

**Ministry of  
Energy, Mines and  
Low Carbon Innovation**

**2022/23  
Annual Service Plan Report**  
**August 2023**



For more information on the Ministry of Energy, Mines and Low Carbon Innovation, please contact us at:

Deputy Minister's Office

PO Box 9313 STN PROV GOVT

V8W 9N3

Telephone Number: 778-698-7283

Or visit our website at: [www.gov.bc.ca/EMLI](http://www.gov.bc.ca/EMLI)

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## Minister's Accountability Statement



The Ministry of Energy, Mines and Low Carbon Innovation 2022/23 Annual Service Plan Report compares the Ministry's actual results to the expected results identified in the 2022/23 – 2024/25 Service Plan published in 2022. I am accountable for those results as reported.

A handwritten signature in black ink, appearing to read 'Josie'.

Honourable Josie Osborne  
Minister of Energy, Mines and Low Carbon Innovation  
August 8, 2023

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## Letter from the Minister

The Ministry of Energy, Mines and Low Carbon Innovation (Ministry) plays a vital role in supporting the sustainable development of British Columbia's (B.C.) varied and abundant natural resources. Through the development of these key resources, revenues are generated that support important public services such as education and healthcare for all British Columbians. This annual report outlines the Ministry's efforts during 2022/23 to support and regulate mining, enforcement, mineral exploration, electricity generation, distribution and conservation, and responsible resource development in B.C.

B.C.'s climate plan, [CleanBC](#) and the updated [CleanBC Roadmap to 2030](#), show how our government will create an equitable, resilient, low carbon future to meet our greenhouse gas (GHG) emissions targets. During 2022/23, the Ministry's programs supported CleanBC outcomes relating to energy efficiency, clean fuels, and electrification to reduce GHG emissions and overcome B.C.'s reliance on fossil fuels. The Ministry helped maximize GHG emissions reductions through clean transportation programs, passing the [Low Carbon Fuels Act](#) in June 2022, continuing to implement the [B.C. Hydrogen Strategy](#), and building out the CleanBC [Better Homes](#) and [Better Buildings](#) programs.

In March 2023 the Province announced a [new energy action framework](#) that includes a regulatory emissions cap for the oil and gas industry to ensure B.C. meets its 2030 sectoral emissions-reduction target. The Framework requires all proposed Liquefied Natural Gas facilities in or entering the environmental assessment process to have a credible plan to be net zero by 2030.

The Reclamation Security Policy for Major Mines came into force on April 5, 2022, which strengthened B.C.'s mining industry with better protection for the environment and increased transparency. In March 2023, the Province approved a [Mines Act](#) permit for a gold and silver mine that will provide jobs for hundreds of workers and generate economic benefits for communities and First Nations throughout British Columbia's central Interior. The Blackwater Gold project will create a wide range of opportunities while ensuring the highest standards of environmental protection, mitigation, and sustainability.

I am pleased to present this annual report.



Honourable Josie Osborne  
Minister of Energy, Mines and Low Carbon Innovation  
August 8, 2023

## Purpose of the Annual Service Plan Report

This annual service plan report has been developed to meet the requirements of [Budget Transparency and Accountability Act \(BTAA\)](#), 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 stated in the service plan for the reported year.

## Strategic Direction

The strategic direction set by Government in 2020 and Minister Bruce Ralston's [2020 Mandate Letter](#) shaped the goals, objectives, performance measures and financial plan outlined in the [Ministry of Energy, Mines and Low Carbon Innovation 2022/23 – 2024/25 Service Plan](#) and the actual results reported on in this annual report.

## Purpose of the Ministry

The availability and access to climate-aligned energy and mineral resources is essential to supporting a clean, competitive, and inclusive low carbon economy now and into the future. The [Ministry of Energy, Mines and Low Carbon Innovation](#) (Ministry) oversees and supports the responsible development of the mineral and energy resources that are critical for B.C.'s future. To support Government's climate objectives set out in the CleanBC Roadmap to 2030, the Ministry focuses on advancing energy efficiency and clean or low-carbon intensity energy sources and technologies, making sure that the energy we use, develop and export is the cleanest possible. The Ministry facilitates electricity, mining and energy sectors which are globally competitive, environmentally leading, and that advance reconciliation with Indigenous peoples, while providing opportunities and quality jobs for British Columbians and a fair return on resources to support the Province's economic recovery following the COVID-19 global pandemic. 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 peoples, communities, environmental and industry organizations, and the public. The Ministry supports the Minister in discharging responsibilities for the following Crown Corporations: [British Columbia Hydro and Power Authority](#) (BC Hydro), and the [BC Energy Regulator](#) (BCER).

## Operating Environment

The CleanBC Roadmap to 2030 and the StrongerBC Economic Plan set out Government's integrated approach for long-term clean energy production and use, reducing greenhouse gas (GHG) emissions, and economic recovery.

During 2022/23 the Ministry contributed to this vision through enhancing incentives for energy efficiency; launching the [B.C. Hydrogen Strategy](#) and [the Indigenous Clean Energy Opportunities Review](#); continuing work to implement a GHG emissions cap for natural gas utilities; transitioning electric vehicle rebates to be income-tested and enhancing programming for medium- and heavy-duty zero-emission vehicles; and committing to expand the [Low Carbon Fuel Standard](#). In addition, the Ministry continued to work with BC Hydro to implement recommendations from the [Comprehensive Review of BC Hydro](#) and advance their [Electrification Plan](#), and committed to establish a [BC Hydro Task Force](#) to accelerate the electrification of B.C.'s economy by powering more homes, businesses and industries with renewable electricity.

Investors and ratings agencies remained increasingly motivated by quantifying new kinds of financial risk. Beyond simple shareholder returns and revenues, markets continued to look for stable investments that align with long-term global sustainability goals (i.e., Paris Agreement, the UN Sustainable Development Goals, etc.) and analysts and regulators included social, environmental and governance factors in their investment and procurement decisions. B.C. operators in the energy and mining sectors continued to face increased pressure from investors and consumers for greater transparency regarding provenance-related attributes for supply chain tracing and environmental, social and governance (ESG) reporting, in particular, where products come from and how they are produced.

B.C.'s mining industry flourished in 2022/23 with the help of rising commodity prices and increased investment in the exploration of critical minerals. Metallurgical coal, which is B.C.'s top mineral commodity in terms of production value, saw its value increase by over 50% in 2022. Spending on critical minerals exploration increased 77% in 2022, while total exploration expenditures were \$741 million, which was the highest annual amount on record for the province. B.C.'s 15 operating mines produced approximately \$18 billion worth of minerals in 2022 which also set an annual record for the province. In 2022, the mining sector contributed approximately 3% to the provincial GDP, more than any other natural resource sector and represented approximately 28% of B.C. origin exports.

With the increased availability and rates of Covid-19 vaccinations in B.C., the Office of the Chief Inspector of Mines (OCIM) returned to more normalized operations in 2022/23 with an increased field presence at mine sites across the province. The OCIM continued to use video conferencing tools to augment training and certifications when feasible, providing for more flexible options for industry. The OCIM staff are working with mines sites to ensure that sustainable technologies on mine sites, such as Battery Electric Vehicles, comply with regulatory requirements and that worker health and safety is continually protected during these transitions.

British Columbia's natural gas production continued to expand in 2022/23. According to Statistics Canada, British Columbia's natural gas production grew on average by 11.3% year-over-year with annual marketable production expected to eclipse 60 billion cubic meters for the first time<sup>1</sup>. The vast majority of natural gas produced in the province continues to make its way via pipelines to Alberta, eastern Canada and into the United States, with a small portion remaining to supply domestic consumers. High demand for natural gas throughout North America resulted in an increase to prices recorded in B.C. with Station 2 prices averaging \$3.86 in 2022/23 (up from \$3.57 in 2021/22<sup>2</sup>).

In January 2023, Government signed multiple, historic reconciliation agreements with Blueberry River First Nations (BRFN) and other Treaty 8 First Nations. The agreements address the cumulative impacts of industrial activity, which have negatively impacted their treaty rights. The cross-government teams responsible for the implementation of the agreements began engaging stakeholders as part of the work. Prior to the agreement and while negotiations were still taking place in 2022, the BC Energy Regulator (then known as the Oil and Gas Commission) continued to review and consult on applications.

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<sup>1</sup> <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2510005501>

<sup>2</sup> <https://www.gljpc.com/price-charts>

## Report on Performance:

### **Goal #1: An innovative, low carbon energy portfolio that advances CleanBC economic opportunities across all sectors.**

This goal is key to supporting the CleanBC Roadmap to 2030. The Ministry facilitates energy sectors which demonstrate leading environmental practices while providing opportunities and quality jobs for British Columbians.

#### **Objective 1.1: Accelerate efforts to decarbonize B.C.'s energy sectors and usage to support the provincial CleanBC plan.**

Decarbonization of the B.C. economy supports the (GHG) greenhouse gas reduction targets set out in the CleanBC Plan and Roadmap to 2030.

#### **Key results**

- Eighteen automakers have submitted annual compliance reports and ZEV sales exceeded targets at over 18% of light-duty vehicle sales in British Columbia. The Ministry continued to use the online Zero-Emission Vehicle (ZEV) reporting System to demonstrate compliance with the [ZEV Act](#).
- Engagement with Indigenous Nations on the [Clean Transportation Action Plan](#) started in Summer 2022, and engagement with local governments started in Fall 2022. A consultation paper was issued to technical stakeholders in February 2023.
- During 2022, the Ministry co-chaired the [Regional Energy and Resource Tables'](#) Clean Fuels Working Group with Natural Resources Canada to identify key hydrogen projects with high domestic strategic value warranting Federal and Provincial support.
- Budget 2022 allocated \$30 million more for the [CleanBC Go Electric Commercial Vehicle Pilot](#) (CVP) Program which supports businesses, non-profits, and eligible public entities looking to deploy commercial ZEVs, including: medium- and heavy-duty on-road vehicles, rail, marine, aircraft, and off-road equipment, along with supporting infrastructure.
- The [Low Carbon Fuel Standard](#) has been one of the most successful approaches to reducing GHGs from transportation and has resulted in the avoidance of more than 15 million tonnes of global greenhouse gas emissions.

#### **Summary of progress made in 2022/23**

The CleanBC Roadmap to 2030 set out to maximize reductions in GHG emissions by expanding the [CleanBC Go Electric](#) suite of programs and the BC [Low Carbon Fuel Standard](#), implementing a GHG emissions cap for natural gas utilities, continuing to implement the [B.C.](#)

[Hydrogen Strategy](#), developing a [Clean Transportation Action Plan](#), and building out the CleanBC [Better Homes](#) and [Better Buildings](#) programs.

The CleanBC Go Electric Program has been highly successful in: reducing market barriers; encouraging the adoption of ZEVs by British Columbians; leveraging private, municipal, and federal investment in ZEVs and infrastructure in B.C.; and supporting new economic opportunities in the ZEV sector. In 2022, ZEVs made up 18.1% of new light-duty passenger vehicles sold with 109,873 ZEVs registered in B.C. and over 3,800 public charging stations.

The provincial GHG forecast in the 2022 CleanBC Climate Change Accountability Report projected that the GHG emissions curve rebounded in 2021, but then continued to follow a downward trajectory as CleanBC policies strengthened their impact.

The 2022 Climate Change Accountability Report stated that the carbon intensity of B.C.'s economy has decreased 24% since 2007, and GHG emissions per capita have gone down 19% since 2007.

### Performance measure(s) and related discussion

Performance Measure	2021/22 Actual	2022/23 Target	2022/23 Actual
1.1 Clean, renewable and low carbon energy as a share of total utility and transportation energy sales <sup>1</sup>	31%	32%	30%

Data Source: Compiled by the Ministry of Energy, Mines and Low Carbon Innovation and includes data from BC Hydro.

<sup>1</sup> 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 data.

<sup>1</sup>PM targets for 2023/24 and 2024/25 were stated in the 2022/23 service plan as 33% and 34%, respectively. For forward-looking planning information, including current targets for 2023/24 – 2025/26, please see the latest service plan on the [BC Budget website](#).

The main factors contributing to this result were a nearly 24 petajoule (or 12%) increase in FortisBC natural gas sales relative to 2021, followed by a nearly 10 PJ increase in (non-clean) transportation fuel consumption.

The increase in natural gas sales appeared to be driven by cooler winter and spring weather in 2022; heating degree days for Vancouver were the highest they had been in six years, and past years' natural gas sales appeared to move with heating degree days.

The increase in transportation fuel consumption continued a trend of transportation fuel consumption returning to pre-pandemic levels.

## **Objective 1.2: Quality programs and incentives that encourage British Columbians to choose greener homes, buildings and transportation.**

The Ministry encourages consumers and businesses to switch to low carbon transportation and heating fuels in support of CleanBC outcomes.

### **Key results**

- During August 2022, the [CleanBC Go Electric Passenger Vehicle Rebate](#) program transitioned to base rebate eligibility on income. With the rebate levels increased for lower-income customers, this improved ZEV affordability and accessibility for low- and middle-income customers.
- During 2022, the [Specialty Use Vehicle Incentive](#) provided a rebate up to 33% for e-cargo bikes, electric motorcycles, low-speed vehicles, medium/heavy-duty vehicles, airport and port vehicles, and utility vehicles. Medium/-heavy-duty rebates may be combined with federal rebates, for total rebates of up to \$250,000.
- Budget 2022 included a [PST exemption on heat pumps](#), paired with an increase to the PST on fossil fuel alternatives to 12 per cent. It also included a new temporary tax credit - the [Clean Buildings Tax Credit](#) - for retrofits that improve the energy efficiency of eligible multi-unit residential buildings and commercial buildings.
- During 2022, the [CleanBC Better Homes](#) was transitioned to requiring use of a [Home Performance Contractor Network](#) member in order to access all residential incentives for heat pumps, insulation and all income-qualified incentives. This helped foster quality workmanship and maximized energy efficiency and emission reductions.
- During 2022, B.C. had the second [highest zero-emission vehicle \(ZEV\) adoption rate](#) in North America (18.1% of new light-duty vehicle sales).

### **Summary of progress made in 2022/23**

The CleanBC [Better Homes](#) and [Better Buildings](#) program provided financial incentives to help households, businesses and the public sector save energy and reduce GHG emissions through heating equipment replacement and building envelope improvements. As of February 2023, CleanBC [Better Homes](#) and [Better Buildings](#) had provided 45,765 residential retrofit rebates and 1,361 income-qualified rebates, approved pre-registrations for 1,000 residential new construction projects and disbursed 296 incentives, and approved 327 capital incentives for commercial, institutional, and multi-unit residential building energy efficiency and fuel-switching projects.

As of December 31, 2022, the [CleanBC Go Electric Program](#) had led to:

- almost 110,000 new light-duty ZEVs on the road;

- over 1,000 ZEVs in commercial applications, such as forklifts, medium/heavy duty vehicles, cargo e-bikes and port and airport ground equipment;
- over 70 early-market commercial medium/heavy-duty ZEVs for diverse on road and off-road applications, as well as 60 commercial vehicle charging points;
- over 70 electric school buses;
- over 3,800 public charging stations, and over 70% of the core network of fast-charging sites enabling travel throughout B.C.

## Performance measure(s) and related discussion

Performance Measure	2021/22 Actual	2022/23 Target	2022/23 Actual
1.2 Zero-Emission Vehicle sales per cent of new light-duty vehicle sales.	10%	12%	18.1%

Data Source: Compiled by Ministry of Energy, Mines and Low Carbon Innovation staff from BC Hydro, ICBC and ZEV sales. Transport Canada defines a light-duty vehicle as one that weighs 3,856kg (8,500lbs) or less. PM targets for 2023/24 and 2024/25 were stated in the 2022/23 service plan as 14% and 18%, respectively. This performance measure was enhanced in the latest service plan by adding a second measure: “Zero-Emission vehicle sales per cent of on-road medium- heavy-duty vehicle sales.” For forward-looking planning information on this new measure and the one carried forward, including current targets for 2023/24 – 2025/26, please see the latest service plan on the [BC Budget website](#).

ZEV uptake continued to exceed targets in B.C., driven by the ZEV Act and Regulation ensuring automakers send their ZEV supply to B.C., the suite of CleanBC Go Electric programs making ZEVs more affordable and accessible, and growing interest among British Columbians in switching to ZEVs. The [Go Electric Passenger Vehicle Rebate Program](#) has seen continuous high demand and as of December 2022, has provided rebates for 61,680 ZEVs. In addition, the Go Electric Public Charger Program has supported the installation of public charging stations across British Columbia which has led to one of the largest public charging networks in Canada. This support for ZEV adoption resulted in exceeding the performance targets.

## **Goal 2: A sustainable and competitive mining sector that supports Indigenous reconciliation, reflects high environmental, social and governance (ESG) standards and contributes to the transition to a low carbon economy with responsibly produced minerals and metals.**

A sustainable sector provides opportunities for all British Columbians, while contributing to a clean economy that combats climate change.

### **Objective 2.1: A strong, innovative mining sector that positions B.C. as a desirable and responsible jurisdiction for investment.**

Innovation in mining contributes to the sector's competitiveness and fosters technological change which supports sustainable employment.

#### **Key results**

- In early March 2023, the Province issued a [Mines Act](#) permit for the Blackwater Gold project located 112km southwest of Vanderhoof.
- During 2022/23, the Ministry engaged with federal counterparts through the [Regional Energy and Resource Tables](#) forum to explore opportunities for collaboration on critical minerals initiatives, including funding for Indigenous engagement, geological assessments, and downstream, manufacturing and recycling related activities.
- The Ministry increased Indigenous Relations capacity through the creation of a new Priorities Advancement and Indigenous Relations Branch in 2022.
- Budget 2022 provided \$18 million over the next three years to continue the Regulatory Excellence in Mining strategy to support robust and efficient decision-making processes across regulatory agencies to engage with Indigenous Nations.
- In 2022, the Ministry released a [Technology Readiness Levels](#) (TRL) guidance tool for industry to help the development of innovative technologies.

#### **Summary of progress made in 2022/23**

The Ministry worked to find efficiencies in the process and timelines required to review applications for major mines, which include amendments for producing mineral and coal mines. As of March 31, 2023, the expected timeline for referral of a Major Works permit to Statutory Decision Making was 6 -12 months from acceptance of the final application to permit

referral. This range reflects the considerable variation in the scope and complexity of permit amendment applications.

The Ministry has increased permitting staff capacity, and has implemented a streamlined review process for small, narrowly scoped, applications that has reduced timelines by 1 to 3 months. Major project review timelines have reduced from an average of 259 business days to 181 business days since 2019, and in 2022/23 over 30 mining amendments were processed for major mines. For regional mines, 417 applications were adjudicated in 2022, with 280 permits issued. The number of files in the backlog was reduced by 30%.

### Performance measure(s) and related discussion

Performance Measure	2021/22 Actual	2022/23 Target	2022/23 Actual
2.1 B.C.'s share of Canadian mineral resource development investments	16%	17%	14%

Data source: Ministry of Energy, Mines and Low Carbon Innovation and Natural Resources Canada 2022/23 Actual is based on preliminary estimates and final numbers may not be available until Q4 2023.

PM targets for 2023/24 and 2024/25 were stated in the 2022/23 service plan as 18% and 19%, respectively. For forward-looking planning information, including current targets for 2023/24 – 2025/26, please see the latest service plan on the [BC Budget website](#).

The target was not met. While the preliminary estimates indicate that overall mineral resource investment in BC was steady from 2021 to 2022, B.C.'s share of the overall Canadian investment was lower due to increased capital investment in Ontario and Saskatchewan in a few major gold and potash projects. To attract mineral resource development investments, B.C. has competitive mineral exploration and mine development incentives including BC Mining Flow-Through Share Tax Credit and the BC Mining Exploration Tax Credit programs.

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

Industry oversight is important and contributes to both a safe and sustainable sector which produces the minerals needed to transition to a low carbon economy.

### Key results

- On November 30, 2022, an updated version of the [Health, Safety and Reclamation Code for Mines in B.C.](#) (the Code) was published. This included updates on requirements for mines to report incidents; implementation of autonomous and semi-autonomous machines at mine sites; and the use of gender-neutral language in the Code. The Code provides detailed regulation for all aspects of mining and mineral exploration in B.C.

- In Fall 2022, Mines Digital Services, a leader in digital transformation across the Natural Resource Ministries, launched an intake of major mine applications through MineSpace and as of March 2023 had received 14 Major Mine Applications.
- In 2022/23, the Ministry continued to work with partner agencies across government, affected First Nations and industry partners to manage health, safety and environmental concerns at three major mine sites with bankrupt or insolvent owners: Tulsequah Chief Mine, Quinsam Mine and Yellow Giant Mine.
- In 2022, the Ministry conducted 43 inspections accompanied by 11 Indigenous Nations. This work supported reconciliation objectives by providing introductory training for the Indigenous Nations as well as information sharing to build strong collaborative relationships in the regulatory management of mining activities in B.C.

## Summary of progress made in 2022/23

The Ministry has prioritized and made substantial progress on actions to improve mining oversight since the [2016 B.C. Auditor General Report](#) on mining compliance and enforcement. In June 2022, the Auditor General completed an additional audit and found that since 2016, the Ministry had developed adequate policies and procedures to address the key environmental risks of major mines. The Auditor General concluded that the Ministry had an adequate framework to manage the risks of abandoned mines.

In April 2022, the Standing Code Review Committee established the UN Declaration Code Review sub-committee. The Code Review Committee is responsible for on-going review of the Code and making recommendations for revisions. The committee has equal representation from Indigenous communities, labour and industry. The purpose of the UN Declaration Code Review sub-committee is to align code revisions with the United Nations Declaration on the Right of Indigenous Peoples and the *Declaration on the Rights of Indigenous Peoples Act*. This is a permanent sub-committee that works with the various technical Code review sub-committees to ensure their work is aligned with the UN Declaration.

During 2022/23, the Ministry continued to invest in the development and implementation of digital systems to help improve data collection, storage and analysis of mining oversight information. During 2022/23, a major focus for the Mines Digital Services systems development was integrating the major mines permitting process into the mines digital ecosystem.

## Performance measure(s) and related discussion

Performance Measure	2021/22 Actual	2022/23 Target	2022/23 Actual
2.2 Minimum mine inspections	2,119	1,600	2,195

Data source: Manually compiled by Ministry of Energy, Mines and Low Carbon Innovation.

PM targets for 2023/24 and 2024/25 were stated in the 2022/23 service plan as 1,600 and 1,600 respectively. For forward-looking planning information, including current targets for 2023/24 – 2025/26, please see the latest service plan on the [BC Budget website](#).

Since the 2016 Auditor General's report, the Ministry has remained responsive to the evolving regulatory needs to protect workers, the public and the environment on mine sites. This includes making effective use of budget increases and internal resources to conduct compliance and enforcement of the more than 4000 active exploration and mine sites in B.C. In 2022/23, the Ministry aligned internal resources to centrally locate mining compliance verification and enforcement activities. This increased the Ministry's capacity for consistent and coordinated site visits at mine sites across the province. Additionally, the Ministry continued use of its risk-based inspection planning approach to ensure the highest risk sites are targeted. The Ministry maintained a strong field presence in 2022/23 and continues to position itself to effectively lead compliance oversight at all operations in B.C.

## **Goal 3: B.C.'s oil and gas industry reduces its carbon footprint in a manner that supports economic sustainability, advances Indigenous reconciliation and exhibits high environmental, social and governance (ESG) performance.**

The Ministry strives to ensure that B.C. oil and gas is produced responsibly and contributes to positive social and economic outcomes for all British Columbians.

### **Objective 3.1: Policies, technologies and processes that support the reduction of greenhouse gas emissions in the oil and gas sector.**

Reducing the carbon footprint of oil and gas activities enhances the industry's ESG performance.

#### **Key results**

- In 2022, the Ministry successfully worked with the federal government to provide clarity on the fiscal measures regarding the underground storage of carbon dioxide: B.C.'s projects are eligible for the federal Carbon Capture and Storage Investment Tax Credit.
- In fall 2022, B.C. passed the [Energy Statutes Amendment Act](#) to support implementation of the CleanBC Roadmap to 2030 by adding the regulation of hydrogen production and underground storage of carbon dioxide from any source to the BC Energy Regulator's responsibilities.

- A new policy announced on March 14, 2023 under the [Energy Action Framework](#) will ensure B.C. meets its 2030 emissions-reduction target for the sector by putting in place a regulatory emissions cap for the oil and gas industry.
- The [Energy & Mines Digital Trust \(EMDT\)](#) project explored the use of new digital trust technologies that enable BC natural resource companies to easily and securely exchange data on their sustainable practices:

## Summary of progress made in 2022/23

A new [oil and natural gas royalty framework](#) was announced in May 2022, which eliminated several royalty incentive programs identified as inefficient and provided the parameters of a new revenue-minus-cost royalty system. A transition period leading up to the new royalty system began on September 1, 2022, and will end when the new system is implemented September 2024. Effective September 1, 2022, new wells (i.e., those that begin drilling on or after that date) are not eligible to qualify for the former deep-well royalty program, the Marginal Well Royalty program, the Ultra marginal Royalty program, the Low Productivity Royalty programs.

The new framework announced on March 14, 2023 under the [Energy Action Framework](#) also requires all proposed Liquefied Natural Gas facilities in or entering the environmental assessment process to have a credible plan to be net zero by 2030.

The [Energy & Mines Digital Trust \(EMDT\)](#) project has earned international support for the unique application of digital credentials for organizational identities, enabling natural resource operators to share critical sustainability data using digital trust technology. Since its inception EMDT has designed a total of five digital credentials with 17 pilot participants and built a global network of over 140 stakeholders. The project has been recognized for its innovative approach at over 20 speaking events including the United Nation's COP27, and through awards such as being selected as a winner of Foresight Canada's BC Cleantech Awards.

## Performance measure(s) and related discussion

Performance Measure	2021/22 Actual	2022/23 Target	2022/23 Actual
3.1 Annual GHG reductions from infrastructure improvements under infrastructure royalty credit programs offered by the Province	163,000 tonnes	210,000 tonnes	245,308 tonnes

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

PM targets for 2023/24 and 2024/25 were stated in the 2022/23 service plan as 290,000 tonnes and 410,000 tonnes respectively. For forward-looking planning information, including current targets for 2023/24 – 2025/26, please see the latest service plan on the [BC Budget website](#).

The 2022/23 actual for annual GHG emission reductions of 245,308 tonnes, slightly surpassed the target. Nine projects from the [2020 Clean Growth Infrastructure Royalty Program](#) were successfully completed ahead of their planned project timelines resulting in GHG emission reductions sooner than expected. Through royalty deductions, this program partnered with

industry in approved projects to advance new technologies and processes that reduce upstream natural gas sector GHG and methane emissions, including electrification projects (using clean British Columbia electricity) to support reaching GHG emission reduction targets. The program was introduced in 2019, and ran for four years, concluding in 2022. Examples of these emissions reduction projects included conversion of high bleed pneumatic instruments to low or zero emitting devices, conversions to compressed air systems operated by electricity rather than natural gas to supply power to process control devices, conversion of chemical injection pumps and circulation pumps to electric or solar powered pumps, and conversions of upstream natural gas compressors to run on clean electricity rather than natural gas.

### **Objective 3.2: Value-added development of B.C.'s oil and gas resources to maximize the benefits to all British Columbians and provide a fair return from our resources.**

Oil and natural gas activities generate revenues to the Crown that support services such as health care and education and facilitate reconciliation with First Nations.

#### **Key results**

- In 2022, B.C. produced over 6 billion cubic feet per day (Bcf/d) of raw natural gas, a 9 per cent increase over 2021.
- In 2022, government added a new condition for [Liquefied Natural Gas](#) projects in B.C. to meet, requiring proposals to provide benefits to communities.

#### **Summary of progress made in 2022/23**

British Columbia is Canada's second largest producer of natural gas and plays a key role in meeting both domestic demand as well as in neighbouring jurisdictions in the Pacific Northwest and across Canada

In January 2023, the Province and four Treaty 8 First Nations (Fort Nelson, Saulteau, Halfway River and Doig River First Nations) reached consensus on a collaborative approach to land and resource planning, and to advance regional stewardship initiatives in northeastern B.C.

During February and March 2023, Ministry staff began actively working with Treaty 8 First Nations to advance the work identified in the agreements for the petroleum and natural gas sector.

## Performance measure(s) and related discussion

Performance Measure	2021/22 Actual	2022/23 Target	2022/23 Actual (Estimated)
3.2 Relative annual investment in natural gas and oil exploration and development (B.C. as % of Canada).	14%	14%	18%

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 2020. All data is only available and provided by calendar year. PM targets for 2023/24 and 2024/25 were stated in the 2022/23 service plan as 14% and 14% respectively. For forward-looking planning information, including current targets for 2023/24 – 2025/26, please see the latest service plan on the [BC Budget website](#).

Despite the pause that was in place on new permits being issued by the BC Energy Regulator throughout most of 2022/23 following the Yahey decision by the BC Supreme Court, the production of natural gas and with that the investment by the sector continued under existing authorizations. These existing authorizations combined with favourable economics (higher market prices for natural gas and natural gas liquids combined with increasing demand) favoured investment and expanded production in British Columbia.

## Financial Summary

	Estimated	Other Authorizations <sup>1</sup>	Total Estimated	Actual	Variance <sup>5</sup>
<b>Operating Expenses (\$000)</b>					
Mines Competitiveness and Authorizations	24,551	200	24,751	24,174	(577)
Mines Health, Safety and Enforcement	12,693	3,589	16,282	17,445	1,163
Electricity and Alternative Energy	38,888	281,320	320,208	319,603	(605)
Oil and Gas	17,271	2,883	20,154	16,657	(3,497)
Strategic and Indigenous Affairs	2,515	0	2,515	2,454	(61)
Executive and Support Services	13,638	0	13,638	17,215	3,577
Innovative Clean Energy Fund Special Account	2,403	0	2,403	1,497	(906)
<b>Sub-total</b>	<b>111,959</b>	<b>287,992</b>	<b>399,951</b>	<b>399,045</b>	<b>(906)</b>
Adjustment of Prior Year Accrual <sup>2</sup>	0	0	0	(7)	(7)
<b>Total</b>	<b>111,959</b>	<b>287,992</b>	<b>399,951</b>	<b>399,038</b>	<b>(913)</b>
<b>Ministry Capital Expenditures (\$000)</b>					
<b>Executive and Support Services</b>	<b>586</b>	<b>0</b>	<b>586</b>	<b>554</b>	<b>(32)</b>
<b>Total</b>	<b>586</b>	<b>0</b>	<b>586</b>	<b>554</b>	<b>(32)</b>
<b>Other Financing Transactions (\$000) <sup>3</sup></b>					
BC Energy Regulator Receipts <sup>4</sup>	(44,000)	0	(44,000)	(47,869)	(3,869)
BC Energy Regulator Disbursements	44,000	0	44,000	47,869	3,869
<b>Net Cash Requirements (Source)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Receipts</b>	<b>(44,000)</b>	<b>0</b>	<b>(44,000)</b>	<b>(47,869)</b>	<b>(3,869)</b>
<b>Total Disbursements</b>	<b>44,000</b>	<b>0</b>	<b>44,000</b>	<b>47,869</b>	<b>3,869</b>
<b>Total Net Cash Requirements (Source)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> "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.

<sup>2</sup> The Adjustment of Prior Year Accrual of (\$0.007) million is a reversal of accruals in the previous year.

<sup>3</sup> Other Financing Transactions are for disbursements that are provided by the province to the BC Energy Regulator 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.

<sup>4</sup> 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 the BC Energy Regulator due to recognition differences.

<sup>5</sup> 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: Public Sector Organizations

As of March 31, 2023, the Minister of Energy, Mines and Low Carbon Innovation was responsible and accountable for the following organizations:

### [BC Energy Regulator \(formerly the BC Oil and Gas Commission\)](#)

The BC Energy Regulator is a single-window regulatory agency with responsibilities for regulating oil, gas and renewable geothermal operations in B.C. The Commission regulates 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 per cent of the population of B.C., and 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.

## Appendix B: Progress on Mandate Letter Priorities

The following is a summary of progress made on priorities as stated in former EMLI Minister Bruce Ralston's 2020 Mandate Letter.

2020 Mandate Letter Priority	Status as of March 31, 2023
Work with cabinet colleagues to advance clean economic opportunities and CleanBC goals as our government responds to and recovers from the COVID-19 pandemic.	<ul style="list-style-type: none"> <li>In Progress. In 2022, B.C. had the second highest zero-emission vehicle (ZEV) adoption rate in North America (18.1% of new light-duty vehicle sales). As of March 2023, the province had one of the largest public charging networks in Canada, the largest public hydrogen fueling network in Canada, and a world-leading hydrogen and fuel cell industry.</li> </ul>
Accelerate the adoption of zero emission vehicles (ZEV) with income-tested rebates, new incentives for purchasing used electric vehicles and an expansion of the CleanBC Specialty-Use Vehicle Incentive program.	<ul style="list-style-type: none"> <li>In Progress: <ul style="list-style-type: none"> <li>In August 2022, the CleanBC Go Electric Passenger Vehicle Rebate program implemented income testing to improve ZEV affordability and accessibility for low- and middle-income customers.</li> <li>As of December 31, 2022, the CleanBC Go Electric Program has led to almost 110,000 new light-duty ZEVs on the road.</li> </ul> </li> </ul>
Increase vehicle charging capacity by providing additional incentives to expand home and workplace electric vehicle charging.	<ul style="list-style-type: none"> <li>In Progress. The CleanBC Go Electric Program supports the installation of chargers in workplaces, and multi-unit residential buildings. The program for level 2 chargers and free EV advisor services in apartments, condos and workplaces.</li> </ul>

2020 Mandate Letter Priority	Status as of March 31, 2023
Enhance energy efficiency programs and incentives for residential and commercial buildings, including Property Assessed Clean Energy financing to help homeowners make energy-saving retrofits and repay the cost of them over time.	<ul style="list-style-type: none"> <li>In progress: The CleanBC Building Innovation Fund provides support for research, commercialization and demonstration of advanced building designs and construction methods, and ultra-efficient building components in order to increase the availability and affordability of low-carbon buildings solutions made in B.C.</li> </ul>
Establish the BC Centre for Innovation and Clean Energy to drive made-in-B.C. innovations such as carbon capture and storage and renewable fuels.	<ul style="list-style-type: none"> <li>Completed. The B.C. Centre for Innovation and Clean Energy (CICE) was announced and became operational on October 25, 2021.</li> </ul>
Drawing on the findings of the independent review, ensure the cost and schedule pressures facing construction of the Site C project are addressed in a manner that protects the best interests of British Columbians.	<ul style="list-style-type: none"> <li>In Progress: In February 2021, Government confirmed its decision to continue with Site C at a revised cost estimate of \$16 billion. As of March 2023, the project was on schedule and on budget.</li> </ul>
Undertake a review of oil and gas royalty credits to ensure they meet B.C.'s goals for economic development, a fair return on our resources and environmental protection.	<ul style="list-style-type: none"> <li>In Progress: On May 19, 2022, the Province announced a new oil and gas royalty system that eliminated several royalty incentive programs identified as inefficient and provided a bridge towards re-purposing existing unused deep well royalty credits held by industry to land restoration and emissions reductions initiatives as well as to a new revenue-minus-cost royalty system.</li> </ul>
Complete implementation of the Fuel Price Transparency Act (FPTA) to ensure oil and gas companies are publicly accountable for unexplained markups and price increases.	<ul style="list-style-type: none"> <li>In its role as administrator of the FPTA, as of March 2023, the BC Utilities Commission has undertaken special projects in response to public requests for information about fuel prices in B.C.</li> </ul>

2020 Mandate Letter Priority	Status as of March 31, 2023
<p>Implement world-leading regulations and technologies to support detection and reduction of harmful methane emissions in the oil and gas sector.</p>	<ul style="list-style-type: none"> <li>Research projects continued to be advanced through the Methane Emissions Research Collaborative to detect the sector's methane emissions sources for the purpose of regulatory development respecting the methane emissions reduction targets. This work will be on-going.</li> <li>A methane emissions measurement campaign continued with the United Nations Environment Programme to conduct aerial and ground surveys from 2022-2024.</li> <li>In 2022 the BC Energy Regulator assessed the effectiveness of the methane emissions regulations under the Drilling and Production Regulation (DPR) by conducting a regulatory review. Amendments to the DPR were made to provide clarity and improve the administration of the regulation including definitions, data collection and reporting, flare performance monitoring, and moving key provisions related to leak detection and repair surveys from guidance to regulation.</li> </ul>
<p>Work with the federal government and BC Hydro to fast track the expansion of electrification by working with industries of all sizes across sectors to make it easier for them to go green.</p>	<ul style="list-style-type: none"> <li>Ongoing: BC Hydro launched a non-binding expression of interest (EOI) on February 15, 2023, to gauge interest by customers on the North Coast in electrifying. The EOI is part of a multi phased approach to determine needs on the coast and inform transmission expansion plans.</li> </ul>
<p>Continue to implement the recommendations of the Mining Jobs Task Force (MJTF) to strengthen this important sector and create good jobs for people.</p>	<ul style="list-style-type: none"> <li>Since 2019, all MJTF actions were completed or substantially started, and implementation continued through 2022/23 in partnership with other government agencies and external partners.</li> </ul>

2020 Mandate Letter Priority	Status as of March 31, 2023
<p>Create a Mining Innovation Hub to identify and support innovation, training for workers in new technologies, regulatory excellence, environmental management and low-carbon approaches.</p>	<ul style="list-style-type: none"> <li>• In Progress: During 2022/23, the Ministry explored options to launch a Mining Innovation Hub to support training in new technology, low carbon approaches, environmental management and regulatory excellence. There are currently no fiscal implications associated with this work.</li> </ul>
<p>Support the Minister of Environment and Climate Change Strategy to ensure owners of large industrial projects are bonded moving forward so that they – not B.C. taxpayers – pay the full costs of environmental cleanup if their projects are abandoned.</p>	<ul style="list-style-type: none"> <li>• The Ministry continued to work with the Ministry of Environment and Climate Change Strategy to develop policies and regulations.</li> </ul>

