FRASER MARSHALL EXECUTIVE DIRECTOR CORPORATE INITIATIVES BIOGRAPHY



Fraser holds a Bachelor of Science in Chemistry with a minor in Biochemistry and Microbiology from the University of Victoria. He then worked in industrial, analytical and geochemical laboratories. He subsequently spent several years working at a consulting firm, Malatest & Associates, managing a wide variety of projects for government and private sector clients. He joined the Province in 1998 in the environmental health section of Ministry of Health, including major project reviews. After that, he worked in strategic HR for Health, the Public Service Agency, and the Ministry of Justice and Attorney General (JAG). In these roles, he developed and implemented a wide variety of programs related to engagement, performance management, leadership development, succession planning, and compensation.

Before joining MEM and NGD, he was the Registrar of the Security Programs Division of JAG. In this role, he was responsible for a wide range of regulatory programs that included front-line service delivery, compliance and enforcement, and policy and legislation. During his time there, he was responsible for implementing the new Metal Dealers and Recyclers Act, starting the Personnel Security Screening Office, and for significant changes to the Criminal Records Review Act – best known to parents who can now do online record checks to volunteer at their kid's schools or to coach their sports teams. Fraser is most proud of winning the award as one of the Public Service's 10 Best Places to Work for 2014.

CORPORATE INITIATIVES BRANCH

Executive Director Responsible: Fraser Marshall

Core Business/ Program Area Description/Critical Business Processes:

The Corporate Initiatives Branch (CIB) is responsible for issues and processes that transect the Ministry's key lines of business or require a Ministry-wide, corporate approach. CIB delivers a range of corporate services for both MEM and MNGD, including Transformation Planning; the Correspondence Unit; public service events such as the Premier's Awards, Public Service Week, and Long Service Awards; FOI and Records Management; Lean and Regulatory Reform; Internal and external communications, including Executive blogs, internet and intranet updating; and supporting MARR on the First Nations file by coordinating Land referrals to line Divisions and participating in the annual FN leaders Gathering.

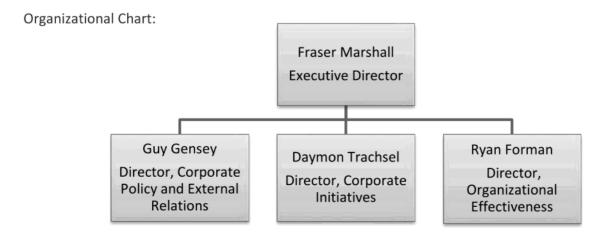
CIB leads and collaborates with Divisions on Ministry policy work that crosses multiple lines of business or is cross-governmental in nature. Examples include the Emergency Programs Act; and the Natural Resource Roads Act. CIB is the point of contact with other Ministries for consultation on their RFLs.

CIB is also responsible for Strategic Planning and Reporting, which includes: developing the Ministry's Service Plans, Annual Service Plan Reports, and coordinating the Ministry's internal planning process of Division Business Plans that link to staff MyPerformance reports; managing the process of Crown Corporation service plan, annual report and mandate letter preparation; ensuring that the Minister and senior Executives are prepared for recurring annual events such as Budget Estimates and the UBCM Convention by coordinating and producing estimates, transition or other corporate briefing binders; and supporting JTST with their annual updates to the BC Jobs Plan.

Budget: \$ 1,437,000 (2017/18 estimates).

Full Time Equivalents (FTEs): 16

Related Legislation: CIB's operations transect the business lines of MNGD and MEM



MINISTRY PROFILE

Ministry: Energy and Mines

Ministry Mandate:

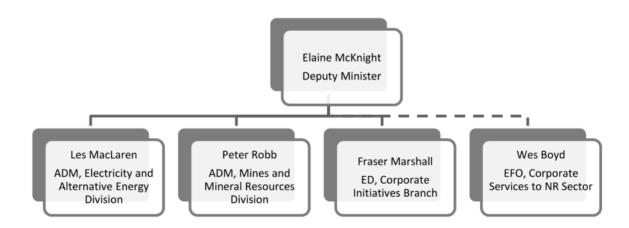
The Ministry of Energy and Mines is responsible for British Columbia's electricity, alternative energy, mining and mineral exploration sectors. These sectors are made up of diverse interests that explore for and produce coal and other valuable minerals and that develop electricity, clean or renewable energy sources, including biomass, biogas, geothermal, hydro, solar, ocean, wind and low-carbon transportation fuels. Through teamwork and positive working relationships with its clients and stakeholders, the Ministry facilitates thriving, safe, environmentally responsible and competitive energy and mining sectors in order to create jobs and economic growth in communities across the province. In fulfulling its mandate, the Ministry consults with other ministries and levels of government, energy developers and marketers, mineral exploration and mining companies, First Nations, communities, environmental and industry organizations, and the public.

The Ministry supports the Minister in his governance responsibilities for the following Crown Corporations: British Columbia Hydro and Power Authority (BC Hydro); Columbia Power Corporation; and the Columbia Basin Trust.

Budget: \$74,258,000 (2017/18 estimates)

Full Time Equivalents (FTEs): 221 (includes Minister's Office)

Executive Organizational Chart:



ELAINE MCKNIGHT DEPUTY MINISTER OF ENERGY AND MINES BIOGRAPHY



Elaine was appointed the Deputy Minister of the Ministry of Energy and Mines on September 15, 2015. The Ministry of Energy and Mines is the key provincial ministry responsible for the safe and environmentally responsible exploration and development of British Columbia's electricity, alternative energy, and mining sectors.

Elaine has held several executive positions within the BC government recently in the BC Public Service Agency and the Ministry of Health. She has over 20 years of experience providing leadership and setting the strategic direction for the development and implementation of a number of complex change initiatives.

LES MACLAREN ADM ELECTRICITY AND ALTERNATIVE ENERGY BIOGRAPHY



Les holds a BSc in Geology from Queen's University and an MBA from the University of British Columbia. After working for 10 years in oil and gas exploration and development in western Canada and Australia, Les joined the Ministry of Energy and Mines in 1991. Les has held varying roles in the BC Public Service related to energy policy and Crown corporation governance and performance.

In his current role, Les' responsibilities include: electricity policy and utility regulation; BC's Clean Energy Act; inter-jurisdictional relations related to power planning and reliability; the Columbia River Treaty; the Innovative Clean Energy Fund; energy efficiency policy and programs; and emerging and renewable energy technologies such as hydrogen, ocean energy and biofuels.

In 2013, Les was awarded the Queen's Diamond Jubilee Medal in recognition of his many years of dedicated commitment to the BC Public Service.

ELECTRICITY AND ALTERNATIVE ENERGY DIVSION

ADM Responsible: Les MacLaren

Core Business/ Program Area Description/Critical Business Processes:

The Electricity and Alternative Energy Division develops and implements legislation, policies and programs to support all forms of electrical power generation and transmission. The Division is also responsible for de-carbonization of the province's energy systems through alternative energy resources and technologies, energy efficiency measures and programs, innovative market transformation strategies, and economic development initiatives with local governments and First Nations across BC. The Division facilitates thriving, competitive, reliable, efficient and environmentally responsible electricity and alternative energy sectors for the benefit of British Columbians. The Province is dedicated to striking a balance between the responsible development of conventional sources of energy for electricity, heating/cooling and transportation applications, and encouraging reductions in energy demand and greenhouse gas emissions through policies and programs.

The Division is responsible for regulating the energy efficiency of manufactured building components and equipment, advancing the commercialization and deployment of renewable fuels, lowering the carbon intensity of transportation fuels, and developing and implementing provincial policy with respect to the regulation of electricity, natural gas and alternative energy utilities. The Division also ensures that British Columbia's energy interests in inter-jurisdictional relations are met (e.g. the Columbia River Treaty, North American Mandatory Reliability Standards for electricity systems).

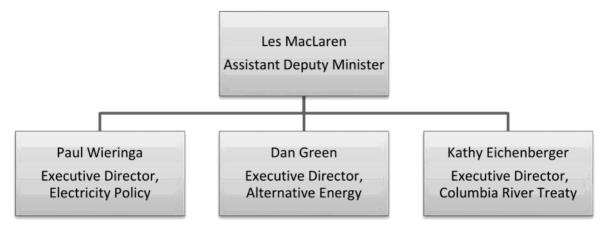
The Division supports the Minister is his/her governance responsibilities for any Crown corporations that the may be assigned to the Minister of Energy and Mines (currently BC Hydro, Columbia Basin Trust, and Columbia Power Corporation). The Division is responsible for the Innovative Clean Energy (ICE) Fund, a Special Account funded by a levy on specified energy products, which is used to invest projects, programs and initiatives that further the energy and environmental priorities of the government.

Budget: \$ 42,998,000 (2017/18 estimates) Note: This includes a one year \$40M funding for Clean Energy Vehicles programs in 2017/18. The Division's usual budget is around \$3M. The Division also manages spending from the ICE Fund Special Account (\$2.3M in 2017/18).

Full Time Equivalents (FTEs): 34

Related Legislation: Clean Energy Act; Columbia Basin Trust Act; Energy Efficiency Act; Geothermal Resources Act; Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act; Hydro and Power Authority Act; Special Accounts Appropriation and Control Act (ICE Fund); Utilities Commission Act (UCA)

Organizational Chart:



Issue:

10 Year Rates Plan for BC Hydro

Background:

- In 2011, BC Hydro was forecasting significant rate increases (32.1% over 3 years) to reinvest in its ageing system and build new infrastructure to meet projected demand growth.
- In response, a Deputy Minister's Review Committee was established, resulting in over \$390 million in cost savings and lower rate increases of 16.6% over three years.
- In 2014, BC Hydro again anticipated large rate increases of 26.4% over two years.
- Again in response the government implemented a 10-Year Rates Plan using Directions to the BC Utilities Commission. The Rates Plan at 9% and 6% for fiscal 2015 and fiscal 2016 (15.5% rather than 26.4%), capped rate increases for each rate class at 4%, 3.5%, and 3% for fiscal 2017-2019, and set targets of 2.6% per year for fiscal 2020 through 2024.
- The 10-Year Rates Plan adopted many of the Deputy Minister's Review Committee recommendations, such as: eliminating the Tier 3 Water Rental Rate; reducing BC Hydro's net income growth; and reducing and/or eliminating dividend payments to allow BC Hydro to increase its equity. These changes reduced BC Hydro's costs and borrowing requirements.
- The 10 year plan has been successful so far:
 - o Rates for the first three years have increased as scheduled;
 - BC Hydro has developed a plan to meet their cost targets throughout the remainder of the 10 Year Rates Plan;
 - Industrial customers have indicated that the certainty over rate increases has been helpful for them;
 - The plan has given government a reference point for making decisions about electricity-sector policies and programs; and
 - Additions to the Rate Smoothing regulatory account are as planned, and BC Hydro expects to fully pay down this account by the end of year 10.
- In July 2016, BC Hydro made a revenue requirements application to the BCUC for years 3-5 of the Rates Plan (increases of 4%, 3.5% and 3% on April 1 of 2016, 2017 and 2018, respectively).
- Under the 10 Year Plan, the BCUC has more discretion over rates starting on April 1, 2019.
- Although the 10 Year Plan includes targets for rate increases of 2.6% per year in the final five
 years of the rates plan, these are not caps and the BCUC could set rate increases above or
 below this total.
- Currently, BC Hydro is phasing out its dividend until its debt:equity ratio reaches 60:40. This will allow it to conserve cash to apply to its capital program.
- Refreshing the 10 Year Plan every five years, on a rolling basis, could ensure that customers were able to plan on a longer time horizon.

Decision required:

- This is a 90 Day Issue.
- The BCUC is expected to make a decision on BC Hydro's Revenue Requirement Application for years 3, 4, and 5, of the 10 Year Rates Plan in the summer of 2017.
- Extending the 10 Year Rates Plan for BC Hydro is an option the Ministry will prepare for the consideration of the incoming government.

Issue:

• Teck Resources' sale of its remaining interest in the Waneta Dam

Background:

- Teck owns two-thirds of the Waneta Dam and Generating Station. BC Hydro owns the other one-third interest, which it acquired for \$825M in 2010. Teck approached BC Hydro in January 2016 stating that was interested in divesting its remaining interest. During the purchase of the initial one-third interest, Teck provided BC Hydro with a right of first offer (ROFO).
- BC Hydro received a sales notice from Teck in June 2016 for \$1.2B. Under this proposal, Teck
 would sell its remaining interest in the dam to BC Hydro and BC Hydro would serve the Teck
 smelter load for 20 years, following which BC Hydro could use the power for its own purposes
 (serving domestic demand or selling to neighbouring markets at BC Hydro's discretion).

s.17,s.21

- On May 12, 2017, Teck announced that it had agreed to sell its interest to Fortis Inc., parent of the FortisBC electric and gas utilities in BC, for \$1.2 billion. Under the arrangements, Teck will lease back the facilities to supply its Trail smelter for 20 years.
- Teck delivered a ROFO package to BC Hydro on May 25, 2017. BC Hydro has two weeks to
 determine whether the package is compliant with the ROFO conditions agreed to in 2009, and
 will have 60 days to decide whether to exercise its ROFO rights and purchase the remainder of
 the Waneta assets.

Decision required:

- This is a 30 day issue.
- If BC Hydro decides it wants to purchase the rest of the Waneta asset, the Province must decide on whether it has the appetite/interest to take on significant additional debt.
- The question of whether the commercial power rate currently applied to Teck's water license
 will remain following the sale of the dam will need to be considered by JAG and the Water
 Comptroller.
- Depending on the relationship between Teck and a third party purchaser of the asset, the purchaser could request the Province grandparent the commercial water rental rates.

Issue:

 On November 4, 2016, the Province announced a new eDrive rate for LNG facilities, without specifying the effective start date, which has implications for BC Hydro, FortisBC and other LNG proponents. The eDrive rate, which is the same electricity rate as other BC Hydro industrial customers, provides an incentive for LNG producers to electrify their compression process.

Background:

- The Province's 2012 LNG Strategy stated that to keep electricity rates affordable, LNG developers would be required to contribute capital for infrastructure and pay for new power supply to meet their large new demands.
- In 2014, the Domestic Long-Term Sales Contracts Regulation under the Clean Energy Act set a LNG rate, higher than the standard BC Hydro industrial rate, to meet this commitment and to help ensure that costs of serving large new LNG developments did not negatively impact broader BC Hydro customer rates.
- The LNG rate was derived by undertaking BC Hydro system studies with and without the "expected LNG" demand of 3,000 gigawatt-hours per year of anticipated in BC Hydro's 2013 Integrated Resource Plan. The impact of adding this demand meant higher revenues in the early years, due to higher than market prices for surplus and initial Site C power, and higher costs in later years due to the need to advance new, higher cost supply from Independent Power Producers.
- From analysis of financial models provided by LNG proponents, the LNG rate was also estimated to be equivalent to the costs LNG developers would incur to use natural gas for liquefaction and generate power for their ancillary needs. Natural gas prices have trended lower than what was forecast in 2013. If lower natural gas prices persist then LNG rate costs will be higher than using natural gas for liquefaction.
- The LNG rate is about 35% higher than the standard BC Hydro industrial rate, and increases at 2% per year until January 1, 2023, when it becomes fixed until the standard industrial rate (which is expected to increase more than 2% per year) catches up. The LNG rate then becomes equal to the industrial rate.
- BC Hydro undertook a review of the LNG rate and concluded that electricity market conditions
 had also changed, including the cost of new future supply, and that an eDrive rate closer to
 the standard BC Hydro industrial rate was possible.
- In the November 4, 2016 announcement of the eDrive rate, government indicated that the
 rate will only be available to proponents once they have announced their final decision to
 proceed with their LNG projects, and use electricity to power their liquefaction process.
- Coinciding with the eDrive rate announcement, Woodfibre announced that they will proceed
 with their project, and pending permitting, construction for the Woodfibre LNG Project could
 begin in 2017, with operation as early as 2020. Government has committed to Woodfibre in a
 November 2016 Letter of Understanding that the eDrive rate will be available to them.
- FortisBC announced their new Tilbury LNG facility in November 2013 and plan to commence operations in summer 2017. FortisBC has operated an LNG storage facility on Tilbury Island since the 1970s to meet peak natural gas demand. Tilbury currently purchases electricity at

BC Hydro's standard industrial rate but when the new facility becomes operational it will be subject to the LNG rate. FortisBC will be using electricity to compress natural gas and has indicated to government that they want to purchase electricity under the eDrive rate. A decision to establish an early effective date could be linked to electrification of other FortisBC facilities, such as compressors on the pipeline that will serve Woodfibre LNG.

 Since the announcement of the eDrive rate, other LNG proponents have come forward to discuss electrification opportunities. s.21

- When the eDrive rate becomes effective it will impact BC Hydro's 10 Year Rates Plan. The
 Minister of Energy and Mines has made a written undertaking that, to the extent that the net
 impact of BC Hydro participating in activities that promote Climate Leadership is a decrease in
 revenues or increase in costs that negatively impact the Rates Plan, the Province has
 committed to take further actions with BC Hydro as required to ensure that Rates Plan targets
 continue to be met.
- Budget 2017 announced that the Provincial Sales Tax for industrial electricity customers would be reduced in October 2017 from 7% to 3.5% and eliminated in April 2019.

Decision required:

This is a 60 day issue.

s.12,s.13,s.21

Issue:

- Columbia River Treaty Confirm Mandate to Engage with Canada and the United States
 - In March 2014, the government of British Columbia announced a decision to continue the Columbia River Treaty (Treaty) and seek improvements within the existing Treaty framework. http://engage.gov.bc.ca/app/uploads/sites/6/2012/03/BC Decision on Columbia River Treaty.pdf.
 - While negotiations with the U.S. and Canada have not formally begun, the Ministry of Energy and Mines, on behalf of the Province, continues to prepare for potential negotiations.

s.12,s.16

The U.S. Department of State finalized its negotiation mandate late fall 2016. The
U.S. Pacific Northwest congressional delegation is urging negotiations to begin
immediately. The U.S. chief negotiator is also urging Canada to move forward on
developing a negotiation framework.
s.13

Background:

- Under the Treaty, which was ratified in 1964, Canada agreed to construct three large storage dams to reduce flood risk and increase dependable power production in both Canada and the U.S.
- The U.S. paid a lump sum of US\$64.4M for 60 years of flood risk mitigation, and agreed to send Canada one half of the increased power potential at dams in the U.S., known as the Canadian Entitlement to downstream power benefits. Those power benefits were sold for the first 30 years for US\$254.4M, with the proceeds used to construct the BC Treaty dams.
- The Entitlement is currently marketed by BC Hydro's trading subsidiary Powerex, and generates about \$120M/year that is deposited into the consolidated revenue fund.
- In 1963, Premier W.A.C. Bennett negotiated the Canada-BC Agreement that transferred most
 of the rights and obligations under the Treaty to the Province. Canada retained its
 constitutional role to negotiate treaties, but agreed not to amend or terminate the Treaty
 without BC's consent.
- Because any benefits or costs associated with changes to the Treaty impact British Columbia, Canada has been supportive of BC taking the lead on Treaty studies and consultations, and Federal representatives have publicly stated that "there will be no light between Canada's and BC's positions on the future of the Treaty."
- On March 13, 2014, the Government of British Columbia released its decision to continue the Columbia River Treaty and seek improvements within its existing framework. The British Columbia Decision includes 14 principles to guide the Province in discussions with Canada and the U.S. on the future of the Treaty.
- The decision was based on an extensive First Nations, local government and public consultation process, and more than two years of hydrologic, social, economic and legal studies.

s.16

- On October 24, 2016, then U.S. Secretary of State, John Kerry, sent a letter to Stephane Dion, then Canada's Minister of Foreign Affairs, urging the Canadian government to begin negotiations with the U.S. to modernize the Treaty, indicating it would be "mutually beneficial to begin negotiations promptly to establish a negotiating framework before the end of 2016."
- Secretary Kerry indicated three areas for negotiations: incorporating ecosystem function in Treaty operations; controlling floods; and allowing economic and reliable hydropower generation.
- In a letter dated March 6, 2017, U.S. Secretary of State Rex Tillerson wrote to Minister of Foreign Affairs Chrystia Freeland reiterating the State Department's desire to begin formal negotiations to modernize the Treaty, and specifically mentioned the Treaty's flood control provisions. s.12,s.16,s.21

s.12, s.16, s.21

• BC's Treaty team continues to consult with the relevant First Nations on aboriginal interests related to the Treaty. Local government officials in the Columbia basin are also engaged.

Decision required:

• This is a 90 day issue. s.12,s.13

BRIEFING NOTE CROWN CORPORATIONS

Name: British Columbia Hydro and Power Authority (BC Hydro)

Mandate:

Created under the Hydro and Power Authority Act, BC Hydro generates and provides electricity to 95 per cent of B.C.'s population and serves over four million people. The electricity it generates and transmits to customers throughout the province powers B.C's economy and quality of life. BC Hydro's mission is to provide customers with reliable, affordable and clean electricity throughout B.C., safely.

Financial Information (high level):

BC Hydro operates 30 hydroelectric plants and two thermal generating plants. These assets, along with BC Hydro's other sources of supply and trading activities, generate total forecast revenues for BC Hydro for 2016/17 of \$5.8 billion, with a forecast net income of \$684 million.

On a projected basis total revenues are forecast to be \$6.5 billion with net income of \$712 million by 2019/20.

In November 2013, the Province, as part of the 10 Year Rates Plan, announced rate increases for BC Hydro in 2014/15 and 2015/16 of 9 per cent and 6 per cent, respectively, with rate increases for 2016/17 to 2018/19 capped at 4 per cent, 3.5 per cent and 3 per cent.

Capital expenditures on the Site C Clean Energy project are forecast to be \$717 million in 2017/18.

Issue(s):

- 30 Day Issue BC Hydro's annual report will require approval from the Minister in June.
- **30 Day Issue** Confirmation on whether to proceed as scheduled on the Integrated Resource Plan, especially for stakeholder engagement starting Fall 2017.

s.12.s.13

- 30 Day Issue Ministerial sign-off on principles of the Crisis Intervention Fund pilot proposal (due to BC Utilities Commission on July 20, 2017 as part of Phase 1 Rate Design Decision).
- 60 Day Issue Implementation of eDrive rate for LNG facilities using grid power for compression.

Appointment Status:

No Board appointments are required within 30/60/90 days.

BRIEFING NOTE CROWN CORPORATIONS

Name: Columbia Basin Trust (Trust)

Mandate:

The Trust is mandated under the Columbia Basin Trust Act to manage its assets for the ongoing economic, environmental and social benefit of the region. The Trust is also mandated under the Columbia Basin Management Plan to include the people of the Basin in planning for the management of its assets, and to work with others to coordinate activities related to the purposes of the Trust.

The Trust has two core functions:

- 1. Invest capital and manage the assets of the Trust.
- 2. Spend the income earned from the Trust's investments to deliver benefits to the Columbia River Basin.

Financial Information (high level):

Total revenues: \$58.8 million (2016/17 forecast)

Total delivery of benefits: \$38.9 million (2016/17 forecast)

Total new investments: \$10 million (2016/17 forecast)

Accumulated surplus \$441 million (2016/17 forecast)

Issue(s):

- 30 day issue: The Trust's annual report will need approval by the Minister in June 2017.
- **90 day issue:** The Trust's service plan and mandate letter will need approval by the Minister by August 2017.

s.12,s.21

Appointment Status:

• No Board appointments are required within 30/60/90 days.

BRIEFING NOTE CROWN CORPORATIONS

Name: Columbia Power Corporation (CPC)

Mandate:

CPC is wholly owned and controlled by the Province of British Columbia. Pursuant to the 1995 Columbia Basin Accord, the primary mandate of CPC is to undertake power project investments as an agent of the Province in partnership with Columbia Basin Trust (CBT). This mandate includes:

- Develop the Arrow Lakes Generation Station, Brilliant Expansion Project, and Waneta Expansion Project as commercially viable power developments.
- Enhance power project asset management to ensure long-term profitability and reliability of facilities through effective and efficient plant operations and maintenance.
- Through Columbia Power's role as the Owner's Representative for the Waneta Expansion Project, successfully close out the Design-Build construction contract to Final Acceptance in April 2018. Complete the transition to operational oversight by FortisBC through the involvement in the Waneta Expansion Limited Partnership Operating Committee.
- Work with the Ministry of Energy and Mines, Ministry of Finance, and CBT to explore structural options to further enhance value to both the Province and Basin residents while mitigating risk.

Financial Information (high level):

CPC currently manages operating assets in excess of \$800 million with installed capacity of 785 megawatts. These assets generate revenues for CPC totaling \$64 million with net income of just over \$40 million (Forecast 2016/17).

On a projected basis, revenues are forecasted to be \$66 million, with net income of \$50 million by 2019/20.

Issue(s):

• **30 day issue:** Columbia Power's annual report will need approval by the Minister in June.

Appointment Status:

The authorized number of Directors for CPC is six. Currently there is one vacancy. The
Board includes two nominees from CBT. During 2016 Budget Estimates, then Minister
Bill Bennett committed to work with the local MLA and CPC's Board to explore the
possibility of adding a representative from the local West Kootenay area.

PETER ROBB ADM MINES AND MINERAL RESOURCES DIVISION BIOGRAPHY



Peter Robb joined the Government of British Columbia in 2001, after several years working in the BC Treaty negotiations process as a consultant. He is a graduate of Bishops University (BComm) and the University of Northern British Columbia (BSc in Environmental Planning). He has spent his entire career working the natural resource sector with a focus on engaging and negotiating with First Nations in the forestry, mining and oil and gas sectors.

He has spent 11 years at the Ministry of Energy and Mines, along with a four year hiatus at the Ministry of Aboriginal Relations and Reconciliation. Before taking his current role, he was the Executive Director of the new Major Mine Permitting Office. He has held numerous positions within government ranging from regional operations, permitting to negotiating major infrastructure projects.

MINES AND MINERAL RESOURCES DIVSION

ADM Responsible: Peter Robb

Core Business/ Program Area Description/Critical Business Processes:

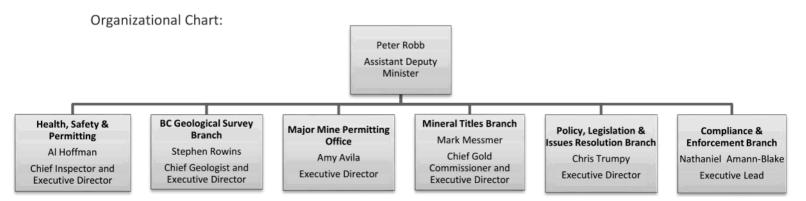
The Mines and Mineral Resources Division (MMRD) manages and facilitates the responsible development of B.C.'s mineral resources. In order to achieve the Province's strategic goals and vision for the mineral exploration and mining sector, MMRD's core businesses are:

- The regulation of mineral exploration and mining of coal, metals, aggregates and industrial
 minerals in the province to ensure the health and safety of workers, the public and the
 environment. Activities include permitting, inspections, compliance and enforcement for all
 phases of mineral development: mineral exploration, mine planning and operations,
 environmental mitigation and management, emergency preparedness, electrical and
 mechanical engineering, occupational health and safety, reclamation and closure.
- Geoscience database development, maintenance and publication by the BC Geological Survey and in collaboration with industry and other organizations such as Geoscience BC. Activities include mineral potential assessments and economic information to guide government decisions on land use and First Nations negotiations and to help market investment opportunities in BC.
- 3. The Division administers Crown mineral and placer mineral tenures using Mineral Titles Online and manages the disposition process for mineral and placer mineral leases, and coal licenses and leases. It also conducts field inspections of mineral and coal titles for auditing and compliance purposes. The Division also undertakes economic and policy analysis to identify measures to enhance exploration and mining competiveness in British Columbia.

Budget: \$ 21,630,000 (2017/18 estimates)

Full Time Equivalents (FTEs): 208

Related Legislation: Mines Act; Mineral Tenure Act; Coal Act



BRIEFING NOTE CROWN AGENCIES

Name: Assayers Certification Program in British Columbia (ACP)

Legislative Authority:

Ministry of Energy and Mines Act, Section 15

Mandate:

To certify that assayers operating in British Columbia are fully trained and qualified by conducting proficiency examinations set and invigilated by the Assayers Certification Board of Examiners at least twice each year. The Minister's signature on a certificate verifies that assayers have passed examinations and are qualified to carry out assays for the public.

Current Appointees:

Manzur Chaudhry, Chair Elaine Woo, Board Member David Tye, Board Member

Appointments required:

None

Issue(s):

None

Key Contact:

- Stephen Rowins
- Chief Geologist and Executive Director
- 250-952-0454

WES BOYD ADM CORPORATE SERVICES AND EXECUTIVE FINANCIAL OFFICER BIOGRAPHY



Reporting to Chair of the Natural Resource Board, Wes is one of two ADM/EFOs responsible for Corporate Services for the Natural Resource Sector. Wes is the Executive Financial Officer for the Ministries of Aboriginal Relations and Reconciliation, Agriculture, Energy and Mines, Environment (including Environmental Assessment Office and Climate Leadership) and Natural Gas Development. Wes is the lead for the Financial Services Branch for the sector; and the People and Workplace Strategies Branch supporting the above Ministries.

Wes was appointed ADM and EFO for all Natural Resource Sector ministries other than Forests, Lands and Natural Resource Operations effective April 4, 2016.

Wes joined CSNR from the Ministry of Technology, Innovation and Citizen Services where he was the ADM of Logistics and Business Services. His responsibilities in that position included procurement and supply services, and administration of the Freedom of Information and Protection of Privacy Act, on behalf of all ministries.

Wes started his career in the public service in 1989 in the Ministry of Social Services. He has worked in a variety of roles working in the Ministries of Health, Employment and Investment, Finance, Healthy Living and Sport, Olympic Games Secretariat, and most recently at Technology, Innovation and Citizen's Services. Wes also worked at Partnerships BC and BC Ferry Services Inc.; and as the Provincial representative on the Community Social Services Employers' Association (CSSEA) Board of Directors.

Wes has a Bachelor of Arts degree in Economics and a Master of Public Administration from the University of Victoria.

s.22

CORPORATE SERVICES FOR THE NATURAL RESOURCE SECTOR (CSNR)

ADM Responsible: Wes Boyd, Executive Financial Officer

Core Business/ Program Area Description/Critical Business Processes:

Since November 2010, one integrated entity has provided corporate services for the natural resource sector (NRS) ministries, which include the Ministries of Energy and Mines, Natural Gas Development and Aboriginal Relations and Reconciliation. The organization, Corporate Services for the Natural Resource Sector, is being led by two Assistant Deputy Ministers (ADM)/Executive Financial Officers (EFO) who oversee the following branches: Information Management Branch; People and Workplace Strategies Branch; Financial Services Branch; and Client Services Branch.

The corporate services model is designed to ensure flexibility and build on existing synergies. Benefits include:

- Enhancing integration and coordination across the sector;
- · Streamlining of processes and providing consistent services across the sector;
- Establishing a single accountability for corporate services functions;
- · Optimizing use of NRS assets and facilities;
- Synergies in central agency requirements (e.g. sector Workforce Plan, sector Technology and Transformation Plan);
- Providing a high level financial overview and consistent financial management practices
 across the sector.

Budget: CSNR chargeback to MEM is \$1.232M

Full Time Equivalents (FTEs): 9 (that provide direct support to MNGD, MEM and MARR) 550 (that support the broader NR Sector 6 ministries including MNGD, MEM and MARR)

Related Legislation: None

Organizational Chart:



Ministry of Energy and Mines - Key Stakeholders

Branch	Organization	Contact	Description	Key Issues	Address
EAED	Advanced Biofuels Canada	Contact Name: Ian Thomson Title: President Phone: 604-947-0040 Email: ithomson@advancedbi ofuels.ca	Advanced Biofuels Canada (ABFC) is a western-Canadian based association established to promote the production and use of advanced biofuels in Canada, collaborate with other stakeholders to expand market access for sustainable low-carbon biofuels in Canada, and collaborate broadly to decarbonize transportation.	 Promoting advanced Biofuels in Canada Achieving decarbonized transportation Accessibility to sustainable low-carbon biofuels 	Mailing address: 206-566 Artisan Lane Bowen Island, BC VON 1G2
EAED	BC Sustainable Energy Association (BCSEA)	Contact Name: Guy Dauncey Title: Communications Director Phone: 250-881-1304 Email: guydauncey@earthfutu re.com	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.	 Sustainable energy Energy efficiency and conservation 	Mailing address: PO Box 44104 Gorge Plaza 2947 Tillicum Rd. Victoria BC V9A 7K1

Branch	Organization	Contact	Description	Key Issues	Address
EAED	Canadian Electricity Association (CEA)	Contact Name: Sergio Marchi Title: President and CEA Phone: 613-230-9263 Email: marchi@electricity.ca	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.	Electricity as a safe, secure, reliable, sustainable and competitively-priced economic essential	Mailing address: 275 Slater Street, Suite 1500 Ottawa, ON K1P 5H9
EAED	Canadian Fuels Association (CFA) formerly the Canadian Petroleum Products Institute	Contact Name: Brian Ahearn Title: Vice-President Phone: 403-266-7565 Email: <u>brianahearn@canadianfuels.ca</u>	The CFA represents Canada's transportation fuels industry. Their members process crude oil into products such as transportation fuels and supply those products to market. One of their stated goals is to help their members meet the environmental policy objectives of government and expectations of Canadians without compromising access to a secure, reliable and competitively priced fuel supply.	 Transportation fuels Fuel policy execution and logistics 	Mailing address: 2100, 350 - 7 th Ave. SW Calgary, AB T2P 3N9

Branch	Organization	Contact	Description	Key Issues	Address
EAED	Renewable	Contact Name: Andrea Kent	Renewable Industries Canada,	Renewable	Mailing address:
	Industries	Title: President	founded in 1984 as the Canadian	fuels	55 Murray Street
	Canada	Phone: 613-594-5528	Renewable Fuels Association, has	Reducing GHG	Suite 450
	(RICanada),	Email: a.kent@greenfuels.org	grown to represent the leaders of	emissions	Ottawa, ON
	formerly		Canada's bioeconomy – producers of		K1N 5M3
	Canadian		renewable fuels and value added		
	Renewable		products that reduce GHG emissions		
	Fuels		and provide economic opportunity		
	Association		to the benefit of all Canadians.		
			Members of Renewable Industries		
			Canada provide the public with		
			renewable, clean-burning biofuels		
			such as ethanol and Biodiesel – fuels		
			that help fight climate change and		
			combat pollution and smog. At the		
			same time, they produce value		
			added products from renewable		
			resources and continuously innovate		
			to provide even greater		
			environmental and economic		
			benefits.		

Branch	Organization	Contact	Description	Key Issues	Address
EAED	Clean Energy	Contact Name: Paul Kariya	Since 1992, the Clean Energy	Clean energy	Mailing address:
	BC (formerly	Title: Executive Director	Association of British Columbia	production	354-409
	Independent	Phone: 604-568-4778	(formerly the Independent Power	Cost-effective	Granville Street
	Power	Email: paul.kariya@cleanenerg	Producers of British Columbia) has	electricity	Vancouver, BC
	Producers	ybc.org	been the voice of Clean Energy	Energy	V6C 1T2
	Association of		Producers in BC, to government and	advocacy and	
	British Columbi		the public - when the members have	knowledge-	
	a)		chosen to send a collective signal.	sharing with	
			Members and non-members also	the public,	
			send their own corporate signals.	media, and	
			The mandate of the Clean Energy	decision	
			Association of British Columbia is to	makers	
			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.		

Branch	Organization	Contact	Description	Key Issues	Address
EAED	Clean Energy Canada	Contact Name: Jeremy Moorhouse Title: Senior Analyst Phone: 604-699-1700 Email: Jeremy@cleanenergyca nada.org	Clean Energy Canada is a climate and clean energy think tank within the Centre for Dialogue at Simon Fraser University. Their mission is to accelerate Canada's transition to clean and renewable energy systems by telling the story of the global shift to clean and low-carbon energy sources. They conduct original research, host dialogues and aim to inspire and inform policy leadership. They envision a future in which our nation has one of the most advanced energy systems in the world, having significantly reduced its carbon emissions by the middle of this century. In Clean Energy Canada's vision, Canada has become a leader in clean and renewable energy production, consumption, and innovation—benefiting citizens socially, environmentally and economically.	Transition to clean, low-carbon, renewable energy systems	Mailing address: Suite 721, 602 West Hastings Street Vancouver, BC V6B 1P2

Branch	Organization	Contact	Description	Key Issues	Address
EAED	Canadian Hydrogen and Fuel Cell Association (CHFCA)	Contact Name: Nicolas Hilario Title: Manager, Government Relations & Communications Phone: 604-283-1040 Email: nhilario@chfca.ca	CHFCA is the national industry association dedicated to accelerating Canada's world-leading hydrogen and fuel cell industry. Their Mission is to accelerate Canada's world-leading hydrogen and fuel cell industry. Members cover most types of hydrogen and fuel cell technologies, components, systems supply and integration, fueling systems, fuel storage, and engineering and financial services.	Hydrogen and fuel cell technology development and supply logistics	Mailing address: 660 - 475 West Georgia Street Vancouver, BC V6B 4M9
EAED	Electric Mobility Canada (EMC)	Contact Name: Chantal Guimont Title: President and CEO Phone: 514-916-4165 Email: Chantal.guimont@emc- mec.ca	EMC is the national industry association dedicated to the promotion of electric mobility as a readily available and important solution to Canada's emerging energy and environmental issues.	Electric mobility	Mailing address: 38 place du Commerce 11-530 Ile des Sœurs, QC H3E 1T8
EAED	Association of Major Power Consumers (AMPC)	Contact Name: Richard Stout Title: Principal Consultant Phone: 604-564-2012 Email: roninconsult@live.com	AMPC 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.	Industrial power use in BC	Mailing address: Unit 15 3459 River Road West Ladner, BC V4K 4Y6

Branch	Organization	Contact	Description	Key Issues	Address
Multi- Sectoral	Energy Council of Canada	Contact Name: Greg Schmidt Title: President Phone: 613-232-8239 Email: greg.schmidt@energy.c a	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 that 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.	 National, Continental, and Global energy issues Strategic thinking around the topic of energy 	Mailing address: 608-350 Sparks St Ottawa, ON K1R 7S8
Multi- Sectoral	Public Interest Advocacy Centre (PIAC)	Contact Name: Leigha Worth Title: Executive Director Phone: 604-687-3063 Email: support@bcpiac.com	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.	Providing important public services to all consumers	Mailing address: ONE Nicholas Street, Suite 1204 Ottawa, ON K1N 7B7

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Aggregate Producers Association of British Columbia	Contact Name: Paul Allard Title: Executive Director Phone: 778-571-2670 Email: gravelbc@telus.net	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.	Production industry Exchanging information with a view to growing a sustainable aggregate economy on both provincial and national levels	Mailing address Box 36065 Hillcrest Village PO Surrey, BC V3S 7Y4

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Association for Mineral Exploration British Columbia (AMEBC)	Contact Name: Gavin Dirom Title: President and CEO (until mid-May 2017) Phone: 604-630-3920 Email: gdirom@amebc.ca	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.	 Provincial and global Mineral exploration endeavors Providing a sustainable environment and business climate for the industry 	Mailing address: Suite 800 - 889 West Pender Street Vancouver, BC V6C 3B2
MMRD	Regional Mining Associations in British Columbia - Kamloops Exploration Group (KEG)	Contact Name: Jane McCaw Title: President Phone: 250-578-2068 Email: Jane.Mccaw@newgold.com	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.	 Mining and prospecting for minerals, and petroleum Furthering education surrounding mineral exploration, prospecting and Geoscience 	Mailing address: 432 Royal Avenue Kamloops, BC V2B 3P7

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Regional Mining Associations in British Columbia - Smithers Exploration Group	Contact Name: Rob Maurer Title: President Phone: 250-877-7883 Email: info@smithersexplorati ongroup.com	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.	 Mineral industry in BC's Northwest Geology Exploration Mining 	Mailing address: 102 – 3423 Fulton Ave Smithers, BC VOJ 2NO
MMRD	Regional Mining Associations in British Columbia - Chamber of Mines of Eastern British Columbia	Contact Name: Bob Denny Title: President Phone: 250-352-5242 Email: chamberofmines@netid ea.com	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.	Providing information to the general public regarding the mining industry	Mailing address: 215 Hall Street Nelson, BC V1L 5X4

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Coal Association of Canada (CAC)	Contact Name: John Schadan Title: President and CEO Phone: 403-262-1544 Email: info@coal.ca	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."	Coal exploration, development and transportation	Mailing address: 10240 – 124 Street, Suite 302 Edmonton, Alberta T5N 3W6
MMRD	Geoscience BC	Contact Name: Carlos Salas Title: Vice President of Energy, Acting President and CEO Phone: 604-662-4147 Email: archdekin@geoscience bc.com	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.	 Applied Geoscience project funding Provincial mineral, oil & gas exploration Collection and interpretation of data 	Mailing address: 1101-750 W. Pender St. Vancouver, BC V6C 2T7

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Mining Association of Canada (MAC)	Contact Name: Pierre Gratton Title: President and CEO Phone: 613-233-9391 Email: communications@mini ng.ca	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 semifabrication. 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.	National Mineral exploration, mining, smelting, refining and semi- fabrication	Mailing address: 275 Slater Street, Suite 1100 Ottawa, ON K1P 5H9

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Mining Association of British Columbia (MABC)	Contact Name: Karina Brino Title: President and CEO Phone: 604-681-4321 Email: kbrino@mining.bc.ca	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.	 Provincial Mineral exploration, mining, smelting, refining and semi- fabrication The collective needs and interests of operating coal, metal and industrial mineral mining companies Regulatory change and joint industry action 	Mailing address: 900-808 West Hastings St. Vancouver, BC V6C 2X4

Branch	Organization	Contact	Description	Key Issues	Address
MMRD	Prospectors and Developers Association of Canada (PDAC)	Contact Name: Robert Schafer Title: President Phone: 416-362-1969 Email: info@pdac.ca	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.	 Canadian Mineral exploration and development industries Standards of technical, environmental , safety and social practices Industry advocacy, information, and networking 	Mailing address: 135 King Street East Toronto, ON M5C 1G6