# BRIEF | Bill C-49, An Act to Amend the Canada-Newfoundland and Labrador Atlantic Accord Implementation Act and the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act and to make consequential amendments to other Acts

**Submitted to:** Members of the House of Commons Standing Committee on Natural Resources
c/o Clerk of the Committee, Alexandre Vassiliev

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## 1 Introduction

Marine Renewables Canada (MRC) welcomes the opportunity to provide a brief to the Standing Committee on Natural Resources as it studies **Bill C-49, An Act to Amend the Canada-Newfoundland and Labrador Atlantic Accord Implementation Act and the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act and to make consequential amendments to other Acts.**

MRC is the national association for offshore wind, tidal, wave, and river current energy, representing 180 members including technology and project developers, suppliers, researchers, and communities. Many of MRC's members are focused on realizing offshore wind development opportunities in Canada, including companies already developing offshore wind projects internationally, as well as numerous suppliers who have a wealth of experience from working in Atlantic Canada's offshore and marine industries. Through this membership, MRC is the voice for the offshore wind industry in Canada and has been advocating for a supportive and predictable regulatory path that can both catalyze growth and ensure sustainable development of the sector.

MRC's members are keenly interested in Canada's offshore wind opportunity, given the world-class and currently untapped offshore wind resources off the coasts of Nova Scotia and Newfoundland and Labrador. Bill C-49 is a fundamental piece of legislation that would allow these provinces' offshore wind resources to be developed in a timely manner. In particular, the passing of Bill C-49 in time to align with Nova Scotia's expected offshore wind leasing process in 2025 is a high priority. With many other jurisdictions already having established regulatory regimes for offshore wind, it is important that Canada has an enabling legislative framework established to attract investment interest. The amended Accord Acts will empower the provinces of Nova Scotia and Newfoundland and Labrador to capture this investment and ensure that offshore wind can contribute to clean electricity goals and sustainable economic growth.

## 2 Background & Context: Canada's Offshore Wind Opportunity

Atlantic Canada has a world-renowned offshore wind resource with wind speeds of 9-11 metres per second, and an estimated technical potential of 938 GW in Nova Scotia's offshore alone[1]. For context, this is comparable to wind speeds in the North Sea, where offshore wind has been successfully and reliably providing renewable electricity to the grid since the 1990s. Canada also has favourable seabed conditions for fixed and floating technologies, making it an attractive location for future offshore wind development and investment.

The Atlantic region is also fortunate to have the existing strength and capacity of offshore suppliers, workforce, and port capacity, all with decades of experience in the maritime and offshore industries. This alone, sets Atlantic Canada apart from many other jurisdictions currently exploring offshore wind. For example, ports and companies in the northeast United States (US) are currently facing challenges fulfilling the requirements of a new offshore sector. In contrast, Atlantic Canadian companies and ports with these existing capabilities are filling supply chain gaps by providing key services like monopile marshalling, environmental and asset monitoring, site assessment and more to international offshore wind projects. Offshore wind is already providing economic benefits to Atlantic Canada and this will only increase as Canadian companies bring their valuable experience to bear on future Canadian projects.

Future offshore wind projects could help to address a number of Canada's clean energy and climate change goals, as well as catalyze new economic opportunities. **Key drivers and advantages of offshore wind development include:**

- **Addressing climate goals:** Emission reductions coupled with increased production of renewable energy are needed to meet Canada's targets of a net zero grid by 2035 and net zero emissions by 2050. Offshore wind presents an opportunity for both producing clean electricity for the grid and green hydrogen for domestic and export use. Greening the grid is particularly important for provinces like Nova Scotia, that are still reliant on fossil fuels for electricity, with coal and coke accounting for 63% of the province's electricity generation in 2019.[2]

- **Meeting electricity demand locally and globally:** With electrification, the demand for clean electricity will increase. Estimates indicate that Canada will need 2-3 times more electricity to

[1] Aegir Insights, 2023. *"Value Mapping Nova Scotia's Offshore Wind Resources."* https://netzeroatlantic.ca/sites/default/files/2023-04/Value%20Mapping%20Nova%20Scotia%20Offshore%20Wind%20Resources.pdf.

[2] Canada Energy Regulator, 2024, "*Provincial and territorial Energy Profiles – Nova Scotia*", https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-nova-scotia.html.

meet its targets[3]. This demand is then increased further as countries around the world look to use green hydrogen produced by renewable electricity.

With a capacity factor of up to 42% (compared to 37% for onshore wind and 16.9% for solar in 2022)[4], offshore wind can produce large amounts of clean electricity that can help meet these increasing clean electricity demands. As offshore wind can be developed at a larger scale than onshore renewables, it is increasingly being viewed as an attractive resource for green hydrogen production. Its higher capacity factor also allows hydrogen electrolyzers to operate more of the time and produce greater volumes of hydrogen.[5]

While the costs associated with offshore wind and the production of green hydrogen are currently higher than some renewable energy sources, these costs are coming down with increased technology deployment. The offshore wind industry has experienced dramatic cost reductions over the last 10 years, evidenced by the global weighted average levelized cost of energy (LCOE) for offshore wind declining by 59% to 8.1¢/kWh.[6] As offshore wind deployment and green hydrogen production continue to increase worldwide, costs will continue to decrease, making this abundant source of renewable energy more affordable and more profitable for export.

- **Spurring local economic development and new jobs:** Globally, the offshore wind market is growing quickly, with over 64 GW installed capacity[7] and an estimated market value of up to $1 trillion by 2040,[8] according to a recent report from the International Energy Agency. Tapping into Canada's offshore wind resources presents an opportunity to attract investment and grow a new industry that will lead to new economic development opportunities from both clean electricity and green hydrogen production.

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[3] Canadian Climate Institute, 2022. "*The Big Switch: Powering Canada's Net Zero Future.*" https://climateinstitute.ca/wp-content/uploads/2022/05/The-Big-Switch-May-4-2022.pdf.
[4] International Renewable Energy Agency, 2023, "*Renewable Power Generation Costs in 2022*", https://mc-cd8320d4-36a1-40ac-83cc-3389-cdn-endpoint.azureedge.net/-/media/Files/IRENA/Agency/Publication/2023/Aug/IRENA_Renewable_power_generation_costs_in_2022.pdf?rev=cccb713bf8294cc5bec3f870e1fa15c2 [IRENA 2023].
[5] Clean Energy States Alliance, 2021, "*Offshore Wind to Green Hydrogen: Insights from Europe*", https://www.cesa.org/wp-content/uploads/Offshore-Wind-to-Green-Hydrogen-Insights-from-Europe.pdf
[6] IRENA 2023, Note 4.
[7] Global Wind Energy Council, 2022, "*Global Offshore Wind Report 2022*", https://gwec.net/gwecs-global-offshore-wind-report/#:~:text=The%20Global%20Offshore%20Wind%20Report,turn%20these%20ambitions%20into%20actions.
[8] International Energy Agency, 2019, "*Offshore Wind Outlook 2019*", https://iea.blob.core.windows.net/assets/495ab264-4ddf-4b68-b9c0-514295ff40a7/Offshore_Wind_Outlook_2019.pdf.

A recent study[9] conducted by the Atlantic Economic Council estimated that just during the early stages of offshore wind development in Atlantic Canada (i.e. between 2024-2030) the total construction value for offshore wind could be about $7 billion. As a result of the capital intensiveness of offshore wind, the Atlantic Economic Council also concluded that offshore wind projects could create significant local benefits, due to offshore installation, subsea work, research and development, and other supply chain requirements which could largely be completed locally. The study estimated that achieving Nova Scotia's initial 5 gigawatt (GW) goal for offshore wind development, could create 5,000 jobs in Canada.[10]

## 3 The Importance of a Regulatory Framework for Offshore Renewables in Atlantic Canada

Despite the immense potential of offshore wind in Atlantic Canada, projects currently cannot be built and the sector cannot move forward because there is no established regulatory framework facilitating development of the resource. **A regulatory framework established by Bill C-49 in the near future is critical to offshore wind advancing in Canada for several reasons.**

**First, the regulatory and investment certainty created by the amended Accord Acts is essential to offshore wind development and it is needed now**. Delays in establishing a regulatory framework not only impact Canada's competitiveness, they also delay the economic opportunities, local jobs, and clean electricity that would result from offshore wind development.

New legislation is notoriously long to enact and joint legislation with provincial and federal governments is even more so. MRC recognizes that creating regulatory frameworks requires adequate time to ensure proper consultation with Indigenous peoples and stakeholders and that the highest standards of safety and environmental protection are achieved. However, we would like to emphasize the importance of timing and certainty for attracting investment and ensuring that Canada secures a competitive advantage when it comes to offshore wind development for the production of green hydrogen, as well as clean electricity to help meet Canada's climate goals.

Canada is already competing against many other jurisdictions that have mature regulatory frameworks for offshore wind in place – investors will go to the countries that have both an attractive energy resource and a clear regulatory regime. Bill C-49 will establish the needed regulatory path and therefore, delays during the legislative process create uncertainty and investment risk. Delays also have

[9] Atlantic Economic Council, 2024. *"Implications for Atlantic Canada's Economy in the Pursuit of Net-Zero Emissions: Economic Opportunities with Existing Clean Energy Technologies."* https://cdn.ymaws.com/atlanticeconomiccouncil.ca/resource/collection/49A8EE1E-D8BE-4955-B708-CD3EBE5AC6D9/Net-Zero_-_Wind-Hydro-Gas__Jan31,_2024_.pdf [Atlantic Economic Council Report].
[10] Atlantic Economic Council Report, Note 9.

ramifications on parallel regulatory and policy initiatives that are crucial to advancing offshore wind projects, such as Nova Scotia's target to begin leasing offshore wind in 2025.

**Second, amending the Accord Acts and building upon existing experience is the most efficient and effective way to regulate this new industry.** Amending the Accord Acts through Bill C-49 results in familiar and effective legislation for industry and the provinces of Nova Scotia and Newfoundland and Labrador. It builds upon existing and proven frameworks that will allow Canada to advance offshore wind development in the near-term. The alternative – starting from scratch to develop the integrated regulatory body that would be needed to govern development of the resource – is neither desirable nor efficient from industry's perspective. Atlantic Canada's history in the offshore, both in terms of the strengths of Canadian businesses and the expertise of the offshore boards, is an asset that should be capitalized upon as we begin developing an offshore wind industry. Leveraging the regulatory experience of the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) and the Canada-Newfoundland and Labrador Offshore Petroleum Board (CNLOPB) and working within a framework that the provinces are familiar with and helped to establish creates a strong foundation for this emerging sector.

This approach of adding offshore renewable energy to the mandate of an existing offshore oil and gas regulator is not unique. Other jurisdictions seeking to diversify their energy mix and enable a transition to cleaner energy resources, have leveraged offshore oil and gas regimes and regulatory experience to support offshore wind. For example, in the US, the Bureau of Ocean Energy Management (BOEM) initially managed regulation of offshore petroleum and in 2009, formally began to administer regulations for offshore wind. In Denmark, the Danish Energy Agency has had a long history in regulating both oil and gas and offshore wind energy development.

**Third, establishment of a regulatory framework is a critical step to supporting and complementing other initiatives that are underway.** It is well recognized by MRC and its members that Bill C-49 is not designed or intended to cover every aspect of the regulation of offshore wind, but the regulatory framework under the Bill is fundamental to how and when other processes, regulations, and policies that impact offshore wind development in Canada will be implemented. These include:

- **Regional Assessment of Offshore Wind Development in Nova Scotia and Newfoundland and Labrador**: Two Regional Assessments of offshore wind development are being carried out simultaneously within jointly managed federal-provincial waters in Nova Scotia and Newfoundland and Labrador to help provide baseline data, an understanding of potential impacts on rights and interests of Indigenous peoples, and guidance for marine-use planning and integration with other marine users/uses. The Regional Assessments are essential for responsible and sustainable development of Canada's offshore wind resources. These processes will ultimately serve to lay a foundation for Natural Resources Canada (NRCan) and the provinces to identify Wind Energy Areas, which must occur in advance of Nova Scotia's offshore wind leasing slated for 2025.

- **Offshore Renewable Energy Regulations (ORER):** The regulations under the *Canada Energy Regulator Act* are being developed by Natural Resources Canada and will delineate safety and environmental protections for offshore renewable energy activities in federal waters, as well as jointly managed federal-provincial waters. These regulations have been developed with consideration of existing regulations for offshore oil and gas, international offshore wind regulatory frameworks, and input from the offshore wind industry active in Canada. They are slated to enter into force this year.

- **Provincial Offshore Wind Procurement Targets:** In September 2022, the Province of Nova Scotia set a procurement target to begin leasing 5 GW of offshore wind in 2025, with all 5 GW leased by 2030. This target can only be met if the Accord Act amendments are finalized by 2025, as a regulatory framework is required in order to give the CNSOPB the authority to conduct an offshore wind lease.

In addition to these government-led initiatives, it is also important to acknowledge that there are aspects of early sector development where industry plays a role. MRC believes that realizing significant local benefits, early and ongoing engagement with Indigenous peoples and communities, and co-existence with other ocean uses and users are all critical to the sustainable development of offshore wind in Canada. To that end, MRC and its members have been leading activities and initiatives to address those needs.

With over half of MRC's membership comprised of local suppliers in Atlantic Canada, ensuring that future offshore wind development creates new opportunities for these businesses and others in the region is a key priority. As such, MRC has been leading numerous supply chain development and engagement initiatives and is planning to lead a study on identifying what supplies and services will be required to meet Nova Scotia and Newfoundland and Labrador's offshore wind development needs and outlining an action plan to support local suppliers' participation in the industry.

Over the past year, MRC and its offshore wind developer members have also prioritized engagement with the fishing industry, stakeholders, and Indigenous groups through workshops, webinars, and meetings. The intent of these actions is to foster two-way dialogue, understand concerns, and share information – all key elements to help inform how offshore wind should be developed in Atlantic Canada.

## 4 Recommendation

Given the critical importance of establishing a regulatory framework for offshore wind, **MRC supports Bill C-49 without any additional amendments and recommends that the Standing Committee for Natural Resources ensure expediency in adopting the Bill and moving it to the next stage of review and consideration.**

MRC and its members are confident that the contents of Bill C-49, along with parallel processes and initiatives underway at provincial and federal levels establish the regulatory certainty that is needed by industry to make critical investment decisions and ultimately develop offshore wind in Canada.

***About Marine Renewables Canada***

*Marine Renewables Canada is the national association for tidal, offshore wind, wave and river current energy, representing a membership of technology and project developers, suppliers, utilities, Indigenous organizations, researchers, and communities. The association works to build the sector by advocating for supportive policies, identifying domestic and international business development opportunities for its members, facilitating collaboration amongst its membership and broader ecosystem, providing education and outreach, and disseminating market intelligence. As part of its focus on developing the sector, Marine Renewables Canada is active in catalyzing opportunities for how marine renewable energy can contribute to achieving decarbonization goals through the production of green fuels such as hydrogen, as well as displacement of diesel in remote communities and marine industries.*