



# Business Plan

2021–22

*Energy and Mines*

**NOVA SCOTIA**

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Departmental Business Plans  
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## Message from the Minister

Despite the challenges of COVID-19, our department's work to fight climate change, help businesses grow and our communities to prosper remains at the heart of what we do at the Department of Energy and Mines.

Renewable energy use in Nova Scotia has more than tripled over the past 10 years, further extending our national leadership in reducing greenhouse gases. With an updated Renewable Electricity Standard expected to be introduced that will raise the target for renewable energy consumption to 80 per cent by 2030 our work to pivot to cleaner sources of energy and the technologies that enable them will accelerate. We are continuing to make all homes more energy efficient through programs like Home Warming and the Mi'kmaw Home Energy Retrofit program with investments from the Green Fund. In the coming year, with the new Green Choice program, we will launch a new independent competitive process that will help large institutional energy users, including the provincial and federal governments, access more renewable energy without affecting costs for other ratepayers.

A new rebate program for electric vehicles and e-bikes is being launched and will be administered through a point of sale program by the Clean Foundation. Nova Scotians can qualify for rebates of up to \$8000 on new and used electric vehicles worth up to \$55,000 and \$500 on new e-bikes, when combined with the existing federal rebate program. The program allows Nova Scotians of varying income levels to take part in the shift to clean transportation and contribute to climate change mitigation.

As we work to build a cleaner energy future, resource development remains an important part of what we do, including strengthening public, stakeholder and investor confidence through development of good public policy and our success as a regulator. Our resource development sectors have some of the toughest regulations anywhere as we balance the economic opportunities of our natural resources with strong protections for our environment.

Having a mining industry with a reputation for excellence in environmental performance will go a long way to positively brand Canadian minerals and metals. The Department will continue to support the growth of Nova Scotia's mineral sector by working collaboratively with partners to raise awareness of resource opportunities, lead trade delegations and identify market potential both at home and abroad.

Nova Scotia will continue to pursue the development of our offshore petroleum resources, as we work with our federal partners and the Canada-Nova Scotia Offshore Petroleum Board. We remain confident that our approach to regulating the offshore can allow development to happen in a safe way that contributes to our prosperity.

Supporting the development of tidal energy continues to be a priority for Energy and Mines. The marine-renewable energy permit program gives companies another way to test their technologies, while research and development continues with berth holders at FORCE.

We will continue to support sustainable electricity buildings and transportation initiatives through green infrastructure projects as well as the Low Carbon Communities program and create more opportunities for young people. I encourage you to read our business plan to find out more.

*(Original signed by the Minister)*

Hon. Chuck Porter  
Minister of Energy and Mines

## Mandate

The Department of Energy and Mines serves the social, environmental, and economic interests of Nova Scotians by ensuring that all energy and mineral resources are developed and used in an efficient and sustainable manner. The Department delivers programs and activities related to electricity, renewable energy, energy efficiency, geoscience, petroleum, minerals and industry development.

### 2021 – 2022 Departmental Initiatives

The following initiatives are being undertaken by the Department in 2021 – 2022 to achieve the department's objectives.

#### Greenhouse Gas (GHG) Emissions Mitigation

In cooperation with the Government of Canada, the Department of Energy and Mines supports strategic investments to reduce greenhouse gas (GHG) emissions, leverage private investment, and support community-led clean energy projects. Three significant areas of GHG mitigation that will be addressed in 2021 – 2022 are:

##### *Electric Vehicle Investments and Programming*

Electrifying our transportation sector is important to reducing our greenhouse gas emissions and meeting provincial climate change goals. The Department will work with the Clean Foundation to establish a new program designed to increase the use of electric vehicles from 500 to 1,000 in its first year. This initiative will help more Nova Scotians adopt cleaner transportation options by providing public engagement and awareness campaigns, new charging infrastructure, and a rebate program for eBikes and new/used EVs.

##### *Community Capacity and Low Carbon Programming*

Low Carbon Programming is the result of a four-year funding agreement with Environment and Climate Change Canada, and additional provincial funding, that supports energy efficiency retrofits and community-driven low carbon projects through the Low Carbon Communities and Connect2 programs (more information available online at [novascotia.ca/low-carbon-communities](https://novascotia.ca/low-carbon-communities)).

##### *Leading the Development of Green GHG Reduction Infrastructure*

In cooperation with Infrastructure Canada and the Department of Transportation and Infrastructure Renewal, the Department will support investments in infrastructure projects that reduce emissions from the largest emitting sectors in the province: electricity, transportation, and buildings.

##### *Supporting Nova Scotia's Climate Change Plan*

The Department will continue to collaborate and contribute to the Province's Climate Change Plan to maximize the green economy and ensure that this work informs the department's policy and funding decisions. This work will include developing new electricity options, and transportation policies, programs and initiatives that will be part of the 2021 Climate Change Plan. Implementing the department's Green Choice Program, continuing and enhancing the Province's

energy efficiency programs, and supporting decarbonization work across the Province will support this important work.

#### Nova Scotia's Offshore Growth Strategy

Nova Scotia's Offshore Growth Strategy is designed to increase investment in offshore exploration and ensure Nova Scotians are best positioned to benefit from the development of our energy resources. The coming year's work is focussed on long-term geoscience research and investment attraction.

#### Reduce Electricity Costs for Low-income Individuals and Families

Through its Electricity Plan (2015), the Department is working towards a cleaner electricity system in which technology development and innovation are supported, power rates are predictable and stable, there is transparency and accountability, and the regulatory system is easier to understand. In addition, the Department is working to support a reduction in the use of carbon-intensive fuel sources, and increased economic opportunities relating to the transmission and storage of liquefied natural gas in the province.

#### Marine Renewable Energy and Clean Growth

Nova Scotia is already among the world leaders in tidal energy development and is well-positioned to become a global player in this emerging energy industry with its rich heritage of marine research, knowledge and innovation, and its natural ocean advantages.

As Nova Scotia transitions toward a low-carbon, net-zero future, the Department will continue to advance marine renewable energy and work to better understand the relevance, applications and economic opportunities associated with emerging green technologies, materials and processes.

Clean Growth initiatives will focus on integrating and prioritizing climate action, responsible resource development, our future energy needs, as well as opportunities and initiatives to maximize clean inclusive economic growth. Collaboration with other governments, research organizations and industry will be critical for innovative projects, advancing technology to commercial readiness and enabling proven technology to be adopted and advanced in Nova Scotia.

In 2021 – 2022, the Department will continue to govern and promote responsible development of our marine renewable energy resources and advance clean growth initiatives that contribute to inclusive economic growth, reduce GHG emissions, and ultimately improve the well-being of Nova Scotians.

#### Mineral Resources Development Fund

The Mineral Resources Development Fund is an ongoing grant program designed to assist prospectors, exploration companies, and university-based researchers, as well as employ post-secondary students. The Fund supports projects in the minerals sector that attract investment, grow Nova Scotia's economy, promote innovation and create jobs. In 2021 – 22, the Mineral Resources Development Fund budget will be \$1.5 Million. More information about the fund is available online at: [novascotia.ca/natr/meb/mrdp.asp](https://novascotia.ca/natr/meb/mrdp.asp).

### Non-electric, Home Energy Efficiency Program Enhancements

The Department will continue to support and fund EfficiencyOne to deliver energy efficiency programming for homes with non-electric heating systems (e.g. furnace oil, wood, propane or natural gas). This includes the HomeWarming, Affordable Multi-family Housing, and the Mi'kmaw Home Energy Retrofit programs. Information about the progress Nova Scotia is making in energy efficiency can be tracked at the Annual Provincial Energy Efficiency Scorecard and in EfficiencyOne Annual Reports. More information about Efficiency Nova Scotia programs may be found online at: [www.efficienyns.ca](http://www.efficienyns.ca).

### Energy Transformation

A key priority for the Department in 2021 – 2022 will be to identify and support innovative tools and research that will help Nova Scotian businesses and workers to enhance their capacity to participate in the economic opportunities afforded by the energy transformation, including providing a clear pathway for the adoption of clean technologies. Accelerating Nova Scotia's energy transformation will help to meet the Province's sustainable development goals, provide a pathway for the Government of Canada, other institutions and larger customers to obtain renewable electricity for their operations in Nova Scotia, improve the competitiveness of Nova Scotian businesses, and support increased energy choices for consumers.

This includes continuing to provide support to the solar, wind and storage industries and working with stakeholders and Nova Scotia Power Inc. to allow for greater integration of renewable electricity in the Nova Scotia electrical grid.

In 2021 – 2022, the Department will collaborate with regional and federal partners to investigate new opportunities to decarbonize the electricity system in Atlantic Canada and assess regional transmission capabilities.

The Department will also continue to examine natural gas access opportunities, develop strategies to aid in the decarbonization of the natural gas distribution grid while maximizing the value of existing infrastructure, and continue to work with other government departments and stakeholders on regulatory processes for natural gas and liquified natural gas (LNG) projects. In addition, the Department is working to support a reduction in the use of carbon-intensive fuel sources, and increased economic opportunities relating to the transmission and storage of LNG in the province.

### Abandoned Mines Openings Program

The department maintains the database of Abandoned Mine Openings (AMO) in Nova Scotia on Crown Lands. This initiative provides information to government and the public on potential public safety hazards from historic near surface mine openings.

The Department coordinates information with NRCan to update the national database. The Nova Scotian database is maintained on a regular basis with field visits and historical mining records.

## 2021 - 2022 Department Initiatives: Legislated Mandate

The Department will continue to provide support for the following initiatives under its legislated mandate:

- Geoscience and mineral resource development
- Industry and supplier development
- Regulatory initiatives
- Royalties administration and audit

### Geoscience and Resource Development

The Department of Energy and Mines brings the province's experts in subsurface resources together in one department and provides opportunities to better understand the province's energy and mineral resources.

#### *Onshore Energy Atlas*

In 2021 – 2022, the Department will continue to undertake necessary geoscience research to support energy initiatives and display data regarding Nova Scotia's subsurface energy resources (oil & gas, geothermal, and storage) which supports better regulatory decisions of the energy industry in the province. Open Files Reports from the Atlas may be found online at: [energy.novascotia.ca/onshore-atlas-version-1-2017/onshore-atlas-open-file-reports](https://energy.novascotia.ca/onshore-atlas-version-1-2017/onshore-atlas-open-file-reports)

#### *Resource Evaluation*

The Department will continue its study of the Province's geology and mineral and resources, with a focus on critical minerals for clean growth and identifying opportunities for mineral exploration and development through ongoing geoscience activities and promotional events.

#### *Environmental Geology*

The Department will support the protection of public safety and health by gaining a better understanding of the quantity and quality of groundwater resources, assessing geological hazards, and assessing the vulnerability of the coastline to erosion and flooding.

#### *Geoscience Information*

The Department will continue to publish reports, maps, atlases, on-line applications, databases, and geographic information system (GIS) data products, provide access to the Provincial Drill Core Library located in Stellarton, and co-manage the natural resources library in Halifax with the Department of Lands and Forestry. Access to geoscience data will support better decision-making by government, the public, and industry.

### Industry and Supplier Development

The Department will grow Nova Scotia's energy and minerals sectors by working collaboratively with partners to identify market potential both at home and abroad; lead trade delegations which promote the competitiveness and capabilities of our companies; and market investment opportunities in the province. The Department will engage with



communities to raise awareness of resource potential and provide geoscience data, advice, and technical support for the mineral resources industry. In addition, the Department will operate three key programs to promote local skills development in the energy sector:

#### *Energy Training Program*

The Department will continue to administer the Energy Training Program, which develops the energy workforce in Nova Scotia by offering a wage subsidy to employers hiring students and new graduates from Nova Scotia universities and community colleges for term employment. Since 2002, the Energy Training Program has funded 480 placements at more than 120 companies. Further information about the Energy Training Program may be found online at: [energy.novascotia.ca/industry-development/energy-training-program](https://energy.novascotia.ca/industry-development/energy-training-program)

#### *Scholarship Program and Innovation Grant*

These programs offer funding to trades and technology, and university undergraduate and Master-level students throughout Nova Scotia to pursue energy related studies. To date, and including the former Pengrowth NS Energy Fund, the Scholarship Program and Innovation Grant has funded 290 students, representing just under \$2 million in funding. Information about the Scholarship Program is available online at: [novascotia.ca/energy-scholarship](https://novascotia.ca/energy-scholarship) and information about the Innovation Grant is available at: <https://novascotia.ca/natr/meb/mrdp.asp>

#### *Exploration Services*

The Department will provide training and assistance to prospectors and promote geological resources engagement to support the growth and further development of Nova Scotia's mineral resource opportunities.

#### *Regulatory Initiatives*

The Department will continue to work with the Government of Canada and the Canada-Nova Scotia Offshore Petroleum Board to ensure that the exploration and development of the province's offshore oil and gas resources are responsibly managed. The department will continue to support regulatory modernization through the Frontier and Offshore Regulatory Renewal Initiative.

In addition, the department will work to support enabling regulatory pathways for emerging sectors such as, but not limited to offshore renewable energy, hydrogen, renewable natural gas and deep geothermal.

The Department will continue to administer and regulate the following pieces of legislation: *Petroleum Resources Act*, *Gas Distribution Act*, *Underground Hydrocarbon Storage Act*, *Pipeline Act*, *Marine Renewable-energy Act*, *Electricity Act*, and *Mineral Resources Act*, as well as all associated regulations. Effective administration of these pieces of legislation will ensure the socially responsible development of Nova Scotia's energy and mineral resources.

The Department retains ongoing responsibility over the Registry of Mineral and Petroleum Titles, which provides global access to a secure, map-based system for mineral and petroleum rights in Nova Scotia.

The Department will continue its efforts to improve processes for discharging the Crown's duty to consult with Indigenous People and improve regulatory efficiency by:

- Working with provincial and federal government partners and industry proponents to ensure we meet our consultation obligations in resource development projects
- Collaborating with Lands and Forestry to improve the efficiency of the Integrated Resource Management review process
- Continually improving in-house processes and the NovaROC application in the Registry

#### Royalties Administration and Audit

The Department is responsible for monitoring energy projects to ensure appropriate economic benefits are collected from the development of offshore petroleum resources and for the administration, auditing, and assessing of royalties from offshore and onshore mineral projects. The Department ensures the province's royalty regime reflects modern best practice and strikes a balance between attracting investment and providing a fair return to Nova Scotians.

## Financial Summary

<b>Departmental Expenses Summary</b>			
<b>Energy and Mines</b>			
<b>(\$ thousands)</b>			
<b><u>Programs and Services</u></b>	<b><u>2020-2021</u></b> <b><u>Estimate</u></b>	<b><u>2020-2021</u></b> <b><u>Forecast</u></b>	<b><u>2021-2022</u></b> <b><u>Estimate</u></b>
Office of the Minister / Deputy Minister	377	490	506
Administrative Services	1,186	1,177	1,303
Sustainable & Renewable Energy	1,860	1,888	1,855
Business Development & Corporate Services	3,868	3,200	3,868
Geoscience and Mines	5,569	5,365	5,578
Petroleum Resources	2,126	1,756	2,016
Canada-Nova Scotia Offshore Petroleum Board	3,933	3,933	2,693
Clean Growth and Climate Change	44,590	48,590	52,949
<b>Total - Departmental Expenses</b>	<b>63,509</b>	<b>66,399</b>	<b>70,768</b>
<b>Ordinary Recoveries</b>	<b>31,768</b>	<b>26,241</b>	<b>34,144</b>
<b><u>Funded Staff (# of FTEs)</u></b>			
<b>Department Funded Staff</b>	<b>96.0</b>	<b>88.1</b>	<b>95.5</b>
<b><u>Notes:</u></b>			
Expense forecast is \$2.9 million greater than authority due to 9.5 million for the New Electric Vehicle Incentive Program and a \$1.6 million increase in Low Carbon Economy Fund costs; offset by decreases of \$7.2 million for Investment in Canada Infrastructure Program expenses, \$700 thousand of travel and trade shows costs (COVID-19), and \$300 thousand in salaries. Also, \$2 million was reallocated from the Homewarming program to support COVID-19 measures to help vulnerable Nova Scotians).			
Ordinary Recoveries are \$5.5M less than Estimate, related to a decrease in ICIP of \$4.5M and a decrease in LCEF of \$1M.			
Funded Staff (# of FTEs) is 7.9 less than Estimate due to temporarily vacant positions.			
Expense Estimate has increased by \$7.3 million due to an increase in the ICIP of \$6.1 million and the LCEF of \$2.7 million; offset by C-NS-OPB expenses and various other expenses.			
Ordinary Recoveries Estimate increase of \$2.4 million is due to increase in LCEF and ICIP.			
Funded Staff (# of FTEs) Estimate is decreased by 0.5 due to reallocated student FTEs.			