Ministry of Energy, Mines and Low Carbon Innovation

2020/21 Annual Service Plan Report



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Ministry of Energy, Mines and Low Carbon Innovation

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Minister's Accountability Statement



The Ministry of Energy, Mines and Low Carbon Innovation 2020/21 Annual Service Plan Report compares the Ministry's actual results to the expected results identified in the 2020/21 – 2022/23 Service Plan created in February 2020. I am accountable for those results as reported.

Honourable Bruce Ralston

Minister of Energy, Mines and Low Carbon Innovation

August 11, 2021

Ministry of Energy, Mines and Low Carbon Innovation

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Purpose of the Annual Service Plan Report

The Annual Service Plan Report is designed to meet the requirements of the <u>Budget</u> <u>Transparency and Accountability Act</u> (BTAA), which sets out the legislative framework for planning, reporting and accountability for Government organizations. Under the BTAA, the Minister is required to report on the actual results of the Ministry's performance related to the forecasted targets documented in the previous year's Service Plan.

Purpose of the Ministry

The Ministry of Energy, Mines and Low Carbon Innovation¹ (Ministry) is responsible for British Columbia's (B.C.) electricity, alternative energy, oil, natural gas and related infrastructure, and the province's mining and mineral exploration sectors. These sectors are made up of diverse interests that explore for and produce oil, natural gas, coal and other valuable minerals and that develop energy and electricity generation, transmission and distribution infrastructure. To support Government's climate objectives, the Ministry focuses on advancing energy efficiency and clean or renewable energy sources and technologies, making sure that the energy we use, develop and export is the cleanest possible. The Ministry facilitates electricity, mining and oil and gas sectors which are globally competitive, environmentally leading, and advance reconciliation with Indigenous peoples, while providing opportunities and quality jobs for British Columbians. The Ministry carries out this work in accordance with the CleanBC plan, and commitments to Indigenous reconciliation. In fulfilling its mandate, the Ministry consults and collaborates with other ministries and levels of government, private sector stakeholders, Indigenous people, communities, environmental and industry organizations, and the public.

The Ministry supports the Minister's governance responsibilities for the following Crown Corporations: <u>British Columbia Hydro and Power Authority</u> (BC Hydro), and the <u>BC Oil and Gas Commission</u> (OGC).

Strategic Direction

The strategic direction set by Government in 2017, and expanded upon in former Energy, Mines and Petroleum Resources Minister Mungall's 2017 <u>Mandate Letter</u> shaped the goals, objectives, performance measures and financial plan outlined in the <u>2020/21 Ministry of Energy, Mines and Low Carbon Innovation's Service Plan and the actual results reported on in this annual report.</u>

The global COVID-19 pandemic resulted in many shifts in priorities, structures and operations across the public sector. Any changes to Ministry of Energy, Mines and Low Carbon Innovation's goals, objectives, performance measures or financial plan to align with the strategic direction established by Government in late 2020 are presented in the 2021/22 Service Plan.

¹ Prior to November 2020, the Ministry's name was, "The Ministry of Energy, Mines and Petroleum Resources." The mandate of the Ministry remains unchanged.

Operating Environment

The COVID-19 pandemic impacted the operating environment for the Ministry in 2020/21 shifting its priorities and operations to focus on pandemic response and economic recovery.

COVID-19 reduced economic activity in the province, which resulted in a significant reduction in electricity consumption and revenue to BC Hydro. In addition, closures of businesses and job losses impacted BC Hydro customers ability to pay their electricity bills. In response to COVID-19, the Ministry and BC Hydro developed targeted bill relief that provided immediate help to those who needed it through September 2020. Residential customers who lost their jobs or were unable to work because of the pandemic could receive a credit to help cover the cost of their electricity bills. Small businesses that were forced to close due to COVID-19 could have their power bills forgiven for three months, and major industries, like pulp and paper mills and mines, could defer 50% of their bill payments for three months.

CleanBC and StrongerBC set out the Government's approach to integrate the Province's plan to respond to the COVID-19 pandemic with its vision for long-term clean energy production and use, economic recovery and reducing greenhouse gas (GHG) emissions. During 2020/21, the Ministry contributed to this vision through its programs aimed at increasing electrification and energy efficiency across the economy, reducing the carbon intensity of transportation fuels, expanding electric and hydrogen fuel cell vehicle adoptions and infrastructure, developing strategies for bioenergy and hydrogen pathways, and coordinating with utilities on programs to reduce energy use and greenhouse gas emissions.

Lasting and meaningful reconciliation with Indigenous peoples remained a key Ministry principle. In 2020/21, to support staff to advance reconciliation objectives, the Ministry developed a draft internal Reconciliation Plan and guidance in the form of a learning plan. This plan transcended specific reconciliation initiatives and negotiations.

In the mining sector, the pandemic introduced commodity price volatility. During 2020/21, prices for some commodities, including coal and copper, fluctuated considerably. For example, at the start of the 2020/21 fiscal year, copper prices were 25% lower compared to beginning of January 2020. This volatility had financial implications for the B.C. mining sector as mines are price takers and do not have enough market share to significantly influence prices. Over the course of the 2020/21 fiscal year, commodity prices rebounded, particularly for copper and gold.

The Ministry shifted resources to pandemic response, and took immediate actions to support industry, keep mines operating and workers safe. This included ensuring mining and mineral exploration were classified as essential services, granting tenure and mineral exploration permit extensions, and issuing operating guidance for mining camps and workers. COVID-19 also affected day-to-day ministry operations with a shift to remote work and restrictions on travel.

Activities of the Office of the Chief Inspector of Mines were impacted by the COVID-19 pandemic in 2020/21. The Chief Inspector worked closely with local health authorities related to any potential mine-related exposures, on-site mine inspections were reduced, and inspectors increased focus on COVID-19 protocol checks, maintaining regular contact with mines and use of video conferencing and online tools to ensure training and certifications moved forward.

Construction on the LNG Canada and Coastal GasLink projects continued to ramp up in 2020/21. Despite the challenges created by COVID-19, LNG Canada continued to hit critical construction milestones. In early September 2020, LNG Canada officially opened its workforce accommodation centre, Cedar Lodge, and commenced construction of the LNG storage tank. By the end of February 2021, Coastal GasLink was reporting that over 25% of the pipeline had been installed. To date, the LNG Canada project has awarded over \$3 billion in contracts to businesses in B.C. and Canada. That includes \$2.5 billion to Indigenous-owned and local area businesses.

The Ministry engaged virtually with local governments, Indigenous peoples, proponents, stakeholders and government agencies on the implementation of LNG Canada and Coastal GasLink. The Ministry worked across all government sectors to ensure that provincial accountabilities relating to the projects were met. The Ministry also supported government partners, health authorities, and the proponents with the management of risks associated with COVID-19 so that construction continued safely.

In 2020/21 British Columbia's natural gas production grew by 2.8% year-over-year due to increasing production from the liquid-rich Montney natural gas play. Natural gas prices in British Columbia averaged higher year-over-year, despite lower annual average prices for crude oil and natural gas liquids (NGLs). Activities continued to focus on portions of the Montney that produce high ratios of NGLs. Other factors that supported higher British Columbia natural gas production in 2020/21 included availability of pipeline infrastructure capacity in Western Canada, which has constrained production growth in the past, declines in Alberta natural gas production and increases in Canadian natural gas exports to the U.S. West region from 2019 to 2020.

Investors and consumers continued to place increased value on Environmental, Social and Governance performance, as high performance can lower investment risk and indicate benefits to society and the environment. In 2020, there were increased commitments made by governments (including Canada) and oil and gas companies to climate actions and to net-zero greenhouse gas emissions targets by 2050. As a response to the COVID-19 pandemic challenges facing the oil and gas sector, the federal government provided a funding package of \$120 million to increase employment in the oil and gas service sector while reducing the environmental footprint of the industry in relation to dormant/inactive and orphan well sites. These funds required a rapid response by the Ministry to prioritize the creation of new programs to utilize this funding.

Report on Performance: Goals, Objectives, Measures and Targets

Goal 1: A competitive energy portfolio powered by clean, renewable energy and supported by technological innovation

This goal relates to the Mandate Letter priority of creating a roadmap for the future of B.C. energy, to generate new energy responsibly and sustainably, and create lasting good jobs across the province. A focus on technological innovation will expand upon energy efficiency and conservation opportunities and create new jobs in the provincial energy sector.

Objective 1.1: Decarbonize B.C.'s energy sectors and usage in support of the provincial CleanBC plan

Key Highlights

- In September 2020, \$10 million was allocated to the construction and operation of ten new public hydrogen refuelling stations, as well as support for the new Hydrogen BC partnership to promote hydrogen energy adoption in B.C.
- In September 2020, \$35 million was announced to develop the Centre for Innovation and Clean Energy to support scale-up and commercialize clean technologies in B.C.
- The Ministry continued working with expert advisors, BC Hydro, Powerex and the
 Ministry of Environment and Climate Change Strategy on Phase 2 of the Comprehensive
 Review of BC Hydro in fiscal 2020/21. A key objective of the Review is to explore how
 BC Hydro can support meeting British Columbia's legislated greenhouse gas reduction
 targets.
- The CleanBC Better Homes and Better Buildings program provided over 11,578 residential retrofit rebates, approved pre-registrations for 71 residential new construction projects, and approved 123 capital incentives for commercial, institutional, and multi-unit residential building energy efficiency and fuel-switching projects.
- In 2020 the Director under the Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act (Act) entered into 22 Part 3 Agreements with 13 different fuel suppliers. The projects supported by Part 3 Agreements contribute to B.C.'s economic recovery by supporting B.C. businesses across several sectors, including refining, forestry, small business, public transit, freight transit and academia. Twenty-one of the 22 projects are located throughout B.C. with four located on Vancouver Island, four in Prince George and thirteen in Metro Vancouver.

Performance Measure(s)	2019/20	2020/21	2020/21	2021/22	2022/23
	Actuals	Target	Actuals	Target	Target
[1.1] Clean or renewable energy as a share of utility and transportation fuel sales ¹	29%	30%	30%	31%	32%

Data Source: The Ministry of Energy, Mines and Low Carbon Innovation. Includes data from BC Hydro.

¹ The following data is tracked to provide the performance measure: BC Hydro's performance in clean procurement; FortisBC's performance in deploying Renewable Natural Gas; relative sales of electricity and natural gas using data from the largest utilities, and transportation fuels.

Discussion of Results

For 2020/2021, this performance target is forecasted to be met. The data is partly based on preliminary data from the Low Carbon Fuel Standard program as finalized data is not available until later in the year, as well as estimates of generation and sales for small-scale utilities.

Demand for transportation fuels fell significantly as commuting and travel decreased due to COVID-19. Increases in renewable transportation fuels and the increased use of clean electricity resulted overall in a higher share of total energy use coming from clean or renewable energy.

Objective 1.2: Support quality economic growth and electrification to reduce greenhouse gas emissions

Key Highlights

- B.C. became the first jurisdiction in the world to legislate a 100% zero emission vehicle (ZEV) target with the passage of the ZEV Act in 2019 and then the ZEV Regulation in 2020. The legislation aims to ensure a greater availability of ZEVs at more affordable prices in B.C. The province's ZEV sector is growing, with an estimated 250 companies and organizations involved in all aspects of the ZEV supply chain, up from 198 in 2015. ZEV jobs and economic output in B.C. have almost doubled since 2015, with more than 6,000 full-time equivalent positions working in the ZEV sector in B.C., over \$1 billion in total economic output, and over \$600 million in direct contribution to provincial GDP.
- Under the Memorandum of Understanding signed by B.C. and the Government of Canada in August 2019, EMLI continued to work with BC Hydro, the federal government and the Canada Infrastructure Bank on funding options to build electrical infrastructure to support industrial electrification.
- In support of economic development and clean growth, EMLI and BC Hydro reduced rates and lowered the costs of connecting to the electricity grid to help industries, public transportation agencies and neighbourhood energy systems reduce greenhouse gas emissions and attract new clean tech industries to British Columbia.
- The CleanBC Building Innovation Fund disbursed \$8 million towards 21 projects that advance innovative low-carbon building designs, construction practices, systems, materials, and products, fostering economic development opportunities across the province.

Performance Measure(s)	2019/20	2020/21	2020/21	2021/22	2022/23
	Actuals	Target	Actuals	Target	Target
[1.2] Zero-Emission Vehicle sales percent of new light-duty vehicle sales. ¹	8.6%	9%	9.4%	10%	12%

Data Source: Compiled by Ministry of Energy, Mines and Low Carbon Innovation staff, ICBC and ZEV sales. ¹ Transport Canada defines a light-duty vehicle as one that weighs 3,856kg (8,500lbs) or less.

Discussion of Results

The performance target for 2020/21 was exceeded. In 2020, B.C. had the highest ZEV sales rates in North America. With over 2,500 public charging stations and three public hydrogen fuelling

stations, B.C. has one of the largest public charging networks and the first cluster of public hydrogen fuelling stations in Canada. The Province's CleanBC Go Electric Program has been working to get more ZEVs on the road by offering several incentive programs for ZEV adoption, including vehicle rebates, home and workplace charger rebates, and funding for public fast-charging and hydrogen fueling stations.

Goal 2: A sustainable, responsible and competitive mining sector that supports Indigenous reconciliation, creates jobs and contributes to responsible mining products and low-carbon technologies

Objective 2.1: B.C. is positioned as an attractive, responsible jurisdiction for investment in the mining sector

Key Highlights

- During 2020/21, key elements of a Shared Prosperity Agreement were negotiated with the Tahltan Nation, setting out initiatives to establish them as partners in a world class mineral jurisdiction.
- The Ministry developed and implemented Notice of Departure guidance and procedures, which reduced timelines for getting approvals when making non-substantial changes to existing mine plans.
- Regionally, Statutory Decision Makers made statutory decisions on almost 500 Notice of Work, Regional Mines Act permit applications, while implementing a new permitting system to improve integration of mining related data.
- The Ministry supported growth of the mining industry through continued implementation of the Mining Jobs Task Force recommendations and provided public geoscience to attract investment.

Performance Measure(s)	2015- 2017 Average	2019/20 Actual	2020/21 Target	2020/21 Actual	2021/22 Target	2022/23 Target
[2.1] B.C.'s share of Canadian mineral resource development investments	13%	14%	15%	15.3%1	16%	17%

Data source: Ministry of Energy, Mines and Petroleum Resources and Natural Resources Canada

Discussion of Results

Based on preliminary data, the 2020/21 target was achieved. Final data has not yet been confirmed by Natural Resources Canada and is expected to be released in September 2021. The measure is an indicator of the attractiveness of B.C. as an investment destination and relative investment attractiveness compared to key competitor jurisdictions across Canada.

¹ Preliminary data from Natural Resources Canada.

Mining Jobs Task Force actions from 2020/2021 include:

- In March 2021, the Mining Association of BC and the Province released the Mining Innovation Roadmap, funded by a \$1 million grant from the Province. The Roadmap sets out a pathway to increase the competitiveness, sustainability and resilience of B.C. mining through innovation.
- The B.C. Responsible Minerals and Metal Summit (RMMS) was held in Fall 2020 and attracted attendees from across the mining value chain including producers, buyers, endusers, the investment sector, civil society, Indigenous groups, labour and policy makers. The RMMS was designed to build understanding, awareness and support for responsible market standards and systems that would advance responsible metals market objectives for B.C. and attract investment.

Objective 2.2: Oversight of the mining industry is continuously improved to protect the environment, human health and public safety

Key Highlights

- The Ministry worked with the Tahltan Nation to co-develop COVID-19 response plans to ensure the safety of the community while at the same time keeping major mines in the region operational.
- *Mines Act* amendments in August 2020 strengthened and modernized mining oversight and created a Chief Permitting Officer responsible for all authorizations, distinct from the Chief Inspector of Mines who is responsible for health, safety, compliance and enforcement.
- *Mines Act* amendments in August 2020 also established the Chief Auditor, responsible for evaluating the effectiveness of the B.C. mining regulatory framework and making recommendations to the Minister for improvement. The first two audits were underway in 2020.
- The Chief Inspector of Mines has centralized dangerous occurrence reporting and published an online weekly summary report to share important safety lessons in a timely way across the mining sector.
- The Standing Code Review Committee, comprised of representatives from labour, Indigenous nations and industry, unanimously brought forward eight revisions to the Health, Safety and Reclamation Code for Mines in British Columbia, which received Royal Assent in January 2021.

Performance Measure(s)	Baseline 2014-2018 Average	2019 Actuals	2020 Target	2020 Actual	2021 Target	2022 Target
[2.2] Mine inspections	1,288	1,733	1,550	1553¹	1,600	1,600

Data Source: Compiled by the Ministry of Energy, Mines and Low Carbon Innovation.

¹ Inspections for 2020 include site inspections (1158), COVID protocol checks (338), and compliance reviews (57).

Discussion of Results

The target was met despite on-site inspections being impacted by COVID-19. A risk-based inspection planning approach informed the focus of inspections while ensuring safety of inspectors. Beginning in 2020, an updated risk-based inspection methodology was put in place to more specifically incorporate higher-risk considerations (e.g. compliance status, type and size of mine, operating status) and ensure that those sites received more attention. To address risks related to COVID-19, inspectors increased online and virtual inspections to ensure ongoing compliance verification while mitigating exposure risks to both mine employees and inspectors.

Goal 3: B.C.'s low carbon-intensity oil and gas products provide sustainable jobs for British Columbians, support Indigenous reconciliation and LNG projects meet the government's four conditions

Objective 3.1: Policies and processes that ensure the competitive and responsible development of oil and gas resources that support the provincial economic framework

Key Highlights

- In July 2020, the Ministry's Clean Growth Infrastructure Royalty Program approved 24 sustainability projects which will reduce emissions, including: electrification of a gas processing facility with clean BC Hydro power, installation of solar powered zero emission well pads, engine waste heat recovery at natural gas compression facilities, and conversion of natural gas driven pneumatics with instrument air technology.
- The Methane Emissions Research Collaborative, a partnership collaboration between government, industry and non-government organizations, continued its research efforts aimed at filling knowledge gaps, improving data accuracy and evaluating new technologies aimed at the detection and reduction of methane emissions.
- In December 2020, as part of the Ministry's work with the Climate Action Secretariat and the BC Oil and Gas Commission to reduce industry methane emissions, the Ministry submitted the first Information Sharing Report under the federal equivalency agreement to the Government of Canada.

Performance Measure(s)	2017/18	2019/20	2020/21	2020/21	2021/22	2022/23
	Baseline	Actual	Target	Actual	Target	Target
[3.1] Annual GHG reductions from infrastructure improvements under infrastructure royalty credit programs offered by the Province	35,000	109,000	140,000	130,000	163,000	210,000
	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes

Data Source: Ministry of Energy, Mines and Low Carbon Innovation

Discussion of Results

The 2020/21 actual for GHG emission reductions of 130,000 tonnes came in just under the target. The COVID-19 pandemic created challenges for industry in terms of some projects not keeping on schedule in construction and installation. Due to the pandemic, 25% of projects were unable to meet completion deadlines as planned, resulting in lower than expected emission reductions.

The 2020/21 target for GHG emission reductions that was established in February 2020 for the 2020/21 Service Plan was calculated based on emission reduction estimates from projects approved under the 2016 and 2018 Clean Infrastructure Royalty Credit Programs and the 2019 Clean Growth Infrastructure Royalty Program.

Objective 3.2: Support the value-added development of B.C.'s oil and gas resources to maximize the benefits to all British Columbians

Key Highlights

A Collaborative Water Monitoring Program, a partnership between the Ministry, the BC
Oil and Gas Commission and an industry partner, was initiated. This will co-locate
monitoring stations with Treaty 8 First Nations, train participating First Nations and
incorporate Indigenous knowledge.

Performance Measure(s)	2019	2020	2020	2021	2022
	Actual	Target	Actual	Target	Target
[3.2] Relative annual investment in natural gas and oil exploration and development (B.C. as % of Canada) ¹	14%	14%	17.4%	14%	14%

Data Source: Ministry of Energy, Mines and Low Carbon Innovation based on Canadian Association of Petroleum Producers Net Cash Expenditure historical data and forecasts for 2019.

Discussion of Results

In 2020/21 natural gas prices were the strongest they have been in the last five years. Low demand for refined fuels as a result of the pandemic drove down crude oil prices for the first half of the fiscal year. This situation made investment in natural gas production relatively more attractive. British Columbia, as the only producing jurisdiction in Canada primarily focussed on natural gas, benefitted from this by seeing a higher proportion of overall investment. This investment focused on the liquid-rich Montney natural gas play which attracted a higher share of Canadian oil and gas exploration and development investments than targeted.

The 2020/21 result is based on Canadian Association of Petroleum Producers' estimates released in January 2021 and is calendar year-based.

¹All data is only available and provided by calendar year.

Financial Report

Financial Summary

	Estimated	Other Authorizations ¹	Total Estimated	Actual	Variance ⁵		
Operating Expenses (\$000)							
Mines Competitiveness and Authorizations	18,293	8,500	26,793	26,393	(400)		
Mines Health, Safety and Enforcement	10,306	864	11,170	11,382	212		
Electricity and Alternative Energy	51,147	126,824	177,971	178,649	677		
Oil and Gas	16,772	2,005	18,777	14,408	(4,369)		
Strategic and Indigenous Affairs	3,031	0	3,031	3,814	783		
Executive and Support Services	11,386	281	11,667	14,764	3,097		
Innovative Clean Energy Fund Special Account	2,696	39	2,735	2,735	0		
Sub-total	113,631	138,513	252,144	252,145	0		
Adjustment of Prior Year Accrual ²	0	0	0	(152)	(152)		
Total	113,631	138,513	252,144	251,993	(152)		
Ministry Capital Expenditures (\$0	000)						
Executive and Support Services	218	0	218	188	(30)		
Total	218	0	218	188	(30)		
Other Financing Transactions (\$0	00) 3						
Oil and Gas Commission ⁴ Receipts	(45,050)	0	(45,050)	(44,127)	923		
Oil and Gas Commission Disbursements	45,050	0	45,050	44,127	(923)		
Net Cash Requirements (Source)	0	0	0	0	0		
Total Receipts	(45,050)	0	(45,050)	(44,127)	923		
Total Disbursements	45,050	0	45,050	44,127	(923)		
Total Net Cash Requirements (Source)	0	0	0	0	0		

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

² The Adjustment of Prior Year Accrual of \$0.152 million is a reversal of accruals in the previous year.

³ Other Financing Transactions are for disbursements that are provided by the province to the Oil and Gas Commission with respect to oil and gas industry fees and levies assessed and collected on behalf of the Commission under the *Oil and Gas Activities Act* and the Fee, Levy and Security Regulation.

⁴ Levies include Orphan Site Reclamation Fund revenues and production levies but not Pipeline revenues or fees from oil and gas applications. Reported information may differ from Oil and Gas Commission due to recognition differences.

⁵ Variance represents "Actual" minus "Total Estimated". If the Actual is greater than the Total Estimated, the Variance will be displayed as a positive number.

Appendix A: Agencies, Boards, Commissions and Tribunals

As of August 2021, the Minister of Energy, Mines and Low Carbon Innovation is responsible and accountable for the following:

BC Oil and Gas Commission

The BC Oil and Gas Commission (OGC) is a single-window regulatory agency with responsibilities for overseeing oil, gas and renewable geothermal operations in British Columbia. The Commission oversees activities from exploration and development, to pipeline transportation and reclamation.

British Columbia Hydro and Power Authority

BC Hydro is one of the largest electricity suppliers in Canada, generating and delivering electricity to 95% of the population of B.C., serving over four million people.

Assayers Certification Board of Examiners

The Board of Examiners provides for the training, examination, and certification of assayers. This ensures that assayers practicing in the province meet the high standards of competency required by the mining and securities industries and that skilled and qualified assayers are available in B.C. as well as other jurisdictions.