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 The Community Mentorship initiative, developed by the Ministry of Energy, Mines and Natural Gas (EMNG), has been successful in job creation and energy project development in communities. To date, representatives from 20 communities have participated in webinar presentations and 4 communities have received one-on-one mentorship from experienced project leaders. An expansion of the Community Mentorship initiative is currently being pursued with VanCity, BC Hydro, Aboriginal Affairs and Northern Development Canada, Natural Resources Canada and QUEST BC.

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CONTACT: Les MacLaren, ADM

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## ISSUE: Remote Community Electrification Policy and Regulation

## **KEY MESSAGES:**

- The Remote Community Electrification (RCE) Program offers BC Hydro utility service to eligible communities not connected to the electrical grid.
- The RCE Program supports regional economic development through increased energy system reliability and reduced customer energy costs.
- The Ministry of Energy, Mines and Natural Gas (EMNG) chairs the Remote Community Energy Network (RCEN), which includes the Province, BC Hydro and Aboriginal Affairs and Northern Development Canada (AANDC). The objective of the RCEN is to assist British Columbia remote communities in implementing community energy solutions by coordinating access to and leveraging network members' programs.
- In 2009, the Province signed a Memorandum of Understanding (MOU) with BC Hydro and AANDC to ensure the federal government continued to meet its fiscal obligation to provide funding for energy services in First Nations communities.

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- The Province provides policy direction for the RCE Program through the BC Energy Plan and the Remote Communities Regulation.
- The RCE Program requires that costs are recovered from currently responsible agencies such as AANDC. The BC Utilities Commission has approved the RCE Program on this cost-recovery basis, to ensure limited impact on ratepayers.
- The RCE Program was developed in recognition of the fact that some communities in the Province do not have access to electricity service; are struggling with unreliable, costly, community-owned systems; and, lack the financial resources and expertise to maintain them properly.

- In some cases, participation in the RCE Program results in the communities being connected to the main electrical grid, but in most cases it results in communities becoming "Non Integrated Areas" (NIA) customers of BC Hydro with discrete generation and distribution systems within the community.
- Remote communities that are not BC Hydro customers pay approximately 40 cents/kWh for electricity. Under the RCE Program, communities that become NIA customers pay Zone 2 rates (approximately 10 cents/kWh), while communities that are connected to the grid pay Zone 1 rates (approximately 6 cents/kWh).
- The RCE Program results in significant long term cost-savings and a reduced administration burden for AANDC in remote First Nations communities, as under the RCE Program BC Hydro takes over operation, maintenance, billing, and capital upgrades of energy systems in these communities.
- The Remote Communities Regulation under the *BC Hydro Public Power Legacy and Heritage Contract Act* creates an obligation for BC Hydro to serve remote communities listed in the Schedule to the Regulation.

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## **ISSUE:**

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## KEY MESSAGES:

- The Energy Efficiency Standards Regulation (EESR), under the *Energy Efficiency Act* (*EEA*), sets energy performance standards for energy-using equipment and building components manufactured, sold, leased or disposed of in British Columbia.
- EESR standards reduce energy bills for consumers, support competitive electricity rates and create employment and investment opportunities.

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 In March 2012, EESR amendments were approved by the Province to delay the effective date for 40-60W light bulb standards by two years (to December 31, 2014) to align with NRCan regulations.

## BACKGROUND:

 Public consultations were held in fall 2012 on proposed EESR amendments for STBs, T8 lighting (phase-out T12 florescent lamps), small natural gas boilers and geoexchange heat pumps.

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#### March 2012 EESR amendments

• In March 2012, EESR amendments established a delayed effective date for efficiency standards for 40-60W light bulbs, along with minor housekeeping changes to other existing EESR standards.

#### July 21, 2011 EESR amendments

 In July 2011, EESR amendments received Order in Council approval, setting new efficiency standards for TVs and for standby losses for compact audio and video products. It also included several housekeeping items related to previous EESR standards for windows, water heaters and furnaces.

## ISSUES: Energy Efficiency Strategy

## KEY MESSAGES:

- Buildings account for 25 percent of British Columbia's energy consumption and 11 percent of its greenhouse gas (GHG) emissions.
- Industrial energy use accounts for more than 40 percent of British Columbia's energy use and 36 percent of provincial GHG emissions.
- The Ministry has released two strategies for energy efficiency in buildings, in 2005 and 2008, which included targets, funding commitments and regulatory plans.

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## BACKGROUND:

- Opportunities exist for saving large quantities of energy for British Columbia buildings. However, many barriers remain (e.g., consumer bias against upfront costs; split incentives between landlords and tenants; a lack of industry capacity; and poor information).
- The economic case for energy efficient buildings in British Columbia is more difficult than in some jurisdictions because of the province's generally mild climate and low energy prices.
- Tackling these challenges will require a comprehensive and coordinated approach by the Ministry and utilities.

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#### **ISSUE:**

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## KEY MESSAGES:

- The industrial sector in British Columbia accounts for more than 40 percent of the total energy used in the Province. There are substantial opportunities for cost-effective, energy efficiency improvements in existing and planned industrial facilities.
- Helping to facilitate improved energy efficiency in the industrial sector will lower operating costs and emissions, minimize utility rate increases over the long-term, improve British Columbia business competitiveness, and create clean tech jobs.

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#### BACKGROUND:

 Primary barriers to industry realizing improved energy efficiency include a lack of senior management support for energy management, a lack of awareness of the specific opportunities for improvement, and a lack of awareness of how existing processes and facilities compare to industry benchmarks.

- In July 2011, the Council of Energy Ministers (CEM) announced a commitment to "Improve industrial energy performance by adopting the ISO 50001 international energy management standard. ISO 50001 provides a voluntary framework and guidance materials to facilitate the systematic and continuous improvement of total energy management. It has been reported that industries can save between 10 and 20 percent of their annual energy use within the first five years of implementing an energy management standard."
- In support of the CEM commitment, EMNG sits on the Canadian Standards Association Technical Committee on Energy Management, responsible for developing, maintaining and advancing Canadian energy management system standards. EMNG is engaging with public utilities to develop measures to support ISO 50001 and has worked directly with large industrial firms to publicize and support their efforts to adopt the standard.

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## ISSUE: LiveSmart BC: Residential Efficiency Incentive Program

## KEY MESSAGES:

- Over the past five years, LiveSmart BC: Efficiency Incentive Program has gained recognition and support among homeowners, the home retrofit industry and utilities for its significant contributions towards improving energy efficiency in the residential sector.
- Budget 2013 did not include funding for LiveSmart BC incentives; however, the Province did commit \$1 million to reduce the cost of home energy assessments.
- In the absence of energy efficiency incentives, the Province has relied on its strong partnership with utilities (BC Hydro and FortisBC) to develop a new program offering in which 100 per cent of incentives are funded through utilities.
- Therefore, from April 1, 2013 until March 31, 2014, the LiveSmart BC program offers incentives for insulation and air sealing with a continued \$150 provincial subsidy to reduce the cost of the initial energy efficiency assessment that is required to enter the program.

- Between April 2008 and March 2013, the LiveSmart BC: Efficiency Incentive Program has provided almost \$95 million (M) in incentives to encourage almost 80,000 homeowners to make energy efficiency improvements that reduce energy costs and greenhouse gas (GHG) emissions while improving health and comfort.
- It is estimated that these incentives have stimulated between \$852M and \$947M in economic activity and created 8,523 to 14,205 person years of employment.
- Participants are each saving an estimated 1.2 tonnes of GHGs annually, for a Program total of almost 100,000 tonnes/year.
- The Program has helped participants reduce their utility bills by between 15 percent and 28 percent.
- Post-program evaluations show more than 90 percent of participants approve or strongly approve of their experience.
- As of March 31, 2013, the LiveSmart BC: Efficiency Incentive Program no longer has provincial funding for residential energy efficiency upgrade incentives, resulting in:
  - o reduced energy savings and GHG emission increases;
  - reduced energy affordability for families and small business competitiveness; and
  - o reduced economic activity and job stimulation.
- The Ministry continues to administer Program incentives funded by utility partners.
- \$1M was approved from the Innovative Clean Energy Fund for 2013/14 to subsidize home energy assessments facilitating access to utility partner incentives.

#### June 2013

- Utility partner incentives are available for some envelope (insulation and air sealing) upgrades; however, incentives are no longer available for many significant residential upgrades such as most heating systems, hot water heaters and window replacements.
- These reductions in available residential incentives are projected to significantly reduce participation in the Program, from a high in 2011/12 of more than 25,000 entrants to approximately 6,000 projected in 2013/14.
- Public and industry response to the Program has been overwhelmingly positive. The program has been foundational for a number of successful utility, municipal and industry programs and policies, many of which have been held up as examples of best practice.
- While significant gains have been made in five years, there remains a large amount of work to do to transform residential energy performance in British Columbia, and make homes more affordable for families. LiveSmart BC has reached about 9 percent of all eligible homes, leaving 91 per cent of eligible housing stock as potential future beneficiaries.

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# ISSUE: LiveSmart BC: Small Business Program

## **KEY MESSAGES:**

- Over the past three years, the LiveSmart BC: Small Business Program has gained support and recognition from small business owners, utilities, chambers of commerce, industry associations, the Small Business Roundtable, and other organizations for helping small businesses save energy and lower their utility costs.
- Budget 2013 did not include funding for LiveSmart BC: Small Business Program; however, the Ministry advanced s17 funds to extend the Business Energy Advisor program component until March 31, 2014.
- Business Energy Advisors offer free energy assessments, provide recommendations for energy efficiency upgrades, help business owners access available utility incentives, and coordinate upgrades. Demand for advisory services has grown steadily.
- Utilities continue to offer energy efficient product incentives to small businesses; however, without the LiveSmart BC top-up to those incentives, it is less cost effective for businesses to move forward with energy efficient upgrades. It is therefore expected that some businesses will choose not to upgrade their energy systems, resulting in lost opportunities to improve the energy efficiency of buildings in British Columbia.

- In 2010, there were approximately 391,700 small businesses operating in British Columbia, accounting for 98 percent of all businesses in the Province.
- Research has shown that small businesses do not have the time, knowledge or resources to invest in energy efficiency measures. The LiveSmart BC: Small Business Program provides a free resource to help businesses identify money- and energy-saving opportunities.
- Building on the well-recognized LiveSmart BC brand, and the successful LiveSmart BC: Efficiency Incentive Program for homes, the LiveSmartBC: Small Business Program has partnered with utilities, industry organizations, chambers of commerce and various non-profit groups in order to identify and deliver cost-savings opportunities to small businesses across multiple sectors (accommodation, food service, retail, agriculture and office space) and regions (Northeast, North Coast/Nechako, Cariboo, Kootenays, Thompson/Okanagan, Vancouver Island/Coast, and Mainland/Southwest).

June 2013

- The Province initially committed \$15 million over three years to the small business program. In 2012, a further \$2 million was added to keep up with program demand.
- From January 2011 March 2013, the Program offered four components:
  - Business Energy Advisor services that included free energy assessments, help accessing incentives, and help coordinating upgrades;
  - Direct Installation Program, which offered free lighting upgrades to very small businesses in FortisBC electricity territory;
  - Enhanced Product Incentives in the form of top-ups to BC Hydro and FortisBC gas and electric incentives; and
  - Champion Program, which helped small business leaders make their energy-efficient ideas into reality by funding proposed innovative or deep energy saving projects.
- Between January 2011 and March 31, 2013, the LiveSmart BC: Small Business Program has helped over 10,000 small businesses save over 150 gigawatt hours of electricity, and over \$6 million in ongoing utility costs, exceeding original program targets by approximately 50 percent.
- Though the program has exceeded original targets, it has served just 3 percent of all small businesses in British Columbia, leaving a potential market of 97 percent for future programs.
- From April 1, 2013 March 31, 2014, the only component remaining in market is the Business Energy Advisor component. There are currently 15 Business Energy Advisors serving the initial sectors (foodservice, retail, accommodation, general office space, agriculture, and small business landlords) and regions (Northeast, North Coast/Nechako, Cariboo, Kootenays, Thompson/Okanagan, Vancouver Island/Coast, and Mainland/Southwest) of the Province, who will continue to deliver free energy assessments, help business owners access incentives, and coordinate upgrades.
- BC Hydro and FortisBC continue to promote the LiveSmart BC: Small Business Program in conjunction with their own small business programs.

# ISSUE: LiveSmart BC: On-Bill Financing Pilots

## KEY MESSAGES:

- The Province is pursuing energy efficiency financing pilots to help homeowners and businesses save money on their energy bills while reducing greenhouse gas emissions.
- On-bill financing (OBF) allows participants to help finance energy retrofits from the estimated energy savings for the improvements.
- Unlike traditional bank loan programs, the OBF loan obligation can remain with the property when the first borrower moves out.
- On January 1, 2014, all eligible Kelowna households as well as Vancouver Island homeowners in electrically heated homes will be able to access OBF funds for energy efficiency upgrades from their utility.
- This announcement builds on existing OBF pilots in Colwood (BC Hydro) and the Regional District of Okanagan-Similkameen (FortisBC) launched in November 2012.

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## BACKGROUND:

- Amendments to the BC *Clean Energy Act* (*CEA*) enacted on June 2, 2011 enable utility companies to provide OBF to eligible customers.
- On July 26, 2012, the Minister signed a regulation under the *CEA* to require BC Hydro and FortisBC to implement residential financing pilots in the City of Colwood (electric-heated homes) and the Regional District of Okanagan-Similkameen (gas- and electric-heated homes) respectively, from November 1, 2012.
- On April 12, 2012, the Minister signed a regulation to expand the current pilots to Vancouver Island (BC Hydro) and Kelowna (FortisBC).
- These pilots apply to eligible owners of single-family and row houses as defined by the regulation.
- The *CEA* provisions give the Province regulatory authority to require major utilities in British Columbia to implement OBF and to set broad parameters for program design.
- OBF will be integrated with the existing LiveSmart BC: Efficiency Incentive Program with respect to tradesperson and industry delivery channels and consumer education and outreach materials.

## ISSUES: Utility Demand Side Management

## **KEY MESSAGES:**

- Utilities help British Columbian families and businesses reduce their energy bills through energy efficiency and conservation programs – otherwise known as demand-side management (DSM).
- BC Hydro has projected an electricity surplus through until 2022. The Ministry is working with BC Hydro to prudently reduce DSM spending to minimize rate increases, while preserving the flexibility to bring back DSM programs to higher levels if demand increases faster than anticipated.
- BC Hydro's DSM expenditures in 2013/2014 will total \$178 million, with estimated savings of 850 gigawatt-hours (GWh) per year from Power Smart, conservation rates, codes and standards. This is equivalent to the annual electricity demand of 77,000 houses.
- The PowerSense program of FortisBC (electric) saved 32 GWh in 2012. This is equivalent to the annual electricity demand of 3,000 houses. The DSM program of FortisBC (natural gas) saved 450,000 gigajoule in 2012, enough natural gas to heat 6,000 houses. This resulted in greenhouse gas emission reductions of 22,500 tonnes.
- Utility DSM expenditures are approved by the British Columbia Utilities Commission (BCUC).
- The Province provides the regulatory framework for DSM through legislation and regulation, including the *Clean Energy Act*, the *Utilities Commission Act* and the Demand-Side Measures Regulation (DSM Regulation).

- The *Clean Energy Act* includes a target for BC Hydro to meet 66 percent of its new demand through DSM by 2020.
- Utility DSM programs are "decoupled" from sales of gas/electricity, allowing utilities to earn a return on DSM investments and ensuring efficiency and supply investments are treated as comparable alternatives in resource planning.
- DSM expenditures are approved by the BCUC for two or three-year terms.
- The DSM Regulation allows the Minister to specify criteria for evaluating cost effectiveness and adequacy of a DSM portfolio.
- BC Hydro's targeted cost of DSM is \$37 per megawatt-hour (MWh), significantly below the British Columbia clean and renewable electricity supply cost of \$129/MWh.
- BC Hydro is forecast to have an electricity supply surplus until 2022. In order to minimize upward rate pressures resulting from DSM during this period, BC Hydro's Power Smart programs will be reduced in the near-term.

- EMNG and BC Hydro staff have developed the following set of principles to guide DSM reductions in future planning:
  - o ensure overall cost-effectiveness for consumers and the utility;
  - o preserve flexibility to ramp-up DSM in future deficit periods;
  - maintain support for prospective codes and standards;
  - minimize the reduction of "missed opportunity" measures (e.g. providing incentives for incremental improvement to building envelope upgrades or new construction); and
  - maximize the range of ratepayers able to participate in DSM and benefit from lower bills (i.e., ensure equity across customer groups).

s.13

 By contrast, the FortisBC Energy Utilities spending on DSM has increased dramatically in recent years, from \$4.5 million in 2009 to \$23.8 million in 2012. This is a result of an increased corporate commitment as well as enabling provisions in the DSM Regulation.

CONTACT: Les MacLaren, ADM

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## ISSUE: California Renewable Portfolio Standard

# KEY MESSAGES:

- The State of California passed a Renewable Portfolio Standard Bill (RPS) calling for at least 33 percent of its electricity to come from renewable energy resources by December 31, 2020.
- This represents a large potential market for British Columbia to sell "eligible" renewable electricity.
- Most run-of-river (RoR) power generated in British Columbia would be ineligible under the RPS as currently defined.
- The RPS requires the California Energy Commission (CEC) to complete a study of British Columbia RoR resources to determine whether they should be considered "renewable" for RPS compliance purposes. This could expand eligibility to RoR power.
- British Columbia wind and biomass energy is considered "renewable" under California's RPS.

- California passed its RPS on March 29, 2011. It was signed into law by Governor Brown on April 12, 2011.
- The RPS requires California utilities to obtain at least 33 percent of their electricity supply from eligible renewable energy resources by December 31, 2020.
- The RPS also directs California utilities to procure 75 percent of renewable energy from in-state producers. The remaining 25 percent can come from out-of-state producers, either as firmed and shaped delivered power product, or as tradable renewable energy credits.
- In summer 2010, British Columbia pursued electricity export advocacy as part of a larger intergovernmental initiative with California to promote climate and clean energy partnerships British Columbia has developed.
- Part of the export strategy focused on informing California Government officials, legislators and Non-Governmental Organizations, of the positive attributes of British Columbia's RoR energy. This was because RoR energy is currently not eligible as a "renewable energy resource" for export into California's premium "renewable portfolio" market. In contrast, British Columbia wind and biomass energy are eligible resources.
- The RPS included "study language" that would require the California Energy Commission (CEC) to:
  - carry out a study of British Columbia's RoR hydroelectric energy and its environmental attributes by June 30, 2012 and
  - recommend to the Legislature whether British Columbia's RoR energy should become an eligible energy resource under California's RPS law.
- The Bill required that the CEC consider the following environmental factors:
  - o emissions of carbon dioxide and other greenhouse gases
  - o emissions of air pollutants
  - o water quality, recreation, and fisheries and
  - any other environmental impact caused by run-of-river hydroelectric generating facilities.
- The CEC received a draft report on British Columbia RoR eligibility in spring 2012. However, the internal vetting process has taken almost a year. CEC staff held a workshop on the draft report in March 2012. The Ministry of Energy, Mines and Natural Gas (EMNG) coordinated provincial and BC Hydro comments on the CEC report.
- The draft report is generally favourable to British Columbia interests. The Ministry of Forests, Lands and Natural Resource Operations (FLNRO) and the Environmental Assessment Office (EAO) provided some technical comments and clarifications. BC Hydro and Powerex provided comments on the need to clarify precise certification standards and expectations for a project to be RPS eligible.

S13, S16, S17

CONTACT: Les MacLaren, ADM

Pages 147 through 148 redacted for the following reasons: S13, S14

# ISUES: Regional Transmission Planning Project

# KEY MESSAGES:

- British Columbia collaborates with other Western Interconnection jurisdictions under the auspices of the Western Interstate Energy Board (WIEB) and the Western Electricity Coordinating Council (WECC).
- The U.S. Department of Energy (DOE) has provided funding to develop a 10- and 20-year regional transmission plan. WIEB and WECC both received funding to support a regional transmission planning project in the Western Interconnection.
- The Ministry of Energy, Mines and Natural Gas (EMNG) and Powerex hold positions on key steering committees to ensure provincial interests are represented.

# BACKGROUND:

- The Western Interconnection is the regional transmission grid that stretches from Alberta and British Columbia down to northern Mexico and as far east as Wyoming. British Columbia has a long history of collaboration with other Western Interconnection jurisdictions on matters related to regional transmission planning.
- WIEB is the energy policy arm of the Western Governors' Association. WECC is the regional entity responsible for coordinating and promoting bulk electricity system reliability and regional planning in the Western Interconnection.
- The DOE received funding under the Obama Administration's economic stimulus package to support regional transmission planning. The Western Governors' Association and WECC submitted coordinated applications and received funding.
- WECC has responsibility for delivering a 10-year regional transmission plan by fall 2011, and a 20-year transmission plan by fall 2014. The Western Governors' Association, through WIEB, is required to coordinate regional social, economic and environmental policy input in to the planning process. The WECC Board approved the draft 10-year regional transmission plan in September 2011.
- EMNG represents British Columbia on the State-Provincial Steering Committee led by WIEB. BC Hydro represents the Province on the Scenario Planning Steering Group (SPSG) led by WECC. These positions enable British Columbia to influence regional transmission planning in a manner that supports the Province's energy strategy.
- The SPSG provides input to WECC's Transmission Expansion Planning and Policy Committee that recommends regional transmission plans to the WECC Board of Directors for approval.

- The SPSG reached consensus on future electricity generation and transmission scenarios that will form the basis of the 20-year plan. WECC has released the first draft of the plan for stakeholder review. It will consolidate comments and present a revised plan at the SPSG quarterly meeting in late May 2013. WECC will hold another comment period during the summer prior to finalizing the draft plan for Board approval in September 2013.
- EMNG will put forward comments as part of the WIEB, but also has the option to put forward its own comments if deemed appropriate. EMNG will consult with staff from Alberta Energy, BC Hydro and the Alberta Electric System Operator to determine whether there is a need to provide a Canadian response to the draft plan.
- WECC is currently undergoing a mandate review in light of several reliability events in the Western Interconnection, notably the San Diego Blackout in fall 2011. The new WECC structure may have a material impact on WECC's ability to deliver the 20-year plan on the DOE's current time frame.
- British Columbia's participation in the regional planning process is largely defensive in nature. It is common for U.S.-based public and private entities to not consider Canadian issues when they discuss the future of the western grid. British Columbia and Alberta participation ensure that Canadian issues are considered and action can be taken in circumstances where U.S. decision-makers propose activities that may adversely affect provincial interests.

CONTACT: Les MacLaren, ADM

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# ISSUE: Innovative Clean Energy Fund

# KEY MESSAGES:

- The Innovative Clean Energy (ICE) Fund supports the development of clean energy technologies in the electricity, alternative energy, transportation and oil and gas sectors.
- The ICE Fund invests in solutions to British Columbia's energy and environmental challenges by helping emerging technologies bridge critical barriers to commercialization.
- Projects supported by the ICE Fund provide province-wide benefits by creating jobs and helping local communities save energy, build economic diversity, and reduce their environmental footprint.
- Many ICE Fund projects have achieved notable success; advancing their technologies to commercial readiness and creating global market opportunities.
- Since 2008, the Province, through the ICE Fund, has approved more than \$77 million for 62 clean energy projects across British Columbia, representing a value over \$450 million in total project costs.
- So far, 19 ICE Fund projects are complete and have created 353 construction jobs and 164 ongoing jobs. At this time, 15 projects underway are anticipated to create 282 construction jobs and 128 ongoing jobs when completed.

### BACKGROUND:

### Status (see Appendix 1):

- As of March 31, 2013, approved ICE Fund commitments total \$61.13 million, of which \$38.85 million has been dispersed.
- Of 62 approved projects, 19 projects are complete, 15 projects are underway, 13 are seeking partners or additional project funding, 5 projects have withdrawn and 10 projects had their funding rescinded.

### Funding:

- Program funding originally came from a 0.4 percent levy on all final sales of electricity, natural gas, fuel oil and grid-delivered propane, and generated approximately \$25 million per year. The ICE Fund levy, collected under the *Social Service Tax Act*, was discontinued following the implementation of the Harmonized Sales Tax.
- The ICE Fund Levy was re-instated April 1, 2013, with the return of PST. There will be no ICE Fund levy on electricity sales and it is estimated the levy will now generate \$7 million per year at current natural gas prices.

• The ICE Fund Special Account legislation enables spending on a broad range of activities to address Government's energy and environmental priorities and advance British Columbia's clean energy sector.

S13, S17

### **Applications History:**

- The First Call for Applications was issued in December 2007. Sixty applications were received for projects valued at about \$700 million. Fifteen projects with a combined project value of \$78.7 million were approved to receive \$24.43 million.
- The Second (Rural) Call for Applications was issued in September 2008. Sixty-four applications were received for projects valued at more than \$568 million. Nineteen projects with a combined project value of over \$96 million were approved to receive \$22.68 million.
- A Call for Liquid Fuels from Biomass was issued in November 2008. Seventeen applications were received valued at \$267 million. Eight projects with a combined value over \$100 million were approved to receive \$10 million. Two projects had their funding rescinded and three projects have since withdrawn citing financial or strategic reasons. The remaining three projects have a combined value of \$21.26 million and will receive \$6.06 million.
- A Third (2010 Showcase) Call for Applications was announced in October 2009. More than 100 applications were received in three application intakes for projects totaling over \$1.1 billion. In March 2010, two projects with a combined value of \$35 million were approved to receive \$6.6 million. In July 2011, 12 projects worth \$78.91 million were announced to receive \$8.13 million. In January 2012, a further six projects valued at \$53.30 million received approval for \$5.98 million.
- During 2011, the program undertook a detailed review of all projects that had not demonstrated satisfactory progress towards commencement. As a result, the ICE Fund rescinded \$13.39 million of funding from eight projects selected in the First, Second and Liquid Fuels from Biomass Calls. Funding made available from these projects was reallocated to complete the Third Call project announcements.
- ICE Fund program funds are generally disbursed to projects through reimbursement of eligible costs and reflect completion of specified milestones identified in the Contribution Agreement signed with each project proponent.

CONTACT: Les MacLaren, ADM

# Appendix 1: Innovative Clean Energy (ICE) Fund Summary

Page 1: Status of Announced Projects Page 2: Active Project Summary with GHG and Employment Benefits Page 3: Active Projects by Region and Technology

Updated March 31, 2013

### Status of Announced Projects

	S. S. S. D. S. D. S.	Announcemer	nt		Current Status				
Call	Date	Projects	IC	E Funding	Withdrawn	Projects	IC	E Funding	
First Call	July 18, 2008	15	\$	24,424,688.64	1	14	\$	22,976,867.00	
Second Call	April 3, 2009	19	\$	22,672,357.00	6	13	\$	13,472,765.00	
Liquid Fuels from Biomass	April 3, 2009	8	\$	10,000,000.00	5	3	\$	6,055,000.00	
Third Call - 1st Announcement	March 25, 2010	2	\$	6,607,463.00	0	2	\$	6,607,463.00	
Third Call - 2nd Announcement	July 23, 2011	12	\$	8,129,756.00	3	9	\$	6,044,756.00	
Third Call - 3rd Announcement	January 29, 2012	6	\$	5,977,790.00	0	6	\$	5,977,790.00	
	Total	62	\$	77,812,054.64	15	47	\$	61,134,641.00	

	First Call	Second Cal	Liquid Fuel	Third Call (	Third Call (	Third Call (3)
Complete - 19	8	8	2	1	0	0
In Progress - 15	5	3	1	1	2	3
Not Started - 13	1	2	0	0	7	3
Withdrawn - 15	1	6	5	0	3	0



Call					1	Expenditure									HI-	Percent		
	ICE	Commited	Total Project		FY O	8/09	FY (	09/10	FY :	10/11	FY	11/12	FY 12	/13	Tot	al to-Date	Expended	Remaining
First Call	s	22,976,867.00	\$	80,428,015.00	Ş	2,590,926.33	\$	7,203,385.43	\$	6,333,727.21	\$	1,545,990.72	\$	957,866.10	\$	18,631,895.79	81%	19%
Second Call	\$	13,472,765.00	\$	44,237,562.00	\$	-	\$	2,266,019.04	\$	3,036,311.76	\$	782,250.95	\$	368,727.62	\$	6,453,309.37	48%	52%
Liquid Fuels from Biomass	\$	6,055,000.00	\$	21,796,963.00	\$		\$	698,392.99	\$	3,522,661.63	s	958,337.81	\$		\$	5,179,392.43	86%	14%
Third Call-1st Announcement	\$	6,607,463.00	\$	35,035,000.00	\$		\$	. • .	\$	774,140.00	\$	5,517,204.00	\$	316,119.00	\$	6,607,463.00	100%	0%
Third Call-2nd Announcement	\$	6,044,756.00	\$	43,605,809.00	\$	-	\$	-	\$	÷.	\$	355,355.00	\$	451,273.00	\$	806,628.00	13%	87%
Third Call-3rd Announcement	\$	5,977,790.00	\$	53,302,529.00	\$	-	\$		\$		\$	4	\$	1,166,486.45	\$	1,166,486.45	20%	80%
Total	\$	61,134,641.00	\$	278,405,878.00	\$	2,590,926.33	\$	10,167,797.46	\$	13,666,840.60	\$	9,159,138.48	\$	3,260,472.17	\$	38,845,175.04	64%	36%

	GHG Benefits - Tonnes / Year							
Call	Completed	Anticipated*	Total					
First Call	62,004	140,741	202,745					
Second Call	1,883	7,050	8,933					
Liquid Fuels from Biomass	7,785	24,960	32,745					
Third Call-1st Announcement	2	5,500	5,502					
Third Call-2nd Announcement	0	75,509	75,509					
Third Call-3rd Announcement	0	16,112	16,112					
Total	71,673	269,872	341,545					

	Employment Benefits										
	Sold States of States	Temporary Jobs	Same States	1.0.0.4	Ongoing Jobs	to the second					
Call	Completed Projects	Anticipated*	Total	Completed Projects	Anticipated*	Total					
First Call	244	59	303	95	29	124					
Second Call	66	199	265	20	32	52					
Liquid Fuels from Biomass	29	5	34	35	25	60					
Third Call-1st Announcement	14	107	121	14	8	22					
Third Call-2nd Announcement	0	97	97	0	61	61					
Third Call-3rd Announcement	0	96	96	0	88	88					
Total	353	563	916	164	243	407					

\* Anticipated Benefits from In Progress and Not Started Projects

8							Employme	ent
Region	# Projects	NIV.	ICE Funding	%	Total Project Value	GHG	ST	LT
Cariboo	2	\$	1,197,000.00	2%	\$ 19,290,200.00	123	22	19
Kootenay	2	\$	1,750,000.00	3%	\$ 9,500,937.00	8,788	52	20
Lower Mainland	19	\$	31,729,253.00	52%	\$ 155,420,840.00	79,079	350	184
Okanagan	4	\$	1,664,083.00	3%	\$ 5,101,750.00	16,739	40	26
Omineca	- 8	\$	13,604,730.00	22%	\$ 49,046,699.00	151,076	313	42
Skeena	3	\$	3,091,397.00	5%	\$ 9,294,294.00	789	36	29
Thompson Nicola	2	\$	123,063.00	0%	\$ 437,189.00	13	6	3
Vancouver Island	7	\$	7,975,115.00	13%	\$ 30,313,969.00	84,937	98	84
Total	47	\$	61,134,641.00	100%	\$ 278,405,878.00	341,544	917	407

# Active ICE Fund Projects by Region and Technology

	Percent of Total Funding
Cariboo	2%
Kootenay	3%
Lower Mainland	52%
Okanagan	3%
Omineca	22%
Skeena	5%
Thompson Nicola	0%
Vancouver Island	13%

Energy Category	# Projects	33 <u>5</u> 3	ICE Funding	
Bioenergy	22	\$	39,089,102.00	64%
Energy Conservation	5	\$	5,857,669.00	10%
Energy Management	6	\$	9,410,000.00	15%
Energy Storage	1	\$	203,775.00	0%
Geoexchange	2	\$	1,075,115.00	2%
Hydro	1	\$	44,000.00	0%
Ocean	2	\$	2,469,622.00	4%
Solar	6	\$	2,093,691.00	3%
Waste to Energy	1	\$	666,667.00	1%
Transportation	1	\$	225,000.00	0%
Total	47	\$	61,134,641.00	100%

# ISSUE: BC Hydro Clean and Renewable Power Acquisitions

# KEY MESSAGES:

- As directed by the 2007 Energy Plan to support British Columbia's energy and climate change goals, BC Hydro has :
  - completed the 2008 Clean Energy Call;
  - o completed a two-phase Bioenergy Call for Power;
  - o initiated a Community- Based Biomass Power Call; and
  - o implemented a Standing Offer Program (SOP), which is ongoing.
- On August 3, 2010, BC Hydro made its final announcement for successful projects in the 2008 Clean Power Call (Call), which included 25 electricity purchase agreements for 27 projects, (1 waste heat project, 6 wind and 20 hydroelectric projects).
- The Bioenergy Phase 1 Call, completed in 2009, resulted in four electricity purchase agreements (EPAs) for a total of 579 gigawatt hours (GWh) of electricity per year – enough to power 52,000 homes.
- The Bioenergy Phase 2 Call for projects greater than 5 megawatts (MW), completed in August 2011, awarded four contracts for 754 GWh of firm energy per year and 104 MW of capacity.
- The Community- Based Biomass Call awarded one EPA for a 1 MW biogas project. Discussions are still open with three other projects.
- The SOP was first introduced in 2008 in response to the 2007 Energy Plan. After a two-year review in 2010, it was relaunched in January 2011.
- In March 2013, three rule changes were implemented.

### BACKGROUND:

- Under the *Clean Energy Act*, "clean or renewable resource" means biomass, biogas, geothermal heat, hydro, solar, ocean, wind or any other resource prescribed through regulation. BC Hydro power acquisitions in the 2008 Clean Energy Call, a two-phase Bioenergy Call for Power; a Community Based Call, and the SOP, are restricted to projects meeting the "clean or renewable" definition.
- On August 3, 2010, BC Hydro made its final announcement for successful projects in the 2008 Clean Power Call (25 electricity purchase agreements for 27 projects were issued, for 1,168 MW of capacity and 3,266 GWh of energy).
- Phase 1 of the Bioenergy Call for Power was completed in 2009. Two of the successful proposals are in Prince George, one is in Kamloops and one in Castlegar.

- The Bioenergy Phase 2 Call was a competitive call through Request for Proposals for biomass projects above 5 MW with a target to acquire up to 1,000 GWh per year of cost-effective electricity.
   S12
   The Phase 2 Call was completed in August 2011 and a complete report on the Bioenergy Phase 2 was released on February 15, 2012.
- Four projects were awarded contracts in the Phase 2 Bioenergy Call (West Fraser Mills in Chetwynd, Western Bioenergy in Fort St. James, West Fraser Mills in Fraser Lake and Western Bioenergy in Merritt) and announced on August 4, 2011. The weighted average price for the Phase 2 call is \$10 per megawatt hour (MWh) lower than the 2008 Clean Power Call.
- The Community Based Biomass Call was conducted through the Request for Quotes, followed by negotiations with short listed projects. Six projects were shortlisted and two have since withdrawn. The projects selected for contract discussions in December 2010 were Revelstoke, Burnaby - SFU, Richmond, Kamloops, Lytton and Anahim Lake, with a total capacity of 14.5 MW. Lytton and Revelstoke have since withdrawn.
- BC Hydro has received 32 SOP applications. Of these, two are new applications, 11 are proceeding through the review process, 10 have been removed from consideration (as they are part of the bilateral Robson Valley initiative), and nine EPAs have been executed.
- BC Hydro projected that within the first two years of the SOP, it would acquire between 90 GWh/year and 900 GWh/year. The nine contracted projects will generate approximately 205 GWh/year of energy and have a capacity of 48 MW.
- In March 2013, BC Hydro introduced three rule changes to re-affirm the SOP's original spirit and intent, while reducing risk that the program will procure significantly more energy than currently needed.
- On November 23, 2012, BC Hydro received 26 responses (representing 29 projects) to its Request for Expressions of Interest for development of clean energy projects on Haida Gwaii. Next steps could include bilateral discussions with one or more respondents, a more formal Request for Proposals process, or a decision to defer additional procurement activities. BC Hydro will consult with the Haida Nation and engage other groups regarding the proposed approach.
- With the current decreased demand in the provincial electricity load forecast, BC Hydro is focused on reducing supply-side acquisitions and decreasing demand-side management expenditures over the short- to medium-term.

### ATTACHMENTS:

BC Hydro Energy Procurement Update, April 2013

CONTACT: Les MacLaren, ADM

Pages 159 through 162 redacted for the following reasons: S13, S16, S17 S13,S16, S17

# ISSUE: Clean and Renewable Power Producers Facts

# KEY MESSAGES:

- The Provincial energy objectives in the *Clean Energy Act* confirm the role of clean, renewable energy producers in meeting British Columbia's electricity needs.
- As of March 2013, there were 79 operational projects with Electricity Purchase Agreements (EPAs) with BC Hydro. BC Hydro also manages another 51EPAs for projects in the pre-commercial operation stage. Additionally, there are 13 applications proceeding through the Standing Offer Program (SOP) review process.
- Of the 79 projects delivering power to BC Hydro:
  - o 55 are hydro projects, including ten storage hydro projects;
  - three are wind projects;
  - 15 are biogas/biomass projects;
  - two are gas-fired thermal projects;
  - o one is a municipal solid waste project; and
  - o three are heat recovery projects.
- To date, these projects deliver 15,074 gigawatt hours (GWh) per year of electricity to BC Hydro; power procurement processes have included Clean Power Calls; Bioenergy Calls; Integrated Power Offer (IPO) for Pulp and Paper Customers, and the SOP for projects with less than 15 megawatts (MW) capacity.

### BACKGROUND:

- Several of British Columbia's energy objectives under the *Clean Energy Act* are relevant to clean and renewable energy projects, namely:
  - o To achieve electricity self-sufficiency;
  - To generate at least 93 percent of the electricity in British Columbia from clean or renewable resources and to build the infrastructure necessary to transmit that electricity;
  - To use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources;
  - o To reduce green house gas emissions; and
  - o To reduce waste by encouraging the use of waste heat, biogas and biomass.
- The Province has implemented a number of tax and royalty policies to encourage the development of clean, renewable energy projects in British Columbia.
- All waterpower projects require a water licence to build and operate, issued by the Ministry of Forests, Lands and Natural Resource Operations. Projects over 50 MW also require a certificate under the *Environmental Assessment Act*.

- As of April 23, 2013, there are 563 water licence applications in the Provincial water licensing database with Power-General as one of the (or the sole) beneficial use categories (category).
- As of April 23, 2013, 215 Power-General water licences have been issued that are still current. Some clean, renewable waterpower projects are issued two or more licences. Of the 215 licences, 30 were issued prior to May 2001.
- At present, there are three operational wind farms and over 350 land tenures issued for wind power projects in the Province.
- BC Hydro awarded 25 EPAs to projects successful in the 2008 Clean Power Call for a total of 3,266 GWh and nine additional EPAs to projects through the SOP.

### ATTACHMENT:

Questions & Answers for Clean and Renewable Power Production in British Columbia

CONTACT: Les MacLaren, ADM

### Q's & A's for Clean and Renewable Power Production in BC

What is the role of Clean and Renewable Power Producers?

- A number of generators including Crown agencies, self generators, utilities and clean, renewable power producers, produce electricity in B.C. BC Hydro produces 69 percent of total electricity generation in B.C. while other generators include Alcan, Teck, Columbia Power Corp., industrial self-generators and clean, renewable power projects.
- In the 2002 Energy Plan, "Energy for Our Future: A Plan for BC", British Columbia moved to strengthen the opportunities for private sector investment in developing new electricity generation.
- The <u>2007 Energy Plan</u> targets energy conservation, investments by BC Hydro in Heritage Assets & system expansion and competitive sourcing from clean, renewable power projects.
- The *Clean Energy Act* affirms this direction with the 16 Provincial Energy Objectives, which include: achieving electricity self-sufficiency, a conservation target for BC Hydro of 66 percent by 2020 (up from 50 percent), and ensuring that at least 93 percent of the electricity generated in BC is from clean or renewable resources (up from 90 percent). Related policy actions were designed to ensure a continued supply of affordable, reliable supply of electricity over the long term to provide value to ratepayers.
- Clean energy producers bring entrepreneurial capital, access to monetary capital and take on associated risk.
- Clean, renewable power producers have a proven track record in B.C., demonstrating the development and operation of cost-effective projects.
- Clean, renewable power producers and their projects contribute to a balanced strategy for ensuring communities, individuals and industries in B.C. have access to adequate supplies of affordable electricity.

### What is the role of BC Hydro?

BC Hydro acquires power from clean and renewable power projects primarily through competitive processes. In some cases, BC Hydro acquires power under bilateral arrangements outside of its competitive processes, with pricing linked to the most recent competitive calls. The amount of power acquired is based on the system need. To date, BC Hydro's initiatives for purchasing electricity from independent and clean, renewable power projects include:

- existing contracted purchases of approximately 15,000 gigawatt-hours per year (GWh/year) of electricity;
- Clean Power Call;
- Bioenergy Call; and
- Standing Offer Program for projects less than 15 megawatts (MW).

BC Hydro's primary business activities are the generation and distribution of electricity, as well as planning and assessing to ensure sufficient power will be available to meet its customer's needs through a combination of:

- o demand management programs to reduce growth in electricity demand;
- o investing in upgrades to its existing assets to improve power production; and
- o acquiring power from outside suppliers.
- BC Hydro plans, operates and maintains an extensive publicly owned electrical transmission system (wires, poles, towers, substations, etc.), ensuring non-discriminatory and open access to the system.

- BC Hydro has a history of construction and operation of large-scale hydroelectric generation facilities with associated dams and water reservoirs.
- BC Hydro is responsible for the operation, maintenance and improvement of large hydro projects, such as:
  - Revelstoke Generating Station (Unit 5 and 6 at about 500 MW each);
  - Peace Canyon Generating Station (installation of new stators and turbine overhaul);
  - Gordon M. Shrum Generating Station (replacement of three stators);
  - Spillway Gate Reliability Updates;
  - Mica Generating Station (replacement of four stators, proposed installation of two large turbines, Unit 5 and 6 at about 500 MW each); and
  - Fort Nelson Generating Station Update;
  - John Hart Generating Station Replacement Project;
  - Ruskin Dam and Powerhouse Upgrade;
  - Smart Metering infrastructure.
- BC Hydro has now moved to the third stage in evaluating the possibility of a third dam on the Peace River called Site C, having submitted the Environmental Impact Statement to the Canadian Environmental Assessment Office and the British Columbia Environmental Assessment Office on January 28, 2013. There are four review stages, which will take four or five years to complete, before a final decision on Site C can be made. If approved, Site C would then enter its fifth stage, which is construction.
- BC Hydro also owns Powerex Corp. Powerex helps optimize BC Hydro's electric system resources, improve the security and reliability of electricity supply for the province, and provide significant economic benefits to British Columbians.
- Electricity trade and power marketing are possible because BC Hydro's bulk transmission network is interconnected with Alberta to the east, and the Bonneville Power Administration to the south. This transmission network links BCHydro with a huge market for the purchase and sale of wholesale electricity outside the province.

# How does BC Hydro decide how much power it needs from clean and renewable projects?

- The *Clean Energy Act* requires BC Hydro to submit an Integrated Resource Plan (IRP) to the Government setting out how it will implement Provincial Energy Objectives and the results of public and First Nations consultations on the IRP. The IRP will also include and assessment of export market potential and an assessment of transmission infrastructure requirements over the next 30 years.
- BC Hydro is currently preparing its 2012 IRP with its long-term plan for acquiring the energy resources to meet its customers' needs for the next 20 years.
- When finalized, the IRP will be submitted to Government for review and approval.

### What is the role of conservation and energy efficiency?

- Under the *Clean Energy Act* a Provincial Energy Objective is for BC Hydro to meet 66 percent of its increased resource requirements to 2020 through energy efficiency and conservation.
- In evaluating the need for additional generation, BC Hydro prepares estimates of the electricity that can be "saved" by users through the adoption of conservation and energy efficiency measures.
- BC Hydro's "Powersmart" program encourages the adoption of energy efficient activities through education and financial incentives and rebates for customers who choose energy efficient products.

- The LiveSmart BC: Efficiency Incentive Program invests \$110 million over 5 years (2008-2013) to help families, low income British Columbians and small business owners lower their energy bills and reduce greenhouse gas emissions.
- These types of programs are called "Demand Side Management". BC Hydro's 2008 Long Term Acquisition Plan proposes demand side management programs to save up to 70 percent of incremental energy requirements. This reduces the need to build and purchase new electricity supply.

### How many clean and renewable power projects are there in B.C.?

- In order to answer this question, it is important to be clear about what is being counted. Generally, when discussing clean and renewable power producers, Crown corporations are excluded (BC Hydro and Columbia Power Corporation) as well as Alcan, Teck, and FortisBC.
- Following the rule above, as of March 2013, BC Hydro has Electricity Purchase Agreements with 73 clean, renewable power projects. Of these operational projects, 51 are waterpower projects (45 non-storage hydro and six storage hydro), 15 are biogas/biomass projects, three are wind power projects, three are energy recovery generation projects, and one is a municipal solid waste project.
- Please note that this total does not include two EPAs that BC Hydro has with natural gas thermal facilities.

# *What is the impact for BC Hydro to purchase electricity from clean and renewable power producers on provincial electricity rates?*

- BC Hydro usually acquires power through competitive processes, where projects bid against each other for the opportunity to supply power to BC Hydro. BC Hydro designs its power acquisition programs to obtain competitively priced supplies of electricity, and these processes evolve over time to address its needs and to meet Provincial policy.
- Notwithstanding the competitive nature of power pricing from clean energy projects, the cost of power from new generation projects is higher than the cost of power from BC Hydro's existing Heritage Assets. It can be expected that as new supply is needed to meet growing needs, this will put upward pressure on electricity rates.
- This is the case regardless of who builds the new projects. For example, BC Hydro's Aberfeldie Redevelopment Project has costs equivalent to accepted projects from BC Hydro's 2006 Call for Power.
- Clean, renewable power producers have demonstrated their ability to finance, build and operate facilities effectively. They bring entrepreneurial capital, access to monetary capital and take on associated risk, have a proven track record in the development and operation of cost-effective projects.

### Can clean and renewable power producers export power?

- It is legal to export electricity, as it is for other commodities produced in B.C. For example, BC Hydro, through Powerex, exports electricity surplus to B.C.'s needs.
- Clean and renewable power producers are free to export power if they: obtain the required approvals and permits to make use of provincial resources, meet provincial and federal environmental standards for their projects, arrange for and fund access to the transmission system, and obtain an export permit from the National Energy Board.
- Although the opportunity for clean and renewable power producers to sell to markets in the United States and Alberta exists, B.C. IPPs have been focusing on selling power to BC Hydro.
- There are a number of reasons the export market has not been attractive, including the cost and availability of transmission to other markets, the difficulties in marketing power from intermittent power projects, and financing of large capital projects without a long term sales agreement.
- Once B.C. achieves electricity self-sufficiency, there will be opportunities to provide B.C.'s clean, low carbon electricity to neighbouring jurisdictions that are looking to reduce their

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greenhouse gas emissions and meet renewable energy targets. Indications show that B.C. has sufficient resource potential to continue to meet its own needs while capitalizing on opportunities to create jobs in B.C. and help other jurisdictions achieve their environmental goals. A robust, competitive market for electricity will help reduce long term costs to buyers.

#### How many clean and renewable power projects will there be in the future?

- This is a difficult question to answer, as there are a number of variables, several of which are difficult to predict.
- BC Hydro is acquiring electricity a number of ways including through their Standing Offer Program.
- BC Hydro awarded EPAs for a total of 3,266 gigawatt hours of electricity through the 2008 Clean Power Call. The BC Hydro Standing Offer Program for projects less than 15 megawatts is an open program that accepts projects as submitted, therefore the number of projects in the future is not known, but is expected to number in the dozens as opposed to the 100's.
- The IRP will identify any further domestic need in the province and make recommendations about how best to meet the anticipated load demand.
- Projects could also be developed to export power in the future, although to date development for export has not been pursued.
- Regardless of what opportunities are pursued by producers, all power project proposals must meet provincial and federal environmental requirements in order to be developed in B.C.

#### How are clean and renewable power project proposals evaluated?

- Projects are evaluated several times as they move from original concept through to full development.
- All projects on Crown land, regardless of size or type, must receive the appropriate permits under the *Water Act* (for a waterpower project) and the *Land Act* from the Provincial government. In deciding whether to issue these permits, Government considers technical information, Federal and Provincial agency comments, comments from the public, local government and First Nations. For example, in total, a typical runof-river project will require more than 50 permits, licences, approvals and reviews from regulatory bodies, including federal, provincial, local and First Nations.
- In its acquisition process, BC Hydro has specific evaluation criteria developed for the review of project submissions.

What rights do clean and renewable power producers acquire when they develop a wind or waterpower project?

#### Waterpower

- In order to develop a waterpower project, the developer must apply for and receive a water licence and associated tenures for Crown land and the project must be compliant with the *Water Act* and the *Land Act*.
- The water licence and land tenures give the developer the right to temporarily use water, modify the land and/or construct improvements as specified in the tenure document, develop a transmission line from the power project to electrical grid connection, power substation and operations centre. Generally this means the construction and operation of the project is described in their submitted and approved development plan for a 40 year term. Ownership of the water resource remains with the Province.
- The developer may construct and operate their project for the time period specified in the permits. The water licence and Crown land tenures may contain terms and conditions which must be adhered to by the developer for the duration of the tenure.

- Where a project has received an Electricity Purchase Agreement (EPA) from BC Hydro, the length of the land tenure matches the time period for the EPA. However, the length of the water licences is fixed by the *Water Act* to be 40 years.
- If the project has not received an EPA, the land tenures are awarded for 10 years.
- The developer has the right to develop their project subject to any terms and conditions on the tenure, to sell electricity for a fair return on investment, and must pay the Province of British Columbia for their use of the water and land. The fees are based on the capacity of the project and the amount of electricity produced, and on the area of land under tenure.
- At the end of the tenure term, the developer may apply for a renewal, and this
  application will be adjudicated following normal procedures at that time for water licences
  and Crown land tenures.
- At the end of the tenure term, the Province of British Columbia may chose to not renew the water licence and land tenures, and may ask the developer to remove the improvements and return the waterway and lands to original condition.
- The IPP Guidebook outlines in more detail the permitting and approval process for waterpower projects.

### **Wind Power**

- In order to develop a wind power project, the developer must apply for and receive land tenures for the turbines, transmission lines connecting between the turbines, transmission line from the turbine cluster to electrical grid connection, power substation and operations centre. The project must be compliant with the Crown Land Use Operational Policy for Wind Power Projects.
- The land tenures give the developer the right to construct and operate a wind power project as described in their approved development plan.
- The developer may construct and operate their project for the time period specified in the permits. The Crown land tenures may contain terms and conditions which must be adhered to by the developer for the duration of the tenure.
- Where a project has received an Electricity Purchase Agreement (EPA) from BC Hydro, the length of the land tenure matches the time period for the EPA.
- If the project has not received an EPA, the land tenures are awarded for 10 years.
- The developer has the right to develop their project subject to any terms and conditions on the tenure, to sell electricity for a fair return on investment, and must pay the Province of British Columbia for their use of land. The fees are based on the capacity of the project and the amount of electricity produced, and on the area of land under tenure.
- At the end of the tenure term, the Province of British Columbia may chose to not renew the land tenures, and may ask the developer to remove the improvements and return the lands to original condition.
- The IPP Guidebook outlines in more detail the permitting and approval process for wind power projects.

# *How do investigative permits and water licence applications relate to actual number of clean and renewable power producer projects built?*

- Developers interested in hydropower, wind power and ocean power must first apply for an investigative permit under the *Land Act*, and file a water licence application under the *Water Act*.
- These initial applications allow for the investigation of a particular site to determine if a viable project can be developed. Resource data and environmental information is collected, preliminary engineering plans are drawn up, and financial analysis is conducted.
- Where there is a good indication that a project could be successful, the developer moves through the permitting requirements under the *Land Act* and *Water Act* and seeks permission to construct their project.

- There has been a speculative environment among hydro developers. As of April 23, 2013, there were 563 Power-General water licence applications recorded in the Provincial water licensing database with Power-General as one of the (or the sole) beneficial use categories (category), and a total of 215 IPP water licences issued that are still current. Some clean, renewable waterpower projects are issued two or more licences.
- For potential wind power projects, over 350 investigative tenures have been issued and three projects are now operational.
- For potential ocean energy projects, about 40 investigative permits have been issued, with no project being authorized to move to the construction stage.
- It is important to note that an application for a water licence or having an investigative permit for wind power development does not mean that a water licence or a permit to construct a wind power project will be granted. Only those applications that are able to meet British Columbia's significant regulatory requirements will proceed beyond the application stage.

# *How is the environment protected when Clean, Renewable Power Projects are developed?*

- All clean, renewable power projects, regardless of size, must meet stringent environmental requirements to receive the necessary permits to construct and operate generation projects.
- The review process for projects 50 MW or larger is subject to an environmental assessment under the *Environmental Assessment Act* and is coordinated by the Environmental Assessment Office.
- Projects subject to an assessment under the *Environmental Assessment Act* must not proceed until they have received an Environmental Assessment Certificate, as well as all other applicable permits and licences.
- The Environmental Assessment Certificate, as well as permits and licences, contain terms and conditions the developer must adhere to, and report on, in order to ensure the environment is protected.
- Smaller projects are assessed as part of the review of permit or licence applications under specific statutes such as the *Water Act* or the *Land Act*. The permits or licences contain terms and conditions the developer must adhere to, and report on, in order to ensure the environment is protected.
- Environmental Assessment certificates are identified on the Environmental Assessment Office's website; water licences may be queried in the Provincial water licence database; and Crown land tenure applications and reasons for decision are posted by the Ministry of Forests, Lands and Natural Resource Operations.

# *What is an environmental assessment under the Environmental Assessment Act for Clean Power Projects 50 MW or greater?*

BC's environmental assessment (EA) process provides a mechanism for reviewing major projects to assess their potential impacts. In order for a major project to proceed, an EA review must be completed successfully and the proposed project much be approved by two provincial Ministers who can issue an Environmental Assessment Certificate.

The EA process addresses a broad range of environmental, economic, social, health and heritage issues through a single, integrated process. It ensures that the issues and concerns of all interested parties and First Nations are considered together, and that a project, if it is to proceed, will do so in a sustainable manner.

How long does an environmental assessment certificate last?

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An environmental assessment certificate remains in effect for the life of the project, unless suspended or cancelled by the Minister of Environment for reasons of non-compliance with the *Environmental Assessment Act*. All certificates also contain a deadline of between three and five years from the date of issuance for the project to be "substantially started". If substantive project development has not begun by this deadline, the holder of the certificate can apply for one extension of the deadline for up to five more years.

*What is the role of the public, local governments and First Nations in clean and renewable power project development?* 

- All clean power projects, regardless of size or type must receive the appropriate permits under the *Water Act* or the *Land Act* from the provincial government.
- Obtaining input from the public, local governments, and First Nations, and any other interests potentially affected by a project is an essential component of permit reviews regardless of project size.
- Input from the public, local governments, and First Nations is used by agencies in deciding whether or not to issue a permit under the *Water Act* or the *Land Act*.
- First Nations are also consulted with respect to how any potential project may impact their asserted rights and title.
- For projects 50 megawatts or greater the BC Environmental Assessment Office establishes an advisory Working Group that consists of First Nations, federal, provincial and local government who participate throughout the project review. The environmental assessment process fosters public involvement through a number of channels including: notification of key consultation events, thorough formal public comment periods on the Terms of Reference and the Application and public meetings.
- The mini-guide, "Opportunities for Local Government and Public Participation in Provincial Regulatory Processes for Independent Power Producers' Projects," available at: <a href="http://www.empr.gov.bc.ca/EAED/AEPB/AEPS/Documents/MiniGuide.pdf">http://www.empr.gov.bc.ca/EAED/AEPB/AEPS/Documents/MiniGuide.pdf</a>, describes the regulatory processes and requirements of the provincial *Water Act, Land Act* and *Environmental Assessment Act*.

# ISSUE: Clean and Renewable Power Producers Projects Policy Issues

### **KEY MESSAGES:**

- Clean, renewable energy producers have been supplying competitively priced clean electricity to BC Hydro for more than 20 years. They will continue to help meet power needs in British Columbia.
- BC Hydro currently has a surplus of electricity and does not expect to issue any calls for power in the near future.
- BC Hydro and other hydroelectric generators pay for the use of provincial water resources. As a provincially-owned resource, clean, renewable energy producers must receive water licences before they can use provincial water resources.

### BACKGROUND:

- BC Hydro is acquiring new electrical generating capacity from clean, renewable energy producers. BC Hydro is pursuing the development of Site C, as approved by Cabinet.
- In the *Clean Energy Act,* 16 Provincial Energy Objectives are set out, including: achieving electricity self-sufficiency; a conservation target for BC Hydro of 66 percent by 2020; and ensuring that at least 93 percent of the electricity generated in British Columbia is from clean or renewable resources. The 2007 Energy Plan established a 50 percent conservation target and 90 percent requirement for clean or renewable resources.
- In 2010, BC Hydro awarded 25 Electricity Purchase Agreements (EPAs) to projects in the 2008 Clean Power Call for a total of 3,266 gigawatt hours (GWh). Nine additional EPAs were awarded to projects through the Standing Offer Program.
- In 2011, BC Hydro awarded four EPAs totalling 754 GWh/yr to successful projects in Phase 2 of the Bioenergy Call for Power.
- The Ministry of Energy, Mines and Natural Gas has the lead responsibility for developing, implementing and maintaining strategic energy policy, whereas the Ministry of Forests, Lands and Natural Resource Operations has the responsibility for Crown land policy.
- Waterpower producers pay for the use of provincial water resources. Water resources remain in public hands and clean, renewable energy projects must receive water licences before they can use the water.
- As of March 2013, BC Hydro managed 79EPAs for projects in commercial operation, delivering 15,074 GWh/year of contracted energy to both its integrated and nonintegrated system including 45 non-storage hydro projects. This includes three EPAs for projects owned by Columbia Power Corporation, one EPA with Rio Tinto Alcan, plus 75 EPAs with smaller private clean energy producers.

- BC Hydro manages 51 EPAs for projects in the pre-commercial operation stage, representing 8,086 GWh/year of contracted energy, or about 4,967 GWh/year when adjusted for potential attrition and including 32 non-storage hydro projects.
- Crown land tenures are required if components of the projects are located on Crown land. Water and Crown land rental payments, like royalty payments for forestry, petroleum and mineral resources, are set by the Province to ensure the people of British Columbia receive fair value for these resources. Royalty and rental policies are reviewed from time to time to ensure provincial objectives are being met.
- The BC Hydro Review Panel determined that BC Hydro was paying water rental rates in excess of those paid in other jurisdictions and directed government to review those rates and adjust them when fiscal conditions in the province improve. This remains to be implemented due to the current fiscal situation.
- The Clean Energy Act created the First Nation Clean Energy Business Fund to facilitate increased First Nations participation in clean energy projects. The funding may flow to First Nations as: capacity development funding; funding to acquire equity positions in clean energy projects or to develop community projects; and revenue sharing with directly impacted First Nations (revenue from water, land and, eventually, wind participation rents).

CONTACT: Les MacLaren

# ISSUE: Sale of Self-Generated Electricity

# KEY MESSAGES:

- In a decision dated May 6, 2009, the British Columbia Utilities Commission (BCUC) ruled that self-generating customers should not be permitted to benefit at the expense of other BC Hydro customers.
- This decision had significant implications for other BC Hydro customers like pulp and paper mills with self-generation.
- It is not in the interest of BC Hydro's ratepayers for a self-generating customer to sell its own power at market prices and replace it with cheaper power from the grid.
- BC Hydro would have to replace it with new power at market prices. This would lead to higher rates for BC Hydro customers.
- This ruling is consistent with the Heritage Contract. The Heritage Contract ensures that BC Hydro's customers receive the benefit of low-cost heritage electricity from BC Hydro's heritage assets.

### BACKGROUND/STATUS:

- In July 2008, the City of Nelson and Nelson Hydro announced an agreement to sell up to nine megawatts (MW) of power from the Upper Bonnington Generating Facility on the open electricity market through North Point Energy Solutions, a wholly-owned marketing subsidiary of Regina-based SaskPower.
- The City of Nelson proposed to arbitrage between the price of electricity it purchases from FortisBC at the BCUC-approved rate of 3.507 cents per kilowatt hour (kWh) and the price it receives selling its generation output in the export market.
- Under this proposed arrangement, it was very likely that FortisBC would purchase additional energy from BC Hydro under its Power Purchase Agreement (PPA), at an approved rate of 2.952 cents/kWh, to provide replacement power to the City of Nelson.
- The proposal would have had an impact on BC Hydro's ratepayers whose rates would increase due to the need to acquire new resources to provide replacement power.
- In August 2008, a similar agreement was announced between FortisBC and Mercer International Inc. (Mercer, owner of the Celgar pulp mill), which would have allowed Mercer to arbitrage between the price of electricity it could purchase from FortisBC and the price it could receive selling its self-generation into the market.
- BC Hydro applied to the BCUC for an amendment to the PPA to prevent arbitrage by customers of FortisBC, such as the City of Nelson and Celgar, and the then Ministry of Energy and Mines (MEM) filed a written argument in support of BC Hydro's application.

- MEM argued that the City of Nelson's proposed arbitrage was inconsistent with the intention of the Heritage Contract, whose objective is to ensure that BC Hydro's heritage assets continue to provide benefits for all BC Hydro customers, and not benefit one set of customers who seek to use the heritage assets as the basis for arbitrage between low cost energy from the heritage assets and market prices.
- The Ministry also stated its position that it is appropriate for self-generating customers to sell to market electricity that is in excess of historical generation.
- On May 6, 2009, the BCUC approved BC Hydro's application to amend the PPA to prevent the arbitrage activities proposed by the City of Nelson and Celgar.
- Self-generators, such as Mercer's Celgar pulp and paper mill, continue to exert pressure on both the BCUC and Government to allow them to engage in arbitrage by selling self-generated electricity at market prices while purchasing low-cost power from their utility.
- In April 2012, Mercer filed a request for arbitration under the North American Free Trade Agreement (NAFTA), alleging that the Province's actions, through BC Hydro and the BCUC, amount to discrimination and seeking damages of \$250 million.

### CROSS-REFERENCE:

s.14

CONTACT: Les MacLaren, ADM

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Pages 176 through 177 redacted for the following reasons: S15, S16, S17

# ISSUE: Waneta Expansion Project

# KEY MESSAGES:

- Columbia Power Corporation (CPC) is pleased with progress to date on the Waneta Expansion Project. The project has an excellent safety record and is on budget and on schedule for completion in spring 2015.
- The design/build contractor, SNC-Lavalin Inc., continues to explore opportunities to complete ahead of schedule.
- It will provide enough clean energy to power about 60,000 homes per year and will reduce greenhouse gas emissions by 400,000 tonnes, the equivalent of taking 78,000 cars off the road.

### BACKGROUND:

- The \$900 million Waneta Expansion Project (WAX) involves the construction of a 335 megawatt powerhouse adjacent and immediately downstream of the existing Waneta Dam on the Pend d'Oreille River at its confluence with the Columbia River. It will share the hydraulic head created by the Waneta Dam.
- The expansion rights at Waneta were purchased from Teck (formerly Cominco) in 1994.
- Construction is scheduled for completion in 2015.
- Project construction activities are currently focused on: concrete, mechanical and roof work in the powerhouse area; fabrication of a scroll case and placing cone; concrete and carpentry work at the intake; excavation of the approach channel above the intake area; and construction of the transition forms for the tunnel/intake.
- To date, the project has logged approximately 1.4 million man hours without a major safety or environmental incident. There are currently over 278 people working on the project. Of those, over 75 percent are local (within 100 km). Equity workers currently make up 11 percent of the unionized workforce.
- To date, local spending on goods and services exceeds \$140 million.
- In August 2010, CPC and Columbia Basin Trust entered into a partnership agreement with Fortis Inc. for construction of the project. The partnership structure has Fortis Inc. with a 51 percent share, CPC with a 32.5 percent share and Columbia Basin Trust with a 16.5 percent share.
- Energy from WAX will be sold to BC Hydro, while the capacity will be sold to FortisBC.
- WAX is being constructed using CPC's design/evaluate/build project approach. This
  process was used previously for the Arrow Lakes and Brilliant Expansion projects and
  was favourably reviewed by the BC Auditor General.
- CPC is acting as the Owner's Representative and manages construction of the project. SNC-Lavalin Inc. is the contractor responsible for the design and construction of the project.

- The project is situated in an area claimed by the Ktunaxa Nation Council and the Okanagan Nation Alliance. Benefit agreements with both First Nations were executed and the owner and contractors are working closely with the First Nations to maximize the opportunities and benefits.
- The associated 10 kilometre transmission line (230 kilovolt) work is progressing well and is targeted for overall completion in 2014 to align with requirements under the design-build contract.
- Columbia Hydro Constructors (CHC) is responsible for the supply of labour for the project. Hiring provisions are in place for local and equity workers.
- The project has a Community Impact Management Committee (CIMC) in place. The committee includes local residents, members of local and regional government, First Nations and representatives from the owners and contractor. The CIMC provides ongoing support to encourage positive community impacts and benefits and relays community concerns resulting from construction of the project. The next CIMC meeting is scheduled for May 28, 2013.
- Local media coverage of the project has been overwhelmingly positive and Columbia Power provides weekly updates to local stakeholders and media.
- In May 2012, a revised Order from the Comptroller of Water Rights was issued to facilitate allocation of water rental payments.
- An amendment to the Canal Plant Agreement, which allocates the amount of water available to the completed project; was completed in October 2012.
- BC Hydro and Fortis BC are in discussions regarding an Energy Export Agreement, pertaining to the WAX capacity. They anticipate filing with the BCUC in May 2013.
- Consistent with government policy for the Arrow Lakes Generating Station and Brilliant Expansion Project, the WAX will be exempt from property tax and pay grantsin-lieu for the publically-owned portion of the partnership.

CONTACT: Les MacLaren, ADM

# ISSUE: Northwest Transmission Line – Iskut Extension

# KEY MESSAGES:

- The Northwest Transmission Line (NTL) will encourage industrial and clean energy development in the northwest part of British Columbia while supporting the Province's goal of mitigating greenhouse gas emissions.
- The terms of the Contribution Agreement with Canada require British Columbia to electrify Iskut. The proposed Iskut Extension will extend publicly owned, high-voltage transmission infrastructure north to support regional economic development.
- As part of a commercial agreement between BC Hydro and Imperial Metals, Imperial Metals is constructing the transmission line portion of the Iskut Extension to BC Hydro standards and will sell it to BC Hydro.
- This commercial arrangement will meet Government's goal of extending the publicly-owned, high voltage system as well as maintain Imperial Metal's earliest in-service date for the Red Chris Mine.

### BACKGROUND:

- The NTL is a 287 kilovolt (kV) line that runs 344 km from Skeena Substation (near Terrace) to Bob Quinn Lake. The \$617 million (M) project will support mining, and potentially clean energy development north of Terrace.
- The Government of Canada (Canada) committed \$130M to the NTL provided it:
  - 1) met federal environmental assessment standards;
  - 2) met the federal obligation to consult with First Nations; and
  - 3) electrified Iskut to reduce emissions from diesel generation within 12 months of when the NTL enters service.
- The NTL is fully permitted and is under construction. BC Hydro estimates it will enter service in summer 2014.
- Imperial Metals Corporation's (Imperial) Red Chris Mine (Red Chris) requires a minimum of a 138 kV transmission line to interconnect to the provincial grid. This infrastructure would normally be permitted, constructed and owned by Imperial.
- Imperial's proposed 138 kV line would not provide enough capacity to support further mining development north of Iskut. Imperial included a line route for both a 138 kV and 287 kV transmission line when it filed to amend its Environmental Assessment Certificate (EAC) in 2011.

S12, S13, S17

S12, S13, S17

- The Tahltan First Nation supports the higher voltage line. However, it wants to
  ensure the Crown's obligation to consult, and if necessary accommodate,
  First Nations is met. BC Hydro will engage directly with the Tahltan on facilities it will
  construct. Imperial is required to meet the Crown's duty to consult for the
  transmission line.
- Official engagement between BC Hydro and the Tahltan started in April 2013. Imperial has a commercial arrangement with the Tahltan Nation Development Corporation to facilitate direct economic benefits for its portion of the project.
- Imperial is currently securing Crown permits for the transmission line. BC Hydro is currently securing Crown permits for upgrades to the Bob Quinn substation, the new Tatogga substation and the distribution line from Tatogga to Iskut. It is expected that construction will begin in summer 2013.

CONTACT: Les MacLaren, ADM

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# ISSUE: Utilities Commission Act Mandatory Reliability Standards

# KEY MESSAGES:

- The BC Energy Plan: A Vision for Clean Energy Leadership (Energy Plan) states that British Columbia will remain consistent with North American transmission reliability standards.
- In 2009, the British Columbia Utilities Commission (BCUC) began to adopt and administer mandatory reliability standards (MRS) that it considers to be in the public interest.
- The BCUC is currently leading a process to register transmission service customers and owners to comply with MRS.
- Government understands that there are some implementation issues that need to be resolved so the MRS regime meets BC's interests. To that end, the BCUC has launched an inquiry on MRS implementation and will make recommendations to Government.

### BACKGROUND/STATUS:

- The 2008 amendments to the Utilities Commission Act (UCA) create a mechanism for introducing mandatory reliability standards for British Columbia's bulk electricity system.
- Under the UCA amendments, the BCUC must adopt standards required to remain consistent with North American standards, unless the BCUC considers those standards not to be in the public interest.
- North American standards are those developed by either the North American Electric Reliability Corporation or the Western Electricity Coordinating Council (WECC).
   Major British Columbia electricity sector participants (e.g. BC Hydro and FortisBC) are active in these organizations.
- The mandatory reliability standards apply to owners, operators and users of the bulk power system and generators and distributors of electricity, as specified in the Mandatory Reliability Standards Regulation (Regulation) enacted in February 2009.
- The UCA required British Columbia Transmission Corporation to provide a report, filed on March 19, 2009 to the BCUC, on new North American standards. The report assessed whether adopting the standard would have any adverse impact on reliability in British Columbia, the suitability of the standard for British Columbia, the potential cost of the standard if it is adopted and any other matter that the government requires by regulation or the BCUC requires by Order. BC Hydro now produces these reports annually.
- The UCA requires that reports be made available to the public and that the BCUC consider any comments provided.
- After allowing for public comment, in June 2009, the BCUC adopted 103 mandatory reliability standards.

- The BCUC ordered that entities subject to the reliability standards under the Mandatory Reliability Standards Regulation must register with the BCUC by November 1, 2009 at which time they were required to begin complying with the 103 adopted standards.
- Two additional reports on additional reliability standards were filed in February 2010 and March 2011.
- BC Hydro continues to monitor WECC reliability standards to identify those that may be suitable for adoption in British Columbia.
- Government approved a statutory amendment to the UCA that would enable the BCUC to levy the same administrative penalties as WECC for non-compliance. These can be up to \$1 million per day in extreme cases.
- Industrial customers, represented by the Association of Major Power Consumers approached Government in December 2011 to request Government amend the Regulation to exempt industrial customers from MRS. They argued that industrial loads do not represent a "real" reliability risk since BC Hydro has the ability to drop them from the system. They also argued that MRS would impose an incremental reporting cost on them to demonstrate compliance. Finally, they argued that it is BC Hydro's responsibility to ensure system reliability, so reporting requirements and associated risk should accrue to the utility.
- BC Hydro and the BCUC argued that industrial customers are legally required to adhere to WECC standards under the Regulation and that there is inherent benefit to undergoing reliability audits and demonstrating compliance in writing. The BCUC went further arguing that MRS is akin to other regulatory regimes adopted for the public interest, such as Work Safe BC.
- The BCUC admits that there have been implementation issues associated with MRS. It also acknowledges that the regime should reflect provincial interests in order to uphold provincial sovereignty. However, the BCUC believes that the best way to address the outstanding issues is to hold an inquiry where all stakeholders can present their views.
- Ministry staff met with all major stakeholders between December 2011 and August 2012 and concurs with the BCUC's proposed approach. Stakeholders presented informed opinions but did not provide any quantifiable evidence as to why industrial customers should, or should not, be covered by MRS. Further, they only represent one customer group. An inquiry is an arm's length, transparent way for stakeholders to discuss the issues.
- BCUC launched its process in October 2012. Final written submissions are due May 30, 2013. The Commission will provide recommendations to Government over the summer of 2013.

### CONTACT: Les MacLaren, ADM

# Mines and Mineral Resources Division

# 1. Purpose of Division

The Mines and Mineral Resources Division (MMRD) manages and facilitates the responsible development of British Columbia's mineral resources. The Division administers the *Mines Act*, the *Mineral Tenure Act* and the *Coal Act* and develops policies and regulations for British Columbia's mineral exploration and mining sector. MMRD is headquartered in Victoria with staff around the Province, including offices in Vancouver, Kamloops, Cranbrook, Prince George and Smithers.

To achieve the Province's strategic goals and vision for the mineral exploration and mining sector, MMRD focuses on the following objectives and strategies:

- Ensuring strong, responsible and safe mineral and coal exploration and mine development, production, closure and reclamation;
- Delivering responsible tenure and permit decisions;
- Stimulating the development and growth of the British Columbia mineral exploration and mining industry with globally competitive policies and publicly accessible geoscience;
- Streamlining regulations and internal processes to facilitate decision making;
- Achieving the Province's strategic social, economic and environmental goals;
- Advising on mineral resource potential both externally and in cross-agency initiatives;
- Promoting British Columbia's many mineral opportunities; and
- Developing and maintaining positive relationships with industry, First Nations, and communities.

# 2. Context

Mineral exploration and mining is a key economic driver in British Columbia. British Columbia mines produced an estimated \$8.3 billion worth of commodities in 2012—nearly 18 percent of the Canadian total. While this was a decrease from 2011, when the production value was nearly \$9 billion, 2012 was a strong year given that commodity prices were significantly lower and ongoing uncertainties in global financial markets.

At an estimated \$680 million, exploration spending in British Columbia hit record levels in 2012. Canada is number one in the world when it comes to generating investment in exploration (in 2011, approximately 18 percent of all exploration spending worldwide went into projects located in Canada). Within Canada, British Columbia ranked second (after Ontario) for exploration spending in 2012, with approximately 19 percent of all investment in Canadian exploration projects occurring in this Province.

Home to more than half of Canada's mineral exploration companies, British Columbia is Canada's single largest exporter of coal, the country's largest producer of copper and its only producer of molybdenum. British Columbia is ideally positioned as Canada's Pacific Gateway to supply key and growing global markets such as China and India. There are currently nine coal mines in operation, ten metal mines, more than thirty industrial minerals mines, and hundreds of aggregate pits and quarries. In addition, there are hundreds of active exploration sites around the Province. With dozens of proposals for new mines and expansions to existing operations in various stages of the approvals process, exploration and mining activity in British Columbia will remain strong in the coming years.

The mineral exploration and mining industry provides thousands of well-paying jobs for British Columbians. Over 30,000 people were employed in mineral exploration, mining and related sectors in 2012, mostly in rural British Columbia. Of these, more than 12,500 were directly employed by mining operations. The industry also provides thousands of spin-off jobs and business opportunities for suppliers and service providers located close to project sites. In addition, mineral tax revenues for 2012/13 were valued at more than \$200 million, supporting essential infrastructure and government programs that benefit all British Columbians.

British Columbia is an attractive mineral exploration and mining jurisdiction for investors. The Province has rich geology, abundant, low-cost power, world-class infrastructure, a stable political climate and competitive taxation. Vancouver is world-renowned as a centre of one of the world's largest pools of international expertise in geology, mine engineering, project financing, and environmental sustainability. More than 800 exploration and mine development companies are headquartered in Vancouver, and every year, the city welcomes thousands of people who come from countries around the globe to attend Mineral Exploration Roundup, the world's largest technical conference on mineral exploration.

# 3. Branch/Work Unit Descriptions

# 3.1 Geological Survey Branch (British Columbia Geological Survey)

### Mandate

To act as the developer, disseminator and custodian of provincial geoscientific knowledge, leading the way for informed decision making by a wide variety of clients.

### Description

The Geological Survey Branch, also known as the British Columbia Geological Survey (BCGS), develops, disseminates and acts as the custodian for provincial geoscience data, including delivering geoscience surveys, maps, databases, publications and technical reports. Established in 1895, the BCGS was the first provincial science organization, and over the course of its long history, it has been expanding knowledge of British Columbia's geology and coal and mineral deposits through field surveys. The Branch creates, maintains and delivers geoscience information in order to:

- advise government on the best use of the Province's mineral resources to benefit all British Columbians;
- provide geoscience assessments on the nature and economic health of the British Columbia mineral exploration and mining industry to guide government policy; and
- attract companies and individuals to British Columbia to explore for mineral and coal resources.

### **Key Functions**

- Conduct new geoscience surveys and generate maps, databases and publications;
- Direct the domestic and international marketing of British Columbia's mineral resources and growth opportunities through the British Columbia Mineral Development Office;
- Manage databases, applications (e.g., MapPlace, MINFILE) and website delivery;
- Monitor and report on mineral exploration and mining activity and geoscientific research activities;
- Provide technical geoscience information and advice to the mineral exploration community and to various government initiatives;
- Lead and actively participate in various trade missions, conferences and task forces; and
- Provide exploration targets, information and risk-reduction ideas to assist and encourage exploration companies and individuals searching for mineral and coal deposits in British Columbia.
# 3.2 Health, Safety and Permitting Branch

#### Mandate

To develop and maintain a strong, responsible and safe mining culture in the Province.

#### Description

The *Mines Act* and the accompanying Health, Safety and Reclamation Code for Mines in British Columbia (the Code) protect workers and the public through provisions for minimizing the health, safety and environmental risks related to mineral exploration and mining activities. MMRD's Health, Safety and Permitting Branch reviews technical applications, issues permits and completes inspections and audits to ensure compliance with the *Mines Act*, the Code and permit conditions. Branch staff conduct timely and efficient technical reviews and provide expert guidance to industry on the development and operation of mines. The Branch also works closely and collaboratively with other provincial and federal agencies and local governments to issue approvals. Branch staff can be found in all five of MMRD's regional offices (i.e., in Victoria, Smithers, Prince George, Cranbrook and Kamloops).

#### **Key Functions**

- Regulate all mine sites in British Columbia (including metal and coal mines, sand and gravel operations, mineral exploration projects, placer and quarry operations and historical mine sites as defined under the *Mines Act*):
  - o Conduct regular mine inspections and audits
  - Enforce compliance with the Code
  - Set permit conditions that consider a range of values (including socioeconomic and environmental values)
  - Ensure that the duty to consult and, where appropriate, accommodate First Nations has been met before issuing a *Mines Act* permit
- Administer certifications, examinations, and reclamation securities; and
- Liaise with mine management, unions and workers, communities, First Nations and other technical organizations, committees and government agencies.

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# 3.3 Mineral Titles Branch

#### Mandate

To manage provincial Crown coal, mineral and placer rights in a manner that provides continuing economic benefit from resource development, supports an active industry and is responsive to public concerns.

#### Description

The Mineral Titles Branch administers the *Mineral Tenure Act*, the *Coal Act* and related enactments. The Branch manages the acquisition, maintenance and registry of mineral, placer and coal rights in the Province, including the web-based Mineral Titles Online application. The Chief Gold Commissioner leads the Branch and adjudicates on matters relating to mineral, placer and coal rights; issues mineral and placer leases and coal licenses and leases; establishes mineral, placer and coal land reserves; and is responsible for the provincial registry of Crown mineral, placer and coal rights. Branch staff conduct field inspections of mineral and coal titles for auditing and compliance purposes.

#### **Key Functions**

- Crown mineral, placer and coal rights administration;
- Mineral and coal land reserve administration;
- Statutory decisions on tenures under the Mineral Tenure Act and Coal Act;
- Industry, First Nations, local government and federal and provincial agency liaison; and
- Investigation and resolution of complaints and disputes arising from the exercise of subsurface rights under the *Mineral Tenure Act, Coal Act* and related acts and regulations.

# 3.4 Policy, Legislation and Issues Resolution Branch

#### Mandate

To provide corporate leadership to the Mines and Mineral Resources Division in policy, legislation, issues resolution and the development and management of strategic initiatives to advance the responsible growth of mineral exploration and mining in British Columbia.

#### Description

The Policy, Legislation and Issues Resolution Branch leads major legislative and policy initiatives and guides the division's efforts to streamline processes in the regulation of the mining sector. The Branch plays a central role in issues management for the division and represents the division's strategic interests in various forums, including multi-stakeholder initiatives to resolve issues related to mineral development in British Columbia. In addition, Branch staff conduct economic and financial analyses and compile and publish statistical data on the mineral exploration and mining sector in British Columbia.

#### **Key Functions**

- Development of legislation, regulations and policies;
- Business and strategic planning for the division;
- Economic, statistical and financial analyses;
- Issues tracking and management for major mine development projects around British Columbia;
- Research and writing support for the division;
- Development and maintenance of website content for the Division;
- Strategic advice and recommendations on emerging issues; and
- Industry, First Nations and federal and provincial agency liaison.

# 4. Organization Chart, Budget and FTEs

Budget:

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Full Time Equivalents (FTEs): 140.5

S17



Detailed Branch organization charts follow.

Ministry Information Binder



#### June 2013

Ministry Information Binder



Mines and Mineral Resources Division

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# Mines and Mineral Resources Briefing Note Index

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# **Tenures**

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# ISSUE: BC Mineral Exploration and Mining Industry Snapshot

# KEY MESSAGES:

- Mineral exploration and mining is a key economic driver in BC.
- This industry provides thousands of well-paying jobs for British Columbians, especially in rural areas of the Province.
- Government revenues from exploration and mining activities support essential infrastructure and programs that benefit all British Columbians.

#### BACKGROUND:

- BC mines produced an estimated \$8.3 billion worth of commodities in 2012 nearly 18 percent of the Canadian total.
- According to preliminary estimates, exploration spending in BC hit a record-setting \$680 million in 2012. This is a 47 percent increase from 2011, when exploration expenditures were estimated at \$463 million.
- BC is Canada's single largest exporter of coal, the country's largest producer of copper and its only producer of molybdenum.
- There are currently nine coal mines in operation, ten metal mines, more than thirty industrial minerals mines, and hundreds of aggregate pits and quarries.
- There are 19 new major mine and two expansion proposals currently active in the *Mines Act* permitting and/or the BC environmental assessment processes.
- In addition, there are hundreds of active exploration sites around the Province.
- Over 30,000 people were employed in mineral exploration, mining and related sectors in 2012, mostly in rural BC. Of these, more than 12,500 were directly employed by mining operations. The industry also provides thousands of spin-off jobs and business opportunities for suppliers and service providers located close to project sites.
- The average mine worker in BC made over \$121,000 in 2012 (salary plus benefits).
- Mineral tax revenues for 2012/13 were approximately \$225 million.
- BC is an attractive mineral exploration and mining jurisdiction for investors. The province has rich geology, abundant, low-cost power, world-class infrastructure, a stable political climate and competitive taxation.
- More than 800 exploration and mine development companies are headquartered in Vancouver.

# ISSUE: Operating Coal Mines in BC

# KEY MESSAGES:

- There are currently nine coal mines operating in BC.
- The estimated value of the coal produced by these mines in 2012 was over \$5 billion, nearly two-thirds of BC's total mining production value.
- BC is Canada's largest exporter of coal.

#### BACKGROUND:

• The following coal mines are currently operating in BC:

Operation	Company	Community	Est. FTEs	Type of Coal
Brule	Walter Energy	Chetwynd	180	Pulverized Coal Injection
Coal Mountain	Teck Resources Limited	Sparwood	310	Metallurgical, Thermal
Elkview	Teck Resources Limited	Sparwood	1,040	Metallurgical
Fording River	Teck Resources Limited	Elkford	1,195	Metallurgical
Greenhills	Teck Resources Limited	Elkford	620	Metallurgical, Thermal
Line Creek	Teck Resources Limited	Sparwood	515	Metallurgical, Thermal
Quinsam	Quinsam Coal Corporation (Vitol Anker International B.V.)	Campbell River	280	Thermal
Trend	Peace River Coal Inc. (Anglo American plc)	Tumbler Ridge	340	Pulverized Coal Injection
Wolverine	Walter Energy	Tumbler Ridge	475	Metallurgical

- In March 2012, Walter Energy announced it was curtailing production at its Willow Creek metallurgical coal mine, which is located near Tumbler Ridge. Walter Energy has indicated that the Willow Creek mine will resume production once coal prices improve, and that in the meantime, the wash plant and rail loadout facilities at Willow Creek continue to operate to support the nearby Brule mine.
- With a production value of over \$5 billion last year, coal accounted for nearly twothirds of the overall production value of the BC mining industry, estimated to be \$8.3 billion in 2012.
- BC coal mines provided over 5,000 direct full-time jobs in 2012.
- BC is Canada's largest exporter of coal.
- About 90% of coal mined in BC is high-quality metallurgical (steel-making) coal.
- Two major expansions to existing coal mines were approved in January 2012 (Elkview and Quinsam).

S13

 There are six potential new coal mine developments active in the BC environmental assessment (EA) process (Arctos Anthracite, Carbon Creek, Echo Hill, Murray River, Raven and Sukunka).

S13

 Teck's Phase II proposal for its currently producing Line Creek Operations is in the BC EA process.
 \$13, \$21

#### S13, S21

Teck also has plans to expand its Fording River Operations. This expansion
proposal, called the Swift River Coal Project, is currently in the pre-application phase
of the BC environmental assessment process.

# ISSUE: Operating Metal Mines in BC

# KEY MESSAGES:

- There are currently 10 metal mines operating in BC.
- These mines provided nearly 4,000 direct full-time jobs in 2012.
- The six key metals mined in BC are copper, molybdenum, gold, silver, lead and zinc.

#### BACKGROUND:

• The following metal mines are currently operating in BC:

Operation	Company	Community	Est. FTEs	Commodity/ies	
Bralorne	Bralorne Gold Mines Ltd.	Lillooet	50	Gold	
Copper Mountain	Copper Mountain Mining Corporation (75%) and Mitsubishi Materials Corporation (25%)	Princeton	340	Copper/Gold/Silver	
Treasure Mountain	Huldra Silver Inc.	Hope	25	Silver/Lead/Zinc	
New Afton	New Gold Inc.	Kamloops	400	Copper/Gold/Silver	
Endako	Thompson Creek Metals Company Inc.	Fraser Lake	370	Molybdenum	
Gibraltar	Taseko Mines Limited	Williams Lake	520	Copper/Molybdenum	
Highland Valley Copper	Teck Resources Limited	Logan Lake	1,295	Copper/Molybdenum/ Silver/Gold	
Huckleberry	Imperial Metals Corporation	Houston	250	Copper/Molybdenum	
Mount Polley	Imperial Metals Corporation	Williams Lake	370	Copper/Gold	
Myra Falls	Nyrstar	Campbell River	325	Zinc/Copper/Lead/ Silver/Gold	

- BC is Canada's largest producer of copper and only producer of molybdenum.
- The estimated production value of BC metal mines in 2012 was \$2.5 billion.
- Since August 2011, five currently operating metal mines have received approval to expand their operations: Mount Polley; Highland Valley Copper; Huckleberry; Endako; and Gibraltar.
- The New Afton mine near Kamloops held its opening ceremony in September 2012. The operation employs over 400 people, including more than 100 who were part of a training program co-ordinated by the BC Aboriginal Mine Training Association. New Afton is expected to yield an average of 85,000 ounces of gold, 214,000 ounces of silver and 75 million pounds of copper annually over its 12-year life.

#### June 2013

- The Treasure Mountain mine, located 28 km east of Hope, also recently began production. This 200 tonne/day underground silver-lead-zinc mine currently employs 25 people and has an estimated mine life of 15–20 years. The operation received its *Mines Act* permit in May 2012.
- Three metal mines are currently under construction in BC:
  - At the Mount Milligan mine site northwest of Prince George, 1,000 jobs were created at the peak of construction in the summer of 2012, and once it is fully operational, the mine will provide 350 full-time jobs over its 22-year expected life.
  - In northwestern BC, the Red Chris copper-gold mine, which received its *Mines* Act permit in May 2012, is being developed at an estimated capital cost of \$470 million; if it reaches production, this mine will employ approximately 300 people full time over an expected 28-year mine life.
  - The Bonanza Ledge gold mine, located about 60 km east of Quesnel, is also under construction.
- The proposed Kitsault silver-lead-tungsten mine received a provincial environmental assessment certificate in March 2013. The proponent, Avanti Mining Inc. submitted a joint application for a *Mines Act* permit and a construction-phase *Environmental Management Act* permit on April 26, 2013.

S13

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The estimated capital cost of the Kitsault project, located in northwestern BC approximately 140 km north of Prince Rupert, is \$837 million. If permitted and developed, Kitsault would employ approximately 700 people during construction and 300 full-time workers during its estimated 16-year mine life.



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# ISSUE: Health and Safety at BC Mines

# KEY MESSAGES:

- Mining is one of the safest heavy industries in the Province.
- This record is a result of the cooperative efforts of mine employees, mine management, unions and regulators.
- Ministry of Energy, Mines and Natural Gas (EMNG) health and safety inspectors are involved in all aspects of the mining cycle, from the exploration phase to operations and final reclamation to ensure the health and safety of workers, environmental protection and compliance with the Health Safety and Reclamation Code for Mines in British Columbia.
- While the industry and the Province are justifiably proud of the safety record of BC mining, EMNG recognizes the need for due diligence and continuous improvement.

# BACKGROUND:

- British Columbia has a diverse mining industry ranging from small-scale placer and gravel operations to world-class surface mines and underground metal and coal mines.
- EMNG achieves mine health and safety objectives through inspections, audits, serious accident and fatality investigations and mentoring and training programs.
- The mine audit program is a distinct component of EMNG's mine health and safety program. An audit involves a team of five to eight inspectors conducting a comprehensive review of regulatory requirements at a mine site.
- In addition to the audit program, inspectors carry out routine inspections of exploration sites, placer operations, mines and aggregate pits within their regions.
- There were 695 mine visits conducted in 2005; 777 mine visits in 2006; 986 mine visits in 2007; 1,015 mine visits in 2008; 1,035 mine visits in 2009; 1,058 mine visits in 2010, 795 mine visits in 2011; and 1,159 mine visits in 2012.
- In 2012, there was one fatality related to an avalanche on an exploration site. There were no mine related fatalities in British Columbia in 2010 and 2011. This was the longest period of time with no mine fatalities since records started to be collected in 1898.
- In 2011 (latest figures available from WorkSafeBC), larger British Columbia mines experienced an estimated injury rate of approximately 1.6 injury claims per 100 person years worked.

• The injury rate at BC mines continued to compare favourably against the estimated injury rates of other heavy industries in 2011:

Industry	Injury Rate
Mining (metal and coal mines)	1.6
Forestry	5
General Construction	5
Heavy Construction	5
Road Construction	3
Wood and Paper	3

# ISSUE: Southeast BC Coal Mines

# **KEY MESSAGES:**

- Teck Resources Ltd. (Teck) has plans to expand all five of its currently operating coal mines in southeast BC: Coal Mountain, Elkview, Fording River, Greenhills and Line Creek Operations.
- The Elk Valley watershed, which is located downstream of these mines, has increasing trends of selenium with concentrations above provincial water quality guidelines for the protection of aquatic life, and in some areas above drinking-water quality guidelines.
- On April 15, 2013 the Minister of Environment issued an order to Teck requiring the company to submit a plan to address the high levels of selenium and other contaminants in the Elk Valley watershed. Teck is responsible for completing and submitting the plan to the minister within 12 months of the Terms of Reference being approved.

#### **BACKGROUND:**

- The Elk Valley in southeast BC has over one hundred years of coal mining history.
- Selenium and other contaminants are released from mine waste rock through exposure to surface water.

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 Teck's Line Creek Operations Phase II project is currently under review in the BC environmental assessment (EA) process.

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- Teck currently employs close to 3,700 people at its southeast BC coal mines and is planning to expand all of these operations.
- In February 2013, Teck released the first version of its Valley-Wide Selenium Management Action Plan to address the cumulative nature of water-quality effects from its southeast BC coal mines.
  - This action plan aims to maintain selenium levels in Lake Koocanusa below BC Water Quality Guidelines to meet US and Montana interests.
  - The action plan includes investments of up to \$600 million by Teck over the next five years for installation of water diversion and treatment facilities, research and development to improve selenium management, and ongoing aquatic monitoring.
- The 2013 Ministerial Order, issued under section 89 of the Environmental Management Act, covers the Elk Valley watershed, including Fording River and Lake Koocanusa, and stipulates the development of an area-based management plan, in consultation with communities of interest. It establishes a process for Teck to take immediate steps to stabilize and reverse water quality concentrations for selenium, cadmium, nitrate and sulphate.
- The order will result in a plan to identify long-term concentration targets, including:
  - o current contaminant concentrations;
  - o current and emerging economically achievable treatment technologies;
  - sustained balance of environmental, economic and social costs and benefits; and
  - $\circ$  current and emerging science regar = the fate and effects of contaminants.
- The order defines specific environmental objectives and outcomes such as protection of aquatic ecosystems, protection of human health and protection of groundwater.
- The order also establishes a long-term selenium concentration target for Lake Koocanusa, which Teck expects can be achieved using water treatment technologies described in its draft Valley-Wide Selenium Management Action Plan.
- Teck will develop the area-based management plan in collaboration with stakeholders, First Nations and various levels of government.

# ISSUE: Mineral Tax Revenue Forecast (2012/2013)

# KEY MESSAGES:

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#### BACKGROUND:

- The mineral tax is a profit-based tax payable by the mines and quarries operating in BC. The tax was enacted in 1990.
- There are two tiers of mineral tax: the lower net current proceeds tax at two percent of operating profits and the net revenue tax at thirteen percent of defined profits after recovery of all operating and capital costs and other deductions.
- BC mineral tax revenues from coal and metal mines grew from \$44 million in 2001 to over \$350 million in 2010 and 2011.

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# ISSUE: Revenue Sharing with First Nations

# KEY MESSAGES:

- BC is committed to sharing wealth generated by new mines and mine expansions with First Nations.
- BC is the first province in Canada to share provincial mineral tax revenue with First Nations.
- These agreements provide First Nations with direct benefits from mine development in their traditional territories and provide financial capacity to help them meet the social and economic goals of their communities.
- Mineral tax revenue sharing is supported by First Nations and the BC mining industry.

# BACKGROUND:

- In 2008, BC became the first province in Canada to introduce a policy to share mineral tax revenue from new and expanded mine projects with First Nations.
- The Ministry of Aboriginal Relations and Reconciliation leads the negotiation of Economic and Community Development Agreements (ECDAs) with First Nations to share mineral tax from mine developments in their traditional territories.
- Under these agreements, First Nations receive a percentage of mineral tax revenue. The percentage can be up to 37.5 percent with possible reductions for potential environmental liabilities, strength of claim and other considerations.
- Several ECDAs have already been signed for new mines and mine expansions (including for New Afton, Mt. Milligan, Mount Polley, Copper Mountain and Highland Valley Copper).
- An ECDA was signed with the Ktunaxa First Nation (Jan 29, 2013) which is applicable to new mines and mine expansions in the Elk Valley.

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# ISSUE: Mine Expansions

# KEY MESSAGES:

- Since August 2011, seven currently operating major mines have received *Mines Act* permit amendments to expand their operations.
- Seven currently operating major mines plan to expand their operations in the coming years.

# BACKGROUND:

- A "mine expansion" can refer to an increase in production and/or extended mine life. These changes require amending an existing *Mines Act* permit and can also trigger the environemtal assessment (EA) process.
- The following currently operating mines have received permit amendments since August 2011 allowing them to expand their operations: Mount Polley, Highland Valley Copper, Huckleberry, Quinsam, Elkview, Endako and Gibraltar.
- The following currently operating mines are pursuing or plan to pursue expansion plans in the near future:

Project	Proponent	Nearby Community/ies	Commodity/ies	Status	
Line Creek Operations – Phase II	Teck Resources Limited	Sparwood	Coal	EA application under review (timeline suspended)	
Fording River Operations – Swift River Coal Project	Teck Resources Limited	Elkford	Coal	EA pre-application	
Greenhills Expansion	Teck Resources Limited	Elkford	Coal	Mines Act permit amendment application pending	
Mount Polley Expansion	Imperial Metals Corporation	Williams Lake	Copper, gold	Mines Act permit amendment application pending	
Quinsam – 7 South Area 5	Quinsam Coal Corporation (Vitol Anker International B.V.)	Campbell River	Coal	<i>Mines Act</i> permit amendment application pending	
Wolverine – EB Pit	Walter Energy Western Coal	Tumbler Ridge	Coal	Mines Act permit amendment application pending	
Copper Mountain Expansion	Copper Mountain Mining Corporation (75%) & Mitsubishi Materials Corporation (25%)	Princeton	Copper, gold, silver	Exploration work is ongoing	

 Teck's Phase II proposal for its currently producing Line Creek Operations is in the EA process.
 S13

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S13, S21 If the project receives an EA certificate, the next step in the approval process is a *Mines Act* permit amendment application.

• Teck also has plans to expand its Fording River Operations and Greenhills coal mine. The expansion proposal for Fording River, called the Swift River Coal Project, is currently in the pre-application phase of the BC EA process. The Greenhills proposal does not trigger the EA process. Both of these expansion proposals will require *Mines Act* permit amendments.

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• The Copper Mine began production in June 2011. The mine currently employs over 270 people full time and is 75 percent owned by Copper Mountain Mining Corporation and 25 percent owned by Mitsubishi Materials Corporation. a major Japanese resource company.

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# ISSUE: Mine Development Projects in BC

# KEY MESSAGES:

- Three metal mines are currently under construction in BC.
- There are 19 new major mine and two expansion proposals currently active in the *Mines Act* permitting and/or the BC environmental assessment (EA) processes.
- Several other projects are close to entering the Mines Act/EA processes.
- This places the province in a strong position for new mine developments and associated economic growth.

#### BACKGROUND:

- At the Mount Milligan mine site northwest of Prince George, 1,000 jobs were created at the peak of construction in the summer of 2012, and once it is fully operational, the mine will provide 350 full-time jobs over its 22-year expected life.
- In northwestern BC, the Red Chris copper-gold mine is currently under construction. This mine is being developed at an estimated capital cost of \$470 million, and if it reaches production, it will employ approximately 300 people full time over an expected 28-year mine life.
- The Bonanza Ledge gold mine, located about 60 km east of Quesnel, is also under construction.
- The Bonanza Ledge and Ruby Creek mines have *Mines Act* permits allowing them to undertake construction activities. Bonanza Ledge has begun pre-construction and plans to continue these activities in 2013.

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- A decision on Teck Resources Limited's *Mines Act* permit amendment application for the Quintette coal mine is expected by the summer of 2013. Located approximately 20 km south of Tumber Ridge in northeastern BC, Quintette closed in 2000 after 18 years of operations. If approved, this project would be re-developed at an estimated capital cost of \$858 million and employ 400 people full time over an estimated 12-year mine life.
- Peace River Coal Ltd.'s Roman project, located 30 km southwest of Tumbler Ridge in northeastern BC, received a BC EA certificate in December 2012 and recently submitted a *Mines Act* permit application for phase 1 construction work. If approved, this mine will provide full-time employment for approximately 375 people over its 10-year mine life.
- The proposed Kitsault silver-lead-tungsten mine received a BC EA certificate in March 2013. The proponent, Avanti Mining Inc., submitted a joint application for a *Mines Act* permit and a construction-phase *Environmental Management* Act permit for Kitsault sometime on April 26, 2013

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The estimated capital cost of the Kitsault project. located in northwestern BC approximately 140 km north of Prince Rupert, is \$837 million. If permitted and

developed, Kitsault would employ approximately 700 people during construction and 300 full-time workers during its estimated 16-year mine life.

• The following 15 new mine development proposals are currently active in the pre-application phase of the BC EA process:

Project	Company	Community	Est. FTEs	Est. Capital Costs (\$M)	Commodity/ ies
Ajax	KGHM Ajax Mining Inc. [Abacus Mining & Exploration Corporation (20%) & KGHM Polska Miedz S.A. (80%)]	Kamloops	380	795	Copper/Gold
Arctos Anthracite	Arctos Anthracite Joint Venture [Fortune Minerals Limited (80%) & POSCAN (20%)]	lskut	500	790	Coal
Blackwater	New Gold Inc.	Vanderhoof	500	1,800	Gold/Silver/ Lead/Zinc
Brucejack	Pretium Resources Inc.	Stewart	300	450	Gold/Silver
Carbon Creek	Cardero Resource Corp.	Hudson Hope	875	475	Coal
Echo Hill	Hillsborough Resources Limited (wholly owned subsidiary of the Vitol Group of companies)	Tumbler Ridge	80	35	Coal
Harper Creek	Yellowhead Mining Inc.	Vavenby	430	840	Copper/Gold/ Silver
Kootenay West	CertainTeed Gypsum Canada Inc.	Canal Flats	17	7–10	Gypsum
KSM	Seabridge Gold Inc.	Stewart	650	5,250	Copper/Gold/ Silver
Kutcho Creek	Kutcho Copper Corp. (Capstone Mining Corp.)	lskut	145	190	Copper/Zinc/ Silver/Gold
Murray River	HD Mining International Ltd. [Huiyong Holdings Ltd. (55%), Canadian Dehua International Mines Group Ltd. (40%) & another partner (5%).	Tumbler Ridge	600	300	Coal
Raven	Comox Joint Venture (partnership between Compliance Energy Corporation, ITOCHU Corporation & LG International Corporation)	Comox/ Courtenay	350	240	Coal
Schaft Creek	Copper Fox Metals Inc.	Telegraph Creek	700	2,950	Copper/Gold/ Molybdenum/ Silver
Spanish Mountain	Spanish Mountain Gold Ltd.	Likely/Williams Lake	175	760	Gold
Sukunka	Xstrata Coal British Columbia [Xstrata plc. (75%) and JX Nippon Oil & Energy Corporation (25%)]	Tumbler Ridge	700	1,800	Coal

# ISSUE: Exploration in British Columbia

# KEY MESSAGES:

- According to preliminary estimates, exploration spending in BC hit a record-setting \$680 million in 2012. This is a 47 percent increase from 2011, when exploration expenditures were \$463 million.
- More than half of Canada's exploration companies are headquartered in Vancouver.
- Exploration leads to new mine development; a healthy level of exploration activity is critical to the long-term success of mining in BC.

#### BACKGROUND:

- The goal of exploration is to locate large, high-grade mineral and coal reserves with minimal disturbance to the ground and the environment.
- Technological advances, including GPS surveying, airborne technologies and downhole seismic imaging, have enabled companies to locate new deposits previously beyond discovery using traditional methods.
- Exploration projects result in benefits for nearby communities, particularly rural BC communities since so many deposits are found in rural areas of the Province.
- In 2012, exploration in BC employed approximately 2,700 people. Exploration activity also provides numerous spin-off benefits for local businesses (e.g., local contractors, caterers, etc.).
- Canada is number one in the world when it comes to generating investment in exploration. In 2011, approximately 18 percent of all exploration spending worldwide went into projects located in Canada. Australia was ranked second with approximately 13 percent of global exploration spending.
- According to preliminary estimates, in 2012, BC ranked second in Canada (after Ontario) for exploration spending, with approximately 19 percent of all investment in Canadian exploration projects occurring in the Province.
- BC is a significant jurisdiction for exploration on the world stage. The Province is attractive for investors because it has rich geology, abundant low-cost power, world-class infrastructure, a stable political climate and competitive taxation.
- Every year, the City of Vancouver welcomes thousands of people who come from countries around the globe to attend Mineral Exploration Roundup, the world's largest technical conference on mineral exploration.
- There are currently a number of advanced exploration projects across BC, including Xstrata's Suska coal project in northeastern BC; Castle Resources' work on the pastproducing Granduc copper/gold/silver mine near Stewart; and Imperial Metals' Ruddock Creek lead/zinc project northwest of Revelstoke.

# ISSUE: Public Geoscience in BC

# KEY MESSAGES:

- "Public geoscience" is funded by taxpayer dollars. Its processes are open and transparent and its results are freely available to all. It provides stewardship for public data, information, and knowledge on earth dynamics and natural resources.
- Public geoscience is essential to the discovery and development of new mineral and energy resources.
- Providers of public geoscience in BC include the Ministry of Energy, Mines and Natural Gas' BC Geological Survey Branch (BCGS) and Oil and Gas Division; the Geological Survey of Canada; and Geoscience BC.

#### BACKGROUND:

- BCGS is the oldest science agency in the BC Government with more than 115 years of service.
- The BCGS's key roles are to:
  - advise government on behalf of all British Columbians on the best use of the Province's minerals resources;
  - create, maintain and deliver geoscience knowledge to lead the way for informed decision making;
  - attract companies and individuals to explore BC for new mineral and coal resources;
  - act as the public steward of mineral resources for current and future generations; and
  - provide assessments on the nature and economic health of mineral exploration and mining industry to guide government policy.
- BCGS is responsible for carrying out geological field surveys and publishing the resulting maps, data, and reports; and providing geoscience expertise to support government's sustainable development objectives and job creation.
- BCGS is the keeper of all provincial geoscience knowledge. Databases are world class and are always ranked in the top ten globally in the Fraser Institute annual industry poll (#1 in 2005/2006).
- BCGS leads the mining industry to frontier areas of BC with high mineral potential through strategic, multi-year geoscience projects.
- Geoscience BC is an industry-led, industry-focused, non-governmental organization that generates new geoscience information that complements the applied geoscience activities of the BCGS and the Oil and Gas Division.
- Since it was established in 2005, the Province supported Geoscience BC through a series of grants totaling nearly \$50 million.

• BC is the only jurisdiction in Canada that uses a non-governmental organization like Geoscience BC to assist in the delivery of public geoscience.

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CONTACT: David Morel, ADM

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# ISSUE: Mining Exploration Tax Incentive Programs

# KEY MESSAGES:

- BC and Canada have comprehensive mining exploration tax incentive programs to encourage exploration for new mines.
- Mining exploration tax incentive programs have contributed to a strong recovery in exploration expenditures in BC.
- BC mineral exploration expenditures were a record \$680 million in 2012. That is 47 percent more than the 2011 expenditures of \$463 million.
- BC supports Canada's Flow Through Share Tax Credit program which was extended to March 31, 2014 by the 2013 federal budget.

#### BACKGROUND

• The Federal Flow Through Share Tax Credit and BC Mining Flow Through Share Tax Credit program combine to produce "Super Flow Through Shares," which can make the after-tax cost of exploration in BC the third lowest in Canada.

#### BC's mining exploration tax incentive programs include:

- BC Mining Exploration Tax Credit This provides a 20 percent refundable tax credit for eligible grassroots exploration expenditures until December 31, 2016. In 2007, this tax credit was increased to 30 percent for eligible exploration in areas affected by the mountain pine beetle.
- BC Mining Flow Through Share Tax Credit The 2010 budget extended this non-refundable 20 percent tax credit until December 31, 2013. It is harmonized with the federal flow through share tax credit program.

#### Canada's mining exploration tax incentive programs include:

- Flow Through Shares This program allows companies to flow Canadian exploration expenses through to investors who can then deduct these expenses from otherwise taxable income. This reduces the funds an investor has at risk.
- Federal Flow Through Share Tax Credit (Federal Mineral Exploration Tax Credit) This program provides a non-refundable 15 percent tax credit on grassroots exploration expenses under a flow through shares agreement. The recent federal budget extended this program until March 31, 2014.

# ISSUE: Mineral and Coal Tenure in BC

# KEY MESSAGES:

- The Mineral Titles Branch of the Ministry of Energy, Mines and Natural Gas (EMNG) maintains the provincial registry of mineral, placer and coal rights on Crown and private land.
- Mineral tenure and coal tenure are governed by two separate statutes with different requirements.
- Mineral Titles Online is the 'free entry' online staking process that allows the holder of a free miner certificate to acquire mineral and placer titles on Crown and private land.
- The issuance of a coal licence from an application is a statutory decision and requires prior consultation on First Nations interests.

# BACKGROUND:

- Mineral and placer titles are issued under the Mineral Tenure Act.
- The term 'free entry' means that the acquisition of mineral and placer claims are 'staked online' on provincial land that is not aliented (such as parks and Federal Indian Reserves) without consultation on First Nations or other interests.
- As of December 31, 2012, the mineral titles registry comprised over 64,000 active mineral and placer tenures covering over 14 million hectares of crown and private land.
- The mineral rights acquired with a mineral or placer claim allow minimal use of the surface such as hand work and prospecting that does not involve mechanical distrubance.
- Formal notification to a landowner is required prior to accessing a claim area that is located on private land. If a landowner and claim holder are not able to agree on terms of access to a claim, they may ask the Chief Gold Commissioner to mediate, and failing that may appeal to the Surface Rights Board.
- If a claim holder wishes to conduct exploration or mining activity that involves mechanized disturbance, a permit under the *Mines Act* is required. As the issuance of a *Mines Act* permit is a statutory decision, the Crown has a duty to consult with First Nations to meet the requirements of the *Constitution Act*.
- Coal licences and leases are issued under the Coal Act.
- There are 1,036 coal licences and 24 coal leases in BC. These coal tenures cover about 500,000 hectares of Crown and private land.
- The acquisition of coal tenure is not a based on a 'free entry' system. An application for a coal licence is made to the Chief Gold Commissioner under the authority of the *Coal Act*.
- The Chief Gold Commissioner must consult with First Nations prior to issuing a Coal licence under the *Coal Act*.

BN: 14

- There are 242 applications for coal licences, of which 129 are considered part of a "backlog"; the backlog applications are those received prior to November 30, 2011.
- Any physical exploration and development work conducted on a coal licence area also requires a permit under the *Mines Act*. First Nations are consulted prior to a decision to issue a *Mines Act* permit.
- If a claim holder or coal licence holder wishes to develop a producing mine, they must convert the claim/licence area to a lease. This applies to both mineral and coal tenures, and the issuance of a lease is a statutory decision and requires consultation with First Nations.

Pages 216 through 217 redacted for the following reasons: S13, S14, S17

# Stakeholder Organizations/Industry Associations Electricity and Alternative Energy

### BC Sustainable Energy Association (BCSEA)

The BCSEA is a non-profit society of citizens, professionals and practitioners committed to promoting the understanding, development and adoption of sustainable energy, energy efficiency and conservation in British Columbia. Their Mission is to facilitate the transition to a sustainable energy future through education, advocacy and tangible community projects.

Key Contact Guy Dauncey, Communications Director, Victoria Phone (general): 250-881-1304 Email: <u>guydauncey@earthfuture.com</u> <u>http://www.bcsea.org/</u>

# Canadian Electricity Association (CEA)

The CEA is made up of corporate utility member companies, major electrical manufacturers, corporate consulting companies and several hundred other company and individual members. Founded in 1891, the CEA is the voice of the Canadian electricity industry, promoting electricity as the critical enabler of the economy and Canadians' expectations for an enhanced quality of life. Their Mission to contribute to the regional, national, and international success of its members is based on the belief that safe, secure, reliable, sustainable and competitively-priced supply of electricity is essential to Canada's prosperity.

Key Contact: Jim Burpee, President and CEO Phone: 613-230-4762 Email: <u>burpee@electricity.ca</u> <u>http://www.electricity.ca</u>

# Canadian Renewable Fuels Association (CRFA)

Founded in 1994, the CRFA is a non-profit organization with a mission to promote the use of renewable fuels for transportation through consumer awareness and government liaison activities. The CRFA membership is comprised of representatives from all levels of the ethanol and biodiesel industry, including: grain and cellulose ethanol producers, biodiesel producers, fuel technology providers, and agricultural associations.

Key Contact W. Scott Thurlow, President Phone: (head office) 613-594-5528 http://www.greenfuels.org/

Email: s.thurlow@greenfuels.org

#### <u>Clean Energy BC (formerly Independent Power Producers Association of</u> <u>British Columbia)</u>

Since 1992, the Clean Energy Association of British Columbia (formerly the Independent Power Producers of British Columbia) has been the voice of Clean Energy Producers in BC, to government and the public - when the members have chosen to send a collective signal. Members and non members also send their own corporate signals. The mandate of the Clean Energy Association of British Columbia is to develop a viable independent power industry in British Columbia that serves the public interest by providing cost-effective electricity through the efficient and environmentally responsible development of the Province's energy resources. Clean Energy BC has been active in advocacy with government electricity policy formulation, regulatory processes, permitting procedures, BC Hydro procurement, BCTC services, media coverage, informing the public, local and First Nations governments and resource users throughout BC.

Key Contact Paul Kariya, Executive Director Phone (general): 604-568-4778 http://www.cleanenergybc.org

Email: paul.kariya@cleanenergybc.org

#### Canadian Hydrogen and Fuel Cell Association (CHFCA)

CHFCA is the national industry association dedicated to accelerating Canada's worldleading hydrogen and fuel cell industry. Their Mission is to accelerate Canada's worldleading hydrogen and fuel cell industry. Members cover most types of hydrogen and fuel cell technologies, components, systems supply and integration, fuelling systems, fuel storage, and engineering and financial services.

Key Contacts Chair: Eric Denhoff, President & CEO Email: <u>edenhoff@chfca.ca</u> Carolyn Bailey, Manager, Business Development & External Relations Phone: 604-783-5542 Email: cbailey@chfca.ca <u>http://www.h2fcc.ca/cfm/index.cfm</u>

#### Joint Industry Electricity Steering Committee (JIESC)

The industry steering committee represents about 25 industrial operators including pulp and paper mills, mining companies and chemical manufacturers who annually account for about one-third of total power consumed in BC.

Key Contact Richard Stout, Executive Director Phone: 604-564-2012

Email: roninconsult@live.com

# **Multi-Sectoral**

#### **Energy Council of Canada**

The Energy Council of Canada is the Canadian national member of the World Energy Council, and is made up of representatives from all facets of Canada's energy sector. The Energy Council is a vehicle for strategic thinking, networking and action by senior executives in the private and public sectors who have a broad interest in national, continental and global energy issues. The Energy Council seeks to forge a better understanding of energy issues, in order to optimally shape the energy sector for the benefit of all Canadians.

Key Contacts Chair: John Muir, Director of Canadian Energy Policy, GE Energy President: Greg Schmidt Email: greg.schmidt@energy.ca Phone: 613-232-8239 Email: brigitte.svarich@energy.ca http://www.energy.ca/users/folder.asp

#### Public Interest Advocacy Centre (PIAC)

PIAC is a non-profit organization that provides legal and research services on behalf of consumer interests, and, in particular, vulnerable consumer interests, concerning the provision of important public services.

Key Contacts Leigha Worth, Executive Director Phone: 604-687-3063 Email: <u>support@bcpiac.com</u> <u>http://www.piac.ca/</u>

# Stakeholder Organizations/Industry Associations Mineral Exploration and Mining

#### Aggregate Producers Association of British Columbia

The Aggregate Producers Association of BC is a not-for-profit association representing members comprised of aggregate producers, suppliers, and associates throughout the province of British Columbia. The Association works with governing bodies and seeks to ensure the industry has an effective and lasting contribution to the economy and to the building of British Columbia. Their Mission is to encourage government policy development to support sustainable development of the aggregate resource, provide a network for the exchange of information (provincially and nationally), communicate with the public and government, and provide cost effective service to their members.

Key Contact Paul Allard, Executive Director Phone (general) 778-571-2670 Email gravelbc@telus.net http://www.gravelbc.ca/

#### Association for Mineral Exploration British Columbia (AME BC)

AME BC (formerly the BC & Yukon Chamber of Mines) was established in 1912 and represents over 4,000 members, including geoscientists, prospectors, engineers, entrepreneurs, exploration companies, suppliers, mineral producers, and associations who are directly or indirectly engaged in mineral exploration in British Columbia and throughout the world. Through leadership, partnerships, and advocacy, AME BC promotes a sustainable environment and business climate for the mineral exploration industry on behalf of its members.

Key Contact Gavin Dirom, President and CEO Phone (general) 604-630-3920 gdirom@amebc.ca http://www.amebc.ca/

#### British Columbia Placer Miners' Association (BCPMA)

The BCPMA is the umbrella association for all placer mining associations in B.C.

Key Contact Bruce Chaytor, President s.22 <u>bcpma@shaw.ca</u> <u>http://bcpma.ca/</u>

#### Mining Association of British Columbia (MABC)

Established in 1901, MABC represents the interests of BC's mining industry. Maintaining mining as BC's second largest resource industry is a primary goal of the MABC which represents the collective needs and interests of operating coal, metal and industrial mineral mining companies. MABC liaises with government legislators, lobbies for regulatory advancement and publicly promotes the economic and social value of mining. In addition, they provide member companies services such as: participation in key government/industry committees, updates on regulatory change, information exchange opportunities, joint industry action on issues of common concern, and the availability of staff expertise on the areas of greatest interest.

Key Contacts Karina Briño, President and CEO Phone 604-681-4321 <u>kbrino@mining.bc.ca</u> <u>http://www.mining.bc.ca/</u>

#### **Regional Mining Associations in British Columbia**

#### Kamloops Exploration Group (KEG)

Kamloops Exploration Group is a registered, non-profit society that generally promotes the interests of mining and prospecting for minerals, metals, and petroleum to the general public; furthers members' knowledge of mineral exploration and mining by offering informational lectures; holds prospecting classes and promotes other educational projects in connection with mining and prospecting; and furthers the general public's knowledge on the subject of Geoscience.

> Key Contacts Colin Russell, President Phone 250-578-2068 Email <u>russellgeoscience@gmail.com</u> http://www.keg.bc.ca/

#### **Smithers Exploration Group**

Formed in 1971, Smithers Exploration Group serves and promotes the mineral industry in Northwest British Columbia. They work to advance geology, exploration and mining in the northwest. Membership includes prospectors, geologists, miners, engineers, pilots, expediters, contractors, line-cutters, drillers and many people from supporting professions.

> Key Contacts Rob Boyce, President and Christine Ogryzlo, Director of Communications Phone (general) 250-877-7883 Email address:<u>info@smithersexplorationgroup.com</u> <u>http://www.smithersexplorationgroup.com/</u>

# **Chamber of Mines of Eastern British Columbia**

The Chamber of Mines of Eastern British Columbia is a non-profit organization providing information to the general public and the mining industry. Our members include everyone from individual prospectors to large mining and engineering companies. They advocate for the mining industry, especially for prospectors and explorationists, as well as serve as an information and resource library with an extensive collection of geological information and maps, as well as rock and mineral specimens. They host elementary to high school classes as well as provide prospecting and other courses.

> Key Contacts Lloyd Addie, President Phone (general) 250–352-5242 Email chamberofmines@netidea.com http://www.cmebc.com/

# Atlin Placer Miners' Association (APMA)

The APMA represents placer miners in the Atlin area, which has a long history of placer mining.

Key Contacts Linda Dandy Daniel Johns Randy Millei

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# Coal Association of Canada (CAC)

The CAC represents companies engaged in the exploration, development, use and transportation of coal. Its members include major coal producers and coal-using utilities, the railroads and ports that ship coal, industry suppliers of goods and services, and municipalities that have an interest in furthering the objectives of the Coal Association. The Vision of the CAC is "A world which recognizes coal as the vital energy source because it is abundant, safe, reliable, economic and environmentally acceptable."

Key Contacts Ann Marie Hann, President Phone (general) 403- 262-1544 e-mail: <u>hann@coal.ca</u> <u>http://www.coal.ca/</u>
#### Geoscience BC

Geoscience BC is an industry-led, not-for-profit, applied geoscience organization. Geoscience BC works in partnership with industry, academia, government, First Nations, and communities to fund applied geoscience projects with the objective to attract mineral and oil & gas exploration to British Columbia. Geoscience BC's mandate includes the collection, interpretation, and delivery of geoscience data and expertise, to promote investment in resource exploration and development in British Columbia.

> Key Contact C.D. ('Lyn) Anglin, PhD, President & CEO Phone (general) 604-662-4147 Email: anglin@geosciencebc.com http://www.geosciencebc.com/s/Home.asp

## Mining Association of Canada (MAC)

MAC was originally incorporated in 1935 (as the Canadian Metal Mining Association) and is a national organization of the Canadian mining industry. It comprises companies engaged in mineral exploration, mining, smelting, refining and semi-fabrication. Member companies account for the vast majority of Canada's output of metals and major industrial minerals. MAC's mission is to promote, through the collective action of members, the growth and development of Canada's mining and mineral-processing industry, for the benefit of all Canadians.

> Key Contacts Pierre Gratton, President and Chief Executive Officer Phone (general) 613-233-9391 http://www.mining.ca/

## Prospectors and Developers Association of Canada (PDAC)

The PDAC exists to protect and promote the interests of the Canadian mineral exploration sector and to ensure a robust mining industry in Canada. The PDAC encourages the highest standards of technical, environmental, safety and social practices in Canada and internationally. The PDAC is a national association representing the interests of the mineral exploration and development industry. The association, which includes individual and corporate members, was established in March 1932. The association's activities can be classified broadly under the following headings: advocacy, information, and networking and are summarized in PDAC Activities, an annual publication. The association is best known for its annual convention, trade show, and investors exchange. In 2008, this event attracted over 20,000 attendees from more than 100 countries.

Key Contacts Glenn Nolan, President and Lisa McDonald, Chief Operating Officer Phone (general) 416-362-1969 ext. 223 <u>lmcdonald@pdac.ca</u>, <u>http://www.pdac.ca/</u>

# Calendar of Events June 2013 to May 2014

Week of:	f: Event/Activity						
(Monday	What, where, who (is organizing/sponsoring/etc), when, role - the Ministry's role and						
to	whether it is a potential Minister's event and or speaking opportunity.						
Sunday)							
	June 2013						
3-9	Annual Sparwood Coal Symposium, June 7-9. MMRD organized meeting. Usually attracts approx. 50 people from coal sector for a workshop, sponsored by industry with talks by GSB Geologists.						
	Provincial Mine Rescue Competition and Mine Health and Safety Awards Banquet – Revelstoke, BC, June 6-8. Annual competition sponsored by MMRD along with mining associations and industry. Attended by ADM, Chief Inspector of Mines and Mine Inspectors. The Provincial Mine Rescue and First Aid Competition is held annually and brings together mine rescue teams from across BC to test their emergency response and rescue abilities. Tagma compate in either surface or underground competitions.						
10-16	<ul> <li>Hydrogen + Fuel Cells 2013 (HFC 2013) Vancouver Convention Centre, June 16-19 This is the sixth edition of its kind, a leading international conference for the hydrogen and fuel cell industry hosted by the Canadian Hydrogen and Fuel Cell Association. HFC 2013 will feature prominent industry and government leaders as keynote speakers as well as plenary and parallel sessions focusing on key issues and new initiatives within the sector. The Exhibition and Trade Show area of the conference will provide attendees with a place to network and partner with global leaders in the business, government and scientific communities.</li> <li>Clean Energy BC's AGM &amp; Industry Outlook – Postponed to June 18. Premier and Minister Coleman invited.</li> </ul>						
24-30							
	July 2013						
1-7	BC Ministries' Annual Reports tabled and published on government website.						
8-14							
15-21							
22-28	<b>GeoWeb, Morris J. Wosk Centre for Dialogue, Vancouver, BC, July 22-26</b> Conference focuses exclusively on geographic information systems, the Internet, and the economic potential associated with their convergence. Focus on the reciprocal impact of the Web and Geographic Information, and the ever-increasing need for collaboration in light of global economic and environmental concerns. Public and Private sectors to meet.						
29-Aug 4							

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# Calendar of Events June 2013 to May 2014

	August 2013
5-11	
12-18	
19-25	Energy and Mines Minister's Conference, Yellowknife, NWT, August 24-27. Minister and DM usually attend.
	<b>National Geological Survey Committee, Yellowknife, NWT, August 24-25</b> . The heads of Canadian geological surveys meet every two years to build partnerships, learning from other agencies, and attend annual field trip.
26-Sept 1	
	September 2013
2-8	Western Regional Mine Rescue Competition, Fernie, BC, September 6-7. Provincial and Territorial Surface and Underground Mine Rescue winners from Western Canada Alberta, British Columbia, Manitoba, Saskatchewan, Yukon and Northwest Territories/Nunavut as well, as the winning surface and underground teams from the Northwestern United States make up the competition. Each team participates in five tasks including first aid, fire and smoke simulation, rope task and a written exam. ADM, Chief Inspector of Mines, Mine Inspectors usually attend.
9-15	
16-22	
23-29	
30-Oct 6	
	October 2013
7-13	
14-20	
21-27	Professional Engineers and Geoscientists AGM and Annual Conference, Whistler, October 24-26.
	<b>Generate 2013, October 26-29</b> – Clean Energy BC's annual fall conference that brings together all stakeholders involved in the Clean Energy industry in British Columbia. This year will be CEBC's 11 <sup>th</sup> annual conference which has grown significantly in past years. Generate 2012 had 85 exhibitor companies and over 900 delegates passed through the doors by attending field trips, short courses, panel or plenary sessions. It is the only conference of its kind in British Columbia each year.
28-Nov 3	
	November 2013
4-10	<b>BC Geological Survey Open House, Victoria, BC, Date TBD.</b> Presentations on the geology and mineral deposits of BC. The Open House is co- sponsored by the Pacific Section of the Geological Association of Canada (PAC-GAC). Presentations will be given by geologists from BCGS, UVic staff and students.

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# Calendar of Events June 2013 to May 2014

	Asia-Pacific Trade and Investment Trip Mission, TBD. Potential Minister's mission to establish trade relationships and market BC's energy and mineral wealth and investment potential to existing partners (Japan and Korea) and emerging powers (China and India). Centered around attendance at China Mining Forum in early November, destinations could include Tianjin, Beijing, Shanghai and Tokyo. ADM or DM, and technical staff have attended in the past.
	Minerals South, Nelson BC, November 5-7. This education and outreach community event attracts broad audience from local politicians, through community members to mineral industry personnel. Can range from 150 to over 400 participants. Marketing BC's mineral wealth and investment potential. MMRD Regional Director/staff; GSB Director/staff usually attend.
11-17	Yukon Geoscience Forum, Whitehorse, YT. November 17-20 Technical conference with broad representation from Yukon mining and proximal areas of BC and Alaska. 300 - 400 participants. Northwest Regional Geologist and GSB geologist usually attend.
18-24	
25-Dec 1	
	December 2013
2-8	
9-15	
16-22	
23-29	
30-Jan 5	
	January 2014
6-12	
13-19	Vancouver Resource Investment Conference (Cambridge), Vancouver Convention Centre, Vancouver, BC, January 19-20. This investors' conference held annually that attracts thousands of investors and hundreds of BC mining companies. Director, BC Mineral Development Office and Chief Geologist usually attend.
20-26	
27-30	Mineral Exploration Roundup, Vancouver Westin Bayshore, Vancouver, BC, January 27-30. International audience largely from mineral exploration industry with some from the mining and financial sectors. Attracts more than 6,000 registrants. MMRD presents several geoscience talks. Marketing BC's mineral wealth and investment potential. Minister, DM, ADM of MMRD, Chief Geologist, Chief Inspector of Mines, senior staff and all GSB technical staff. The BC Minister traditionally opens Roundup.
27-Feb 2	

# Calendar of Events June 2013 to May 2014

	February 2014
3-9	
10-16	
17-23	
24-Mar 2	
	March 2014
3-9	<b>Prospectors and Developers Association of Canada, Toronto, Ont., March 2-5, 2014.</b> Metro Toronto Convention Centre. Largest mineral industry conference in the world with more than 12,000 participants. Large BC booth and staff marketing BC's mineral wealth and investment potential. Minister, DM, ADM, Chief Geologist and several staff attend.
10-16	
17-23	
24-30	
31-Apr 6	
	April 2014
7-13	
14-20	<b>REG Conference, Kamloops, BC, April 8-12</b> . Key meeting/technical conference to reach companies and prospectors exploring in BC. The provincial review of exploration activity that attracts 400 or more mineral exploration industry personnel. MMRD contributes 7 or 8 regional geologists and geoscience presentations. Marketing BC's mineral wealth and investment potential. Minister, DM, ADM, geologists.
21-27	
28-May 3	MABC Mining Week, Vancouver, BC. As declared by the legislature of BC, there is a week in May dedicated to BC Mining Week. Mining is one of BC's largest and oldest industries and BC Mining Week is an opportunity to recognize and celebrate the importance of the modern industry and promote awareness of the role that new technology plays in keeping industry competitive while maintaining a solid commitment to environmental and reclamation standards. Activities are planned for Vancouver and communities all around the province of BC. (Contact MABC)
5 11	May 2014
3-11	
12-18	Canadian Institute of Mining Metallurgy and Petroleum (CIM), Vancouver Convention Centre, Vancouver, BC, May 11-14. Key Technical conference for the provincial, national and international review and knowledge transfer on technical mining issues. Attracts 500 participants from industry and government. Usually attended by BC's Chief Inspector, Deputy Chief Inspectors, mine inspectors and geologists.
19-25	Geological Association of Canada Annual Meeting, Fredericton, NB.
	This annual national geoscience meeting. Professional training opportunity for GSB.
26-Jun 1	

# Legislation

#### **BC Hydro Public Power Legacy and Heritage Contract Act** (brought into force November 2003)

The *B.C. Hydro Public Power Legacy and Heritage Contract Act* protects public ownership of BC Hydro's generation, transmission and distribution assets. It is also the enabling legislation that allows for a Heritage Contract to be established between BC Hydro generation and distribution lines of business, which will ensure BC Hydro ratepayers continue to benefit from the low cost heritage assets.

#### Coal Act (brought into force April 2004)

The *Coal Act* governs the management of Crown coal rights including tenure issuance and administration. The Act defines the rights of exploration and production on Crown coal tenure.

#### Clean Energy Act (brought into force June 2010)

The *Clean Energy Act* builds on the foundation of the BC Energy Plan and the Climate Action Plan and has three overarching goals: promoting electricity self-sufficiency, creating jobs and reducing greenhouse gas emissions. Its more specific goals include: expediting clean energy investments, protecting B.C. ratepayers, ensuring competitive rates, encouraging conservation, strengthening environmental protection and promoting regional job creation and First Nations' involvement in clean electricity development opportunities.

#### Energy Efficiency Act (brought into force May 1991)

The *Energy Efficiency Act* regulates the manufacturing and sale of energy devices and establishes prescribed energy standards, which energy devices must meet.

#### Fort Nelson Indian Reserve Minerals Revenue Sharing Act (brought into force October 1980) (potentially shared with Ministry of Natural Gas Development)

The Fort Nelson Indian Reserve Minerals Revenue Sharing Act gives force and effect to a revenue sharing agreement with Canada over minerals, including coal, petroleum and natural gas, taken from the Fort Nelson Indian Reserve. Under the agreement, the Province collects revenues arising from exploration and development of the resources. The Province shares these revenues 50/50 with Canada, on behalf of the Fort Nelson First Nation. This Act mirrors federal legislation related to the agreement, and is linked to the *Indian Reserve Mineral Resource Act*.

Legislation

Page 1 of 4

## Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act (brought into force January 2010)

The Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act establishes a framework to reduce carbon dioxide emissions from transportation fuels and sets out requirements for renewable fuel content in, and greenhouse gas emissions from, transportation fuels.

## Hydro and Power Authority Act (brought into force March 1964)

The *Hydro and Power Authority Act* establishes BC Hydro and Power Authority (BC Hydro) as a Crown corporation. The Act lays out BC Hydro's powers and its mandate.

#### Hydro Power Measures Act (brought into force March 1964)

The *Hydro Power Measures Act* is the legislation related to the acquisition of British Columbia Electric Company Ltd. in the early 1960's. BC Electric was amalgamated with the British Columbia Power Commission in 1965 to create BC Hydro.

## Indian Reserve Mineral Resource Act (brought into force July 1943)

The *Indian Reserve Mineral Resource Act* gives force and effect to a revenue sharing agreement signed in 1943 with Canada over minerals, excluding coal, oil and natural gas and specified surface materials, taken from Indian Reserves. Under the agreement, the Province is to collect all revenue, which is then, shared 50/50 with Canada. For the agreement to apply, the mineral rights in a reserve must first be surrendered by the First Nation to Canada pursuant to the *Indian Act*. This Act mirrors federal legislation related to the agreement.

## Mineral Land Tax Act (brought into force June 1973)

The *Mineral Land Tax Act* provides for the imposition of a property tax on freehold privately owned subsurface mineral (including coal, petroleum and natural gas) ownership.

#### Mineral Tax Act (brought into force January 1990)

The *Mineral Tax Act* provides for a tax on the production of minerals (as defined in the *Mineral Tenure Act* and coal) taken from any mine, whether freehold or leased rights, based on the net profit of the mine.

## Mineral Tenure Act (brought into force August 1988)

The *Mineral Tenure Act* governs the management of Crown mineral rights, excluding rights to coal, petroleum and natural gas. The Act defines who may explore for and produce Crown minerals, sets the framework for the provision of mineral tenure and provides for administration of tenures. All land in the province is open to mineral exploration unless otherwise restricted under the Act.

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#### Mines Act (brought into force July 1990)

The *Mines Act* is the primary regulatory mechanism for mining in British Columbia. The Act provides for the appointment and powers of inspectors, sets out requirements for obtaining a permit, establishes advisory committees, provides mechanism for developing the Health, Safety and Reclamation Code, sets offence penalties for non-compliance with orders, establishes mine managers' responsibilities and establishes a mine reclamation fund for each mine..

## Mining Right of Way Act (brought into force September 1989)

The *Mining Right of Way Act* provides for the ability of a holder of a recorded claim, under the *Mineral Tenure Act*, to gain access over private and Crown land for purposes of constructing, maintaining, and operating facilities necessary for the exploration development and operation of mines. The Act sets some limits on what can be taken and used, provides for application of the *Expropriation Act* if consent of the private land holder is not obtained and provides direction for multi-user use of access roads.

# *Ministry of Energy and Mines Act* (brought into force November 1983) (shared with Ministry of Natural Gas Development)

The *Ministry of Energy and Mines Act* defines the duties, powers and functions of the Minister in relation to energy, mineral and petroleum resources that are assigned to the Minister and that are not assigned to another Minister, ministry, branch or agency of the government. The Act enables the Minister to approve the funding of infrastructure development to facilitate exploration and development of energy, mineral and petroleum resources.

## Power for Jobs Development Act (brought into force December 1997)

The *Power for Jobs Development Act* allows the Province to facilitate the establishment of new businesses, the expansion of existing businesses in British Columbia, or support businesses under the Job Protection Commission (since eliminated), by providing 'development power rates' where electricity costs are a critical factor to the businesses' viability. The Power for Jobs program was cancelled in 2001, however the Act has been maintained to facilitate the management of existing Power for Jobs contracts.

# Special Accounts Appropriation and Control Act s.9.5 [Innovative Clean Energy Fund]) (brought into force September 2007)

Section 9.5 of the *Special Accounts Appropriation and Control Act* establishes the Innovative Clean Energy (ICE) Fund special account and outlines the revenue received through the ICE Fund Levy in the *Provincial Sales Tax Act*. Eligibility for clean energy and energy efficiency projects, programs, and initiatives are identified.

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# West Kootenay Power and Light Company Act, 1897 (Private Act) (brought into force May 1897)

The West Kootenay Power and Light Company Act, 1897 is a Special Act of the Legislature. In the days before the Business Corporations Act (or its precursor), special acts of the legislature were required to create corporations, and the West Kootenay Power and Light Company Act, 1897 was used to incorporate the West Kootenay Power and Light Company which is now part of FortisBC.

Legislation

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Legislation

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Ministry of Energy, Mines and Natural Gas and Minister Responsible for Housing

# 2013/14 – 2015/16 SERVICE PLAN



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Ministry of Energy, Mines and Natural Gas and Minister Responsible for Housing see Ministry Contact Information on page 38 or contact:

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

PO BOX 9319 STN PROV GOVT VICTORIA, BC V8W 9N3

or visit our website at *http://www.gov.bc.ca/ener/* 

Published by the Ministry of Energy, Mines and Natural Gas and Minister Responsible for Housing

#### Message from the Minister and Accountability Statement



Since its early days as a province, British Columbia has relied on natural resources to power its economy. Strategies for natural gas, liquefied natural gas, and for mineral exploration and mining, released in 2012, aim at boosting this traditional advantage, to the benefit of all British Columbians.

British Columbia's Natural Gas Strategy and Liquefied Natural Gas: A Strategy for B.C.'s Newest Industry were launched February 3, 2012. Liquefied natural gas projects on British Columbia's northwest coast could add more than \$1 trillion to the province's Gross Domestic Product over the next 30 years. Between 2013 and 2022, tens of billions of dollars are projected to be invested in liquefied natural gas projects in British Columbia, requiring significant

numbers of skilled workers during construction and to support ongoing operations. The liquefied natural gas strategy aims for three operating facilities by 2020. These projects will diversify B.C's markets in natural gas, as well as take advantage of much higher natural gas prices in the Asian markets than in North America. Major global and domestic industrial interests are partnering on projects of such magnitude that British Columbia's emerging liquefied natural gas industry has the potential to be the game changer that can transform our economy and generate a lasting legacy.

This diversification into markets with higher returns is particularly important in light of historically low North American natural gas prices over the last year, causing government revenue to fall significantly. British Columbia's developing ability to sell this important resource to new, more lucrative markets will add long-term stability to the provincial economy. In the fall of 2012 the Government announced a new installment of the infrastructure royalty credit program to support the capital needs of the province's upstream natural gas industry. Development of the 21 projects in northeast British Columbia resulting from the \$120 million program will generate more than \$260 million in new capital spending and create 1,600 construction jobs.

Mineral exploration and mining form another critical part of British Columbia's natural resources heritage, and these activities continue to make strong contributions both to government revenues and the provincial economy. More than half of Canada's mineral exploration companies are based in Vancouver, and 2011 was a record year in terms of the production value of the B.C. mining industry. To build on this success, on May 16, 2012, the government released *British Columbia's Mineral Exploration and Mining Strategy*. The strategy outlines six key steps to increase investment, expand job creation, develop new economic opportunities, protect the environment and build a better quality of life for future generations. By developing eight new mines and expanding nine existing ones by 2015, British Columbia will create 5,000 new direct and indirect jobs. These new and expanded mines will bring in more than \$150 million annually in government revenue. *Canada Starts Here: The BC Jobs Plan*, released in 2011, committed to reducing the backlog of mineral exploration permits, and the Ministry is well ahead of its target.

Liquefied natural gas facilities and mines require considerable amounts of power. An amendment to the *Clean Energy Act* approved by the legislature in the Spring of 2012 allows for the greater use of gas-fired electricity by liquefied natural gas projects. New electricity transmission infrastructure in the northwest region will help meet that commitment.

The Northwest Transmission Line will open new areas to mining, while allowing northwest communities currently relying on diesel generators to switch to cleaner electricity. When completed in 2014, it will also provide a secure interconnection point for clean generation projects. The Dawson Creek/Chetwynd Area Transmission Project, also expected to be finished in 2014, will serve the South Peace region, benefitting the regional economy by making clean power available to natural gas and other industrial customers, as well as residents.

The Ministry plays a major role in housing British Columbians. The Residential Tenancy Branch supports successful tenancies by providing information to landlords and tenants about their rights and responsibilities and provides a dispute resolution process that balances the needs of both groups. In 2012 a new Building Code, Plumbing Code and Fire Code were released, which describe standards for health, safety, accessibility and the fire and structural protection of buildings in British Columbia.

Providing housing and supports to those in greatest need are key priorities of the provincial housing strategy, *Housing Matters BC*. Almost 100,000 B.C. residents benefit from provincial housing programs. Through strong partnerships with local governments and community organizations, the Ministry continues to help increase the available housing options.

The Ministry remains committed to managing the liquor and gaming industries to protect the public interest and ensure public safety. It continues to enforce the requirement that liquor licensees and staff do not serve or sell liquor to minors. The Ministry is also working with the gaming industry to prevent criminal attempts to legitimize illegal proceeds of crime in gaming facilities in the province.

The Ministry of Energy, Mines and Natural Gas and Minister Responsible for Housing's 2013/14 - 2015/16 Service Plan was prepared under my direction in accordance with the *Budget Transparency and Accountability Act*. I am accountable for the basis on which the plan has been prepared.

## Honourable Rich Coleman

Minister of Energy, Mines and Natural Gas and Minister Responsible for Housing February 7, 2013

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# **Purpose of the Ministry**

The Ministry of Energy, Mines and Natural Gas is the key provincial ministry responsible for British Columbia's energy and mining sectors, which comprise public and private interests that explore for, develop and use oil and gas, electricity, clean or renewable energy (biomass, biogas, geothermal, hydro, solar, ocean, wind or any other alternative energy resource), coal, minerals, and renewable and low carbon fuels. Through teamwork and positive working relationships with its clients, the Ministry facilitates B.C.'s thriving, safe, environmentally responsible and competitive energy and mining sectors to create jobs and economic growth in communities. In developing energy and mining sector policies, legislation and guidelines, the Ministry consults with other ministries and levels of government, energy and mining companies, First Nations, communities, environmental and industry organizations, and the public.

A key component of the Ministry's mandate is to develop tenure, royalty and regulatory policy for British Columbia's oil and gas industry, thereby promoting the effective and environmentally responsible management of the province's oil and gas resources. The Ministry provides a range of oil and gas related services, including the issuance of Crown subsurface resource rights, royalty programs, public geoscience and policies to address potential future resource opportunities, such as unconventional oil and gas resource development. The Ministry has created a Liquefied Natural Gas Task Force which is leading an inter-agency team to support the development of a new liquefied natural gas industry in British Columbia.

Working with its stakeholders, the Ministry develops policies, programs and legislation to maintain B.C.'s mining sector competitiveness and encourage investment in mineral exploration and mining in the province. The Ministry develops and delivers geoscience databases and surveys, and provides funding to other organizations to collect and publish geoscience information. The Ministry is responsible for permitting and inspecting major mining projects, promoting mineral exploration and providing assistance and advice to advance and support continued development of the sector.

The Ministry develops and oversees British Columbia's policies with regard to electrical power generation and transmission. It is responsible for initiatives that promote new energy technologies, energy efficiency and conservation, and alternative energy resources, including renewable and low carbon transportation fuels. The *Clean Energy Act* builds upon B.C.'s unique wealth of clean, renewable energy resources and sets the foundation for significant investments in clean, renewable energy across the province while keeping electricity rates affordable for British Columbians. Through the Innovative Clean Energy Fund, the Ministry is helping to invest in new technologies to respond to global energy and environmental challenges.

The Ministry strives to ensure that British Columbians have access to safe, affordable and appropriate housing through market and non-market housing policy and programs, building and safety policy and the development of technical codes and standards, and services for landlords and tenants. With regard to housing issues, the Ministry's stakeholders are the citizens of British Columbia and their representatives at all levels of government, First Nations, community groups, non-profit societies, schools, service organizations, businesses and industry associations. Key to the Ministry's success is its ability to maintain strong, collaborative relationships with stakeholders, partner agencies and other levels of government.



Camas Gardens, a supportive housing building near downtown Victoria, was constructed to high sustainability standards. The building's 44 units provide self-contained bachelor and one-bedroom apartments for individuals who are homeless or at risk of homelessness, including those who may be facing mental health or addiction challenges. The building is managed by Pacifica Housing, funded in part by BC Housing. Camas Gardens won the 2012 Canadian Wood Council BC Wood Design Award in the multi-family category.

The Ministry works with its stakeholders and partners on liquor licensing, enforcement and distribution, as well as gaming policy, regulation and enforcement, problem gambling programs, licensing of charitable gaming, and oversight of horse racing.

The Ministry is responsible for administering all or parts of 44 statutes pertaining to the energy, mining, gaming, liquor distribution and housing sectors, and has policy responsibilities under the *Utilities Commission Act.* The Ministry is responsible for the following six Crown Corporations: the British Columbia Hydro and Power Authority (BC Hydro), the Columbia Power Corporation, the Oil and Gas Commission, the British Columbia Housing Management Commission (BC Housing), BC Pavilion Corporation (PavCo) and the British Columbia Lottery Corporation. The Ministry also has responsibility for the Liquor Distribution Branch.

# **Strategic Context**

British Columbia is in the fortunate position of having abundant energy and mineral resources as well as innovative, growing energy and mining sectors. B.C. also has robust buildings in which our citizens live, learn and work, supported by a vibrant construction and housing sector.

People, resources and technology combine to provide the energy and mineral products and services required by British Columbians and our export customers, create business and investment opportunities, and develop and market new products and technologies for energy production, use and conservation. The energy and mining sectors help to meet the daily needs of families and businesses, provide important inputs to industrial and manufacturing processes, and generate new jobs, investment and government revenue. The Ministry is committed to working with natural resource sector agencies, communities, First Nations, industry and environmental organizations to ensure that the continued growth, exploration and development of our energy and mining sectors and resources are socially and environmentally responsible.

The Economic Forecast Council estimates that British Columbia's real Gross Domestic Product (GDP) grew by 2.1 per cent in 2012 and projects that the rate of real GDP growth will remain at 2.1 per cent in 2013, before increasing to 2.5 per cent in 2014. Risks to British Columbia's economic outlook include a return to recession in the US; the European sovereign debt crisis threatening the stability of global financial markets; slower than anticipated economic growth in Asia dampening demand for BC exports; and a weakening of the US dollar disrupting the financial markets and raising the cost of BC exports abroad.

Keeping British Columbia's electricity prices affordable is a government priority. BC Hydro has provided relatively low-cost power to the citizens of B.C. for over 50 years, thanks to the Province's heritage assets, which include historic electricity facilities such as the major dams on the Peace and Columbia Rivers. The establishment of the Heritage Contract ensures that B.C. ratepayers continue to benefit from the low-cost electricity generated by these assets. The British Columbia Utilities Commission sets domestic rates based on costs.

Increasing demand for electricity, changing patterns of use and an aging infrastructure require attention. BC Hydro is planning a \$6 billion capital program including:

- The Interior to Lower Mainland transmission expansion project—a 250 km 500 kV transmission line along the existing right-of-way between Merritt and Coquitlam. This \$700 million project is the largest transmission project in the last 30 years.
- The \$222 million Dawson Creek/Chetwynd Area Transmission Project will provide reliable power to the South Peace region, which has a greater demand for electricity than any other region of the province.
- Smart Transmission Grid and Meters will improve reliability, outage detection and reduce electricity use, while delivering net benefits to ratepayers. The \$900 million project is underway and nearing completion.
- The Ruskin Dam and Powerhouse \$700 million upgrade is underway and is expected to be completed by 2018. The 80-year-old facility is in need of a major upgrade.

- Operating since 1947, the John Hart dam needs to be replaced. Construction of this \$1.1 billion project is expected to begin in 2013 and will address seismic, reliability, and both fish and fish habitat concerns.
- The installation of two additional turbines in existing turbine bays at Mica Generating Station is underway. The \$700 million project will provide 1,000 MW of capacity. The target in-service date for the 5th turbine is October 2014; the 6th turbine the following year.

The 2010 *Clean Energy Act* set the policy framework for the future of electricity self-sufficiency, job creation and reduced greenhouse gas emissions in B.C. In 2012, the Province's electricity self-sufficiency definition was changed by: (i) an amendment to the *Electricity Self-Sufficiency Regulation* under the *Clean Energy Act*, to reflect average water levels rather than critical water levels; and (ii) repealing the requirement in the *Clean Energy Act* for BC Hydro to provide, by 2020, 3,000 gigawatt hours of "insurance" electricity. This approach protects B.C. ratepayers and ensures the development of sufficient new power to meet our needs, while avoiding overbuilding to supply a U.S. market which currently does not require the power.



Data Source: Ministry of Energy, Mines and Natural Gas, using data from *Selected Economic Statistics*, June 2012, BC Stats. Note: 1 terawatt-hour = 1,000 gigawatt-hours. Generation is by calendar year.

Due to the heightened awareness of the need to address climate change, consumers continue to focus on reducing their energy consumption, improving energy efficiency, and supporting cleaner energy supply options. By reducing their consumption and choosing cleaner fuels, British Columbians can reduce their greenhouse gas emissions. B.C. has the opportunity to harness its significant renewable energy resources and become a clean-energy powerhouse. Both electricity and natural gas have the potential to help people in B.C. and other jurisdictions reduce their carbon emissions.

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The Ministry's three sector strategies, for natural gas, liquefied natural gas, and mineral exploration and mining, all directly support *Canada Starts Here: The BC Jobs Plan (BC Jobs Plan).* 

The challenges and opportunities in B.C.'s natural gas industry and the Province's initiatives to address them are outlined in *British Columbia's Natural Gas Strategy* released in February 2012. B.C.'s estimated natural gas resources are substantial. Despite relatively low North American natural gas prices, production levels have been maintained in the B.C. portion of the Western Canadian Sedimentary Basin. Future growth is expected to come from significant investment to develop the Province's large shale and tight gas deposits, such as in the Montney and Horn River areas of Northeast B.C.



An exploration rig drilling a shale gas well in the Kiwigana area of the Horn River Basin, in northeast B.C. This rig is powered by natural gas, an example of industry efforts to reduce emissions and the overall footprint of development.

As described in *Liquefied Natural Gas: A Strategy for B.C.'s Newest Industry*, the development of liquefied natural gas export capacity in B.C. to access stronger markets in Asia is critical to sustaining the growth of B.C.'s natural gas industry. This is a unique opportunity for B.C. and timing is critical, with more than 100 proposed liquefied natural gas export projects competing globally. British Columbia's strong competitive position has attracted investment interest from around the globe, including international energy companies such as: Shell and partners PetroChina, Korea Gas and Mitsubishi (LNG Canada partnership); CNOOC and the Nexen/Inpex partnership; BG Group and its pipeline partner Spectra Energy; Apache Canada and partner Chevron Canada (Kitimat LNG); the LNG Partners and Haisla Nation; and the PETRONAS/Progress Energy Resources initiative (Pacific Northwest LNG). In addition there are several industrial interests from the Asia Pacific region and from Canada. Liquefied natural gas provides an abundant, lower carbon fuel than coal or oil for

electricity generation and transportation. Also, British Columbia's liquefied natural gas can have lower lifecycle greenhouse gas emissions than anywhere else in the world with the potential to use B.C.'s clean electricity to power liquefied natural gas plants.

Since the BC Jobs Plan was launched in September 2011, two liquefied natural gas proponents have received 20-year export licences from the National Energy Board. In February, 2013, the National Energy Board granted a third export license for 25 years to the LNG Canada partnership for their large export proposal. The economic prospects of this proposed facility are significant and will create thousands of jobs for British Columbians. The Coastal Gas Link Project will develop approximately 700 kilometres of pipeline to link Montney Basin, near Dawson Creek, to Kitimat.

The Government, BC Hydro and several liquefied natural gas proponents are negotiating power supply arrangements. The requirement for 93 per cent clean or renewable electricity supply was amended by regulation July 24, 2012, in order to exempt gas-fired electricity used to liquefy natural gas and create a more competitively-priced power portfolio. Since electricity supply agreements could have a material impact on B.C.'s future power needs, BC Hydro is now required to submit its Integrated Resource Plan<sup>1</sup> in August 2013.



Data Source: Ministry of Energy, Mines and Natural Gas, using data from BC Stats. The jobs are in oil and gas extraction; mining and mix mining; and support activities for mining, oil and gas extraction. The numbers of jobs are annual averages, and data is for calendar years.

British Columbia is Canada's largest producer of copper and its largest exporter of metallurgical coal. B.C.'s mining sector is a key economic driver: the value of commodities produced by B.C. mines grew to approximately \$8.6 billion in 2011, a 20 per cent increase from the previous year. There are currently ten coal mines in operation, nine metal mines, 30 industrial mineral mines, and more than 50 construction aggregate mines. Together, they directly employ 12,500 British Columbians. Due to

<sup>&</sup>lt;sup>1</sup> The Integrated Resource Plan specifies BC Hydro's plan for conservation and for acquiring sufficient generation and transmission facilities to meet customers' anticipated future electricity needs, reliably and cost-effectively.

increased demand for B.C.-produced minerals and coal on world markets, both mining company revenues and provincial mineral tax revenues are expected to continue to increase.

The *BC Jobs Plan* committed to the opening of eight new mines and the expansion of nine existing mines by 2015. In 2012, one mine began production and four were under construction. Five mine expansions have been permitted since the *BC Jobs Plan* was released. The increased mining activity provides jobs and economic opportunities in B.C.'s rural communities.

The Copper Mountain Mine outside Princeton is now fully operational, employing 270 people full time. The New Afton Mine near Kamloops opened in September 2012 and employs over 400 people, including more than 100 BC Aboriginal Mine Training Association candidates. New Afton is expected to yield an average of 85,000 ounces of gold and 75 million pounds of copper annually over its 12-year life. At the Mount Milligan mine site, northwest of Prince George, 1,000 jobs were created at the peak of construction in the summer of 2012, and once it is fully operational, the mine will provide 400 full-time jobs over its 15-year expected life. Smaller mines are also planned or under construction, such as the Treasure Mountain silver, lead and zinc mine, which received its *Mines Act* permit in May 2012. While mine developments result in significant numbers of high-paying jobs and substantial, long-term capital investments, mining uses less than one half of one per cent of the provincial land base, and over 20,700 hectares of former mines have been reclaimed.

The Government is playing a key role in facilitating investment in B.C. mines, mineral exploration, oil and gas, and liquefied natural gas projects through trade and investment missions to Asian countries such as Japan, Korea, China and India. The Ministry produces publications and is committed to leading-edge technologies in support of these efforts. British Columbia, in particular Vancouver, is the centre of one of the world's largest pools of international expertise in geology, mine engineering, project financing, and environmental sustainability.

The British Columbia government regulates and monitors the liquor industry to protect the public from the harm that may be caused by illegally making and selling liquor or products that contain alcohol. Through the *Liquor Control and Licensing Act* and its regulations, and by requiring anyone who holds a liquor licence to meet strict terms and conditions, the government works to prevent under-age drinking, the over-consumption of liquor, overcrowding or unsafe conditions in restaurants, bars and pubs, the misuse of non-beverage products containing alcohol, and to minimize the potentially negative impact of liquor sales on neighbourhoods and communities.

The housing needs of the vast majority of British Columbians are served through the private market. Recognizing the importance of the planning and land use tools they have, local governments are increasingly innovative and involved in affordable housing, looking for greater diversity in housing type and form. The Ministry is working with local government and other key stakeholders to develop initiatives to increase the supply of small, low-cost housing. With approximately one million British Columbians now living in strata properties, and with stratas making up more than half of new residential construction, the need to ensure effective strata regulation and self-governance is increasingly essential.

#### Ministry continues housing support programs

Providing housing and supports to those in greatest need are key priorities of the provincial housing strategy, Housing Matters BC. Since 2006, the B-C. government has doubled the number of provincially subsidized apartments and shelter spaces available for the homeless and those at risk of homelessness. There are 1,600 year-round emergency shelter spaces available, extreme-weather shelters that open during the cold winter months and more than 2,200 new supportive housing units being built through partnerships with local governments.

"Since the release of our housing strategy in 2006, we've been able to provide thousands of people with chances to stabilize and rebuild their lives. This would not have been possible without the help of numerous partners who share our commitment for providing new opportunities and hope when it's needed most."— Rich Coleman, Minister Responsible for Housing

About 98,900 households throughout B.C. are likely to receive subsidized housing assistance in 2013/14. This accounts for approximately six per cent of all housing in the province and includes 26,870 low-income households receiving rental assistance in the private market. In 2010, the building construction sector in B.C. accounted for approximately 2.9 per cent of Gross Domestic Product and 4.7 per cent of employment in the province. Inconsistent application of building codes and standards increases the cost of construction, reducing housing affordability.

The Ministry annually assesses external factors and the risks and opportunities associated with the factors described above as part of its strategic planning process. As risks and opportunities are identified, they are managed and/or mitigated by the Ministry through a range of strategies so that the Ministry's goals and objectives can be achieved. The following paragraphs discuss external factors that may affect the Ministry's operations in the coming year and how these are being managed.

**Competitiveness** - Investment dollars move readily around the globe to the jurisdictions that provide the highest net return for given levels of risk. The Ministry monitors changes in British Columbia's competitiveness as compared to other jurisdictions and implements strategies to maintain its competitive position and investment attractiveness. The Ministry continues to streamline and update legislative and policy frameworks to minimize the regulatory burden while maintaining environmental protection. Public geoscience data, maps and other studies, generated by the Ministry and Geoscience BC, provide key information that allows natural gas and mineral exploration companies and prospectors to target areas for investment in B.C.

**Skilled Workers** - In the last decade, the rapid expansion of B.C.'s energy and mining sectors has resulted in a growing number of permanent, high-income employment opportunities for British Columbians. The mining sector alone is expected to have 10,000 job openings by 2020, including those in key occupations such as machinery and transportation equipment mechanics, primary production workers and vehicle drivers. One of the challenges facing resource-based industries today is attracting young people into their workforces as the average age of the workforce increases. The *BC Jobs Plan, British Columbia's Natural Gas Strategy* and *British Columbia's Mineral Exploration and Mining Strategy* outline approaches to skills training and labour which focus on attracting,

developing, retaining, and educating individuals for employment opportunities in the province's resource sectors. As building construction becomes increasingly complex, there is a need to train and retrain the workforce to keep pace with innovation, new technologies and new building code requirements.

**Energy and Mineral Commodity Markets** - British Columbia sells large and growing volumes of energy and mineral products in global commodity markets, which are subject to price and demand fluctuations. In 2011, the province exported a total of \$13.6 billion worth of energy and metallic mineral products, which amounts to 41 per cent of all B.C. exports. These exports boost the provincial economy, bringing additional jobs, investment and government revenue. British Columbia will remain a significant supplier of natural gas to North American markets and is directly supporting expansion of its market access to Asia through the development of a liquefied natural gas industry. The Ministry faces a timing risk to bring liquefied natural gas projects on line by 2020, as 2015 – 2020 is a critical window for development to meet Asian demand. The Ministry continues to promote exploration and development of shale and tight gas resources that are the feedstock for both domestic and export natural gas supplies.



**Data Source**: Ministry of Energy, Mines and Natural Gas, using data from BC Stats. Data is by calendar year. Notes: (i) Metallic mineral products include: copper and molybdenum ores and concentrates; and unwrought aluminum and zinc. It does not include fabricated metal products or coal. (ii) Energy products include natural gas, coal, electricity and petroleum products.

**First Nations in Energy and Mining -** Increased collaboration between First Nations and mineral exploration, mining, oil and gas, and energy companies is resulting in benefits for all parties. For First Nations there are jobs, contracts and resource revenue-sharing opportunities. The new First

Nations Clean Energy Business Fund provides resource revenue sharing for impacted First Nations from new private clean and renewable electricity projects, as well as capacity and equity funding.

New arrangements with First Nations continue to be pursued, to enable opportunities in Aboriginal communities and to provide regulatory certainty for proponents. A recent example is the agreement reached in 2012 among Canada, B.C. and the Haisla First Nation for the Kitimat LNG project, to be located on a Haisla reserve at Bish Cove in the Douglas Channel. The agreement and accompanying regulation under the federal *First Nations Commercial and Industrial Development Act* enables clear application of provincial law to apply on the Haisla reserve so that the LNG facility may be regulated, primarily by the provincial Oil and Gas Commission, in a similar way to other projects in B.C. Northwest B.C. First Nations are generally supportive of the development of a liquefied natural gas export industry in B.C., which holds significant economic development opportunities for First Nations. Fifteen First Nations have endorsed an economic agreement with the province in support of the Pacific Trails Pipeline that will transport natural gas to the Kitimat LNG project.

In addition, the Province has signed economic and community development agreements with both the McLeod Lake Indian Band and the Nak'azdli First Nation for the Mount Milligan mine (located between Mackenzie and Fort St. James), and with the Skeetchestn (Skeet-che-sen) Indian Band and the Tk'emlups (Kamloops) Indian Band (which together compose the Stk'emlúpsceme of the Secwepeme Nation) for the New Afton mine near Kamloops. The Province is currently in discussion with a number of other First Nations about possible economic and community development agreement opportunities.

**Project Assessments -** In July 2012, the federal government amended the *Canadian Environmental Assessment Act* in a number of important ways. These amendments include: new "start-to-finish" timelines; the introduction of new compliance functions; and a requirement that the federal government issue a federal "decision statement" at the conclusion of each environmental assessment. British Columbia is actively pursuing the goal of "one project, one environmental assessment" with the federal government, with the aim of reducing duplication and overlap while increasing certainty and predictability, and maintaining rigorous environmental standards. In addition, the Ministry is developing an agreement with Canada that will address any regulatory overlaps that pertain to liquefied natural gas plant operations on federal port lands in Prince Rupert. The goal is to have regulatory and environmental assessment certainty for liquefied natural gas proponents, government agencies and the public.

**Housing Affordability** - B.C. has the least affordable housing in Canada. Rental accommodation and home ownership present particular challenges for low to moderate income families with children. Historically, high demand and a lack of purpose-built rental accommodation have contributed to low vacancy rates and high rents in B.C. Recently, however, rental vacancy rates have increased as a result of individuals moving from apartments in purpose-built rental buildings to other forms of housing, including homeownership, investor-owned condominiums and secondary suites.

**Demographic Shifts** - Innovative forms of housing are required to meet population changes including the aging population (accessibility and support service requirements/aging safely); declining average household size; the growth of immigrant populations; and a rapidly growing Aboriginal population.

**Aboriginal Housing** - The Provincial Government recognizes the continued need for appropriate offreserve Aboriginal housing. A disproportionate number of Aboriginal households are in need of safe, well constructed housing. Aboriginal persons continue to be overrepresented in the homeless population, and underrepresented among British Columbian homeowners. The Province acknowledges the importance of working in partnership and meets regularly with federal and First Nations partners.

**Growing Importance of Condominiums** - Due to the scarcity and high cost of developable land and the increasing number of smaller households, more than half of newly built housing in B.C. is strata titled. Multifamily construction also supports higher urban densities and more viable public transit systems.

**Construction Sector Innovation** - The building regulatory system needs to be more flexible and responsive to the rapid pace of construction innovation and the emergence of new products and technologies. This will increase productivity in the construction sector, leading to improved standards and housing affordability, while enhancing provincial objectives relating to health, safety and energy efficiency.

#### **Modernizing Liquor Regulations**

The B.C. government is modernizing liquor regulations – providing industry with additional flexibility while ensuring measures remain in place to keep public safety a priority. Changes made during the 2012/13 fiscal year include:

*Liquor in Theatres -* Movie theatres and live-event theatres in B.C. can now apply for a licence to serve alcohol during the screening of a film when no minors are present.

**Corkage – Bring Your Own Bottle** - Restaurant patrons wanting to bring their own wine into a licensed dining establishment may now do so at participating restaurants, giving the restaurant industry more flexibility in terms of the services it can offer its customers.

**Licensing Caterers** - New legislation will allow dedicated catering businesses and existing licensed establishments – such as restaurants, hotels and conference centres – to apply for a licence to serve liquor at catered events. This expansion of services will make it easier for clients to have liquor service at catered events, which will not only help support the hospitality industry, but also strengthen B.C.'s tourism appeal.

Importing Canadian Wine - BC residents are now allowed to have an unlimited amount of 100 per cent Canadian wine for their personal use shipped directly to their homes from a recognized winery in another province. Also, BC residents returning from another Canadian province can bring back on-their-person up to nine litres of wine of any origin, three litres of spirits, and a combined total of 25.6 litres of beer, cider or coolers for personal consumption. **Gaming** - The increasing complexity of gaming poses new regulatory and enforcement challenges. For example, the introduction of casino-style games offered over the Internet, as well as gaming on mobile devices, mark a significant milestone in the evolution of the gaming industry, requiring regulatory and enforcement practices to evolve along with the industry.

#### **Resource Management Coordination**

When Government's structure to manage Crown land and natural resources was reconfigured in the spring of 2011, it created an improved arena for coordination and integration. The ministries involved included: Aboriginal Relations and Reconciliation; Agriculture; Energy, Mines and Natural Gas; Environment; Forests, Lands, and Natural Resource Operations; and Jobs, Tourism and Skill Training. Under the direction of the Natural Resource Board, these ministries are making bold changes to service delivery in the natural resource sector. This sectoral approach promotes streamlined authorization processes and enhanced access to public services across the province. The reconfiguration facilitates more consistent engagement and consultation with industry, stakeholders, partners and clients. It also enhances inclusion of Aboriginal, economic and environmental considerations into decision making. The ministries are working together to make these improvements and meet the commitments of the *BC Jobs Plan*.

#### **Ministry Commitment to Lean Processes**

As of May 2012, Lean is the process improvement method used by all British Columbia ministries and agencies to improve customer service, build internal capacity and eliminate waste in the form of unnecessary rules, processes and non-essential activities. To implement a Lean culture of innovation, customer focus and continuous improvement, in 2012/13 the Ministry piloted three Lean projects to improve the business processes for natural gas royalty pricing, coal tenure application and residential tenancy dispute resolution. Lean information sessions and ongoing staff training will be offered in the coming years. The Ministry and its staff, with the help of the BC Public Service Agency, will continue to make Lean culture an integral part of the work environment.

#### **Expenditure Restraint Measures**

In support of Government's commitment to balance the budget by 2013/14, the Ministry has initiated expenditure restraint measures, including adhering to government-wide Managed Hiring Guidelines, travel restrictions, and other office and operating cost management measures to achieve efficiencies and savings. The Ministry is committed to meeting its approved budget without negatively impacting service levels.

# Goals, Objectives, Strategies and Performance Measures

A wide range of Ministry strategies are being implemented to facilitate job creation, economic development and the well-being of communities throughout B.C. These strategies include Ministry initiatives in support of the *BC Jobs Plan*, as well as three strategies released in 2012: *British Columbia's Mineral Exploration and Mining Strategy, British Columbia's Natural Gas Strategy* and *Liquefied Natural Gas: A Strategy for B.C.'s Newest Industry*. The Ministry also continues implementation of the *Clean Energy Act*, and the *BC Energy Plan*. The Ministry's performance measures and targets are designed to support our goals.

The Ministry promotes the reliable and environmentally responsible exploration, development and production of oil and gas in B.C. Oil and gas industry investment in B.C. has a strong, positive economic impact, creating significant business and job opportunities in northern communities, and generating revenues to government that support health, education and other services for British Columbians. The Ministry is committed to ensuring B.C. maintains a competitive business environment to attract oil and gas industry investment by providing a modern regulatory framework, improvements to public and private infrastructure, and targeted royalty programs.

The Ministry regularly reviews the legislative, regulatory and policy frameworks associated with oil and gas, mining and alternative energy. As part of this, improving the effectiveness and timeliness of multi-agency federal and provincial reviews of proposed energy and mining projects is a high priority for British Columbia. For oil and gas, changes to the regulatory framework introduced new requirements that ensure exploration and development activities throughout the oil and gas sector are both planned and implemented in a manner that safeguards environmental values. For mineral exploration and mines, the Ministry maintains effective and efficient regulation of the sites through health, safety and environmental best practices.

The *BC Jobs Plan* highlights the importance of the mining sector to the B.C. economy and targets eight new mines to be in operation by 2015, and the expansion of at least nine existing mines. Investments such as the Northwest Transmission Line will facilitate the opening of new areas to mining by providing cleaner, affordable electricity in places where communities currently rely on diesel generators. With its vast reserves of coal, and both metallic and non-metallic minerals, and with the world's largest concentration of mining and exploration companies, B.C. is well positioned to benefit from the surging global demand for mined commodities.

The natural gas and liquefied natural gas strategies highlight the opportunity to develop the significant shale gas deposits in northeast B.C. for both North American and offshore markets. The Ministry is committed to working with First Nations and communities to reach the Province's goals of new investment, job creation, revenue generation and other economic opportunities.

The Ministry promotes development and use of alternative energy technology and energy efficiency measures to minimize waste, increase productivity and lower operating costs, while delivering a healthier living and work environment for British Columbians. The *BC Energy Plan* together with the *Clean Energy Act* foster the development of new, sustainable energy and technology industries. This will ensure more comprehensive and proactive approaches to energy issues in British Columbia for

the next 20 years, and support the delivery of a secure, reliable supply of affordable electricity that is produced in an environmentally responsible way.

There have been several changes in the performance measures for the 2013/14 - 2015/16 Service *Plan.* One performance measure has been dropped: "Annual investment in electricity facilities." The measure does not directly reflect performance for current government policies and programs, following the changes to the definition of electricity self-sufficiency.

Another performance measure, "Total energy savings achieved through electric utility and provincial conservation policies, programs and regulations," has been replaced with an improved version, "Cumulative energy savings achieved each year through energy utility and provincial conservation policies, programs and regulations since 2007/08." By reporting the cumulative energy savings each year rather than energy savings resulting exclusively from new initiatives, the measure more accurately reflects the impact of government policies, programs and regulations on the consumer and ratepayer. For more details, see the discussion section under the performance measure 7 heading.

Two other performance measures have been changed in name only. The name of performance measure 2 has been changed from "Number of operating mines with upgrades or expansions" to "Number of expansions to existing mines," in order to better reflect the language of the *BC Jobs Plan*. The name of performance measure 6 has been changed from "Short term injury rate at B.C. mines" to "WorkSafeBC injury rate at B.C. mines," in order to better reflect the data source.

# Goal 1: Internationally competitive energy, mining and natural gas sectors that contribute to jobs and the economy

# Objective 1.1: New energy and mineral resource projects that support the creation of family-supporting jobs in B.C.

## Strategies

- Work with proponents of liquefied natural gas projects and other ministries to have at least three terminals and associated pipelines in operation by 2020.
- Work with First Nations, communities and Canada to ensure best practices are in place to guide marine traffic and the safe shipment of liquefied natural gas to export markets.
- Support the development of pipelines, roads and electricity infrastructure required for new mines, mine expansions and liquefied natural gas facilities. including the development of industrial land use plans for the Douglas Channel, Kitimat and Prince Rupert areas.
- Work with BC Hydro to ensure an adequate supply of clean electricity is available to support new investments in liquefied natural gas, upstream oil and gas, and mines.
- Continue to develop a coordinated, transparent permitting and approval process with clear timelines for all industrial projects, including natural resource development projects.

- Continuously improve geological and resource assessments for natural gas, geothermal, storage reservoirs, coal, minerals and aggregate through collaboration with industry, industry associations, and academic and research institutes.
- Work closely with the Ministry of Jobs, Tourism and Skills Training to ensure that skills gaps in the workforces of the oil and gas, and mineral exploration and mining sectors are identified and filled.

## Performance Measures 1 and 2: Number of new and expanded mines

Performance Measure	2012/13 Forecast	2013/14 Target	2014/15 Target	2015/16 Target
Number of new mines in operation	2	3	2	2
Number of expansions to existing mines	2	4	2	2

Data Source: Ministry of Energy, Mines and Natural Gas

#### Discussion

The annual targets support commitments in the BC Jobs Plan to have a total of eight new mines in operation and nine expansions to existing mines in place by 2015. The target for total 'Number of expansions to existing mines' remains at six for the two years 2012/13 and 2013/14; however, the year in which the expansions are forecast to occur has been adjusted. These changes are the result of the challenges in predicting the actual timing of mine expansions which are determined by various factors, including market conditions.

The responsibility for meeting the performance targets is shared jointly with the Ministry of Forests, Lands and Natural Resource Operations.

# Objective 1.2: B.C. is positioned as an attractive jurisdiction for investment in the energy and mining sectors and related businesses

## Strategies

- Contribute to trade missions and marketing initiatives led by the Ministry of Jobs, Tourism and Skills Training to attract investment in B.C. energy and mineral projects and business opportunities.
- Further establish B.C. as a recognized centre of excellence for energy and mining expertise, innovation and technology in collaboration with industry, post-secondary institutions, the federal government and provincial agency partners.
- Improve the competitiveness of B.C.'s energy and mining sectors by providing leadership, information, investing in infrastructure, and developing new policies, regulations and programs.
- Maintain B.C.'s competitiveness for investment in upstream natural gas development, and related liquefied natural gas export opportunities, by modernizing petroleum and natural gas tenure legislation, ensuring royalty programs remain highly competitive, supporting infrastructure development and facilitating efficient and timely regulatory review of proposed developments.

- Conduct energy and mining related geoscience research and technical assessments to promote industry investment.
- Work with the Ministry of Forests, Lands and Natural Resource Operations towards an average 60day turnaround time for processing Notice of Work permit applications for mineral and coal exploration activities.
- The Province will continue to work with the federal government to develop a single, effective environmental review process, maintaining the highest standards while eliminating costly and time-consuming duplication.

## Performance Measures 3 and 4: Annual investment in the oil and gas sector, and the mineral exploration and mining sector

Performance Measure	2012/13 Forecast	2013/14 Target	2014/15 Target	2015/16 Target
Annual investment in oil and gas exploration and development <sup>1</sup>	\$4.0 billion	\$4.8 billion	\$5.3 billion	\$7.2 billion
Annual investment in mineral exploration and mines <sup>2</sup>	\$2.2 billion	\$2.8 billion	\$2.4 billion	\$2.6 billion

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

<sup>2</sup> Data Source: Ministry of Energy, Mines and Natural Gas based on calendar year survey results from Natural Resources Canada, Statistics Canada and PriceWaterhouseCoopers.

#### Discussion

Through its strategies to improve B.C.'s competitiveness, the Ministry continuously strives to attract long term investment in B.C.'s energy and mining sectors and related service industries. Such investment creates jobs and business opportunities throughout the province, which in turn contribute to the stability and well-being of B.C. communities. A key challenge to achieving investment targets is that the markets for energy and mineral commodities can be cyclical, as can the levels of investment in these sectors. Financial markets and currency fluctuations also affect investment levels. Streamlined processes for energy and mine project permitting and environmental assessment, along with the timely review of tenure applications, help to reduce risk and sustain investment levels.

Annual investment in oil and gas exploration and development consists of industry investment in acquiring resource rights, geophysical and geological surveys, exploration and production wells, pipelines, development roads and processing plants. Investment in natural gas exploration and production is critical to supporting the creation of a liquefied natural gas export industry in B.C. Within North America, natural gas is shipped by pipeline for use in homes for heating and cooking purposes, and for a wide range of commercial and industrial uses. Natural gas can help reduce carbon dioxide emissions when it is substituted for coal or oil, and is the cleanest burning fossil fuel.

Annual mineral and coal exploration investment includes expenditures on prospecting, geological surveys, mapping, mineral valuation, drilling and rock work. Annual investment in mines includes mine planning, permitting, environmental assessment, construction, operation and reclamation.

The 2012/13 forecast for Performance Measure 3, the annual investment in oil and gas exploration and development, is \$4.0 billion, or approximately 22 per cent less than the \$5.1 billion 2012/13 target provided in the Ministry's 2012/13 - 2014/15 Service Plan. While investment in British Columbia's natural gas sector remains strong relative to other North American jurisdictions, the industry has suffered from unexpectedly low natural gas prices and declining production volumes. As indicated in the B.C. Government's *First Quarterly Report* dated September 13, 2012, these impacts are the result of weak demand and increased supply in North America.

The 2012/13 forecast for Performance Measure 4, the annual investment in mineral exploration and mines, is \$2.2 billion—double the \$1.1 billion 2012/13 target provided in the Ministry's 2012/13 - 2014/15 Service Plan. This is primarily the result of continuing strong demand for mining products. Increased demand has driven mineral exploration, which in turn has resulted in more new mine development and mine expansion projects.



Inside the mill at Endako Mines, northwest of Prince George. An expansion of the mill was commissioned in the summer of 2012, and along with other upgrades to the molybdenum mine, will nearly double the ore processing capacity to 55,000 tonnes daily. The mine employs 420 skilled and professional workers.

# Objective 1.3: Optimal revenue from the development of B.C.'s energy and mineral resources

### Strategies

- Provide the government services needed to respond to increasing economic activity, in particular delivering sound, timely decisions on mining, oil and gas, liquefied natural gas, and related water, Crown land and other permits, authorizations and tenures.
- Monitor and evaluate the performance of B.C.'s energy and mining policies and programs to fully maximize the financial benefit of resource development and use for British Columbians.
- Implement revenue collection mechanisms to address B.C.'s specific challenges that might otherwise slow or hinder the development of oil, gas, coal and mineral resources.
- Continue to hold 12 monthly Crown oil and gas rights sales per year.

#### Royalty Program Supports New Infrastructure Projects in Northeast B.C.

In the fall of 2012, the Province approved infrastructure royalty credits that will lead to the construction of 21 new infrastructure projects in northeast B.C., creating more than 1,650 construction jobs. The 2012 program supports the commitments of the *BC Jobs Plan* by expediting project development needed to support growth in the province's natural gas sector.

The 2012 program involves \$120 million in royalty credits, which are expected to generate approximately \$300 million in new net incremental royalties over the first five years. Industry will fund the entire cost of each project, but companies can then recover up to 50 per cent of an approved projects's cost through deductions from royalties which they must later pay to the government. Since the infrastructure royalty credit program began in 2004, it has led to the development of 81 new resource roads and 115 new pipeline projects.

The program—which is unique in North America—promotes B.C.'s competitiveness relative to other North American jurisdictions in attracting new investment for oil and gas development.

# **Performance Measure 5:**

## Direct government revenue derived from mining and oil and gas

Performance	2012/13	2013/14	2014/15	2015/16
Measure	Forecast	Target	Target	Target
Direct government revenue from mining, and oil and gas	\$1.348 billion	\$1.550 billion	\$1.530 billion	\$1.524 billion

Data Source: Ministry of Energy, Mines and Natural Gas.

#### Discussion

Revenue derived from mineral exploration and mining, and oil and gas operations and tenure dispositions contributes to government programs such as education and social services. Optimal revenue is defined as the fairest and best return that can be collected by the Crown for the use of publicly owned resources under prevailing economic, environmental and social conditions.

This indicator shows the forecast of mining, oil and gas revenues expected to be collected from industry and paid into the Province's consolidated revenue fund, based on data provided by Ministry program staff. B.C.'s oil and gas, coal and mineral producers are subject to demand and price fluctuations in world commodity markets where their products are sold. The Ministry implements resource revenue collection mechanisms, such as oil and gas royalties and mineral tax, that are market-based to share the market and investment risk, and manage resource development. As a result, government revenues are also subject to market fluctuations and financial conditions.



Data Source: Ministry of Energy, Mines and Natural Gas, using data from BC Public Accounts, 2002 – 2012. Data is for fiscal years, ending March 31 of the year listed. The figures are reported after adjustments for various royalty credit programs, and after disbursements for the Oil and Gas Commission.

# Objective 1.4: A secure, reliable supply of energy for the long term benefit of all British Columbians

## Strategies

- Work with BC Hydro to upgrade the Province's heritage generation, transmission and distribution assets to meet future demand.
- Develop and implement policies to keep electricity rates affordable for B.C. families and respond to B.C.'s other energy objectives.
- Ensure reliable electricity supply through innovative, aggressive conservation, ongoing competitive power procurement programs, and BC Hydro funded projects.

- Expand the use of natural gas as a transportation fuel.
- Conduct regional studies and resource assessments to enhance understanding of the geological framework that hosts B.C.'s oil and gas resources, improve the province's resource estimates, and encourage exploration.



Photo: Courtesy BC Hydro

One of BC Hydro's oldest facilities, the 65-year-old John Hart generating station near Campbell River is due to be replaced by 2018. The replacement, generating 835 gigawatt-hours of electricity annually, will be much more earthquake resistant, more reliable, and—thanks to a new water bypass facility—will improve the habitat for fish. A contract is expected to be signed in the summer of 2013, creating about 400 jobs for the five-year construction period.

# **Objective 1.5:** Efficient and effective energy and mining policy, legislation and regulation in the public interest of British Columbians

## Strategies

- In cooperation with other levels of government, continue to review legislation and regulations to ensure B.C. remains competitive, while enhancing the integrity of environmental, health and safety standards.
- Modernize the Ministry's oil and gas tenure administration processes.
- Complete the development of a Carbon Capture and Storage Regulatory Framework.
- Manage the review of the Columbia River Treaty to ensure benefits for British Columbia continue to be realized.

• In consultation with other ministries and stakeholders, develop and implement new acts and regulations that support the responsible development and use of energy and mineral resources.

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

## **Objective 2.1:** Standards that protect the public and the environment

## Strategies

- Work with industry and other natural resource sector agencies to improve environmental and safety regulation compliance at mine sites through inspections and audits.
- Collaborate with other government ministries on the Ministry of Health's study into the potential human health effects of the oil and gas industry.
- Work with industry to identify disposal zones for carbon dioxide sequestration projects and opportunities for carbon dioxide use in enhanced oil recovery.
- Continue to support the annual British Columbia Mine Reclamation Awards to recognize outstanding achievements in mine reclamation in this province.
- Support mine rescue competitions and the annual Mines Safety Awards.

# Performance Measure 6: WorkSafe BC injury rate at B.C. mines

Performance	2012/13	2013/14	2014/15	2015/16
Measure	Forecast	Target	Target	Target
WorkSafeBC injury rate at B.C. mines	1.8	1.8	1.8	1.8

Data Source: Ministry of Energy, Mines and Natural Gas and WorkSafe BC. Note: This measure, formerly known as "Short term injury rate at B.C. mines" has been renamed to reflect the data source. In all other respects, the measure is unchanged.

#### Discussion

Operations at mines, electricity generating stations and transmission facilities and oil and gas exploration, pipeline and processing sites can be hazardous and if not properly managed, can affect the environment. Safeguarding the public and the environment contributes to environmentally responsible development and use of these resources. The threat of accidents, leakages and spills is always present, so ongoing policy development and education are necessary to ensure risk is minimized.

The targets reflect the anticipated average number of accident claims per year at B.C. mines, including open pit coal and metal mines, quarries and underground mines per 100 person years. B.C.'s mining workforce is constantly evolving and is expected to have a number of workers over the next ten years who are new to mining operations. Enhanced health and safety training and inspections
are required to ensure mining remains one of B.C.'s safest heavy industries. To provide context for this measure, using 2009 estimates, a 0.1 per cent decrease in the WorkSafeBC injury rate would result in approximately 10 fewer claims or an 8.6 per cent decrease in the number of claims. The claims cost for the three major mines subsectors (i.e., open-pit coal, open-pit metal and underground mines) was estimated at \$3.34 million in 2009. Therefore, an 8.6 per cent decrease in the number of claims would result in an estimated \$288,000 savings in cost. While the measure remains unchanged for the current year, it has been renamed from "Short term injury rate at B.C. mines" to "WorkSafeBC injury rate at B.C. mines," in order to reflect the source of the data.

# Objective 2.2:Clean energy resources, fuels and related technologies<br/>complemented by energy efficiency and conservation<br/>efforts across all sectors of the economy.

### Strategies

- Support energy utilities with the implementation of cost effective demand side management measures.
- Participate in and support long-term clean energy planning initiatives at the regional and provincial level, including the Western Renewable Energy Zones initiative and BC Hydro's *Integrated Resource Plan.*
- Work with the Climate Action Secretariat (Ministry of Environment), other government ministries and agencies, Crown corporations, the public, electricity producers and utilities across B.C. to implement a coordinated approach to energy conservation and efficiency measures and support the deployment of alternative energy options to meet the province's energy needs.
- Continue to support energy efficiency in homes and buildings by monitoring on-bill financing pilots for British Columbians to inform the evolution of the successful LiveSmart BC: Energy Efficiency Program.
- Ensure the procurement of clean and renewable electricity continues to account for at least 93 per cent of total generation, excluding power required for liquefied natural gas projects.
- Continue to implement the *BC Bioenergy Strategy* to take advantage of B.C.'s abundant sources of Mountain Pine Beetle timber, wood wastes and agricultural residues.
- Through the Innovative Clean Energy Fund, support projects that solve real, everyday energy and environmental issues and create economic benefits for all British Columbians.
- Reduce the carbon intensity of the energy used by British Columbians by implementing a low carbon fuel requirement and increasing the supply of clean electricity for transportation.



Located in the remote Cariboo region, the off-grid Siwash Lake Ranch, with funding from the Ministry's ICE Fund, runs partially on solar power.

Promoting the deployment of alternative energy technology contributes to environmentally responsible energy development and use. The Government plays a key role in providing information to the public about practical conservation initiatives, establishing new standards through the B.C. Building Code and *Energy Efficiency Act*, and encouraging the private sector to develop alternative energy sources.

B.C. has a number of alternative energy options such as solar, tidal, biomass, wave, geothermal and wind power. These sources of alternative energy are renewable and can complement existing electricity generating facilities and heating and transportation fuels.

### **Performance Measure 7:**

## Total energy savings achieved each year through utility and provincial conservation policies, programs, and regulations

Performance	2012/13	2013/14	2014/15	2015/16
Measure	Forecast	Target	Target	Target
Cumulative energy savings achieved each year through energy utility and provincial conservation policies, programs, and regulations since 2007/08 <sup>1</sup>	20,591,460 GJ	24,724,511 GJ	33,548,401 GJ	39,500,343 GJ

Data Source: Ministry of Energy, Mines and Natural Gas.

<sup>1</sup>Measured in Gigajoules to include both gas and electricity savings. The savings from energy utilities are from BC Hydro, FortisBC Electric and FortisBC Gas. Data on conservation rates is from BC Hydro and FortisBC Electric.

#### Discussion

This new measure reports cumulative energy savings achieved each year through the LiveSmart BC energy efficiency incentive program, utility demand-side management programs, conservation rates, and regulated codes and standards since 2007/08.<sup>2</sup> The measure replaces the previous measure, "Total energy savings achieved through electric utility and provincial conservation policies, programs and regulations." The new measure is driven by energy efficiency and conservation policies of *The BC Energy Plan* of 2007, as well as British Columbia's *Clean Energy Act* objectives for BC Hydro. These objectives are for BC Hydro to reduce expected increases in demand for electricity by 66 per cent by 2020, and to ensure BC Hydro rates remain among the most competitive for North American public utilities. In 2012/13 alone, British Columbia will save energy equivalent to the annual energy consumption of 228,034 households.

The previous measure, "Total energy savings achieved through electric utility and provincial conservation policies, programs and regulations," reported new, or incremental, annual energy savings, while the new measure reports the cumulative energy savings each year. This provides a better account of the performance of energy efficiency and conservation initiatives. For instance, upgrading to a high efficiency appliance reduces energy consumption each year over the effective life of the appliance, rather than for just the year it was purchased. The cumulative measure also harmonizes with the way that BC Hydro reports energy savings. Finally, the new measure has been broadened to include natural gas savings resulting from FortisBC Gas efficiency and conservation initiatives.

BC Hydro's energy savings are drawn from its 2012/13 – 2013/14 demand side management expenditure application, which has been approved by the British Columbia Utilities Commission. BC Hydro is required to seek the approval of the Commission for demand side management expenditures beyond 2013/14, and BC Hydro will align its future demand side management targets with its Integrated Resource Plan, due to be submitted to the Government in August 2013. As expenditures for the FortisBC Gas demand side management plan are approved by the British Columbia Utilities Commission only through 2013, targets for subsequent years assume incremental annual energy savings equivalent to those projected by the utility for 2013. Projected savings from the LiveSmart BC program for 2013/14 and beyond reflect cumulative energy savings from previous measures being carried forward with no new incremental energy savings after April 1, 2013, as funding for the program is not confirmed beyond the 2012/13 fiscal year.

 $<sup>^{2}</sup>$  The energy savings in this measure reflect energy efficiency and conservation initiatives undertaken since *The BC Energy Plan* of 2007.

# Objective 2.3: The Ministry, stakeholders, First Nations and industry are engaged and working cooperatively for the responsible development and use of B.C.'s energy and mineral resources

# Strategies

- Develop and implement an effective community and stakeholder engagement model to respond to increased unconventional gas exploration and development in Northeast B.C.
- Seek support for the Farmers Advocacy Office in Dawson Creek to assist land owners in engaging the oil and gas sector.
- Foster working relationships among industry, the public, First Nations and landowners by clarifying and simplifying resource exploration and development management processes, enhancing dispute resolution methods, and offering more support and information.
- Continue to collaborate with other ministries, agencies and Crown corporations to provide information to promote greater public understanding of the exploration and development of resources.
- Support the development and continuous improvement of Strategic Engagement Agreements with First Nations to make consultation processes more predictable.
- Support the development of Revenue Sharing Agreements that provide First Nations communities with economic benefits based on energy and mining activities in their traditional territories.
- Continue to work with the Ministry of Aboriginal Relations and Reconciliation to build effective business development relationships with First Nations.
- Continue to support the annual Mining and Sustainability Award to recognize the diverse companies, communities, First Nations, non-governmental organizations, government agencies and individuals committed to advancing and promoting sustainable development in B.C. mining.
- Continue to support the Remote Community Energy Network (BC Hydro, Aboriginal Affairs and Northern Development Canada, the First Nations Technology Council and the Ministry) including energy education and training, community energy planning, utility service provision, clean energy development, energy efficiency and energy monitoring.

If the public, First Nations, landowners and non-governmental organizations are informed and participate in responsible resource exploration and development, they will have an opportunity to help identify and contribute constructively to the resolution of issues. They also become more aware of the benefits that resource development can provide to a community, such as regular employment for citizens and expanded infrastructure.

There are close to 70 remote communities in B.C. that are not connected to the major natural gas or electricity grids. These communities have challenges and opportunities in their energy systems that are very different than grid connected communities. The Ministry's community energy solutions support in these communities is tailored to these unique situations.

# Goal 3: Safe and sustainable homes for all British Columbians

## **Objective 3.1:** Access to safe and stable housing

#### Strategies

- Provide provincial policy leadership for the housing sector through the renewal of the provincial housing strategy, *Housing Matters BC*, to express government priorities and strategies including a focus on families and market housing affordability.
- Work with BC Housing to enhance the integrity of program delivery and administration and to ensure that government's strategic priorities are addressed.
- Work collaboratively with other ministries, agencies and Crown corporations to ensure the integrated delivery of the continuum of housing programs and services for vulnerable British Columbians. These programs and services include: homeless outreach, emergency shelters, supportive housing, transition houses, assisted living and subsidized housing.
- Preserve and increase the supply of affordable market rental and homeownership units by working with local governments and other partners to address local housing challenges and improve the economic viability in the development of affordable units.
- Support the one million strata owners and residents in B.C. with an improved strata governance system, including financial accountability, new dispute resolution mechanisms and prudent management of common assets.
- Continue to work collaboratively with other ministries, agencies and stakeholders to identify and resolve emerging strata issues and to provide educational materials to strata owners, strata councils, strata property managers and developers.
- Assist landlords and tenants to resolve disputes earlier by: improving the spectrum of Residential Tenancy Branch services to make it easier for tenants and landlords to access information and rely less on formal arbitration; implementing a strategic public education plan that includes working with partners to enhance information outreach; and achieving service delivery efficiencies to ensure public inquiries and requests are appropriately addressed.

Performance Measure 8: Priority groups in subsidized housing

Performance	2012/13	2013/14	2014/15	2015/16
Measure	Forecast	Target	Target	Target
Percentage of clients belonging to priority groups in subsidized housing	88	85 or higher	85 or higher	85 or higher

Data Source: The measure is calculated by taking the current inventory of subsidized housing and determining the percentage of units that are available for each of the designated priority groups

#### Discussion

This measure is an indicator of performance in ensuring that those in greatest need receive priority assistance for housing. For the purposes of the measure, the groups considered to be among those in greatest housing need include: low income or frail seniors; people with physical or mental disabilities; people with mental illness; women and children who have experienced domestic violence; individuals facing alcohol and drug addiction challenges; Aboriginal individuals and families; and, people who are homeless or at risk of homelessness.<sup>3</sup>

The targets are set to reflect the number of social housing households that fall into one of the designated priority groups, as well as the anticipated number of new and acquired housing units, all of which are targeted to priority groups, during the service plan period.

# Performance Measure 9: Residential tenancy dispute resolution requests

Performance	2012/13	2013/14	2014/15	2015/16
Measure	Forecast	Target	Target	Target
Number of residential tenancy dispute resolution requests per 1,000 British Columbia adult population (over age 19)	6.0	6.0	5.9	5.8

Data Source: Results for this measure are derived from records of dispute resolution requests to the Ministry's Residential Tenancy Branch and British Columbia Statistics population data. The measure includes only those British Columbians age 20 and older because of the population data age categories used by British Columbia Statistics.

#### Discussion

Modernizing and streamlining the spectrum of Residential Tenancy Branch services will contribute to a reduction in the number of requests to help resolve tenancy disputes. Improvements will make it easier for tenants and landlords to access information, ensure that enquiries and requests are addressed, and resolve disputes earlier.

About one third of all B.C. households are rental households. As the B.C. population increases every year, so does the number of tenancies. Tying the number of dispute resolution requests to the adult population provides a comparable measure across fiscal years.

# Objective 3.2 A modern building regulatory system that supports safety and innovation in the design and construction of buildings

# Strategies

• Establish provincial leadership in a modern, streamlined and efficient building regulatory system with a uniform building code as a key element.

<sup>&</sup>lt;sup>3</sup> A more detailed discussion of the methodology for this performance measure is included in the *BC Housing Service Plan 2013/14 – 2015/16.* 

- Continue to engage stakeholders in the development of the 2012 editions of the BC Building, Fire and Plumbing Codes, including improvements in energy and water efficiency.
- Work with the BC Safety Authority to continuously improve technical product safety and support technical innovation through timely adoption of safety codes and standards.

# Goal 4: Responsible regulation of gaming opportunities and the sale and use of liquor

# Objective 4.1 British Columbians continue to have confidence in the management of gaming and liquor

# Strategies

- Ensure that all gaming in the province, including gaming conducted over the Internet, is subject to a high level of rigour and scrutiny. This includes ensuring appropriate people and companies are involved in the gaming industry, conducting regular audits of all commercial gaming venues, and investigating allegations of wrongdoing to ensure the integrity of gaming and use of proceeds.
- As part of a broader enforcement strategy, work with the British Columbia Lottery Corporation and the gaming industry to move away from cash-based play in order to prevent money laundering activity at casinos.
- Target liquor regulation resources on high-risk licensed establishments and focus inspections and investigations primarily on service to minors, over-service, overcrowding and illicit alcohol. This includes the ongoing use of a 'minors as agents' program which employs underage youth to assess whether licensees or staff serve or sell liquor to minors. Minors hired for this purpose are under supervision and not allowed to consume alcohol. Preventing minors from accessing liquor is a major public safety initiative aimed at protecting families and the public from the harms associated with underage consumption of liquor.
- Continue to develop a public safety strategy for special occasion liquor licences. To date this has included directing resources toward events with a higher risk of over-service, service to minors, and over-crowding. Key areas for these efforts were applicant screening, host education, event security planning and inspection and compliance efforts, and continuing efforts to improve public safety at these events are currently underway.
- Improve public safety at large public events to ensure that they are safe and enjoyable for families. In response to the Stanley Cup riot in 2011, an integrated strategy for managing large public events review response was developed with other agencies and levels of government. Building on this success, the Liquor Control and Licensing Branch also developed an integrated Grey Cup strategy which will be used as a model for future management of large public events.

#### Ministry Program Reduces Liquor Sales to Minors

With heavy drinking among youth aged 15 to 24 years approximately three times higher than for adults 25 years or older, reducing minors' access to liquor is an important safety measure. When minors drink, they face significant increases in the risks of being involved in a vehicle crash, a sexual assault, or a physical altercation.

The Minors as Agents Program, which hires minors to test alcohol sales, has resulted in a reduction of illicit sales to youth. In the first year of the program, 87 per cent of more than 400 private and government stores tested complied with the law.

The liquor stores found selling alcohol to minors were levied \$7,500 fines. Restricting access to liquor by minors remains a key public safety priority for the Ministry's Liquor Control and Licensing Branch.

• Improve education and awareness of responsible alcohol consumption to assist in citizen engagement on responsible drinking. The Liquor Control and Licensing Branch will be continuing to develop the new social responsibility section on the Branch website, which has links to educational programs and resources. The Branch will continue to produce a biannual newsletter to communicate with licensees about policy changes, social responsibility, and other new and topical issues. The Liquor Control and Licensing Branch will continue its work on social responsibility, leveraging the partnerships developed during the development of a high school Dry Grad party planner, and an anti-binge drinking social marketing campaign. Development of resources for parents of minors is currently underway.

#### Performance Measure 10: Enhanced access to funds in gaming facilities

Performance Measure	2011/12 Baseline	2012/13 Target	2013/14 Target	2014/15 Target	2015/16 Target
Enhance access to funds in gaming facilities	Two options	Introduce three new options	Introduce three new options	Introduce one new option	Introduce one new option

Data Source: Ministry of Energy, Mines and Natural Gas

#### Discussion

This new measure tracks the strategy of providing a suite of options to access funds in gaming facilities. The strategy is part of the Gaming Policy and Enforcement Branch's continuing diligence concerning money laundering in B.C. casinos. Developing options that result in the increased use of electronic methods to access funds in casinos, enables an increased vigilance of large cash amounts carried into casinos.

Transition from cash transactions to electronic methods to access funds in casinos supports the goal of moving the gaming industry away from its current state as a cash dependent industry. It diminishes

opportunities for criminal attempts to legitimize illegal proceeds of crime in gaming facilities in the province.

Casino patrons currently have the option of using the Patron Gaming Fund or an Automated Teller Machine to access funds. In 2012/13, the Gaming Policy and Enforcement Branch will add three new strategies, namely: the ability to access debit at the cash cage; use a cheque hold process; and use pre-approved cheques. In 2013/14, casino patrons will be able to access funds inside a casino through internet transfer, U.S. funds transfer and foreign funds transfer.

# Performance Measure 11: Liquor Licensee Compliance Rate

Performance Measure	2011/12	2012/13	2013/14	2014/15	2015/16
	Baseline	Forecast	Target	Target	Target
Percentage of inspected/investigated liquor licensees in compliance	96	95	95	95	95

Data Source: Ministry of Energy, Mines and Natural Gas.

#### Discussion

The Ministry tracks the percentage of inspected or investigated liquor licensees that are found to be in compliance with provincial liquor licensing regulations. Over 12,000 inspections are conducted annually of almost 10,000 licensees across all regions of the province. The Ministry focuses resources on high-risk establishments, so some establishments may be visited more than once in a given year, while others may not be visited during that year.

The level of voluntary compliance indicates the degree to which licensees understand and are willing to cooperate with the liquor regulatory framework. A high level of voluntary compliance in areas such as over-service and prevention of service to minors may also indicate a corresponding low level of liquor misuse.

The Ministry's targeted approach of focusing resources on public safety contraventions, and high-risk or problem establishments, means there is a greater degree of certainty of enforcement consequences for non-compliant licensees. In the short term, this leads to a higher degree of voluntary compliance. Over the long term, however, the compliance rate may be seen to decrease due to the focus on high-risk, chronically non-compliant licensees.

# **Resource Summary**

Core Business Area	2012/13 Restated	2013/14 Estimates	2014/15 Plan	20145/16 Plan
	Operating Exp	enses (\$000)		
Oil and Gas	14,768	13,872	13,872	13,872
Mines and Mineral Resources	11,171	11,056	11,056	11,056
Electricity and Alternative Energy	17,980	2,949	2,949	2,949
British Columbia Pavilion Corporation	<sup></sup> 9,142	8,977	8,992	8,972
Executive and Support Services	7,199	7,138	7,138	7,138
Housing	- 346,242	343,866	346,291	350,259
Liquor Control and Licensing	1	1	1	1
Gaming Policy and Enforcement	- 18,145	19,587	19,587	19,587
Housing Endowment Fund	- 10,000	12,000	18,000	20,000
Innovative Clean Energy Fund	14,947	5,030	2,300	2,300
Total	449,595	424,476	430,186	436,134
Ministry Capit	al Expenditures (Con	solidated Revenue Fi	und) (\$000)	
Executive and Support Services	28,168	27,369	4,297	233
Housing Capital Fund <sup>2</sup>	44,506	33,144	22,927	6,357
Total	72,674	60,513	27,224	6,590

	2012/13 Restated Estimates 1	2013/14 Estimates Plan	2014/15 Plan	20145/16 Plan
	Other Financing Tra	ansactions (\$000)		
Oil and Gas Commission Receipts	31,157	28,083	30,938	31,808
Oil and Gas Commission Disbursements	· (31,157)	(28,083)	(30,938)	(31,808)
Total Net Cash Source (Requirements)	0	0	0	0
Northwest Transmission Line Receipts	60,000	57,000	13,000	0
Northwest Transmission Line Disbursements	(60,000)	(57,000)	(13,000)	0
Total Net Cash Source (Requirements)	0	0	0	0

<sup>1</sup>Amounts have been restated, for comparative purposes only, to be consistent with Schedule A of the 2013/14 Estimates.

<sup>2</sup> The grant for Housing Capital Funding meets the British Columbia Housing Management Commission's objective to increase the supply of housing for those at risk of homelessness and to fund infrastructure projects to increase the supply of provincially owned housing for seniors and persons with disabilities.

# Appendices

# **Ministry Contact Information**

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

Eighth Floor, 1810 Blanshard Street PO Box 9319 Stn Prov Govt Victoria, B.C. V8W 9N3 Phone: 250-952-0241 website: <u>www.gov.bc.ca/empr</u>

#### **Mines and Minerals Resources Regional Offices**

#### Northwest

PO Box 5000 Second Floor, 3726 Alfred Avenue Smithers, B.C. V0J 2N0 Phone: 250-847-7383 email: <u>MMD-Smithers@gov.bc.ca</u>

#### South Central

2<sup>nd</sup> Floor, 441 Columbia Street Kamloops, B.C. V2C 2T3 Phone: 250-371-3912 Phone: 250-420-2161 email: <u>MMD-Kamloops@gov.bc.ca</u>

#### Southwest

PO Box 9320 Stn Prov Govt Sixth Floor, 1810 Blanshard Street Victoria, B.C. V8W 9N3 Phone: 250-387-4825 email: <u>SouthwestMinesDivision@gov.bc.ca</u>

#### **Mineral Titles Branch**

303-865 Hornby Street Vancouver BC V6Z 2G3 Phone: 1-866-616-4999

#### **Mineral Claims Inspectors**

#### Kamloops

2<sup>nd</sup> Floor, 441 Columbia Street Kamloops B.C. V2C 2T3 Phone: 250-371-3786

#### Central/Northeast

350 - 1011 – 4th Avenue Prince George, B.C. V2L 3H9 Phone: 250-565-4240 email: MMD-PrinceGeorge@gov.bc.ca

#### Southeast

1902 Theatre Road Cranbrook, B.C. V1C 7G1 email: <u>MMD-Cranbrook@gov.bc.ca</u>

#### Smithers

PO Box 1389 Houston B.C. V0J 1Z0 Phone: 250-845-3584

#### **Residential Tenancy Branch Regional Offices**

#### Victoria

Suite 101 – 3350 Douglas St, Victoria BC V8Z 3L1 PO Box 9298 Stn Prov Govt, Victoria BC V8W 9J8

#### Burnaby

#400 – 5021 Kingsway, Burnaby BC V5H 4A5

#### Kelowna

#305 – 478 Bernard Ave, Kelowna BC V1Y 6N7

#### Liquor Control and Licensing

PO Box 9292 Stn Prov Govt, Victoria BC V8W 9J8 Ph (in Victoria): 250-952-5787 Ph (outside Victoria): 1-866-209-2111 Fax: 250-952-7066

#### **Gaming Policy and Enforcement**

#### Victoria – Head Office

3<sup>rd</sup> Fl, 910 Government Street Victoria B.C. Ph: 250-387-5311 Fax: 250-356-8149

#### Burnaby – Audit, Investigation and Racing

Audit: #220 - 4370 Dominion Street Burnaby, B.C.

**Investigations and Racing:** #408 - 4603 Kingsway Avenue, Burnaby, B.C. Ph: 604 660-0245Fax: 604 660-2030

#### **Kelowna – Regional Office** #200 - 1517 Water Street, Kelowna, B.C. Ph: 250 861-7363 Fax: 250-861-7362

#### Prince George – Regional Office #211 - 1577 7th Avenue, Prince George, B.C.

#211 - 1577 7th Avenue, Prince George, B.C. Ph: 250-612-4122 Fax: 250-612-4130

# Hyperlinks to Additional Information

A list of Legislation administered by the Ministry can be found at: www.empr.gov.bc.ca/Titles/legislation/Pages/default.aspx

A list of Crowns, Agencies, Boards and Commissions reporting to the Minister, can be found at: http://www.empr.gov.bc.ca/Titles/legislation/Pages/Major\_Agencies\_Boards\_and\_Commissins.aspx

*Canada Starts Here: The B.C. Jobs Plan* can be found at: http://www.bcjobsplan.ca/wp-content/uploads/2011/09/CSH\_BCJobsPlan\_web.pdf

## **Energy and Mines Information**

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

The *Clean Energy Act* and a complete set of backgrounders and factsheets can be found at: www.mediaroom.gov.bc.ca/DisplayEventDetails.aspx?eventId=490

*British Columbia's Mineral Exploration and Mining Strategy* can be found at: http://www.empr.gov.bc.ca/Mining/Documents/MiningStrategy2012.pdf

*British Columbia's Natural Gas Strategy* can be found at: http://www.gov.bc.ca/ener/popt/down/natural\_gas\_strategy.pdf

*Liquefied Natural Gas: A Strategy for B.C.'s Newsest Industry* can be found at: <u>http://www.gov.bc.ca/ener/popt/down/liquefied\_natural\_gas\_strategy.pdf</u>

The Frac Focus BC website can be found at: <u>http://fracfocus.ca/</u>

# Housing Policy and Building and Safety Standards

Contact and other information about Housing Policy and Building and Safety Standards can be found at: <u>www.housing.gov.bc.ca</u>

Information about Aboriginal Housing Initiatives can be found at: <u>http://www.bchousing.org/Initiatives/Creating/AHI</u>

The Provincial Housing Strategy, *Housing Matters BC*, can be found at: <u>www.housingmattersbc.ca</u>

Information about the British Columbia Housing Management Commission (BC Housing) can be found at: <u>www.bchousing.org</u>

### **Residential Tenancy**

Contact and other information about Residential Tenancy can be found at: <u>www.rto.gov.bc.ca</u>

# **Problem Gambling Help Line**

For help in recognizing the warning signs of problem gambling - and to get information on free programs, services and resources available to assist problem gamblers and their families:

Call 1-888-795-6111

or visit www.bcresponsiblegambling.ca

Confidential • Free • 24 hours/7 days • Multiple Languages

# **Gaming Policy and Enforcement**

www.pssg.gov.bc.ca/gaming

## Liquor Control and Licensing

www.pssg.gov.bc.ca/lclb

Ministry of Energy and Mines and Minister Responsible for Housing

# 2011/12 Annual Service Plan Report



EGM-2013-00159 Page 275 of 315 For more information on how to contact the British Columbia Ministry of Energy and Mines see Ministry Contact Information on Page XX or contact:

#### **Ministry of Energy and Mines**

PO BOX 9319 STN PROV GOVT VICTORIA B.C. V8W 9N3

or visit our website at

www.gov.bc.ca/ener/

Published by the Ministry of Energy and Mines

# Message from the Minister and Accountability Statement



Our province was built on its natural resources and today natural gas, minerals, water, wind and biomass continue to fuel British Columbia's economy. In support of this, the BC Jobs Plan, released in September 2011, leverages our competitive advantages to benefit all British Columbians. By opening new markets for export and strengthening our infrastructure to get goods to market, we can grow our economy and create jobs in every region.

The Jobs Plan specifies clear targets for liquefied natural gas (LNG) plants and infrastructure, and the natural gas and LNG strategies establish

a plan to achieve these. Our vision is for British Columbia to be a global leader in secure, sustainable natural gas investment, development and export. B.C. is ideally positioned to export natural gas in the form of LNG to growing markets in Asia. By exporting LNG, world-wide emissions will be lowered as B.C.'s natural gas increasingly displaces the use of more carbon intensive fuels such as coal and diesel.

Our support for industry growth and diversification, such as our Infrastructure Royalty Credit Program, continues to fuel natural gas development in British Columbia. Revenues from the sector, including \$287 million in petroleum and natural gas rights sales in 2011/12, sustain important government programs and services like health care and education.

The BC Jobs Plan sets targets for the number of new and expanded mines in British Columbia. Our mining strategy outlines how B.C. can grow our mining industry and reach out to fastgrowing Asian markets – where B.C. coal, copper and other mined commodities are supporting the world's largest-ever urbanization. This growth is expected to generate revenue estimated at \$1.6 billion per year once the projects are fully operational, creating approximately 1,800 new jobs, and sustaining more than 5,000 direct-mining jobs in the province.

B.C. is blessed with deposits of coal, copper, gold, molybdenum, silver, lead and zinc. By responsibly mining these, we can reach our investment goals and create new jobs and economic opportunities—while protecting the environment and building a better quality of life for future generations.

British Columbia is a national leader in mining and mineral production, with gross revenues estimated at \$8.6 billion in 2011/12, of which the Province received more than \$357 million in direct revenue. Mineral exploration spending exceeded \$460 million in 2011, an increase from \$374 million in 2010—and 1,300 per cent more than a decade ago.

We are ensuring that BC Hydro rates remain among the lowest in North America, while making unprecedented investments in our electricity system. One of these investments is the Northwest Transmission Line, which has the potential to attract \$15 billion in investment and create more than 10,000 jobs over the next few decades. Another is the proposed Site C dam and hydroelectric generating station on the Peace River, which would be a source of clean, reliable

and cost-effective electricity for more than 100 years. It would provide enough electricity to power the equivalent of 450,000 homes in B.C., and create an estimated 7,000 person-years of direct construction employment and up to 35,000 direct and indirect jobs through all stages of development and construction. These investments, along with competitive power procurement from clean and renewable sources, as well as an expanded commitment to energy efficiency and conservation, will help B.C. to continue to provide reliable, cost-effective and clean electricity to meet growing demand.

The Government supports energy efficiency, and introduced the new *Energy and Water Efficiency Act*, which will lower consumers' energy bills by improving energy efficiency standards for products ranging from windows to digital cable boxes. The LiveSmart BC residential and small businesses programs continue to provide incentives to help families save energy and money.

The Office of Housing and Construction Standards has an important role in the housing market and construction sector. Working with industry and local governments, we continue to explore ways to modernize the building regulatory system and establish a uniform building code that will encourage innovation and improve housing affordability. We have introduced improved regulations governing strata corporations to help more than half a million strata owners in the province. The Residential Tenancy Branch helps protect landlords and tenants through information, education and a dispute resolution process that balances the rights and responsibilities of all parties in a tenancy agreement. Through Housing Matters BC, our comprehensive housing strategy, we continue to improve the lives of British Columbians by providing safe, affordable housing options - from supportive housing for those who are homeless to affordable rentals for individuals, seniors and families with lower incomes. More than 97,000 B.C. residents benefit from provincial housing programs and our strong partnerships with local governments and community organizations continue to help increase the available housing options in B.C.

The Ministry remains committed to managing the liquor and gaming industries to protect public interests and ensure public safety. It is working to better ensure that liquor licensees and staff do not serve or sell liquor to minors, and that minors are prevented from entering age-restricted gaming facilities. We are providing more flexibility for movie and live-event theatres, by allowing them to apply for a licence to serve alcohol during the screening of a film, and by permitting caterers to acquire a liquor licence. The Ministry is also part of efforts to prevent and deter money-laundering in gaming facilities in the province.

The Ministry of Energy and Mines and Minister Responsible for Housing 2011/12 Annual Service Plan Report compares the actual results to the expected results identified in the Ministry's 2011/12 - 2013/14 Service Plan. I am accountable for those results as reported.

Honourable Rich Coleman Minister of Energy and Mines and Minister Responsible for Housing May 31, 2012

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# **Highlights of the Year**

As part of *Canada Starts Here: The BC Jobs Plan*, in February 2012 the British Columbia Government launched two complementary strategies: the natural gas strategy and the liquefied natural gas (LNG) strategy. Global trade in LNG is expected to grow by 50 per cent by 2020, and the Ministry has been working hard to build a whole new industry aimed at exporting LNG, especially to Asia. By exporting LNG, world-wide greenhouse gas emissions will be lowered as B.C.'s natural gas increasingly displaces the use of other higher emission power sources, such as coal and diesel. Establishing a liquefied natural gas industry in British Columbia moved a major step closer to reality on October 13, 2011 when the National Energy Board approved a 20-year export licence for the Kitimat LNG facility – the first licence of its kind in Canada. The Kitimat LNG facility will create approximately 1,500 person-years of work during its construction phase and 120-140 permanent positions once the terminal is in operation. Development of LNG is expected to produce approximately \$20 billion in new private sector investment, for upstream natural gas exploration and development, pipelines and plants in the province. In February 2012, Mitsubishi Corporation of Japan announced it was investing \$2.9 billion in the Montney natural gas plays in northeast British Columbia.

In February 2012, the Province amended its self-sufficiency policy to require BC Hydro to meet customer demand on an average water year, instead of historically low water levels. This change ensures that BC Hydro customers will continue to pay some of the lowest prices for electricity in North America as economic growth under the *BC Jobs Plan* spurs greater electricity demand.

On July 21, 2011, the Energy Efficiency Standards Regulation was amended, setting new energy efficiency requirements for televisions manufactured on or after January 1, 2012, and for compact audio and video products manufactured on or after January 1, 2013. The new requirements are expected to reduce electricity demand in B.C. by 390 gigawatt-hours in 2020. This is equivalent to the total energy demand (including heating) of 22,000 households. On January 1, 2011, new lighting efficiency standards took effect for 75 and 100 watt equivalent light bulbs. In March 2012, the regulation was amended to harmonize BC's efficiency standards for 40 and 60 watt equivalent light bulbs with the federal government's December 31, 2014 effective date.

The LiveSmart BC: Efficiency Incentive program offers homeowners partial cost coverage of a baseline energy efficiency evaluation of their home and incentives for energy efficiency upgrades. On April 1, 2011, program incentive levels for the next two years were announced. The new incentives put more emphasis on building envelope upgrades (insulation, windows, doors and air sealing) and encourage homeowners to use certified installers, improving the quality and value of the work done. In 2011/12 the program invested \$16.9 million for over 27,500 energy assessments and over 18,000 incentives. It is estimated that these participants will reduce their  $CO_2$  emissions by over 47,000 tonnes annually.

The Infrastructure Royalty Credit Program continued in 2011, its tenth year of operation. This program supported development of 30 new and upgraded road and new pipeline projects in northeast B.C. – creating more year-round jobs and business opportunities for B.C. families in the province's petroleum and natural gas sector.

In January 2012 the Oil and Gas Commission launched FracFocus.ca, an online registry – accessible to everyone – that allows visitors to search locations of shale gas developments, and the additives used during hydraulic fracturing of oil and gas deposits. This initiative supports the Province's commitment to open and transparent government. It also builds upon the pledge to British Columbians that water is protected by strict regulations and containment procedures. B.C. has never had an incident of water contamination resulting from hydraulic fracturing, and the Ministry is taking steps to prevent this from happening.

In 2011/12, the auction of Crown subsurface petroleum and natural gas rights realized Government revenues totalling \$286.6 million, at an average price of \$1,322 per hectare. In July 2011, the Province received approximately \$220,000 from the sale of subsurface geothermal rights. In addition, the Province received hundreds of millions of dollars in oil and gas royalties. Revenue from royalties and from the sale of subsurface rights supports important programs such as health and education.

Mining exploration spending in B.C. grew for the second consecutive year in 2011, to an estimated \$463 million, an increase of 35 per cent from 2010. In the same period, the total sales value of minerals produced in the province grew to an estimated \$8.6 billion, an increase of more than 20 per cent.

On August 18, 2011, Copper Mountain Mine, near Princeton, celebrated its grand opening, and is expected to produce more than two billion kilograms of copper over its 17-year life. On December 8, 2011, the Ministry announced the awarding of a *Mines Act* permit to the Barkerville Gold Mine, outside Wells. On December 30, 2011, the Ministry approved a *Mines Act* permit for a large expansion to the Huckleberry copper and molybdenum mine in west central B.C.

In 2011, B.C. exported approximately \$5.8 billion worth of coal, much of which was metallurgical (steel-making) coal destined for Asian markets. In November 2011, Chinese companies announced plans to invest a total of \$1.36 billion in coal mine developments in northeastern B.C., setting the stage for additional economic opportunities and thousands of new direct and indirect jobs. The Ministry actively participated in the Premier's November 2011 trade mission to Asia and works closely with the Ministry of Jobs, Tourism and Innovation to market B.C. mineral exploration and mining abroad. Many of B.C.'s mined products are exported to Asia Pacific countries, including China and Japan, and with rapid growth continuing to take place in Asia, demand in that region is expected to remain high.

In March 2012, the Residential Tenancy Branch levied its first administrative penalty of \$115,000 against a landlord for failing to comply with an order of a dispute resolution officer under the *Residential Tenancy Act*.

In December 2011, the Ministry introduced regulations requiring depreciation reports for strata corporations. The new regulations were developed in consultation with the strata community, including: condominium owners' associations, strata owners, strata council members, legal experts, professionals and the public. The depreciation reports will help strata corporations plan for future repair and maintenance costs. They have been described by stakeholders as the most significant change to the strata sector since the *Strata Property Act* was introduced.

About 97,000 households throughout B.C. were assisted through subsidized housing in 2011/12. This accounts for almost six per cent of all housing in the province and includes approximately 26,500 low-income households receiving rental assistance in the private market.

On August 24, 2011, the Gaming Policy and Enforcement Branch announced a comprehensive anti-money laundering strategy by moving away from a cash basis as quickly as possible, and by scrutinizing the remaining cash for appropriate action.

The Liquor Control and Licensing Branch continues to use the Minors as Agents Program to monitor compliance with the legislative prohibition against selling liquor to minors. Initial results of the program have shown that it has been very successful in decreasing sales to minors in liquor retail stores.

#### Green jobs for First Nations

First Nations interested in developing clean energy projects can now get assistance from B.C.'s First Nations Clean Energy Business Fund, announced in April 2011. The fund was created as part of the Clean Energy Act. "More than 125 First Nations are engaged in energy projects", said Rich Coleman, Minister of Energy and Mines. "This fund will encourage more First Nations to become part of B.C.'s energy future and drive investment in clean, renewable energy projects."

# **Purpose of Ministry**

The Ministry of Energy and Mines (Ministry) is the key provincial ministry responsible for British Columbia's energy and mining sectors. These sectors cover both public and private interests that explore for, develop and use oil and gas, electricity, clean or renewable energy (biomass, biogas, geothermal, hydro, solar, ocean, wind or any other prescribed alternative energy resource), coal, minerals, and renewable and low carbon fuels. Through teamwork and positive working relationships with its clients, the Ministry facilitates B.C.'s thriving, safe, environmentally responsible and competitive energy and mining sectors to create jobs and economic growth in communities. In developing energy and mining sector policies, legislation and guidelines, the Ministry consults with other ministries and levels of government, energy and mining companies, First Nations, communities, environmental and industry organizations and the public.

A key component of the Ministry's mandate is to develop tenure, royalty and regulatory policy for British Columbia's oil and gas industry, thereby ensuring the effective and environmentally responsible management of the province's oil and gas resources. The Ministry provides a range of oil and gas related services, including the issuance of Crown subsurface resource rights, royalty programs, public geoscience and policies to address potential future resource opportunities, such as unconventional oil and gas resource development.

Working with its stakeholders, the Ministry develops policies, programs and legislation to maintain B.C.'s mining sector competitiveness and encourage investment in mineral exploration and mining in the province. The Ministry develops and maintains geoscience databases and surveys, and provides funding to other organizations to collect and publish geoscience information. The Ministry is responsible for permitting and inspecting major mining projects, promoting mineral exploration and providing assistance and advice to promote and support continued development of the sector.

The Ministry develops and oversees British Columbia's policies with regard to electrical power generation and transmission. The Ministry is responsible for initiatives that promote new energy technologies, energy efficiency and conservation, and alternative energy resources. The *Clean Energy Act* builds upon B.C.'s unique wealth of clean, renewable energy resources and sets the foundation for significant investments in clean, renewable energy across the province while keeping electricity rates affordable for British Columbians. Through the Innovative Clean Energy Fund, the Ministry is helping to invest in new technologies to respond to British Columbia's energy and environmental challenges.

The Ministry strives to ensure that British Columbians have access to safe, affordable and appropriate housing through market and non-market housing policy and programs, building and safety policy and the development of technical codes and standards, and services for landlords and tenants. With regard to housing issues, the Ministry's stakeholders are the citizens of British Columbia and their representatives at all levels of government, First Nations, community groups,

non-profit societies, schools, service organizations, businesses and industry associations. Key to the Ministry's success is its ability to maintain strong, collaborative relationships with stakeholders, partner agencies and other levels of government.

The Ministry works with its stakeholders and partners on liquor licensing, enforcement and distribution as well as gaming policy, regulation and enforcement, problem gambling programs, licensing of charitable gaming, and oversight of horse racing.

The Ministry is responsible for administering all or parts of 42 statutes pertaining to the energy, mining, gaming, liquor distribution, and housing and construction sectors, and has policy responsibilities under the *Utilities Commission Act*. The Minister is responsible for the following five Crown Corporations: the British Columbia Hydro and Power Authority (BC Hydro), the Columbia Power Corporation, the Oil and Gas Commission, the British Columbia Housing Management Commission (BC Housing), and the British Columbia Lottery Corporation. The Minister also has responsibility for the Liquor Distribution Branch, and the Gaming Policy and Enforcement Branch.



An energy efficient Hupacaseth First Nation new home in Port Alberni, designed by the community.

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# **Strategic Context**

British Columbia's real GDP increased by 2.9 per cent in 2011 (according to preliminary GDP by industry data from Statistics Canada), following growth of 3.0 per cent in 2010. Overall in 2011, most indicators of British Columbia's economic performance showed improvement compared to the previous year. Gains in the domestic economy were observed in employment and consumer spending, while external gains were made in exports and shipments of manufactured goods. However, several risks to British Columbia's economy remain, including the European sovereign debt crisis, ongoing weakness in the US economy, exchange rate volatility, and slower than anticipated Asian demand for BC products.

British Columbia has abundant energy and mineral resources and innovative, growing energy and mining sectors. B.C. also has robust buildings in which our citizens live, learn and work, supported by a vibrant housing and construction sector.

The energy and mining sectors featured prominently in *Canada Starts Here: The BC Jobs Plan*, released by the Premier in September 2011. During 2011/12, the Ministry worked with natural resource sector agencies, communities, First Nations, industry and environmental organizations to ensure that the continued growth, exploration and development of our energy and mining sectors and resources are socially and environmentally responsible.

Clean hydroelectric power, along with other renewable sources such as wind power and biomass, meets over 93 per cent of British Columbia's electricity needs. British Columbia is also offsetting two-thirds of its electricity demand growth through efficiency and conservation measures. BC Hydro has provided relatively low-cost power to the citizens of B.C. for more than 50 years, thanks to the Province's heritage assets, which include historic electricity facilities such as the major dams on the Peace and Columbia Rivers. The establishment of the Heritage Contract ensures that B.C. ratepayers continue to benefit from the low-cost electricity generated by these assets.

During 2011/12, the price of natural gas fell 53 per cent. On April 1, 2011, the spot price for natural gas was \$4.31 per million British Thermal Units (BTUs). By March 31, 2012 it had fallen to \$2.02 per million BTUs. The Province has significant shale and tight gas deposits—such as in the Horn River and Montney areas of Northeast B.C.—and the Government is stimulating the demand for B.C.'s natural gas by promoting the export of liquefied natural gas (LNG) to Asia. LNG provides an abundant, lower carbon fuel for electricity generation and transportation, and can displace coal and oil, which have higher emissions. LNG development in B.C. can have lower lifecycle greenhouse gas emissions than anywhere else in the world by promoting the use of clean electricity to power LNG plants and drive the liquefaction process. British Columbia has many strategic advantages fostering the development of an LNG industry, but must ensure its competitiveness with other natural gas producing jurisdictions that are also working to attract LNG export investments. As described in "Liquefied Natural Gas: A Strategy for B.C.'s Newest

Industry," the development of liquefied natural gas export capacity in B.C. to access stronger markets in Asia is critical to sustaining the growth of B.C.'s natural gas industry.

In 2011, B.C.'s mining sector had a production value of \$8.6 billion. In 2011, more than 29,000 people in more than 50 communities throughout the province were employed in mineral exploration, mining, smelting, refining and mineral processing. The B.C. mining sector invested more than \$2 billion in 2011, an increase of \$700 million from the previous year, to upgrade capital equipment, expand existing operations and develop new mines. In addition, preliminary estimates indicate that mineral exploration spending topped \$460 million in 2011. All of this speaks to the strength of the province's exploration and mining industry. Gold prices continued to climb in the first part of the year, reaching an all-time high of \$1,895 per troy ounce in August 2011; however prices have fallen since January 2012.

In 2011/12, Government played a key role in facilitating investment in B.C. mines, mineral exploration, and oil and gas projects through trade and investment missions to Asian countries such as Japan, Korea, China and India. British Columbia, in particular Vancouver, is the centre of one of the world's largest pools of international expertise in geology, mine engineering, project financing, and environmental sustainability.

The private market serves the housing needs of the vast majority of British Columbians. During 2011/12, the Ministry continued to work with local government and other key stakeholders to increase the supply of small, low-cost housing. With approximately one million British Columbians now living in strata properties, and with stratas making up more than half of new residential construction, the need to ensure effective strata regulation and self-governance is increasingly important.

The increasing complexity of gaming continued to pose new regulatory and enforcement challenges. The introduction of new internet gaming components such as eBingo and gaming on mobile devices, marked significant milestones in the evolution of the gaming industry, requiring regulatory and enforcement practices to evolve along with the industry. The Ministry also focussed on balancing the competing interests of manufacturers, licensees and the majority of the population who consume liquor responsibly with the need to protect the public from the costs and harms of the minority who cause alcohol related harm. The Stanley Cup riot in June 2011 and the subsequent recommendations of the independent riot review report marked a significant milestone in the evolution of liquor regulation, requiring the development of a cross agency response to ensure the safe enjoyment of public celebrations.

#### Live event venues get more flexibility for liquor licences

"The Province made liquor licences more flexible for venues that host live events", Rich Coleman, Minister of Mines and Energy announced in February 2012. "The change allows licence holders to screen films and broadcast pay-per-view programs outside the hours described in their liquor licences. As a result, licence holders throughout British Columbia have greater flexibility in the types of entertainment they can offer."

# **Report on Performance**

The Ministry has a strong commitment to continuous improvement. Several performance measures from the 2010/11 Service Plan have been modified in order to provide more meaningful data to track Ministry progress.

Several performance measures in the Ministry's *Revised 2011/12 Service Plan* published in May 2011 were added to or changed from those of the Ministry's 2010/11 Service Plan released in February 2010. One of the housing measures was changed from "Percentage of homeless individuals accessing housing who remain housed six months after placement" to "Percentage of clients belonging to priority groups in subsidized housing." The measure from the 2010/11 Service Plan "Annual investment in mineral exploration and mines" has been replaced by three new measures: "Sales value of products sold from mines, pits and quarries;" "B.C. share of Canada's exploration spending;" and "Direct government revenue from mining." On February 8, 2012, responsibility for gaming and for liquor control and licensing was transferred to the Ministry. As a result, two measures, the "Gaming policy and enforcement service score percentage," and the "Percentage of inspected/investigated liquor licensees in compliance," are added to the 2011/12 Annual Service Plan Report.

The remaining performance measures were carried forward from the Ministry's 2010/11 Service Plan, in an effort to preserve the year-on-year stability of performance tracking and reporting.



A natural gas drilling rig in northeast B.C.

# **Report on Performance**

# **Performance Results Summary Table**

Goal 1: Thriving and competitive energy and mining sectors	2011/12	2011/12
For greater detail see pages 16 to 22	Target	Actual
1.1 Increased energy sector investment, revenue generation and job creation for the long term benefit of all British Columbians		
Annual Investment in Petroleum and Natural Gas Exploration and Development	\$5.0 BILLION	\$6.1 BILLION (ESTIMATE) EXCEEDED
Annual Investment in Electricity Facilities	\$2.5 BILLION	\$2.5 BILLION (ESTIMATE) ACHIEVED
<b>1.2 Increase mineral exploration and mining activities in B.C.</b> Sales value of products sold from mines, pits and quarries	\$6.1 BILLION	\$8.6 BILLION EXCEEDED
B.C. share of Canada's exploration spending	12.6%	15.5%
Direct government revenue from mining (\$ millions)	\$493 MILLION	\$357.7 MILLION NOT ACHIEVED
1.3 An increasingly secure, reliable supply of energy for the long term benefit of all British Columbians		
1.4 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		
1.5 Greater public awareness of the benefits of energy exports		
Goal 2: Safe and environmentally responsible energy and mineral resource development and use For greater detail see pages 23 to 28	2011/12 Target	2011/12 Actual
2.1 Practices that protect the public and the environment Number of new or existing mine sites adopting (TSM) sustainable measures	10	DATA NOT AVAILABLE
Short term injury rate at B.C. mines	1.8	1.8 (ESTIMATE) ACHIEVED

2.2 Increased energy conservation and use of alternative clean		
anarry and fuels, and afficient technologies		
Investment leverage ratio	3.1	4:1
	•••	EXCEEDED
Fineray saved by LiveSmart narticinants	27%	- 25%
	2170	SUBSTANTIALLY
		ACHIEVED
Total energy sovings achieved each year through electric utility and	4 729 427 G.I	5 207 256 GJ
anovincial concernation noticies programs and regulations	7,120,721 00	EXCEEDED
provincial conservation policies, programs and regulations		
Goal 3: The Ministry, stakeholders, First Nations and		
industry working cooperatively for the responsible	2014/42	9044449
development and use of British Columbia's energy and	ZUTITZ	ZUTI/1Z Actual
mineral resources	raiger	Aving
For greater detail see pages 28 to 29		
3.1 A continued strong commitment to environmentally and socially		
responsible development through appropriate and timely engagement		
of First Nations, the public and stakeholders in energy and mineral		
resource development		
3.2 Enhanced stakeholder awareness of resource opportunities and		
the benefits of their responsible development and use		
Goal 4: Safe and sustainable homes for all British	0044140	2044/42
Columbians	ZUTI/12 Target	2011/12 Actual
For greater detail see pages 29 to 31	Taiget	Aviuei
4.1 Access to safe and stable housing		
Percentage of clients belonging to priority groups in subsidized housing	84	88
•		EXCEEDED
Number of residential tenancy dispute resolution requests per 1,000 British	6.0	5.9
Columbia adult population (over age 19)		EXCEEDED
4.2 Safety and environmental sustainability in the design, construction		
and occupancy of buildings		
Goal 5: Sound regulatory measures to promote		
responsible liquor licensing and gaming, consumer	2011/12	2011/12
protection and fair business practices in British Columbia	Target	Actual
For greater detail see pages 32 to 34		
5.1 Comprehensive and responsible gaming regulatory framework and		
programs		
Gaming policy and enforcement service score	84	90
percentage		EXCEEDED
5.2 Effective licensing and inspection of liquor licensees		
Percentage of inspected/investigated liquor licensees	95	96
in compliance		EXCEEDED

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# Goals, Objectives, Strategies and Performance Results

# Goal 1: Thriving and competitive energy and mining sectors

# Objective 1.1: Increased energy sector investment, revenue generation and job creation for the long-term benefit of all British Columbians

Long term investment in the energy sector contributes to stability and predictability, allowing the industries to grow and prosper.

A challenge to achieving this objective is that demand for energy can be cyclical, affecting the price of electricity, natural gas and other energy resources, and thus the level of investment in the sector. Financial costs and currency fluctuations also impact investment levels.

#### Strategies

- Attract investment by continuing to work with industry to develop and implement focused marketing and investment programs to showcase British Columbia as a centre of excellence for energy resource and technology development.
- Further establish British Columbia as a recognized centre for energy innovation and technology research, education and demonstration, in collaboration with industry, post-secondary institutions, the federal government and provincial agency partners.
- Improve the competitiveness of British Columbia's energy sector by providing leadership, information, investing in infrastructure, and developing new policies, regulations and programs.
- Support unconventional petroleum and natural gas development and exploration by modernizing the petroleum and natural gas rights disposition processes.
- Conduct energy related geoscience research and technical assessments to promote and support the petroleum and natural gas energy and geothermal industries in B.C. while also contributing baseline data to support the protection of environmental values.

#### Ministry of Energy and Mines and Minister Responsible for Housing



The intake for the award-winning East Toba hydro project, constructed by an Independent Power Producer in partnership with the Klahoose First Nation. The facility delivers 715,000 megawatt hours per year of clean power.

## Performance Measures 1 and 2: Annual investment in the energy sector

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Annual Investment in Petroleum and Gas				\$6.1 BILLION
Exploration and Development <sup>1</sup>	\$5.2 BILLION	\$7.1 BILLION	\$5.0 BILLION	(ESTIMATE)
•				EXCEEDED
				\$2.5 BILLION
Annual Investment in Electricity Facilities <sup>2</sup>	\$2.8 BILLION	\$2.7 BILLION	\$2.5 BILLION	(ESTIMATE)
				ACHIEVED

Data Sources:

<sup>1</sup> Data analysis by Ministry of Energy and Mines based on Canadian Association of Petroleum Producers data for previous years. Estimates are for the 2011 calendar year.

<sup>2</sup> Data analysis by Ministry of Energy and Mines and B.C. public utilities. The data for 2011/12 is expected by late May, following the availability of figures from the utilities. Estimates provided by fiscal year.

# **Discussion of Results**

Annual investment in oil and gas exploration and development is comprised of industry investment in geophysical and geological surveys, exploratory and production wells, pipelines and processing plants owned by producers. 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 2012/13 Ministry Service Plan, where it has been revised in name only to annual

#### Ministry of Energy and Mines and Minister Responsible for Housing

investment in petroleum and natural gas exploration and development. The target for 2011/12 is estimated to have been significantly exceeded.

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 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. The measure continues in the 2012/13 Ministry Service Plan.



Construction continues on the Waneta expansion project, a partnership between Columbia Power Corporation, Fortis Inc. and the Columbia Basin Trust. The new facility is expected to be operational by the spring of 2015.

# **Objective 1.2: Increase mineral exploration and mining activities in B.C.**

#### Strategies

- Identify issues and opportunities facing the mineral exploration and mining industry in British Columbia and update the 2005 mining plan to address them.
- Gather and utilize information for informed decision making (e.g. Geoscience).
- Encourage mineral exploration.
- Remove barriers to mining investment and create the conditions that encourage investment and development of mineral resources.
- Support the implementation of initiatives that contribute to a globally competitive and sustainable sector.

# Performance Measures 3, 4 and 5: Mining sales, exploration spending and government revenue

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Estimate
Sales value of products sold from mines, pits and quarries <sup>1</sup>	\$5.77 BILLION	\$7.1 BILLION	\$6.1BILLION	\$8.6 BILLION EXCEEDED
B.C. share of Canada's exploration spending <sup>2</sup>	11.7%	13%	12.6%	15.5% EXCEEDED
Direct government revenue from mining <sup>3</sup>	\$291.5 MILLION	\$363.9 MILLION	\$493 MILLION	\$357.7 MILLION NOT ACHIEVED

Data Sources: 1 Natural Resources Canada and Statistics Canada

<sup>2</sup>Natural Resources Canada Data analysis by the Ministry of Energy and Mines based on calendar year survey results from Natural Resources Canada, Statistics Canada and PriceWaterhouseCoopers

<sup>3</sup> Ministry of Energy and Mines. Forecast and target are based on the January, 2011 Blue Book Budget Estimates Forecast. Mining revenue figures are comprised of free miner certificate fees, mineral title and coal tenure revenues, health and safety inspection fees, and mineral taxes which are collected by the Ministry of Finance.

# **Discussion of Results**

These three performance measures were new for 2011/12. The total value of mineral sales in B.C. indicates the economic impact of mining on the provincial economy. It is measured through surveys conducted by Statistics Canada and Natural Resources Canada and includes the total value of all minerals sold including metals, coal, industrial minerals and construction aggregates. In 2011/12, the estimated result was significantly greater than the target.

Exploration to identify mineral reserves is critical to sustaining the level of mining activity and production. The data sourced from Natural Resources Canada's Survey of exploration spending across all Canadian jurisdictions. This performance measure tracks exploration spending in B.C.

by mining exploration companies and prospectors. Annual spending in B.C. compared to overall spending across Canada as a "per cent share measure" is a reflection of B.C.'s competitiveness in attracting exploration spending to the province. The estimated result for 2011/12 exceeded the target.

Direct government revenue from mining is the revenue collected from mining fees, charges and resource taxes and deposited in the Provincial consolidated revenue fund. Forecasts of revenue and setting of targets are based on analysis of mining and mineral exploration activity under prevailing and forecast economic conditions. The estimated results for 2011/12 did not achieve the target. This is likely the result of several factors, including the downturn in some mineral prices during the second half of the year, higher capital expenditures and higher than expected operating costs.

# Objective 1.3: An increasingly secure, reliable supply of energy for the long term benefit of all British Columbians.

A secure and reliable supply of energy contributes to economic growth and stability for British Columbians.

Energy supply is influenced by a number of factors outside the Province's control, including world economic growth cycles, regional and global market demand, supply and prices, interest rates, and exchange rates.

### Strategies

- Work with BC Hydro to upgrade the Province's Heritage generation, transmission and distribution assets.
- Ensure electricity self-sufficiency through innovative, aggressive conservation, competitive power procurement programs, and BC Hydro's own projects.
- Diversify and reduce the carbon intensity of British Columbia's energy supply, including the use of biofuels, the implementation of a low carbon fuel requirement, expanded natural gas use, and increased supply of clean electricity from projects such as the 335 megawatt Waneta hydroelectric expansion project.
- Work with BC Hydro to advance electricity self sufficiency and respond to British Columbia's other energy objectives through the development of its Integrated Resource Plan.

#### Ministry of Energy and Mines and Minister Responsible for Housing



The 102 megawatt Bear Mountain Wind Park, near Dawson Creek, which includes 34 windmill towers, has been operational since 2009.

# Objective 1.4: Efficient and effective fiscal, legislative and regulatory frameworks and services that reflect the public interest, and enhanced social and economic benefits for all British Columbians.

An efficient and effective royalty and policy framework for the energy and mining sectors enhances competition and encourages the investment necessary to prosper.

Competition with other jurisdictions for investment requires ongoing monitoring and progress in regulatory reform, fee and licence reviews, and policy development.

Maintaining the balance between the interests of local residents and resource developers is a shared objective of residents, regulators, provincial ministries and industry.

#### Strategies

• In cooperation with other levels of government, continue to review regulations to ensure British Columbia remains competitive, while maintaining the integrity of environmental, health and safety standards.
- Expand and improve online service delivery, for example by leading the development of the Integrated Petroleum System that will replace current legacy platforms.
- Manage the oversight of the Columbia River Treaty to ensure the value of downstream power benefits continues to be realized.
- Implement new regulations for renewable and reduced carbon intensity of transportation fuels under the *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act.*
- Consult with the Oil and Gas Commission, the Ministry of Forests, Lands and Natural Resource Operations, other government agencies, industry, First Nations and stakeholders to identify and resolve any issues arising from the implementation of the *Oil and Gas Activities Act*.
- Facilitate the efficient and effective implementation of the *Clean Energy Act* by developing and implementing appropriate regulations.

# **Objective 1.5: Greater public awareness of the benefits of energy exports.**

Increased awareness of the benefits derived from energy exports is one element that contributes to public acceptance of the energy sector and its role in a competitive, global economy. The energy sector contributes significant revenues to the government which are used to fund public services such as healthcare and education.

- Provide information to, and foster engagement with, the public, stakeholders, industry and other government partners about the benefits of environmentally and socially responsible resource development and exploration, and opportunities for energy conservation.
- Work cooperatively with other ministries and partners to increase provincial awareness of energy development and exploration as well as export opportunities.
- Pursue financial and cooperative renewable energy partnerships with industry, such as those with clean and renewable electricity producers, the public and other levels of government.

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

# **Objective 2.1: Practices that protect the public and the environment.**

Operations at major mines, electricity generating stations and transmission facilities and petroleum and natural gas exploration, pipeline and processing sites can be hazardous, and can have an impact on the environment if not properly managed. Practices that safeguard the public and the environment contribute to environmentally responsible development and use of these resources.

The threat of accidents, leakages and spills is always present, so ongoing policy development and education are necessary to ensure these are minimized.

# Strategies

- Explore further opportunities to expand environmentally responsible energy and mineral resource development and exploration, in partnership with industry and other government organizations.
- In cooperation with industry, enhance collaboration to improve environmental and safety regulation compliance through inspections and audits.

# Performance Measures 6 and 7: Mine sustainability and safety

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Number of new or existing mines sites adopting (TSM) sustainable measures <sup>1</sup>	DATA NOT AVAILABLE <sup>2</sup>	5	10	DATA NOT AVAILABLE <sup>3</sup>
Short term injury rate at B.C. Mines <sup>4</sup>	1.28	1.14	1.8	1.8 (ESTIMATE) ACHIEVED

<sup>1</sup> Data source: Mining Association of B.C.

<sup>2</sup>This measure was new for the 2011/12 Service Plan.

<sup>3</sup>The actual results are expected in the Fall 2012. This measure has been suspended for the 12/13 Service Plan.

<sup>4</sup> Data source: Ministry of Energy and Mines 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 smooths out statistical anomalies caused by significant single events. The measure captures open pit coal and metal mines, quarries and underground mines. As a result, the measure and targets are an accurate representation of the accident rate for the sector.

# **Discussion of Results**

The number of new or existing mines adopting "Towards Sustainable Mining" (TSM) measures was new for 2011/12. The Mining Association of B.C. (MABC) adopted—and is encouraging its

member mining companies to adopt—the provincially developed TSM check list. The list has multiple levels of "sustainable activities" at mine sites. This measure counts the number of mine sites which have adopted TSM at any level and reported their results to MABC. TSM provides a way of finding common ground with communities of interest in order to build a better mining industry. TSM is based on a set of guiding principles that are in turn supported by performance elements and indicators that include operational, environmental and corporate sustainability.

The short term injury rate at B.C. mines target reflects the anticipated average number of accident claims per year at B.C. mines, including open pit coal mines, open pit metal mines 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. The measure continues in the 2012/13 Ministry Service Plan. Preliminary estimates indicate that the short-term injury rate target of 1.8 for 2011/12 was achieved, but the actual statistics from WorkSafeBC will not be available until July 2012.



A team competes in the 56<sup>th</sup> Annual Mine Rescue and First Aid competition, held in Revelstoke in June 2011

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

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

The up-front expense of retrofitting existing homes and buildings to conserve energy, as well as the expense of material and equipment for energy efficient new buildings, will be fully recovered over time through lower energy bills.

British Columbia has a number of alternative energy options such as solar, tidal, biomass, wave, geothermal and wind power. These sources of alternative energy are renewable and can complement existing electricity generating facilities and heating and transportation fuels.

- Support energy utilities with the implementation of cost effective demand side management measures.
- Participate in and support long-term clean energy planning initiatives at the regional and provincial level, including the Western Renewable Energy Zones initiative and BC Hydro's Integrated Resource Plan.
- Work with the Climate Action Secretariat, other government ministries and agencies, Crown Corporations, the public, electricity producers and utilities across British Columbia to implement a coordinated and focused approach to energy conservation and efficiency measures and support deployment of alternative energy options to meet the province's energy needs.
- Continue to support energy efficiency in homes and buildings through the LiveSmart BC: Energy Efficiency Program which provides one-stop access to provincial and utility programs.
- Introduce a new LiveSmart Small Business program to reach more than 4,000 small businesses with energy assessments, direct installation and incentives.
- Continue to implement the Energy Efficient Buildings Strategy: More Action, Less Energy which has among the most aggressive energy efficiency targets in Canada.
- Position natural gas as an abundant, clean-burning alternative to diesel and other hydro-carbon fuels, as natural gas has fewer pollutants and lower carbon dioxide emissions.
- Ensure the procurement of clean and renewable electricity continues to account for at least 93 per cent of total generation.

- Continue to advance the development of a hydrogen economy by promoting the hydrogen fuel cell industry and other technology that supports alternative energy.
- Continue to implement the BC Bioenergy Strategy to take advantage of B.C.'s abundant sources of beetle-killed timber, wood wastes and agricultural residues.
- Improve energy efficiency in homes, buildings and industry by implementing new standards under the *Energy Efficiency Act* to increase the minimum performance levels for manufactured building components and equipment.
- Work with industry to identify disposal zones for CO<sub>2</sub> sequestration.
- Work with industry and BC Hydro to promote greater use of electricity to power natural gas processing facilities in northeast B.C.
- Through the Innovative Clean Energy Fund (ICE Fund), accelerate the development of new energy technologies with the potential to solve real, everyday energy and environmental issues and create economic benefits for all British Columbians.

# **Performance Measure 8: Investment ratio**

Performance	2008/09	2010/11	2011/12	2011/12
Measure	Benchmark	Actual	Target	Actual
Investment leverage ratio	2:1	3:1	3:1	4:1 <sup>1</sup> EXCEEDED

Data Source: Ministry of Energy and Mines Staff analysis.

<sup>1</sup>Value based on data from First, Second, Third Call and Liquid Biofuels projects.

# **Discussion of Results**

The Innovative Clean Energy (ICE) Fund accelerates the development of new energy technologies that have the potential to solve real, everyday energy and environmental issues and create socio-economic benefits for all British Columbians. The ongoing target is to optimize government's investment in clean energy technologies by encouraging project proponents to use the ICE Fund to leverage other sources of public and private-sector funding. The measure is calculated in a way that is consistent with the leveraging calculation methodology applied by other funding programs: (Total Project Value minus Total ICE Funding) / Total ICE Funding. This methodology is also applied to forecasts and performance targets. The target was exceeded.

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Energy saved by LiveSmart participants	N/A <sup>1</sup>	25%	27%	25% SUBSTANTIALLY ACHIEVED
Total energy savings achieved each year through utility and provincial conservation policies, programs, and regulations <sup>1</sup>	3,805,448 GIGAJOULES	3,640,252 GIGAJOULES	4,729,427 GIGAJOULES	5,207,256 GIGAJOULES EXCEEDED

# Performance Measures 9 and 10: Energy savings

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

<sup>1</sup>This measure was new for the 2011/12 Service Plan.

<sup>2</sup>Measured in gigajoules to include both gas and electricity savings. Excludes savings from Fortis BC gas.

# **Discussion of Results**

The LiveSmart BC: Efficiency Incentive Program provides financial support to households for energy assessments and energy efficiency building retrofits. Tens of thousands of British Columbians have displayed their commitment to home energy efficiency through their participation in the program. This performance measure forecasts the average percentage energy savings for program participants resulting from energy efficiency upgrades to their homes. Program participants have their homes assessed by federally-certified energy advisors both before and after efficiency upgrades are undertaken. Examples of eligible home improvements include space heating, water heating, and wall and attic insulation.

These measures are driven by the first nine policy actions of the BC Energy Plan. Targets represent energy savings from the LiveSmart BC: Efficiency Incentive Program, regulated standards under the *Energy Efficiency Act*, green building code changes, and BC Hydro's Power Smart and Fortis BC's PowerSense demand side management programs and conservation/stepped rate participants. Both of these utilities design and direct their energy efficiency programs to three main market sectors — residential, commercial and industrial.

The target for the percentage of energy saved by LiveSmart participants was increased from 2010/11 to 2011/12 because it was projected that improvements to the incentive structure would result in increased energy savings. This improved incentive structure did not result in increased savings, likely because the reintroduction of federal incentives reduced the time period of participation for many participants. However, the percentage of energy savings for LiveSmart participants was equal to that of the previous year, at 25 per cent.

The performance measure for energy savings in gigajoules has been improved by including natural gas savings to the extent possible, rather than only the electricity savings reported in previous years. In order to add two different forms of energy savings, the measure is now in

gigajoules rather than gigawatt hours. By reporting both natural gas and electricity savings, this measure provides a more complete indicator of the performance of the total energy demand side management effort by Government and utilities and their customers. FortisBC Gas is commencing an expanded demand side management program, and its results will be incorporated into future reporting. The measure continues in the 2012/13 Ministry Service Plan. The target was significantly exceeded, mainly due to increased energy savings by several Power Smart Partner Programs.

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

# Objective 3.1: A continued strong commitment to environmentally and socially responsible development through appropriate and timely engagement of First Nations, the public and stakeholders in energy and mineral resource development.

If the public, First Nations, landowners and non-governmental organizations are informed and participate in responsible resource exploration and development, they will have an opportunity to help identify and contribute constructively to the resolution of issues and become more aware of the benefits that resource development can provide to a community, such as regular employment for citizens.

- Foster working relationships between industry, the public, First Nations and landowners by clarifying and simplifying resource exploration and development management processes, enhancing dispute resolution methods, and offering more support and information.
- Continually examine tenure policies and legislation, and, with the engagement of stakeholders and other ministries, develop new regulations in response to technological and societal changes.
- Work with industry, the Oil and Gas Commission and the public to manage the development of the Horn River Basin and other shale gas plays in a manner that establishes leading North American standards for unconventional gas resources.
- Exchange information with industry regarding Crown petroleum and natural gas rights disposition matters, resolve overlapping requests or parcels that are too large, and negotiate parcel configurations.

# Objective 3.2: Enhanced stakeholder awareness of resource opportunities and the benefits of their responsible development and use.

Increased stakeholder awareness of the employment and business opportunities that result from responsible resource exploration and development can enhance cooperation among industry, the public and the Ministry.

The Ministry seeks to reach stakeholders and the public in key energy and mineral producing regions.

# Strategies

- Continue to collaborate with other ministries, agencies and Crown corporations to provide information and engage stakeholders to promote awareness and greater understanding of the exploration and development of resources.
- Continue to improve the referral process for Crown petroleum and natural gas rights dispositions to be more responsive to industry, First Nations and community interests.
- Continue support for the annual B.C. Mining and Sustainability Award (implemented in 2006) to recognize the achievements of communities, industry, organizations and individuals.

# Goal 4: Safe and sustainable homes for all British Columbians

# **Objective 4.1: Access to safe and stable housing**

- Provide policy and funding support for a continuum of social housing, including emergency shelters, subsidized units and private market rental assistance. The support needs of vulnerable citizens are further addressed through the Homeless Outreach Program, supportive housing, transition homes and assisted living.
- Work with local governments and other partners to address local housing challenges and increase the supply of affordable market rental and homeownership units.
- Provide policy development to ensure an effective strata regulatory system, including supporting strata residents with improved dispute resolution mechanisms and financial accountability requirements.
- Provide policy and funding support for transition house and safe house services for women and children who are fleeing domestic violence, as well as for a longer term enhanced continuum of safe housing options, such as second stage housing.

• Assist landlords and tenants to resolve disputes earlier in the resolution process by: increasing public education; working with partner agencies and organizations to expand the availability of consistent information regarding tenancies; and, expanding the triage process and scheduling to ensure landlords' and tenants' enquiries and requests are appropriately addressed.

# Performance Measure 11: Priority clients in subsidized housing

Performance	2009/10	2010/11	2011/12	2011/12
Measure	Actual	Actual	Target	Actual
Percentage of clients belonging to priority groups in subsidized housing	N/A	N/A	84	88 Exceeded

Data Source: This measure is calculated by taking the current inventory of subsidized housing and determining the percentage of units that are available for each of the designated priority groups

Note: This measure was new for the 2011/12 Service Plan.

## **Discussion of Results**

Tracking the percentage of individuals belonging to priority access groups in subsidized housing allows the Ministry to assess how well it is meeting the goal of improving access to housing and support services for homeless British Columbians.

This performance measure was new in the Ministry's 2011/12 Revised Service Plan. This measure will continue to be monitored as part of the BC Housing Service Plan and Annual Report. The target was exceeded.

As of March 31, 2011, 88 per cent of all households receiving housing assistance were within one of the identified priority groups, exceeding the target of 84 per cent. This increase from 86 per cent from the previous year reflects the creation of new subsidized housing as well as an increase in the number of existing units adapted for higher priority needs.

The actual figures for 2009/10 and 2010/11 show an "N/A" because this performance measure was a replacement for a previous one (percentage of homeless individuals accessing housing who remain housed six months after placement.)

Performance	2008/09	2009/10	2010/11	2011/12	2011/12
Measure	Baseline	Actual	Actual	Target	Actual
Number of residential dispute resolution requests per 1,000 British Columbia adult population (over age 19)	7.04	5.8	6.1	6.0	5.9 Exceeded

# Performance Measure 12: Residential dispute resolution

**Data Source:** Ministry of Energy and Mines, Residential Tenancy Branch – Records of dispute resolution requests; Statistics Canada, Catalogue no. 91-215-X, Table 2.1-11

Note: The Actual figure for 2010/11 has changed (from. 6.77). This is the result of the difference between population forecasts and the current population estimates.

# **Discussion of Results**

The Ministry provides information about legislation and regulations as well as dispute resolution services to landlords and tenants. Increased accessibility to this information means landlords and tenants are developing more successful tenancies, and have sought formal dispute resolution less often over the past three years. This outcome is reflected in the performance measure.

The Ministry cannot determine the precise number of tenancies in the province, though it is estimated to be approximately one third of the adult population. Tying the number of dispute resolutions to adult population provides a comparable measure across fiscal years, as the number of tenancies increases with population increase. The Ministry influences the performance results by implementing the strategies listed above.

The actual number of requests for dispute resolution per 1,000 British Columbia adults was slightly lower than the target of 6.0. Improvements to public education, along with improved delivery of information by information officers may have resulted in fewer unnecessary applications. The Ministry will continue to emphasize public education and information delivery.

# Objective 4.2: Safety and environmental sustainability in the design, construction and occupancy of buildings

- Increase the effectiveness of the building regulatory system through consistent application and enforcement of a uniform Building Code.
- Continue to engage stakeholders in the development of the next edition of the BC Building Code, and continue to develop projects for Greening the Code to support improvements in energy and water efficiency.
- Engage Ministry partners and stakeholders in discussions leading to a new vision for the built environment, including ways to streamline processes within the building regulatory system, and explore how technology could be used to increase efficiency.

# Goal 5: Sound regulatory measures to promote responsible liquor licensing and gaming, consumer protection and fair business practices in British Columbia

# **Objective 5.1: Comprehensive and responsible gaming regulatory framework and programs**

# Strategies

- Ensure all gaming in the province, including gaming conducted over the Internet, is subject to a high level of rigour and scrutiny. In the case of online gaming, this includes certifying and monitoring the online platform, systems upgrades, and all games to ensure technical standards are met.
- Certify all companies, people and equipment involved in gaming and horse racing.
- Conduct regular audits of all commercial gaming venues and investigate all allegations of wrongdoing, to ensure the integrity of gaming and use of proceeds.
- Oversee the regulation and operation of horse racing in the province, including implementing the BC Horse Racing Industry Revitalization Initiative.
- Provide gaming grants to support social programs, community services, local economic development initiatives, local governments and the horse racing industry.<sup>2</sup>
- Continue to develop and enhance the Province's Responsible Gambling Strategy for online players and for those who visit more traditional gaming facilities.
- Implement, evaluate and report on recommendations concerning the lottery retail network made by the Office of the Ombudsperson and the independent auditing firm, Deloitte and Touche LLP.

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<sup>&</sup>lt;sup>2</sup> Responsibility for gaming grants was transferred to the Ministry of Community, Sport and Cultural Development on April 1, 2011.

Performance	2009/10	2010/11	2011/12	2011/12
Measure	Actual	Actual	Target	Actual
Gaming policy and enforcement service score	N/A	81	84	90 Exceeded

## Performance Measure 13: Gaming policy and enforcement

Data Source: Ministry of Energy and Mines-Gaming Policy and Enforcement Branch

**Note:** This measure is a score based on the timeliness of response to public applications, communications, and requests, and was new for the 2011/12 Service Plan.

## Discussion

The service score was developed as a measure of the ability of the Ministry's Gaming Policy and Enforcement Branch to meet pre-determined standards of timeliness of service to the public.

The score is an average result calculated across the five program areas that have appropriate, measured service standards: audit; licensing and grants; registration; policy; and, problem gambling. Examples of service standards include the percentage of complete applications for lottery retail registration processed within five business days, and the percentage of draft reports of commercial gaming audits issued within 30 days.<sup>3</sup> The service score is a percentage, but it is unlikely that a score of 100 per cent will be achieved due to some measures being impacted by factors outside of the Ministry's control, such as an incomplete application for a gaming event licence. The target was exceeded in 2011/12.

# **Objective 5.2: Effective licensing and inspection of liquor licensees**

- Target resources on high-risk establishments and focus inspections and investigations primarily on service to minors, over-service, overcrowding and illicit alcohol.
- Strengthen integrated partnerships with stakeholders, such as local government staff and officials, police and industry members.
- Increase voluntary compliance through expanded provision of education and information to licensees.
- Ensure that only qualified applicants hold liquor licenses and establishment locations are appropriate.
- Ensure regulations, policies and resources are directed at protecting public safety and public interests.

<sup>&</sup>lt;sup>3</sup> A detailed breakdown of the service score is included in the *Gaming Policy and Enforcement Branch 2011/12 Business Plan*, available at: www.pssg.gov.bc.ca/gaming/reports.

Performance	2009/10	2010/11	2011/12	2011/12
Measure	Actual	Actual	Target	Actual
Percentage of inspected/investigated liquor licensees in compliance	N/A <sup>4</sup>	95	95	96 Exceeded

# Performance Measure 14: Liquor licensee inspection and investigation

Data Source: Liquor Control and Licensing Branch

Note: This measure was new for the 2011/12 Service Plan.

# Discussion

The Ministry tracks the percentage of inspected or investigated liquor licensees who are found to be in compliance with provincial liquor licensing regulations. More than 9,000 inspections are conducted annually of almost 10,000 licensees across all regions of the province. The Ministry focuses resources on high-risk establishments, so some establishments may be visited more than once in a given year, while others may not be visited during that year.

Increased voluntary compliance indicates the level at which licensees understand and are willing to cooperate with the liquor regulatory framework. An increase in voluntary compliance in areas such as over-service and prevention of service to minors may also indicate that liquor misuse is decreasing, thereby increasing public safety.

The Ministry's targeted approach of focusing resources on public safety contraventions and highrisk or problem establishments means there is a greater degree of certainty of enforcement consequences for non-compliant licensees. In the short term, this leads to a higher degree of voluntary compliance. Over the long term, however, the compliance rate may be seen to decrease due to the focus on high-risk, chronically non-compliant licensees. The target was exceeded in 2011/12.

# **Report on Resources**

	Estimated	Other Authorizations <sup>1</sup>	Total Estimated	Actual	Variance			
Operating Expenses (\$000)								
Oil and Gas	12,042	27	12,069	6,872	(5,197)			
Mines and Mineral Resources	10,084	0	10,084	11,475	1,391			
Titles and Corporate Relations	3,753	95	3,848	3,721	(127)			
Electricity and Alternative Energy	18,048	8,900	26,948	29,169	2,221			
Executive and Support Services	3,999	0	3,999	5,711	1,712			
Housing	345,444	794	346,238	346,238	0			
Housing Endowment Fund Special Account	10,000	0	10,000	5,716	(4,284)			
Innovative Clean Energy Fund Special Account	14,947	0	14,947	9,614	(5,333)			
Liquor Control and Licensing	0	1	1	1	0			
Gaming Policy and Enforcement	0	33,849	33,849	33,849	0			
<b>Executive and Support Services</b>	0	362	362	362	0			
Sub-total	418,317	44,028	462,345	452,728	(9,617)			
Prior Year Accrual Reversals	0	0	0	(5,836)	(5,836)			
Total	418,317	44,028	462,345	446,892	(15,453)			
Ministry	Capital Expendit	ures (Consolidated	Revenue Fund)	\$000)				
Executive and Support Services	64,250	0	64,250	5,192	(59,058)			
Liquor and Gaming Administration	0	885	885	216	(669)			
Total	64,250	885	65,135	5,408	(59,727)			
Capital Plan (\$000) <sup>2</sup>								
Housing	161,262	0	161,262	119,698	(41,564)			
Total	161,262	0,000	161,262	119,698	(41,564)			

Other Financing Transactions (\$000) <sup>3</sup>						
Oil and Gas Commission						
Receipts	40,750	0,000	40,750	29,968	(10,782)	
Oil and Gas Commission						
Disbursements	(40,750)	0,000	(40,750)	(29,968)	10,782	
Net Cash Source						
(Requirements)	0,000	0,000	0,000	0,000	0,000	
Northwest Transmission Line						
Receipts	61,000	0,000	61,000	0,000	(61,000)	
Northwest Transmission Line						
Disbursements	(61,000)	0,000	(61,000)	0,000	61,000	
Net Cash Source						
(Requirements)	0,000	0,000	0,000	0,000	0,000	

<sup>1</sup> "Other Authorizations" includes Contingencies and the Liquor and Gaming programs newly transferred in the February 2012 reorganization. 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.

# **Annual Service Plan Report Appendices**

# **Appendix A: Ministry Contact Information**

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

Eighth Floor, 1810 Blanshard Street PO Box 9319 Stn Prov Govt Victoria, B.C. V8W 9N3 Phone: 250-952-0241 website: <u>www.gov.bc.ca/empr</u>

### **Mines and Minerals Resources Regional Offices**

### Northwest

PO Box 5000 Second Floor, 3726 Alfred Avenue Smithers, B.C. V0J 2N0 Phone: 250-847-7383 email: MMD-Smithers@gov.bc.ca

### Central/Northeast

350 - 1011 – 4th Avenue Prince George, B.C. V2L 3H9 Phone: 250-565-4240 email: MMD-PrinceGeorge@gov.bc.ca

### South Central

2<sup>nd</sup> Floor, 441 Columbia Street Kamloops, B.C. V2C 2T3 Phone: 250-371-3912 email: <u>MMD-Kamloops@gov.bc.ca</u>

### Southeast

1902 Theatre Road Cranbrook, B.C. V1C 7G1 Phone: 250-420-2161 email: MMD-Cranbrook@gov.bc.ca

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### Southwest

PO Box 9320 Stn Prov Govt Sixth Floor, 1810 Blanshard Street Victoria, B.C. V8W 9N3 Phone: 250-387-4825 email: <u>SouthwestMinesDivision@gov.bc.ca</u>

### **Mineral Titles Branch**

303-865 Hornby Street Vancouver BC V6Z 2G3 Phone: 1-866-616-4999

### **Mineral Claims Inspectors**

### Kamloops

2<sup>nd</sup> Floor, 441 Columbia Street Kamloops B.C. V2C 2T3 Phone: 250-371-3786

### Smithers

PO Box 1389 Houston B.C. V0J 1Z0 Phone: 250-845-3584

### **Residential Tenancy Branch Regional Offices**

### Victoria

Suite 101 – 3350 Douglas St, Victoria BC V8Z 3L1 PO Box 9298 Stn Prov Govt, Victoria BC V8W 9J8

### Burnaby

#400 – 5021 Kingsway, Burnaby BC V5H 4A5

### Kelowna

#305 – 478 Bernard Ave, Kelowna BC V1Y 6N7

### Liquor Control and Licensing

PO Box 9292 Stn Prov Govt, Victoria BC V8W 9J8 Ph (in Victoria): 250-952-5787

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Ph (outside Victoria): 1-866-209-2111 Fax: 250-952-7066

### **Gaming Policy and Enforcement**

## Victoria – Head Office

3<sup>rd</sup> Fl, 910 Government Street Victoria B.C. Ph: 250-387-5311 Fax: 250-356-8149

### Burnaby - Audit, Investigation and Racing

Audit: #220 - 4370 Dominion Street Burnaby, B.C.

**Investigations and Racing:** #408 - 4603 Kingsway Avenue, Burnaby, B.C. Ph: 604 660-0245Fax: 604 660-2030

Kelowna – Regional Office #200 - 1517 Water Street, Kelowna, B.C.

Ph: 250 861-7363 Fax: 250-861-7362

### **Prince George – Regional Office**

#211 - 1577 7th Avenue, Prince George, B.C. Ph: 250-612-4122 Fax: 250-612-4130

# **Appendix B: Hyperlinks to Additional Information**

A list of legislation administered by the Ministry can be found at: <a href="https://www.empr.gov.bc.ca/Titles/legislation/Pages/default.aspx">www.empr.gov.bc.ca/Titles/legislation/Pages/default.aspx</a>

A list of Crowns, Agencies, Boards and Commissions reporting to the Minister, can be found at: <a href="https://www.empr.gov.bc.ca/Titles/legislation/Pages/Major\_Agencies\_Boards\_and\_Commissins.aspx">www.empr.gov.bc.ca/Titles/legislation/Pages/Major\_Agencies\_Boards\_and\_Commissins.aspx</a>

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

The Green Energy Advisory Task Force report can be found at: http://www.empr.gov.bc.ca/EAED/Documents/GreenEnergyAdvisoryTaskForce.pdf

The Clean Energy Act and a complete set of backgrounders and factsheets can be found at: <a href="https://www.mediaroom.gov.bc.ca/DisplayEventDetails.aspx?eventId=490">www.mediaroom.gov.bc.ca/DisplayEventDetails.aspx?eventId=490</a>

The Natural Gas Strategy can be found at: http://www.gov.bc.ca/ener/popt/down/natural\_gas\_strategy.pdf

The LNG Strategy can be found at: http://www.gov.bc.ca/ener/popt/down/liquefied\_natural\_gas\_strategy.pdf

The Frac Focus BC website can be found at: http://fracfocus.ca/

### Office of Housing and Construction Standards

Contact and other information about the Office of Housing and Construction Standards can be found at: <u>www.housing.gov.bc.ca</u>

For information about Aboriginal Housing Initiatives, visit the website at: www.housing.gov.bc.ca/housing/AboriginalHousing

The Provincial Housing Strategy, Housing Matters BC, can be found at: www.housingmattersbc.ca

### **Residential Tenancy**

Contact and other information about Residential Tenancy can be found at: <u>www.rto.gov.bc.ca</u>

### **Gaming Policy and Enforcement**

Contact and other information about Gaming Policy and Enforcement can be found at: <a href="http://www.pssg.gov.bc.ca/gaming">www.pssg.gov.bc.ca/gaming</a>

### Liquor Control and Licensing

Contact and other information about Liquor Control and Licensing can be found at: <u>www.pssg.gov.bc.ca/lclb</u>

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