

net-zero

Atlantic Canada Offshore Wind Grid Integration and Transmission Study



ACKNOWLEDGEMENTS

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Forward

This Policy assessment is a deliverable of the Atlantic Canada Offshore Wind Integration and Transmission Study. The initial Policy Assessment was completed by Stantec and submitted to Net Zero Atlantic on July 8, 2024. It included an assessment of current federal and provincial policy and regulatory frameworks driving offshore wind development on Canada's Atlantic coast. The report also defined potential challenges and risks within the current policy environment that might hinder or inhibit offshore wind development and highlighted opportunities for policy evolution that continue to facilitate the industry's advancement.

The first addendum to the Policy Assessment was completed on August 15, 2024, outlining recently announced initiatives that further enable offshore wind development for Canada's Atlantic provinces. It discussed the creation of a new collaboration framework between the Government of Canada and the Province of Nova Scotia to accelerate clean economic growth and job creation through six key areas. The addendum also provided a summary of the newly released *Nova Scotia Regional Energy and Resource Table Framework for Collaboration on the Path to Net Zero*.

The second addendum was completed on December 11, 2024 and included further discussion of Canada's policy environment with respect to its enablement of offshore wind development. It detailed Canada's Offshore Renewable Energy Regulations, the Canadian Energy Regulatory Act, the 2023 Accord Acts, as well as Nova Scotia's recently introduced Advancing Nova Scotia Opportunities Act (Bill 471) and the introduction of mirror legislation in Newfoundland and Labrador.

A third and final addendum was completed on March 13, 2025. It consists of a summary of the *Final Report on the Regional Assessment of Offshore Wind in Nova Scotia* as well as the *Final Report on the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador.* The addendum also highlighted the newly announced *Framework for Collaboration on the Path to Net Zero* between the Governments of Canada and Prince Edward Island and details the 2019 Impact Assessment Act and discusses Canada's membership in the Global Offshore Wind Alliance. Finally, it discusses the recently announced moratorium on offshore wind development in Georges Bank, Nova Scotia.

Federal Legislation

Applicable Canadian federal policy is primarily aimed at achieving net-zero greenhouse gas (GHG) emissions. In 2021, the Canadian Net-Zero Emissions Accountability Act received royal assent. The Act enshrines in legislation Canada's commitment to reducing GHG emissions by 40-45% below 2005 levels by 2030 and achieving net-zero GHG emissions by 2050. The Act established the requirement to develop an emissions reduction plan¹ and the

federal government met this requirement when it released the 2030 Emissions Reduction Plan in 2022.² The Plan outlines a roadmap, planned investments, and introduced carbon pricing to guide emissions reduction efforts and includes accountability and reporting requirements. The Plan earmarks over \$850 million to support the



¹ Canadian Net-Zero Emissions Accountability Act (S.C. 2021, c. 22), subsection 6 and subsection 9(2).

² The federal government committed in the Plan to review and report on progress made in 2023, 2025 and 2027, with additional targets and plans to be developed for 2035 through 2050.

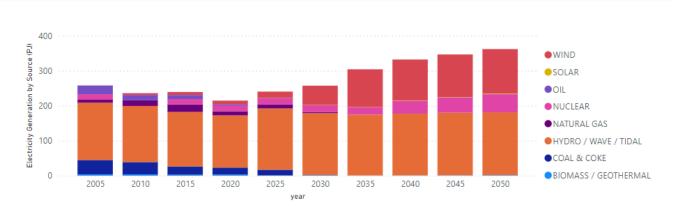




development and deployment of renewable energy technologies, including offshore wind, in the electricity sector.

A key component of the Plan was the development of the Clean Electricity Regulations, which the federal government released for public input in 2023.3 The Regulations propose performance standards to reduce GHG emissions from fossil fuel-generated electricity beginning in 2035. In addition, the Regulations list various electricity system technologies needed to meet net-zero GHG emissions by 2050, including offshore wind. Figure 2 below shows one potential net-zero by 2050 scenario's electricity generation mix in the Atlantic provinces.

Figure 2 - Electricity Generation by Source for Atlantic Provinces, Under Canada Net-Zero Scenario⁴



The federal government has proposed changes in legislation to facilitate the development of renewable energy sources in the Atlantic provinces. In 2021, the federal government introduced Bill C-49.5 Bill C-49 proposes establishing the two primary regulators of energy in Newfoundland and Labrador and Nova Scotia as the regulating bodies for offshore renewable energy projects, as well as regimes and processes for the issuance of submerged land licences to carry out offshore renewable energy projects. In 2023, both Nova Scotia and Newfoundland and Labrador formalized an agreement with the Government of Canada to conduct regional assessments of offshore wind development in the provinces, with the aim of enhancing the efficiency and effectiveness of future impact assessments for offshore wind projects subject to the federal Impact Assessment Act.

In its 2024 budget, the federal government introduced investment tax credits to advance energy transition projects. New Brunswick expressed its support of the incentives, which include a 15% refundable Clean Electricity Investment Tax Credit and a 15-40% Clean Hydrogen Investment Tax Credit for costs associated with clean hydrogen production.

³ The Regulations remain in draft form, with extensive public engagement completed in February 2024. An update report stated intent to publish final Regulations later in 2024. See clean-electricity-regulations-public-update-16022024.pdf (canada.ca)

⁴ With data from Canada's Energy Future, <u>CER – Energy Future 2023: Executive Summary (cer-rec.gc.ca)</u>

⁵ Bill C-49 (officially An Act to amend the Canada-Newfoundland and Labrador Atlantic Accord Implementation Act and the Canada-Nova Scotia Offshore Petroleum and Resources Accord Implementation Act) remains under debate, with its third reading in front of the House of Commons in progress as of May 24, 2024.





Provincial Legislation

Nova Scotia

The province of Nova Scotia (NS) first enacted the Renewable Electricity Regulations, made under Section 5 of the Electricity Act, in 2004.⁶ The Renewable Electricity Regulations outline prescriptive standards and targets for 2030 for supplying customers in NS with renewable electricity. They also mandate specific targets for Nova Scotia Power Inc. to acquire electricity from independent power producers.

In 2021, the province enacted the Environmental Goals and Climate Change Reduction Act. This Act outlines the province's targets for GHG emissions reduction, including the requirement to have net-zero emissions by 2050. The Act also defines several goals set by the provincial government respecting climate change mitigation, adaptation, and GHG emissions reductions, mandating that renewable energy sources account for 80% of the province's electricity by 2030.

In 2024, the province enacted the Energy Reform Act. The Act marked a significant overhaul in the regulation of electricity in the province. The Act split the Nova Scotia Utility and Review Board (NSUARB) into two boards: (1) the Nova Scotia Energy Board, which oversees the regulation of public utilities in the province and has the requirement to consider the above-mentioned Environmental Goals and Climate Change Reduction Act, and (2) the Energy and Regulatory Boards Tribunal, which maintains the remaining responsibilities from the NSUARB not overseen by the Energy Board. The More Access to Energy Act establishes an Independent Energy System Operator to manage the operations of the electricity system and the connection of renewable energy projects to the electricity grid.

Prince Edward Island

The province of Prince Edward Island (PEI)'s Renewable Energy Act (2004)⁹ establishes rules for renewable energy generators and net-metering agreements with small-capacity renewable energy generators. The Renewable Energy Act is intended to foster the emergence of new energy suppliers in the province and enhance the capacity and reliability of PEI's electrical system. PEI also enacted the Net-Zero Carbon Act in 2021, which outlined prescriptive and detailed reporting requirements and targets for reducing GHG emissions. In this Act, PEI sets a target to achieve net-zero emissions by 2040, a decade earlier than current federal net-zero by 2050 targets.

In 2022, PEI released its 2040 Net Zero Framework following the release of the federal Canada Net-Zero Emissions Accountability Act and 2030 Emissions Reduction Plan. The Framework sets forth PEI's ambitious targets of achieving net-zero emissions by 2040, along with the necessary strategies to achieve these targets. The province specifically highlights its current and planned future utilization of wind energy in reaching its targets.

New Brunswick

In 2015, New Brunswick enacted Regulation 2015-60 pursuant to the Electricity Act, establishing objectives for sourcing 40% of electricity from renewable energy. Two programs were launched to stimulate renewable energy projects. One primarily supports small-scale initiatives by creating a procurement set-aside for projects, and one is aimed at large industrials and guarantees a price for generated renewable energy. New Brunswick also enacted the Climate Change Act in 2018, which outlined specific GHG emissions reduction targets by 2020, 2030 and

 $^{^{\}rm 6}$ The Renewable Electricity Regulations had amendments in both 2010 and 2022.

⁷ The Energy Reform Act received royal assent in April 2024.

⁸ The establishment of these boards appears to align with the amendments of the proposed Bill C-49.

⁹ The Renewable Energy Act has undergone several amendments since 2004, with the most recent amendment in December 2023.





2050. A Climate Change Fund was established to support initiatives related to GHG reductions, climate change adaptation and public education.

In 2022, the Climate Change Action Plan 2022-2027 was released. This Plan outlined a target of net-zero emissions by 2050. The plan outlines the development of a Clean Energy Strategy by 2025 for achieving net-zero electricity emissions by 2035. In 2023, the province revealed parts of its renewable energy vision for 2035, including an increase in wind power capacity by 1400 MW by 2033, a focus on small nuclear reactors, and advancements in hydrogen production. ¹⁰

Newfoundland and Labrador

In 2016, the province of Newfoundland and Labrador (NL) introduced the Management of Greenhouse Gas Act and Regulations. These measures are intended to reduce GHG emissions in the province for large industrial facilities, including those involved in electricity generation, through a form of carbon pricing. The Regulations establish specific annual reduction goals for the GHG emissions of industrial facilities through 2030.

In 2021, NL released its Renewable Energy Plan, which outlines the province's commitment to net-zero emissions by 2050. The Renewable Energy Plan includes two actions aimed at maintaining collaboration with the federal government to facilitate environmental assessment processes for offshore wind. The province also released its Hydrogen Development Action Plan in May 2024, which presented 31 actions to explore and develop a green hydrogen sector within the province.

In June 2022, the province established the Newfoundland and Labrador Regional Energy and Resource Table - Framework for Collaboration on the Path to Net-Zero. One focus area of the Regional Table is wind and hydrogen development, with a short-term objective to modernize the Canada-Newfoundland and Labrador Offshore Petroleum Board (CNLOPB),¹¹ accelerate the review processes for offshore wind projects,¹² and examine macroeconomic and supply chain considerations for offshore wind. Notably, the province signed a memorandum of understanding (MOU) with the federal government in 2023, granting NL the regulatory authority over offshore wind projects within inland bays to enable the development of offshore wind. The MOU establishes a clear process for NL to administer offshore wind land tenure and life cycle regulation and sets a commitment to design and implement a Revenue Framework in the Offshore Renewable Energy Area.

Challenges and Risks in the Current Policy Environment

Broadly, external factors can influence the lead-lag relationship between development and implementation of policy, and present a challenge when attempting to proactively develop capital-intensive generation sources such as offshore wind.

The biggest risk when assessing policies that span multiple decades is the consistency of the government in upholding those policies. This uncertainty makes it challenging to create long-term, consistent investment decisions as policy drivers may shift over time and with political leaning. Between October 2024 and October 2025, the federal government and 3 of the 4 Atlantic provinces will hold general elections, as illustrated in *Figure 3*. Priorities can particularly shift when an election triggers a change in the governing party. In general, this tends

¹⁰ The province has noted it intends to release a hydrogen roadmap between 2027 and 2035 and proposed Bill-23. The bill proposes to amend the Distribution Act and Pipeline Act to incorporate renewable gas and hydrogen into the existing regulatory framework. The bill received its first reading in March 2024.

¹¹ The modernization of the CNLOPB is currently before the House of Commons as Bill C-49.

¹² Primarily through regional assessments and data collection to inform project regulatory reviews.





to happen quicker in the Atlantic provinces where, since 1945, on average a party governs between 8 to 10 years before another party is voted in.¹³ In addition, the upcoming United States federal election in November 2024 may challenge the Inflation Reduction Act and have resulting impacts on clean energy investment across North America.¹⁴

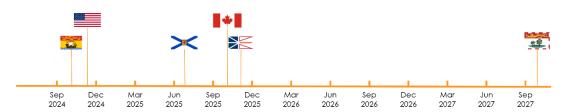


Figure 3 - National and Provincial Election Forecast (2024 - 2027)

Challenges in energy transition exist when electrification in the heating, transportation and construction sectors creates additional energy demand from electric utilities, which needs to be met with new renewable energy generation sources. This can pose a risk if electrification uptake is faster than renewable energy generation can manage; the success of one may hamper the other. If electrification uptake is slower, this may create a disincentive to invest in additional renewable energy generation. Technical challenges also arise from a frequently changing policy landscape, as engineers need to continuously adapt designs to adhere to new regulations. Clear, enabling, and aligned policy can accelerate the development of renewable energy projects.

One way to mitigate such a risk is regional collaboration. By taking a regional, larger-scale approach changes in one area can be buffered in another. In Atlantic Canada, each province has created their own strategy and roadmap, giving weight to both electrification and the production of renewable energy. A regional policy approach may benefit all, where the efforts of one province are supported by the efforts of another. Currently, this joint approach appears absent, though the importance of collaboration is made explicit in multiple plans referenced above.

Finally, while policy generally requires a long-term, multi-year vision, major projects and budgets are often planned and allocated annually. This creates uncertainty for industries that need to make long-term financial commitments to realize their projects. A clearer connection between policy and its investment drivers may mitigate this risk.

Opportunities for Policy to Drive/Facilitate Offshore Wind

Federal policy to date has provided the provinces with consistent guidance, targets, and benchmarks for pursuing overall emissions reductions. For example, each of the Atlantic provinces has developed its own renewable energy and/or climate change action plans in response to the release of the federal 2030 Emissions Reduction Plan. Each province has committed to achieving net-zero emissions by 2040 or 2050, which is aligned with the federal government's plan. Additionally, each of the Atlantic provinces appears to have legislation and/or acts governing their net-zero and GHG emissions reduction targets.

Continued development of federal policy, including the finalization of the Clean Electricity Regulations, will provide a mechanism for continued collaboration with the provinces. The draft regulations use offshore wind technology as one of the inputs into the preliminary modelling of the future state of Canada's electricity system. The

¹³ Newfoundland and Labrador, on average has a governing party change every 15 years.

¹⁴ The Act was signed into law in August 2022, and marked the most significant action the United States has taken on clean energy.





development of the regulations to date has been a collaborative process between federal government agencies, provincial governments, industry, Indigenous stakeholders, and non-governmental organizations. Continued collaboration in the finalization of the regulations will ensure all stakeholders are aligned on the future of the country's electricity system. The federal government has demonstrated its commitment to working with the Atlantic provinces through the introduction of Bill C-49 to allow Newfoundland and Labrador and Nova Scotia to regulate its own renewable energy resources, including offshore wind.

Each of the Atlantic provinces has developed their own renewable energy and/or climate change action plans and have embedded in legislation their net-zero and GHG emissions reduction targets. Nova Scotia and New Brunswick plans are focusing policy efforts on reducing and/or eliminating reliance on fossil fuel-based electricity generation and transitioning to renewable, non-emitting generation sources. Prince Edward Island's significant wind generation capability in its electricity system can be further expanded to achieve the province's goal of achieving net-zero emissions by 2040. Newfoundland and Labrador has undertaken specific actions to explore and accelerate the development of offshore wind and assess its market pairing with a global green hydrogen export industry. The Atlantic provinces have also established regional collaboration with the New England governors and have continuously communicated their commitment to net-zero emissions by 2050, each recognizing the importance of both their own provincial/state plans and regional energy planning over the longer term. The foundations of collaboration in the region are in place for continued provincial alignment on developing renewable energy sectors, such as offshore wind.

In collaboration with ongoing policy development, opportunities exist at federal and provincial levels to continue incentivizing offshore wind project implementation. In addition, ensuring the Atlantic region maintains an available and adequately trained labour force will ensure the development of offshore wind projects is achievable.¹⁶

Regardless of the uncertainty around the pace of electrification occurring today and into the future, energy demand will continue to grow, and it presents a significant opportunity for the development of renewable energy sources, including offshore wind. Overall, the current policy environment appears conducive to the development of offshore wind development, however, policy uncertainty due to political risk and evolving technical challenges must be acknowledged. Opportunities exist to further develop renewable energy policies, collaborate amongst the provinces and eastern seaboard region, align interpretation of sector drivers, support investment and labour force requirements at the federal and provincial levels, and ensure policy remains and becomes increasingly technically informed. This will enhance the policy environment and allow for final investment decisions on offshore wind technology in Atlantic Canada.

¹⁵ See NEG-ECP-Statement-September-25-2023-Quebec-City-EN.pdf (cap-cpma.ca)

¹⁶ For example, in its 2021 Renewable Energy Plan and Hydrogen Development Action Plan, Newfoundland and Labrador placed focus on identifying labour resources required to construct and maintain wind generation and hydrogen production facilities, including identifying post-secondary programming opportunities.





Report Addendum 1 - August 15, 2024

Press Release: Government of Canada and Province of Nova Scotia Unveil Collaboration Framework to Drive Economic Growth and Create Jobs

- Nova Scotia Regional Energy and Resource Table Framework for Collaboration on the Path to Net-Zero¹⁷ released July 30, 2024 – identifies six areas of economic opportunity to pursue:
 - Hydrogen
 - o Marine Renewables
 - Clean Electricity
 - o Critical Minerals
 - Forest Bioeconomy
 - Carbon Management
- Federal Government (July 30, 2024) also announced additional \$192 million for clean energy projects and associated storage systems
- Nova Scotia and federal governments both agreed to Joint Policy Statement on Developing and
 Transmitting Clean, Reliable, and Affordable Power in NS & NB (signed October 2023) committed to
 collaborating to ensure progress toward electricity systems that are affordable, reliable and clean while
 also meeting requirements of incoming Clean Electricity Regulation

Nova Scotia Regional Energy and Resource Table – Framework for Collaboration on the Path to Net-Zero

The Framework¹⁸ identifies six opportunity areas:

- **1.Carbon Management:** support the development of NS's carbon management sector, including CO₂ storage potential and technology development and deployment
 - Notes CM like point-source carbon capture, utilization, and storage (CCUS) and carbon dioxide removal (CDR) important climate action/ clean growth opportunity for NS/ Canada
 - NS is well-situated to develop offshore CO₂ storage capacity for neighbouring eastern provinces like Ontario and for NE US
 - Two main pillars:
 - Developing CO₂ storage potential
 - Developing and promoting carbon management opportunities in NS
- **2.Clean Electricity**: support / help ensure an affordable and reliable phase out of coal / transition to net-zero energy
 - October 2023 Canada, NS, NB agreed to Joint Policy Statement on Developing and Transmitting clean, Reliable, and Affordable Power in Nova Scotia and New Brunswick
 - Within context of Joint Policy Statement, Canada and NS seek to collaborate on two opportunities:
 - Phase out coal-fired electricity by 2030, and transition to clean energy. Priority projects required to meet this timeline could include installation of wind and solar (among other project types)

¹⁷ Government of Canada and Province of Nova Scotia Unveil Collaboration Framework to Drive Economic Growth and Create Jobs - Canada.ca

¹⁸ Nova Scotia Regional Energy and Resource Table – Framework for Collaboration on the Path to Net-Zero (canada.ca)





- Achieve net-zero electricity in Nova Scotia by 2035. This will continue to advance some of same elements in first track of work while integrating others such as offshore wind projects in the province
 - Also includes exploring regional transmission and energy exchange opportunities in partnership with utilities in QC, NB, NL, PE
- **3.Critical Minerals:** accelerate the development of critical minerals to expedite NS position as a competitive leader in the critical minerals industry to support clean energy and other essential value chains.
- **4.Forest Bioeconomy:** sustainably develop NS's bioeconomy to advance use and development of bioproducts, biofuels, bioenergy, mass timber construction.
- **5.Hydrogen:** accelerate production, export, and use of hydrogen to foster NS's position as world leader. Proposed offshore wind projects can be used to support production of low to zero-carbon fuels like hydrogen and derivatives.
 - Canada and NS seek to collaborate on three main pillars:
 - Advancing green hydrogen production and export opportunities: looking to promote NS hydrogen production at international level by collaboratively facilitating discussions with potential partners / international governments and supporting hydrogen sector development by conducting analysis to identify and evaluate how regional Atlantic hydrogen hub / corridor opportunities support export and domestic opportunities
 - Support domestic hydrogen use cases: looking to collaboratively develop codes and standards to blend up to 5% hydrogen into NS natural gas distribution system by 2025 and develop deeper understanding of practical domestic use cases in NS
 - Ensuring a skilled hydrogen workforce in NS
- **6.Marine Renewables:** advance necessary foundational knowledge and regulatory frameworks to support development of NS's marine renewables industry province remains committed to development of marine renewable energy resources
 - Canada and NS seek to collaborate on 4 main pillars:
 - Support NS position as leader for offshore wind development: The Canadian Government and NS will collaborate to de-risk first-mover projects by facilitating discussions on how to leverage existing programming, identifying where there may be gaps in the funding landscape, explore other financial support mechanisms
 - Continued collaboration to amend Accord Acts and Joint Management Regimes in NS to modernize Canada-Nova Scotia Offshore Petroleum Board and expand its mandate to include regulation of offshore renewable energy
 - Support grid readiness for offshore wind energy: Canada and NS to work collaboratively with partners to identify and address information gaps to further understand how offshore wind energy can be fed back into provincial grid system – with Net Zero Atlantic's efforts, this is already underway
 - Understand provincial needs of ports and related infrastructure: The Canadian Government and NS to work together to identify which ports and related infrastructure in NS can act as key marshalling yards and identify workforce capacity gaps and opportunities for workforce development/ upskilling





 Advance/ grow tidal industry: Canada and NS to collaboratively create enabling environment for successful tidal energy project demonstrations and continue to advance research and tech innovation to further understanding of potential impacts and improve economic of tidal energy development

Implementation and Next Steps

- Ongoing collaboration between governments will continue to explore more systematic and effective ways
 to identify, prioritize, and advance regionally significant projects in Nova Scotia, including through
 improving program alignment and complementarity, exchanging technical expertise, and co-funding
 strategic projects.
- Implementation of actions listed will be primary focus in coming years. Several already underway while
 other require mobilizing partners and securing opportunities to leverage funding / financing instruments
 to support priorities and projects.

Report Addendum 2 - December 11, 2024

Canada Offshore Renewable Energy Regulations (CORER)

The Canada Offshore Renewable Energy Regulations (CORER) initiative was established in 2020 to develop modern safety, security, and environmental protection regulations for offshore renewable energy (ORE) projects in Canada's federal offshore wind areas. Enabled by Part 5 of the Canadian Energy Regulator (CER) Act¹⁹, CORER aims to ensure the safe, secure, and environmentally responsible development of ORE projects and offshore power lines. The proposed regulations were pre-published in the Canada Gazette in February 2024²⁰ and are expected to come into force by the end of the year. These regulations will also form the basis for future regulations under the amended Accord Acts.

Key areas of CORER include:

1. Regulatory Framework and Authority

- Canadian Energy Regulatory Act: Part 5 of the CER Act provides the framework for overseeing ORE projects and offshore power lines.
- Bill C-49: Proposes amendments to expand regulation of ORE in joint-management areas, transferring regulatory authority from the CER to the Canada-Nova Scotia and Canada-Newfoundland and Labrador Offshore Wind Petroleum Boards. Once engaged, the CER Act would no longer apply in these areas, necessitating new regulations.

2. Application and Authorization Processes

- Phased Authorization: Outline requirements for obtaining authorization for each major project phase (site assessment, construction, operations, decommissioning), allowing one application per phase to avoid multiple applications for discrete activities.
- Application Requirements: Minimum and phase-specific requirements tailored to project's scope and risk level, with applications and documents matching project's nature and complexity.

¹⁹ Canada Offshore Renewable Energy Regulations

²⁰ Cana<u>da Gazette, Part 1, Volume 158, Number 8: Canada Offshore Renewable Energy Regulations</u>





 Regulatory Approval: Operators must satisfy all conditions and receive regulator approval before starting work. Early approval of the general approach is possible while finalizing detailed plans and specifications.

3. Management System

Comprehensive Management System: Operators must establish a proactive system to reduce safety
and environmental risks, ensure reliable operation and emergency response, and facilitate continuous
improvement and coordination among all parties.

4. Safety and Environmental Regulations

- Safety & Environmental Protection Plans: Detailed plans are required, outlining procedures, risk assessments, and measures to mitigate hazards.
- Emergency Response: Operators must have an emergency response plan detailing procedures, resources, and communication methods for potential incidents.

5. Ongoing Requirements

• Compliance & Reporting: operators must ensure ongoing compliance with plans and programs, maintain reliable operations, and report incidents/ compliance statue to the regulator.

The implementation of CORER will significantly impact offshore wind transmission and integration in Canada's Atlantic Provinces by establishing clear regulatory requirements and a robust safety framework. This will likely attract investment, promote renewable energy growth, and contribute to Canada's clean energy goals. The transfer of regulatory authority to regional boards under Bill C-49 will ensure local conditions and priorities are considered.

Canadian Energy Regulatory Act

The Canadian Energy Regulatory Act²¹, assented to in 2019, established an independent regulatory body tasked with overseeing the safe and secure construction, operation, and abandonment of pipeline, power line, and offshore renewable energy projects within the jurisdiction of Parliament. This body is also responsible for regulating the trade of energy products, ensuring that these activities protect people, property, and the environment.

The Act's mandate includes:

- Making transparent decisions, orders, and recommendations regarding pipelines, power lines, offshore renewable energy projects, and abandoned pipelines.
- Overseeing construction, operation, and abandonment of pipelines, interprovincial and international power lines, an activities authorized under Part 5, as well as abandoned facilities.
- Making orders relating to traffic, tolls, tariffs and overseeing matters concerning these areas.
- Making decisions and giving directions under Part 8 concerning oil and gas interests, production, and conservation.
- Advising and reporting on energy matters.
- Providing alternative dispute resolution processes
- Exercising powers and duties conferred under other Acts of Parliament.
- Operating in a manner that respects the Government of Canada's commitments to the rights of Indigenous peoples.

²¹ Canadian Energy Regulator Act





The Canadian Energy Regulatory Act ensures that offshore wind projects in Atlantic Canada are developed under stringent regulatory oversight. This means that these projects must adhere to high standards of safety and environmental protection. The regulator's transparent decision-making processes and commitment to sustainability will facilitate the integration of offshore wind energy into the region's power grid. This promotes the growth of renewable energy sources while safeguarding the interests of local communities and the environment.

2023 Accord Acts

The 2023 Accord Acts²² aim to expand and modernize the mandates of Offshore Boards to include energy regulation, reflecting the rise of offshore renewable energy. In April 2022, Canada, Newfoundland and Labrador, and Nova Scotia committed to this expansion, introducing amendments to the Atlantic Accord Acts to reflect the new mandate and rename the Boards.

Key Measures to Accelerate Offshore Renewable Energy Development:

- Marine Data Collection: Budget 2023 included investments to inform reviews and calls for bids.
- Grid Integration Study: Introduction of tax credits to accelerate renewable energy and green hydrogen production, including:
 - Clean Technology Investment Tax Credit up to 30%
 - Clean Electricity Investment Tax Credit up to 15%
 - Clean Hydrogen Investment Tax Credit up to 40%
- Canada Infrastructure Bank Investments: At least \$20 billion allocated for clean electricity and clean growth infrastructure projects.
- Additional Funding: \$3 billion over thirteen years for Smart Renewables and Electrification Pathways Program and Smart Grid program.
- Indigenous Partnerships/ Engagement Initiatives: Ensuring inclusive development processes.

Other Proposed Amendments to the Accord Acts:

- Alignment with Impact Assessment Act: Removing outdated references and clarifying roles and responsibilities during the Impact Assessment Process.
- Strengthening Marine Conservation: Supporting marine conservation targets by facilitating the application
 of Federal Marine Protected Area Protection standards in offshore areas and providing authority for
 Ministers to prohibit oil and gas activities in conservation areas.
- Modernizing Land Tenure Provisions: Updating provisions to reflect technological advancements and international best practices, limiting significant discovery licences to 25 years, and allowing Boards to cancel exploitation licences for administrative reasons without a hearing.

Next Steps

Canada, Newfoundland and Labrador, Nova Scotia, and other partners will collaborate to pass the necessary legislation, and launch calls for bids in 2025. The federal and provincial versions of the bills will be brought into force simultaneously, ensuring a coordinated approach to the development of offshore renewable energy projects. This collaborative effort aims to promote clean energy growth while protecting marine environments and respecting Indigenous rights.

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²² Canada Offshore Renewable Energy Regulations





Nova Scotia Advancing Nova Scotia Opportunities Act (Bill 471)

The Advancing Nova Scotia Opportunities Act (Bill 471)²³ received royal assent on September 20, 2024. This comprehensive bill includes amendments to multiple acts, notably changing the "An Act to Implement an Agreement Between the Government of Nova Scotia and the Government of Canada on Offshore Resource Management and Revenue and to Provide for the Joint Management of Offshore Renewable Energy." These changes are designed to mirror those established in Bill C-49, ensuring that legislation is in place in Nova Scotia to advance offshore wind energy development.

Key Provisions of the Advancing Nova Scotia Opportunities Act:

- Land Licenses for Offshore Renewable Projects: Establishes a process for issuing land licenses, calls for bids, and conducting impact assessments for offshore renewable energy projects.
- Alignment with Federal Legislation: Mirrors changes in Bill C-49 to ensure consistency and support for offshore wind energy initiatives.
- Amendments to Multiple Acts: Includes significant updates to existing legislation to facilitate the development and management of offshore renewable energy resources.

Mirror Legislation in Newfoundland and Labrador:

Similar legislation has been introduced in Newfoundland and Labrador (Canada-Newfoundland Atlantic Accord Implementation Newfoundland and Labrador Act (Amdt)). However, it has only received its first reading on November 5, 2024 with no further updates or access to the proposed amendments at this time.

Report Addendum 3 - March 13, 2025

Final Report on the Regional Assessment of Offshore Wind Development in Nova Scotia

On January 23, 2025, the Committee for the Regional Assessment of Offshore Wind in Nova Scotia released its Final Regional Assessment Report²⁴ to federal and provincial Ministers. This report, now under review by the Canadian federal government and the Nova Scotia provincial government, evaluates the potential for sustainable energy generation in Nova Scotia. The assessment sets targets of 80% renewable electricity by 2030 and net-zero emissions by 2050, with offshore wind is identified as a key component in achieving these goals. The report provides information and analysis to improve planning, licensing, and impact assessment processes for future offshore wind development in the province. It summarizes existing conditions, potential impacts, opportunities, and challenges, and aligns with legislative updates and the establishment of the Canada-NS Offshore Energy Regulator. The report concludes with recommendations for offshore wind industry development and management.

The assessment concentrated on a 300,000 km² study area, excluding provincial internal waters. It embraced a collaborative and inclusive approach, holding over 120 engagement sessions with Indigenous communities, government agencies, fisheries groups, NGOs, and industry representatives. The recommendations address uncertainties and risks, identify eight development areas across two tiers, and establish a framework for balancing renewable energy development with environmental and socio-economic considerations.

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²³ Nova Scotia Legislature - Bill 471 - Advancing Nova Scotia Opportunities Act

²⁴ https://iaac-aeic.gc.ca/050/documents/p83514/160595E.pdf





Environmental impacts identified include seabed disturbance, noise, and electromagnetic fields, while socioeconomic impacts include interference with fishing, marine transportation, and other ocean uses. Mitigation measures involve collaborative planning and further engagement to minimize conflicts and address knowledge gaps. The report highlights significant economic benefits from infrastructure upgrades, construction, operation, and decommissioning of wind farms, contingent on labor availability and supply chain readiness.

The report outlines significant economic potential in terms of job creation, regional economic growth, and leadership in renewable energy. It emphasizes the need for investment in port infrastructure, supply chain development, and workforce training. The scale of development presents challenges for local communities, such as potential strains on housing, healthcare, and social services. It also identifies early identification and addressing of impacts as crucial elements to ensuring disadvantaged groups are not disproportionately affected.

The assessment highlights major gaps in baseline environmental data, socio-economic projections, and technological understanding. There is limited knowledge of the marine ecosystem, cumulative effects, and the readiness of local supply chains, labor markets, and infrastructure to support offshore wind development. The report calls for coordinated research with fisheries groups, government agencies, industry, Indigenous organizations, and academic institutions. It recommends an immediate and systematic approach to addressing these gaps through new governance structures, targeted studies, monitoring programs, and investments in research and innovation.

The recommendations focus on facilitating the development of a sustainable offshore wind industry, balancing renewable energy ambitions with environmental preservation, stakeholder interests, and sustainable economic growth. They are organized into seven key themes:

- Theme 1: Existing Knowledge, Gaps, and Necessary Research emphasizes the need for collaborative
 efforts among various stakeholders to address fragmented offshore ecosystem knowledge. Key
 recommendations include establishing the Scotian Shelf Collaborative Research Initiative (SSCRI),
 funding Mi'kmaw Ecological Knowledge Studies (MEKS), creating a shared data repository, and
 supporting ongoing research in federal departments.
- Theme 2: Socio-Economic Feasibility Consequences focuses on ensuring the socio-economic feasibility
 of offshore wind development by fostering equitable opportunities and minimizing barriers for
 disadvantaged groups. Recommendations include establishing a Port Advisory Group, conducting followup studies on project costs and impacts, adopting a regional/national planning approach, and engaging
 provincial departments in workforce development.
- Theme 3: Project Development guides project development with robust regulatory frameworks. Key
 recommendations include establishing a 25 km buffer zone from the coast and around Sable Island,
 adopting Tier 1 and Tier 2 Proposed Development Areas, implementing a multi-criteria bid process, and
 ensuring adequate security for abandonment and decommissioning activities.
- Theme 4: Coexistence and Compensation addresses the coexistence of offshore wind development with
 other marine users and the need for a compensation framework. Recommendations include adopting the
 principle of compensating for economic loss, developing a comprehensive baseline characterization of
 the fishery, promoting coexistence as a key objective, and establishing an industry-wide funding model
 for compensation.
- Theme 5: Cumulative Effects recognizes that cumulative effects assessment must be a shared responsibility among federal, provincial, and international bodies. Recommendations include preparing





guidelines and data sources for developers and ensuring that cumulative effects assessment is recognized as a tiered and shared responsibility.

- Theme 6: Governance encourages strong governance structures and inclusive decision-making
 processes. Key recommendations include CNSOER preparing best practice guidelines, reserving a
 CNSOER Board position for a Mi'kmaq nominee, requiring project-specific federal impact assessments
 for OSW projects, and mandating vessel tracking systems for all fishing vessels in the RA Study Area.
- Theme 7: Education and Training emphasizes investments in education, training, and infrastructure to build local capacity and support a resilient supply chain. Recommendations include developing curriculum and training programs related to OSW and other renewables, and creating upskilling, retraining, and micro-credential programs for the current marine workforce.

Summary and Interpretation of Impacts

The Final Report on the Regional Assessment of Offshore Wind Development in Nova Scotia evaluates the potential for sustainable energy generation in the province. The report also sets ambitious targets of 80% renewable electricity by 2030 and net-zero emissions by 2050, identifying offshore wind as a crucial component of this transition. It provides comprehensive information and analysis to enhance planning, licensing, and impact assessment processes for future offshore wind projects. The assessment covers existing conditions, potential impacts, opportunities, and challenges, aligning with legislative updates and the establishment of the Canada-NS Offshore Energy Regulator. Key recommendations focus on addressing knowledge gaps, ensuring socioeconomic feasibility, guiding project development, promoting coexistence with other marine users, managing cumulative effects, strengthening governance, and investing in education and training. The report also emphasizes the need for collaborative efforts among stakeholders, including Indigenous communities, government agencies, fisheries groups, NGOs, and industry representatives, to achieve these goals.

The implementation of this reports recommendations is expected to significantly impact offshore wind development in Nova Scotia. By addressing data gaps and fostering socio-economic feasibility, the plan aims to create a sustainable offshore wind industry that balances renewable energy ambitions with environmental preservation and stakeholder interests. The anticipated next steps involve reviewing the report by federal and provincial governments, followed by the execution of the reported recommendations. This will support Nova Scotia's transition to a renewable energy future, with significant economic potential in terms of job creation, regional economic growth, and leadership in renewable energy. The plan also highlights the importance of early identification and addressing of impacts to ensure that disadvantaged groups are not disproportionately affected, ensuring a just and equitable transition to decarbonization.

Final Report on the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador

On January 23, 2025, the Committee for the Regional Assessment of Offshore Wind in Newfoundland and Labrador released its Final Regional Assessment Report²⁵ to federal and provincial Ministers (the Report). The Report was completed in accordance with the agreement established between the federal and provincial governments, who identified that the offshore area in Newfoundland and Labrador has an abundance of offshore renewable energy resources.

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²⁵ iaac-aeic.gc.ca/050/documents/p84343/160594E.pdf





The Report considered the potential effects (including cumulative effects) as well as the potential interactions of those effects, of activities relating to the development of offshore wind power generation facilities. This includes construction/expansion, operation, decommissioning and abandonment of these facilities. As part of the regional assessment, the Committee identified both a Study Area and Focus Area. The Study Area included all coasts of Newfoundland and Labrador, while the Focus Area was denoted as the portion of the Study Area where it was more likely to see offshore wind development of ten (10) turbines or more in the foreseeable future. The Focus Area was condensed to the western and southern coasts of the island of Newfoundland. This threshold is in line with that outlined in the Impact Assessment Act, which is summarized in later sections of this addendum.

In completing the regional assessment, the Committee conducted extensive stakeholder engagement with Indigenous peoples, fishers and other ocean users, environmental organizations, research groups, offshore wind developers, representatives from municipal, provincial and federal government, and other members of the public. In total, over the course of 19 months, the Committee held nearly 100 meetings with a total of 500 participants. The Committee noted that some of the main challenges that arose throughout engagement was engagement fatigue, advertising, access to technology and the timing/seasonality of meetings. Several of the Committee's recommendations throughout the Report include completing further engagement with stakeholders to gain their knowledge and understanding of the offshore space in the province.

The Report focuses heavily on an assessment of environmental, health, social and economic effects. In total, 13 individual components were assessed, with potential effects, mitigation, engagement and data gaps and limitations described for all. These components include air quality and greenhouse gases, aerofauna, marine fish and fish habitat, marine mammals and sea turtles, protected and special areas, Indigenous communities, activities, interests and rights, fisheries, other ocean users, visual aesthetics and viewscapes, acoustic environment, physical and cultural heritage, health, and communities and economy. The Committee provided several recommendations for each component, with the most significant recommendations highlighting the need for additional data and study to further refine the Focus Area and licencing areas and address identified data gaps. Similarly, the Committee noted numerous challenges in completing an analysis of cumulative effects resulting from data gaps and the complexities of the marine environment.

The Committee also provided recommendations for the mitigation of accidental effects and effects of the environment in the focus area. Recommendations focused on reviewing lessons learned from previous safety incidents, as well as those through the design and operation of offshore oil and gas facilities in the province. Intersectionality was also considered in the regional assessment, with recommendations in the Report focused on the creation and expansion of Gender Based Analysis Plus data, to understand how the development of offshore wind in the province may impact diverse populations.

Summary and Interpretation of Impacts

Overall, the Report provides comprehensive and action-oriented recommendations for the development of offshore wind in Newfoundland and Labrador. It is anticipated that the implementation of the recommendations contained within the Report will have significant impacts on the development of offshore wind resources in Newfoundland and Labrador. Most notably, by addressing significant data and knowledge gaps in technical information, the province can continue to refine the feasible development and licencing areas for offshore wind. By establishing accurate and precise licencing areas and ensuring socio-economic feasibility through continuous stakeholder engagement, a sustainable offshore wind industry can be developed and maintained in the province, providing Newfoundland and Labrador with further economic opportunities as outlined in its 2022 Renewable Energy Plan. Similar to Nova Scotia's next steps highlighted above, the anticipated next steps involve reviewing the report by federal and provincial governments, followed by the execution of the reported recommendations.





Prince Edward Island Framework for Collaboration on the Path to Net-Zero

On February 24, 2025, the Canada-Prince Edward Island Regional Energy and Resource Table (Regional Table) through Natural Resources Canada (NRCan) released its Framework for Collaboration on the Path to Net-Zero²⁶. Similar to those frameworks released by the provinces of Nova Scotia and Newfoundland and Labrador which were covered in the initial policy assessment report, PEI's framework outlines both short- and medium-term opportunities for the province to focus on in its goal of reaching net-zero emissions by 2040.

The framework outlines three opportunity areas for the province to focus on: clean electricity and energy storage, clean fuels, and clean technology innovation. Notably, the framework does not have any specific focus on the development of offshore wind, beyond the province noting that Atlantic Canada is exploring offshore wind opportunities and its participation in the Net-Zero Atlantic Offshore Wind Integration and Transmission Study.

Under clean electricity and energy storage, the province is focusing on expanding energy storage capacity including batteries, grid resilience through grid modernization, and expanding renewably energy generation. Under clean fuels, the province is focusing on hydrogen, including exploring market opportunities for hydrogen offtake, including its derivatives, and energy storage for excess power to better understand market potential in Prince Edward Island, waste-to-energy, industrial decarbonization and the transportation sector. Under clean technology innovation, the province is focusing on developing a clean technology sector through identifying labour development opportunities, establishing a provincial clean technology profile, and seek knowledge and expertise sharing opportunities in the clean technology sector.

Impact Assessment Act (2019)

The Impact Assessment Act²⁷ addresses offshore wind (OSW) projects by categorizing those with ten (10) or more turbines as "designated projects," which require a federal impact assessment to evaluate their potential environmental and socio-economic impacts. For OSW projects with fewer than 10 turbines, the Canadian Energy Regulator (CER) conducts a review and determines the appropriate level of assessment based on the project's risk. This approach ensures that larger projects undergo thorough scrutiny while smaller projects are assessed proportionately to their potential impact.²⁸

Canada's Membership in the Global Offshore Wind Alliance

On February 13, 2025, Canada announced its membership in the Global Offshore Wind Alliance (GOWA)²⁹, a significant step towards advancing the country's offshore wind energy. This alliance aims to mobilize international economies and establish agreements to accelerate the adoption of offshore

²⁶ https://natural-resources.canada.ca/climate-change/regional-energy-resource-tables/prince-edward-island-framework-collaboration-path-net-zero

²⁷ https://laws-lois.justice.gc.ca/eng/acts/I-2.75/page-3.html#h-1160329

²⁸ https://www.cer-rec.gc.ca/en/applications-hearings/view-applications-projects/integrated-impact-assessments/index.html

²⁹ https://www.canada.ca/en/natural-resources-canada/news/2025/02/government-of-canada-joins-global-efforts-to-accelerate-the-deployment-of-offshore-wind-and-help-power-canadas-economy.html





wind energy. Alongside Canada, the governments of Nova Scotia and Newfoundland and Labrador also joined GOWA as subnational members.

By joining GOWA, Canada will gain access to international and industry expertise, which will help strengthen the foundations of its offshore wind industry. This move compliments existing legislative efforts in positioning Canada to seize the economic opportunities presented by offshore wind energy, create sustainable jobs, and contribute to a secure and clean energy future.³⁰

Moratorium on Offshore Wind Development in Georges Bank

On March 6, 2025, the governments of Canada and Nova Scotia jointly announced a moratorium on offshore wind projects in the Canadian portion of Georges Bank³¹. This decision, directed to the Canada-Nova Scotia Offshore Energy Regulator, prohibits the issuance of submerged land licences for offshore wind energy in the area. Georges Bank is a critical habitat for diverse marine life and a vital fishing ground supporting thousands of jobs. This moratorium aligns with the existing ban on oil and gas activities within the area, recognizing its ecological and socio-economic importance. Both governments reaffirmed their commitment to developing offshore wind energy in a way that safeguards traditional industries while advancing towards a sustainable clean energy future.

³⁰ https://www.offshorewind.biz/2025/02/17/canada-joins-global-offshore-wind-alliance/

³¹ https://www.canada.ca/en/natural-resources-canada/news/2025/03/moratorium-on-offshore-wind-development-in-georges-bank.html