



Accountability Report 2020–21

Energy and Mines



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Accountability Report 2020–2021

ISBN: 978-1-77448-233-9

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Accountability Statement

The Accountability Report of the Department of Energy and Mines for the year ended March 31, 2021, is prepared pursuant to the Finance Act and government policies and guidelines. These authorities require the reporting of outcomes against the Department of Energy and Mines Business Plan for the fiscal year just ended. The reporting of the Department of Energy and Mines outcomes necessarily includes estimates, judgments and opinions by the Department of Energy and Mines management.

We acknowledge that this Accountability Report is the responsibility the Department of Energy and Mines management. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in the Department of Energy and Mines 2020-2021 Business Plan.

Honourable Tory Rushton
Minister

Karen Gatien
Deputy Minister

Message from the Minister

I am pleased to present the accountability report for the department of Energy and Mines for fiscal year 2020-21.

The department will be transitioning into the new Department of Natural Resources and Renewables during the 2021-22 fiscal year. Our government looks forward to working with communities, businesses and individual Nova Scotians to safely develop the province's resources and create jobs and economic opportunities through the power of innovation.

Together we will build a future where everyone can play a part in building a stronger Nova Scotia.

Sincerely,

Original signed by

Hon. Tory Rushton
Minister

Financial Results

	2020-2021 Estimate	2020-2021 Actual Expense	2020-2021 Variance
Program & Service Area	(\$ thousands)	(\$ thousands)	(\$ thousands)
Gross Departmental Expenses:			
Office of the Minister and Deputy Minister	377	454	77
Administrative Services	1,186	1,049	(137)
Sustainable and Renewable Energy	1,860	1,840	(20)
Business Development & Corporate Services	3,868	3,056	(812)
Geoscience and Mines	5,569	5,540	(29)
Petroleum Resources	2,126	1,667	(459)
Canada – NS Offshore Petroleum Board	3,933	3,449	(484)
Clean Growth and Climate Change	44,590	43,931	(659)
Total: Gross Departmental Expenses	63,509	60,986	(2,523)
Additional Information:			
Ordinary Recoveries	31,768	23,783	(7,985)
Provincial Funded Staff (FTEs)	96.0	88.1	(7.9)

Variance Explanation:

1. Gross Departmental Expenses were \$2.5 million below estimate primarily due an \$11.7 million reduction in the Investing in Canada Infrastructure Plan, offset by new funding of \$9.5 million for the Electric Vehicle Rebate program.
2. Recoveries were \$8 million below estimate, mostly due to reductions relating to the Investing in Canada Infrastructure Plan.
3. Provincial Funded Staff variance was primarily due to various temporarily vacant positions throughout the year.

Measuring our Performance

The mandate of the Department of Energy and Mines is to serve the social, environmental, and economic interests of Nova Scotians by promoting the efficient, effective and environmentally sound use of energy and mineral resources.

The 2017 Ministerial Mandate letters outline that our work is to be directed towards the following strategic actions:

1. Reduce greenhouse gas emissions
2. Develop the offshore growth strategy
3. Manage and renew the Mineral Resources Development Fund
4. Ensure electricity rate stability and reduce energy costs for low income individuals and families
5. Advance work on tidal and renewable energy
6. Enhance the non-electric, home energy efficiency program

In addition to these strategic actions, the following initiatives have guided the work of the Department's other core functions in 2020-2021:

- Grow an evolving economy through development of our diverse energy and mineral resources;
- Transform our energy economy, driving clean inclusive growth while minimizing impact on affordability;
- Strengthen public, stakeholder and investor confidence in energy and mineral development; and
- Invest in our staff, using our technical and business knowledge to inform development of good public policy and ensure we are a best-in-class regulator.

Highlights of the Department's accomplishments are included under the heading of the Ministerial Mandate or core function to which they are most directly aligned.

2020-2021 Departmental Performance on Ministerial Mandate

The 2020-2021 Business Plans for Energy and Mines outlined activities, initiatives, and measures relating to its mandate. The following is an overview of our progress in the past year.

Continued to work on Greenhouse Gas (GHG) Emissions Mitigation

Nova Scotia is a national leader in fighting climate change by reducing greenhouse gas emissions (GHGs) with the most ambitious emission reduction targets in the country.

The Department of Energy and Mines supported the Department of Environment and Climate Change and other Departments to reduce greenhouse gas emissions through policy and program support and through green infrastructure investments (such as the Mi'kmaw Home Energy Efficiency program, the Housing Nova Scotia deep retrofit program and funding for active transportation infrastructure projects located throughout the province.) In cooperation with the Government of Canada, the Department of Energy and Mines supported strategic investments to reduce greenhouse gas (GHG) emissions, leverage investment, and support community-led clean energy projects.

In September 2020, the Department signed a Memorandum of Understanding (MOU) with Natural Resources Canada and Innovation, Science and Economic Development Canada respecting the Clean Growth Hub. The MOU represents a collaboration with the Federal government to help grow clean technology success in Nova Scotia and provides access to Federal programs and supports available to businesses seeking to adopt clean technology solutions.

Two significant areas that the Department focussed on in 2020-2021 include:

Low Carbon Programing

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. The Department offered two types of grants to support GHG emission reductions: Low Carbon Communities (LCC) and Connect2 (<https://novascotia.ca/low-carbon-communities/>). These programs invested \$1.49M in clean transportation and other low carbon projects led by First Nations, municipalities and non-profit organizations in 2020-2021. Connect2 is now in its sixth round of funding, providing \$655,760 in grants to 14 clean transportation projects. The Connect2 program was transferred to the Department of Transportation and Active Transit in March 2021.

Green Infrastructure Funding

The Department manages the Climate Change Mitigation (CCM) sub stream of the Investing in Canada Plan (ICIP), which provides provincial and federal funding to infrastructure projects that reduce GHG emissions. In July 2020 the Department issued a "Call for Projects" for the CCM sub stream of ICIP. In total 54 project applications were received from First Nations, municipalities, non-profit and private sector organizations across Nova Scotia for projects that reduce GHG emissions in the electricity, buildings and transportation sectors.

- 11% of the projects were received from the South Shore, 17% from the Valley,
- 11% from the Northern Area, 15% from the Highlands, 9 percent from Cape Breton, and 22% from Central Area.

Applications were assessed in coordination with the departments of Transportation and Infrastructure Renewal, Environment and Municipal Affairs. Project awards, from the "Call for Projects" began in 2021-22.

Nova Scotia's Offshore Growth Strategy

The Offshore Growth Strategy (OGS) continues to generate new insight into our offshore petroleum geology to attract new investments into the province, and ready our offshore regulatory regime and supply chain to support increased offshore oil and gas activity. Energy and Mines continues to work with the Offshore Energy Research Association (OERA) and other partners such as NRCan and Saint Mary's University to implement projects that add value by decreasing risk and showcasing the opportunities in offshore Nova Scotia.

The COVID-19 pandemic affected staff's ability to collaborate with partners face-to-face. During 2020-2021 some project work included:

- Working with MEOPAR (Marine Ocean Observation and Response) to help establish the Mobile Ocean Research Infrastructure (MORI). MORI is a new entity within Dalhousie University that allows for flexible infrastructure to maximize ocean-going research capacity and access.
- Promoting geoscience research internationally in virtual trade shows and conferences.
- Collaborating with Natural Resource Canada (NRCan) and Genome Canada to design and implement ongoing projects in offshore exploration and, secure academic funding for two post doctoral research fellows at Saint Mary's University and NRCan.
- Providing support for graduate students and interns through the Accelerate Program at Mitacs (<https://www.mitacs.ca/en/programs/accelerate>), a non-profit organization which funds cutting-edge research, creates job opportunities and helps companies reach business goals to achieve results and help bolster the Canadian economy.
- Working with the Morocco state oil and gas company through a multi-year collaboration agreement to strengthen the Department's knowledge and resources in support of seismic reconstruction and geochemistry projects.

Administered mineral resources development fund

The Mineral Resources Development Fund (MRDF) is a multi-year funding program designed to assist prospectors, exploration companies, and researchers; employ post-secondary students; and support projects in the mining sector that attract investment, grow Nova Scotia's economy and create jobs, particularly in rural areas. In 2020-21 the Department launched the third round of funding for the MRDF, for a total of \$1.5 million.

The table below details the allocation of funding among MRDF's funding streams:

Funding Stream	Number of Grants	Total Awarded
Prospecting and Exploration	26	\$608,600
Shared Funding	4	\$450,000
Post-secondary Research	3	\$204,300
Education, Outreach, and Engagement	3	\$27,800
Innovation Grants	2	\$186,000

More detailed information about the MRDF is available online at https://novascotia.ca/natr/meb/mrdp/mrdp_results_2020-2021.asp.

Ensured electricity rate stability and reduce energy costs for low income individuals and families
Ensuring Nova Scotians benefit from price stability, innovation, accountability, and competition is the basis of the Province's 'Our Electricity Future: Nova Scotia's Electricity Plan 2015-2040.' In 2020-21 the Department continued to work with Nova Scotia Power and Nova Scotians to ensure technology development and innovation are supported while keeping power rates predictable and stable.

In 2020-21, the Department:

- Participated in the Integrated Resource Plan (IRP) at the Utility and Review Board (UARB). The Department completed an internal, detailed analysis of the various materials submitted by Nova Scotia Power and participated in the stakeholder sessions associated with the IRP process.
- The Atlantic Clean Power roadmap will outline how the Atlantic Provinces will collaborate over the coming decades to strengthen the regional electricity system and provide clean energy across the region. In 2020-21 the Department, along with the other Atlantic provinces, Quebec and the Federal government contributed to the interim Report titled, 'Towards a Clean Power Roadmap for Atlantic Canada.' The report was released in August 2020, and can be viewed online: <https://www.canada.ca/content/dam/acoa-apeca/documents/Towards%20a%20Clean%20Power%20Roadmap%20for%20Atlantic%20Canada.pdf>. A final report is anticipated to be released in 2021.

Continued work on tidal and renewable energy

The Department is responsible for the administration of the *Marine Renewable-energy Act* – the purpose of which is to provide for the responsible, efficient and effective development of marine-renewable energy resources. Since 2006, considerable attention and resources have been focused on researching and developing in-stream tidal energy in Nova Scotia. Most recently, the Province is beginning to explore the

potential for offshore wind to generate green hydrogen (H₂) and/or green ammonia (NH₃).

Tidal Energy

The Department is responsible for administering a Licencing and Permitting Program for tidal energy development under the *Marine Renewable-energy Act*. A total of eight licences, with a total installed capacity of twenty-two megawatts (22MW), have been issued for tidal development at the Fundy Ocean Research Centre for Energy (FORCE). These include:

- Pempa'q Project (9 MW development under 5 licences)
- Uisce Tapa Project (9 MW development under 2 licences); and
- Big Moon (4 MW development under 1 licence).

Permitted projects are limited to a generating capacity of no more than 5 MW, with a total of 10 MW available under the program. There is currently no capacity available under the permit program with all ten megawatts allocated. Capacity has been awarded as follows:

- Big Moon (5 MW)
- Nova Innovation (1.5 MW)
- Jupiter Hydro (2 MW)
- Sustainable Marine Energy (Canada) (700 kw; and
- New East (800 kw)

Under the permit program, applicants may apply for unconnected permits to test non-grid connected devices. There is no capacity limit for unconnected demonstrations. Licence and permit holders are authorized to deploy and test (unconnected) under the authority of a licence or permit. To date, there have been no unconnected permits issued for development that is not otherwise authorized under a licence or permit.

Offshore Wind

In 2020-2021 the Department supported a variety of studies and research initiatives to better understand the offshore environment and the development/integration of variable renewables including offshore wind. These early studies provide valuable information for provincial and federal policy makers for future decisions related to this activity. The analysis and research focused on resource assessment, seabed geology, levelized cost of electricity (measurement of lifetime costs divided by energy production), grid value of offshore wind, constraint mapping, ports and infrastructure, hydrogen production powered by offshore wind; and stakeholder engagement.

Solar Energy

In 2020-2021, the Department continued to support the development of solar energy initiatives in Nova Scotia. The Department prepared amendments to the *Electricity Act* (passed April 19, 2021) to enable the Shared Net Metering and the Commercial Solar

programs. Net Metering programs allow customers to connect a small renewable electricity project to the grid and sell any electricity produced beyond the customer's own consumption to Nova Scotia Power. The new Shared Net Metering program will provide renters and low-income individuals access to this program, rather than limiting it to just single-family homeowners. Regulations are required before these programs can be launched, anticipated to be developed in fiscal 2021-2022.

Other initiatives and work done in this area include the following:

- Partnered with Solar Schools Canada to develop and deliver resource guides for schools, teachers and students on how to develop school-based renewable energy projects and programs.
- A new website (www.solardatans.ca) was developed to provide Nova Scotians with real-time information about over 2,300 solar installations in the province. The website is part of the Community Solar Database initiative spearheaded by Nova Scotia Community College (NSCC), which collects data on solar electricity generation from solar arrays (multiple solar panels) across the province and makes this data available for research and public education. The website was created by NSCC, in partnership with Atlantic Canada Opportunities Agency (ACOA), Halifax Regional Municipality, Nova Scotia Power, Efficiency Nova Scotia, Dalhousie University, Green Power Labs and Solar Nova Scotia.
- Two new solar photovoltaic (PV) projects were supported for facilities that offer affordable housing units and services in the province. These projects were part of a pilot administered by Efficiency Nova Scotia called, "Solar for Affordable Multi-Use Residential and Shelters." The electricity savings from these projects will be reinvested back into the facilities to assist with costs associated with laundry fees, social activities/services, and facility upgrades.
- The province provided funding to Efficiency Nova Scotia to complete a Solar Quality Assurance (QA) Pilot. The newly launched Solar QA program ensures solar installers who participate in Efficiency NS's "Efficiency Preferred Partners (EPP)" networks, comply with service delivery standards. Being a member of the EPP is necessary to be a solar installer under the Solar Homes Programs (<https://www.energyncns.ca/residential/programs-services/solar-homes>)

In March 2021 further funding was committed to the SolarHomes program to extend the program through to 2023. Funding was committed through an extension of the Low Carbon Economy Fund and from the Department of Environment and Climate Change's Green Fund. As of March 2021, SolarHomes supported installs in over 2,000 homes totaling \$13.8M in rebates.

Nova Scotia was again ranked as the top province in Canada by Energy Hub (<https://www.energyhub.org/nova-scotia/>) for installing a solar power system based on factors such as rebates, financing options, installation costs, and utility policies.

Sustainable Transportation

Interdepartmental collaboration and engagement with staff about the Halifax Regional Municipality's Integrated Mobility Plan has led to a \$25M investment in HRM's active transportation infrastructure through the Investing in Canada Infrastructure Program. The transportation sector represents 32 percent of Nova Scotia's overall GHG emissions. However, the adoption of electric vehicles (EVs) has been slow in the province. The Department of Energy and Mines continued to develop policies and programs that support the transition to electric vehicles, including personal and commercial vehicles, public transit fleets and marine vehicles.

The Department commissioned Clean Foundation to run Year 2 of the Next Ride EV engagement campaign which resulted in over 450 people experiencing their first test drive of an electric vehicle, and over 1,000 in person engagements. Due to COVID 19, events were not held between March and June 2020, and then on a limited basis until the end of the fiscal. The Next Ride team pivoted quickly to develop an online sign-up portal where they scheduled test drives from a person's place of work or home. The digital platforms saw increased utilization, with over 31,000 unique visitors on their engagement websites.

The Department is developing a rural ride-sharing initiative to field test the potential for an on-demand app-based ride-sharing program in a small community. Community engagement and selection has been completed, and the Department will work with the selected community to develop the project scope and parameters. However, due to the current COVID pandemic, the project has been paused at this stage, and will resume when conditions for a field test are more favourable.

In March 2021 the Department introduced a new \$9.5M Electric Vehicle Rebate program (<https://evassist.ca/rebates/>) to allow Nova Scotians of varying income levels to take part in the shift to clean transportation. The goal of this new program is to increase the number of EVs in the province to more than 3,000 over the next three years. The rebate amounts for vehicles are \$1,000 to \$3,000 for used and new fully electric vehicles and plug-in hybrid electric vehicles. From February to April 1, 2021, this program provided Nova Scotians support to purchase of 32 new and 11 used EVs and 102 eBikes.

Oversaw non-electric, home energy efficiency program enhancements

The Department promotes energy efficiency, beneficial electrification and distributed energy resource programs for non-electrically heated homes (i.e., those heated by furnace oil, wood, propane, or natural gas) by funding programs delivered by Efficiency Nova Scotia.

Due to COVID-19 the HomeWarming program (as well as all other Efficiency Nova Scotia programs that involved in home visits and assessments) was suspended from March 17, 2020 until June 15, 2020. This action was taken to protect the health and safety of Efficiency Nova Scotia employees, partners, program participants and to

cooperation with public health officials' efforts to stop the spread of COVID-19. A portion of the annual HomeWarming budget was reallocated to the COVID relief fund.

In 2020-2021, HomeWarming assisted 917 participants in total and achieved 29,307 gigajoules (GJ) of annual energy savings and 1,526 tonnes of annual GHG reductions (60% of the annual participant forecast, 59% of the annual energy savings forecast and 46% of the annual GHG reductions forecast). Unfortunately, the total results are below the annual forecast for this program, due to COVID-19.

In 2020-2021, the Affordable Multifamily Housing and Non-Profits program completed energy saving upgrade projects in 24 participating buildings. 4,816 GJ of annual energy savings and 246 tonnes of annual GHG reductions were achieved. The total results (60% of the annual participant forecast, 87% of the annual energy savings forecast and 67% of the annual GHG reductions forecast) are below the annual forecast for this program mainly due to COVID-19.

In 2020/21, the Mi'kmaw Home Energy Efficiency Program reached participants in 11 of Nova Scotia's 13 Mi'kmaw communities. All in-home visits were suspended for several months early to mid-2020. When resuming services in the summer of 2020, two communities chose not to participate in the program due to concerns from COVID-19, the other 11 communities permitted services at varying points in 2020. In 2020-2021, 118 homes were completed in total with upgrades and a final energy assessment, which resulted in 3,605 GJ of annual energy savings and 242 tonnes of annual GHG reductions. The total results (51% of the annual forecast for both energy savings and GHG reductions) are below the annual forecast for this program mainly due to COVID-19.

The Home Energy Assessment program finished the 2020-2021 year with 1,011 participant completions and savings of 50,573 GJ and 3,509 tonnes of GHG reductions, exceeding its annual forecast. Despite COVID-19 and its impact on the program, results improved every quarter of the year.

2020 -2021 was a successful year for the Green Heat program with a total of 3,374 efficiency measures rebated and an annual energy savings of 56,678 GJ and 1,614 tonnes of annual GHG reductions, exceeding its annual forecast.

2020-2021 Departmental Performance on Core Functions

In 2019-2020 the Department continued to advance functions in support of its mandate, strategic goals and government's priorities. These functions are detailed below and include strengthening the Department's relationships with the Mi'kmaq of Nova Scotia and continuing to support Mi'kmaw participation in the energy and mining sectors. The Department funds a Mi'kmaq Energy and Mines Advisor to support the Assembly of Nova Scotia Mi'kmaq Chiefs.

Supported geoscience and resource development

Resource development is an important part of Nova Scotia's economic future. The Department of Energy and Mines brings together the experts in the province's subsurface resources to better understand the province's energy and mineral resources.

Geoscience Atlas

The Department aims to improve data accessibility and usability, to provide new insight in the province's onshore geology. One of the main guiding principles for this project is to provide this information publicly. This gives scientists and technical professionals the opportunity to reproduce and verify these findings, resulting in a better understanding of Nova Scotia's resource potential. This work also provides new insight into areas such as Carbon Capture and Storage (CCS) and Geothermal energy. In 2020-2021 the Department, in collaboration with the Offshore Energy Research Association (OERA) and the Department of Fisheries and Agriculture, completed a phase 1 evaluation of the province's geothermal energy potential and GAP analysis. This first step offered valuable insight into the technical advances for the development of our subsurface energy potential alongside traditional natural gas and or liquids rich gas and will help inform future regulatory work.

Resource Evaluation

The Department monitored mineral exploration activities in Nova Scotia, including auditing the confidential assessment reports that are submitted in support of exploration licence renewals, visiting exploration sites, liaising with prospectors and mineral exploration companies (when public health protocols permitted), as well as collaborating with the Regional Geologist. Some highlights for 2020-21 include:

- Detailed bedrock mapping on the Eastern Shore of Nova Scotia,
- Development of deposit and exploration models for mineralization in the province,
- Providing the wine industry with data and interpretations on how geology and glacial history affect the flavour of agricultural products, most notably wine,
- Research related to markets for industrial minerals,
- Field investigations of critical minerals for a green economy,
- Provided geoscience expertise and support to the regional Integrated Resource Management Teams on land use decisions on Crown land,
- Provided geoscience expertise and support to prospectors and the mineral industry.

Environmental Geology

In 2020-21 the Department continued to assess geological hazards and the vulnerability of the coastline to erosion and flooding in support of public health and safety. With respect to groundwater, the department works to produce scientific information on the quality, availability and vulnerability of groundwater in Nova Scotia, and to make this information publicly available (<https://novascotia.ca/natr/meb/water-resources/ground-water.asp>).

Geoscience Information

The Department continues to publish reports, maps, atlases, online applications and databases, and geographic information system (GIS) data products. The Department

also maintained the Drill Core Database, which can be searched by location, county, claim reference map, tract, company name, and minerals found. More information about the database can be found at: <https://novascotia.ca/natr/meb/geoscience-online/about-database-dcdh.asp>.

Continued to Support Industry and Supplier Development

The global Covid-19 pandemic significantly impacted some of the work the Department had planned to support industry and supplier development. Due to travel restrictions and public health advisories, department staff were not able to network and collaborate in-person with industry. Instead, staff modified their activities and substituted face-to-face interactions by attending and participating in virtual conferences, missions, workshops, and webinars.

The Department partnered with stakeholders during the year to identify studies and research on clean growth economic opportunities, skills development, and supplier development in a transitioning global economy. The Department collaborated with other stakeholders (Maritimes Energy Association, Marine Renewables Canada, Ocean Technology Council of Nova Scotia, Atlantic Canada Opportunities Agency, Nova Scotia Offshore Energy Research Association, Nova Scotia Business Inc, Natural Resources Canada, Canadian Renewable Energy Association) to advance clean growth opportunities and encourage economic development. Activities included providing advice on best practices to maximize community benefits for clean growth opportunities; promoting local procurement; and enabling workforce development and skills training within the energy sector to help generate revenue and additional jobs for Nova Scotia.

Nova Scotia Energy & Mines Scholarship (formerly Pengrowth) and Innovation Grant Program

The Pengrowth Scholarship Program was renamed the Nova Scotia Energy & Mines Scholarship program. Changes were made to the program to incorporate mining-related disciplines, which include additional disciplines in both the university and trades portion of the scholarship program.

The Nova Scotia Energy & Mines Scholarship program provided scholarships funding to 40 students in 2020. Of which, eight were NSCC students pursuing trades at NSCC, 27 were university undergraduate students in various stages of the 4-year scholarship program, and five were master level students in various stages of the 2-year innovation grant program. In 2020, 20 of the 40 students were new to the program.

Program	# of Students	Total awarded
Nova Scotia Energy & Mines Scholarship Program	35	\$87,500
Nova Scotia Energy & Mines Innovation Grant	5	\$37,500

Energy Training Program

The Energy Training Program ran a pilot in the fall (2020-21) for municipalities looking to explore green energy programs. The pilot was called the *Energy Training Program - Greening Municipalities*. The Department received applications from three municipalities and all three received a 75 percent wage subsidy (up to a maximum of \$11.25 per hour for 40/hours/week) for a 12–15-week period ending in December 2020. Promoting the pilot on short notice and during a municipal election campaign, along with financial constraints of municipalities and the global pandemic presented some challenges around program promotion and may have impacted participation in the program.

The Energy Training Program funded 19 student placements throughout the province during the summer of 2020. Originally 28 placements were approved for participation in January 2020 however, due to challenges with Covid-19, nine placements were withdrawn before the program started in late April 2020.

Program	# of students funded	Total awarded
Energy Training Program & Greening Municipalities pilot	22	\$95,816
Skills Canada - Nova Scotia (Skilled Futures in Energy Video Project)	N/A	\$10,000

Regulatory Initiatives

In 2020-2021 the Department worked 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 continued to support regulatory modernization through the Frontier and Offshore Regulatory Renewal Initiative and Occupational Health and Safety Initiatives, including conducting a detailed analysis of draft regulations and reviewing feedback from stakeholders.

In addition, the department undertook analysis for enabling regulatory pathways for emerging sectors such as, but not limited to, offshore renewable energy and renewable electricity.

The Department continued 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 ensures the Nova Scotia’s energy and mineral resources are socially responsibly developed.

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 continued 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.
- Continuing to provide support for the Mi'kmaq Energy and Mines Advisor Position at the Kwilmuk Maw-klusuaqn Negotiation Office (KMKNO).

Royalties Administration and Audits

Offshore Petroleum Royalties

The Department is responsible for monitoring energy projects to ensure appropriate economic benefits are collected from the development of offshore petroleum resources. The administration and auditing of oil and gas royalties and Crown Share Adjustment payments contributes millions of dollars directly to the provincial treasury. 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.

Mineral Royalties

The Department is responsible for administering, auditing, and assessing royalties from onshore mineral projects. An effective mining regulatory regime supports competitiveness, efficiencies in government and industry, and economic prosperity in our province. In 2020-21, the Department continues to provide recommendations regarding the administration of the royalty regulations and agreements under the *Mineral Resources Act* and associated regulations that came into effect in 2018.

2020 – 2021 Departmental Initiatives: Departmental Priorities

Energy Transformation

Energy transformation remains to be a key priority for the Department, to help meet the Province's sustainable development goals, provide a pathway for the Government of Canada to build and procure renewable electricity for federal buildings in Nova Scotia, improve the competitiveness of Nova Scotian businesses and support increased energy choices for consumers.

In 2020-2021 the Atlantic Provinces continued to collaborate on the development of an Atlantic Canada Clean Power Roadmap. This work will support the province's clean economy objectives and will lead to the development of the Atlantic Loop. Furthering Nova Scotia's transition from coal to cleaner sources of electricity require changes to the electricity system, including increased transmission infrastructure, closure of coal-fired units and increased renewable energy projects.

In 2020-2021 the Department prioritized several key initiatives to introduce new renewable electricity, and therefore lower the carbon intensity of Nova Scotia's electricity system:

- Continued to engage with large-scale electricity customers, Nova Scotia Power and independent power producers to further refine the Green Choice Program, which was introduced in February 2020.
- In 2020 the Department appointed a Procurement Administrator, CustomerFirst Renewables, to enroll interested buyers, conduct requests for proposals and issue power purchase agreements for renewable electricity generation for large energy customers. That includes the federal government, which has committed to acquire all of its electricity needs from renewable sources by 2022.
- Announced a \$5.5M investment over two years to continue the Solar Homes program, which offers rebates to homeowners installing solar panels. This program has been a key contributing factor to growth and increasing sophistication of Nova Scotia's solar energy sector. To date over 3,700 applications have been submitted over the three-year lifespan of the project.

Appendix A: Annual Report under Section 18 of the *Public Interest Disclosure of Wrongdoing Act*

The *Public Interest Disclosure of Wrongdoing Act* was proclaimed into law on December 20, 2011.

The *Act* provides for government employees to be able to come forward if they reasonably believe that a wrongdoing has been committed or is about to be committed and they are acting in good faith.

The *Act* also protects employees who do disclose from reprisals, by enabling them to lay a complaint of reprisal with the Labour Board.

A Wrongdoing for the purposes of the *Act* is:

- a) a contravention of provincial or federal laws or regulations,
- b) a misuse or gross mismanagement of public funds or assets,
- c) an act or omission that creates an imminent risk of a substantial and specific danger to the life, health or safety of persons or the environment, or
- d) directing or counselling someone to commit a wrongdoing.

The following is a summary of disclosures received by the Department of Energy and Mines in the Fiscal Year 2020-2021.

Information Required under Section 18 of the Act	Fiscal Year 2020-2021
The number of disclosures received	0
The number of findings of wrongdoing	N/A
Details of each wrongdoing	N/A
Recommendations and actions taken on each wrongdoing	N/A