

Briefing Note
Intergovernmental Affairs Secretariat

Title: Internal Trade Scene Setter

Issue: To provide an update on Canada's Internal Trade Environment.

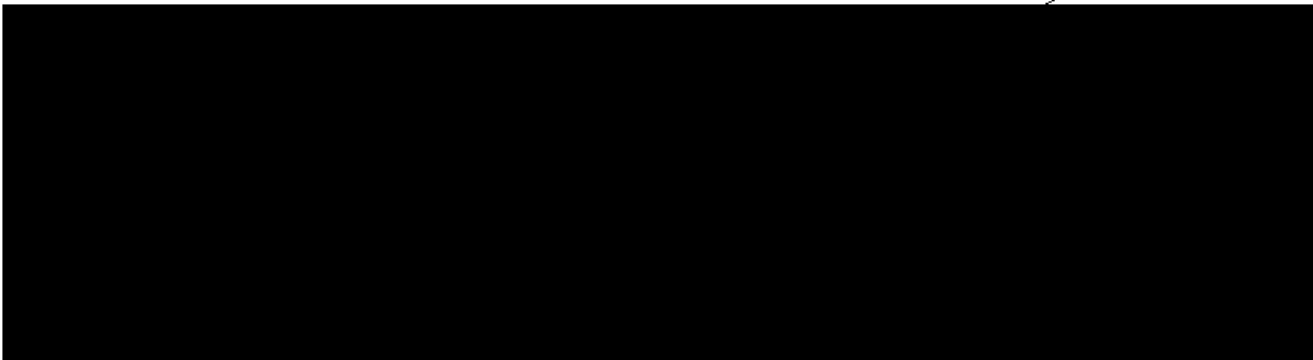
Background and Current Status:

- As jurisdictions legitimately legislated and regulated in areas of their respective responsibility, divergence in practices ("trade barriers") arose in response to the needs and preferences of each jurisdiction. This divergence is long recognized as impacting commerce and trade, and thus productivity, and Canadian jurisdictions have been working for decades to balance legislative and regulatory imperatives with trade and commerce facilitation.
- The Agreement on Internal Trade (AIT), which entered into force on July 1, 1995, was the first broad attempt toward this goal. As continued negotiation with foreign governments toward comprehensive free trade agreements resulted in a situation where by the 2010s, Canadian jurisdictions were bound to afford better treatment to foreigners than to fellow Canadians, in August 2014, the Council of the Federation (COF) decided to lead a comprehensive renewal of the AIT. This resulted in the Canadian Free Trade Agreement (CFTA) entering into force on July 1, 2017.
- The CFTA contained a 'forward program' - now substantially complete - to negotiate a financial services chapter and rules on cannabis following entry into force of the agreement. It also established the Regulatory Reconciliation and Cooperation Table (RCT) which serves to facilitate regulatory harmonization.
- Various observers have drawn links between Canada's remaining internal trade barriers and economic performance. The Federal Action Plan to Strengthen Internal Trade released in 2022 and Federal Budget 2024 both referenced the International Monetary Fund's (IMF) view that removing remaining barriers to internal trade could increase Canada's gross domestic product by nearly four per cent.

Overview of Current CFTA related work

- In recent years, internal trade officials have completed much the CFTA forward program. The Electricity Transmission rules have officially become part of the CFTA. The rules for non-medical cannabis have also been incorporated into the CFTA. The RCT was established and has developed five annual work plans which has led to 12 completed reconciliation agreements covering 17 work plan items.

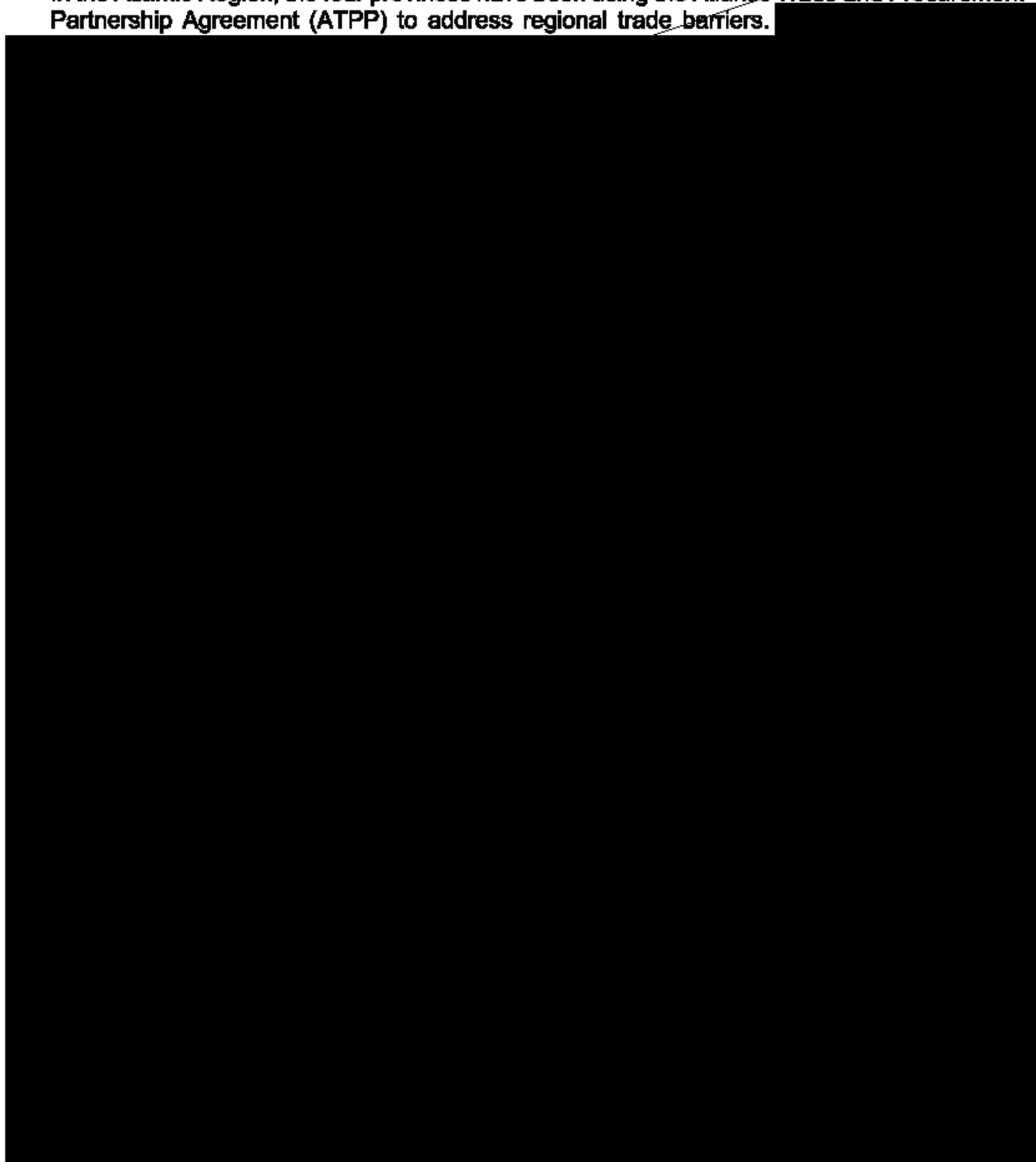
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- The most recent initiatives respecting internal trade are addressed throughout this briefing book.

Atlantic Internal Trade Environment

29(1)(a), 34(1)(a)(i)

- In the Atlantic Region, the four provinces have been using the Atlantic Trade and Procurement Partnership Agreement (ATPP) to address regional trade barriers.
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- In its April 2023 position paper *Responding to Canada's Growth Challenge – Options to Reform Equalization*, AB argues that federal transfers should be reformed to encourage growth, and that "protecting taxpayers through affordable federal programs, delivering transfers on an equitable basis, and ensuring that provinces and territories have the tax room to fulfill their obligations would be important steps." In a May 2024 article, Fen Hampson and Tim Sargent argue that the federal government should incentivize PTs to reduce internal trade barriers by offering a tax point transfer.

Prepared by: R. Squires / J. Dredge / M. Janes
Approved by: P. Hearn

September 19, 2024

29(1)(a), 34(1)(a)(i)

Committee on Internal Trade (CIT) – Background Note – U.S. Relations and the Impact on Internal Trade (Guest Speaker Steve Verheul)
Intergovernmental Affairs Secretariat

Issue: Guest Speaker Steve Verheul will discuss U.S. Relations and the Impact on Internal Trade (bio attached at the end).

Background and Current Status:

- The trading relationship between the two nations is governed by the Canada-United States-Mexico Agreement (CUSMA), which entered into force in 2020. CUSMA includes a 6-year review clause and a 16-year term (sunset clause), should agreement from all parties to extend CUSMA not occur.
- The first scheduled full review of the CUSMA is due to take place in 2026, with Environment and Labour Chapters slated to be reviewed in the 5th year of the Agreement in the lead-up to the full agreement review.
- On August 21, 2024, GAC launched its initial call for public consultations to gather Canadians' views on CUSMA as a whole.
- Canada recently enacted the *Digital Services Tax Act*, it received royal assent on June 20, 2024 and came into force on June 28, 2024. The Act targets multinational digital companies on the revenue they earn in Canada. Since the tax received royal assent, the U.S. has publicly communicated that they deem the tax discriminatory and are considering challenging the tax via CUSMA.

Federal Cabinet Retreat

- The Prime Minister held a Cabinet retreat in Halifax, Nova Scotia, from August 25 to 27, 2024. The retreat focused on the federal government's work to "strengthen the middle class, grow the economy, and deliver fairness for every generation".
- Post retreat, Minister François-Philippe Champagne, Minister Mary Ng and Canadian Ambassador to the U.S., Kirsten Hillman addressed media to provide an update on the Team Canada U.S. engagement strategy, indicating that since January the trio has visited 33 states and met with 42 governors, as well as mayors, senators, trade officials, business executives and labour groups.
- Retreat discussions also reportedly included: former Canadian Ambassadors David MacNaughton and Frank McKenna for a session with ministers specifically dedicated to Canada-U.S.; C.J. Mahoney, the former U.S. deputy trade representative who previously led the new NAFTA talks; and, Steve Verheul, Canada's former chief trade negotiator who led those talks for Canada.

Chinese Electric Vehicle Tariffs

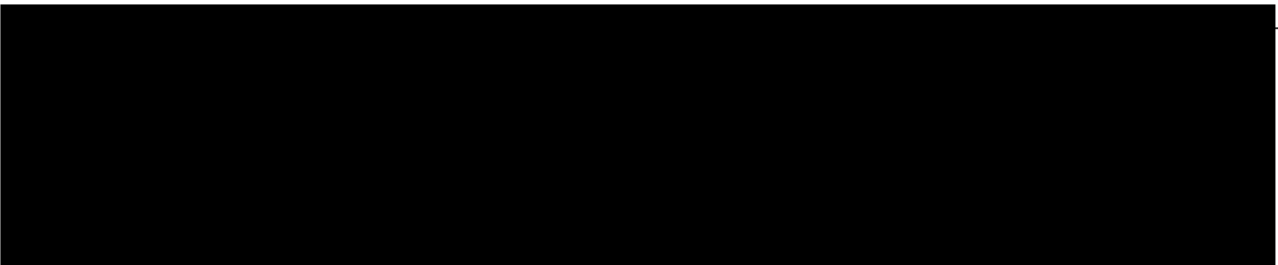
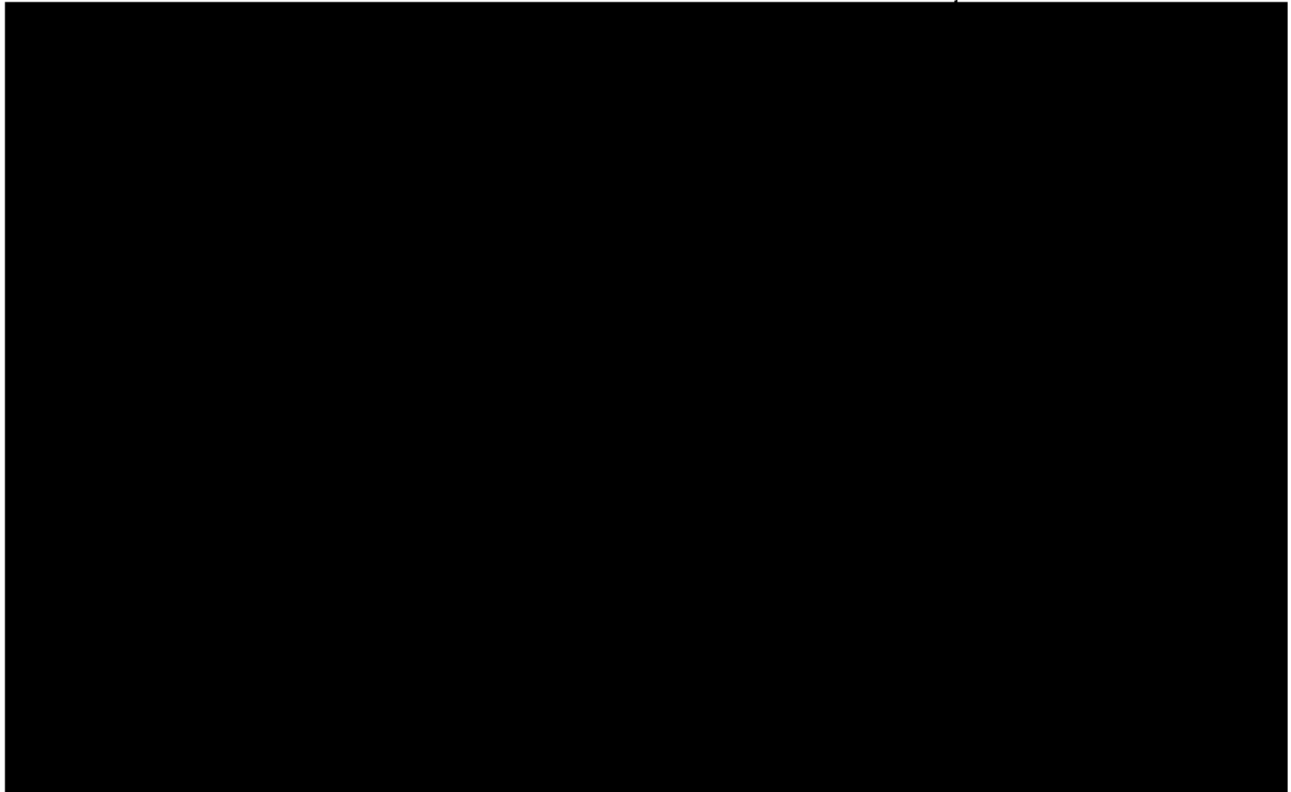
- In response to significant subsidies going into China's electric vehicle (EV) industry, the U.S. has been urging Canada to match U.S. tariffs on Chinese-made EVs, as not just an economic threat but as a safeguard against cheap imports flooding the market. The U.S. has specifically expressed concerns related to data security, critical infrastructure and national security issues associated with connected EVs.
- During the recent federal Cabinet retreat in Halifax, the PM announced a 100 per cent surtax on all Chinese-made EVs and 25 per cent surtax on imports of steel and aluminum products from China, which will come into effect October 15, 2024.
- In response to these tariffs, China announced an anti-dumping investigation into Canadian canola imports on September 3, 2024, and has indicated its intent to challenge the Canadian tariffs via the World Trade Organization (WTO).

U.S. Election

- While the Democratic and Republican candidates for the upcoming U.S. Presidential Election differ significantly on social issues, both are expected to maintain the current protectionist trade policy stance taken by the United States. Examples of this policy stance include recent amendments to Buy American Act and Buy America regulations requiring increased government procurement of U.S. goods and services to which Canada has no carve-outs at this time.
 - In the context of the Buy American Act, before October 25, 2022, for a product to be considered as being produced in the U.S., it must be manufactured in the U.S. and at least 55 percent of the cost of their components must come from the U.S. The rule has been recently amended to gradually increase this threshold up to 75% in 2029, which will make it more difficult for Canadian companies to qualify for U.S. federal contracts.
 - In the context of Buy America regulations, there have been expanded provisions to widen the coverage of infrastructure project resulting in stricter requirements for U.S. made materials across more sectors (e.g. broadband, energy, etc.)
- It is notable that Republican candidate, former President Donald Trump, has indicated a desire to enforce a minimum 10% tariff on all global imports while Democratic candidate, current Vice-President Kamala Harris, has criticized this proposed tariff and framed it as a "Trump Tax" that will raise prices for families.

Newfoundland and Labrador-U.S. Trade

- The U.S. was the largest export destination country for Newfoundland and Labrador in 2023, with exports totaling \$4.6 billion (36.8 per cent of total exports). A large portion of exports came from the oil and gas sector, accounting for \$3.1 billion. Seafood was the second-largest industry export, accumulating \$700 million in export value. The Province imported \$822 million (37.33 per cent of total imports) in goods from the U.S. in 2023, making it the largest importing destination for the Province as well.
- Trade between Newfoundland and Labrador and the US plays a significant role in the economic landscape of both regions – across multiple sectors including energy, fisheries, minerals, tourism and educational services, with growing activity in the ocean technology and biotechnology space.



Potential Questions for Guest Speaker:

- **With major changes occurring within our energy sectors, that have both national and international implications, do you view the interconnected nature of U.S. Relations and internal trade being an opportunity or a potential impediment?**
- **Newfoundland and Labrador is in the process of opening an Office in Boston to strengthen U.S. relations, is there any advice you would offer for working with the U.S. in these turbulent times?**

Prepared/Reviewed by: R. Squires / J. Dredge / M. Janes

Approved by: P. Hearn, DM

September 19, 2024

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Biography – Steve Verheul



As Canada's Chief Trade Negotiator from 2017 to 2021, Steve Verheul was responsible for negotiating Canada's most important trade deals including the new NAFTA (CUSMA/USMCA) and Canada-European Union trade agreement. Most recently he served as a special advisor on trade policy to Canada's Deputy Minister of Finance.

Hailed by media and pundits as the "most important Canadian you've probably never heard of", Mr. Verheul's support for our clients is game-changing. His network, expertise and relationships in domestic and international markets is unparalleled.

During his 34 years in the federal public service, he was Assistant Deputy Minister of the Trade Policy and Negotiations Branch at Global Affairs Canada and appointed as Canada's Chief Trade Negotiator for negotiations between Canada and the European Union in the Department of Foreign Affairs and International Trade from 2009-2016, leading that negotiation from its beginning through to its successful conclusion.

He was previously Canada's Chief Agriculture Negotiator from 2003 to 2009, responsible for leading Canada's involvement in international trade negotiations on agriculture, including the WTO. During his tenure at Agriculture and Agri-Food Canada, he worked on the NAFTA negotiations, the Uruguay Round of Multilateral Trade Negotiations that led to the establishment of the World Trade Organization (WTO), and the Doha Round of WTO negotiations.

Mr. Verheul is known for his steady hand and sound advice in guiding companies and organizations through complex, time-sensitive and pressing international trade issues, explaining and anticipating government policies and decisions, and finding creative solutions to challenging problems and identifying emerging opportunities. He currently advises CEOs, boards of directors, and senior executives on the shifting international trade landscape in order to forecast and mitigate risks, and exploit opportunities in existing or changing government policies and directions.

**Committee on Internal Trade (CIT) – Background Note – Internal Trade Action Plan
Intergovernmental Affairs Secretariat**

29(1)(a), 34(1)(a)(i)

Issue:

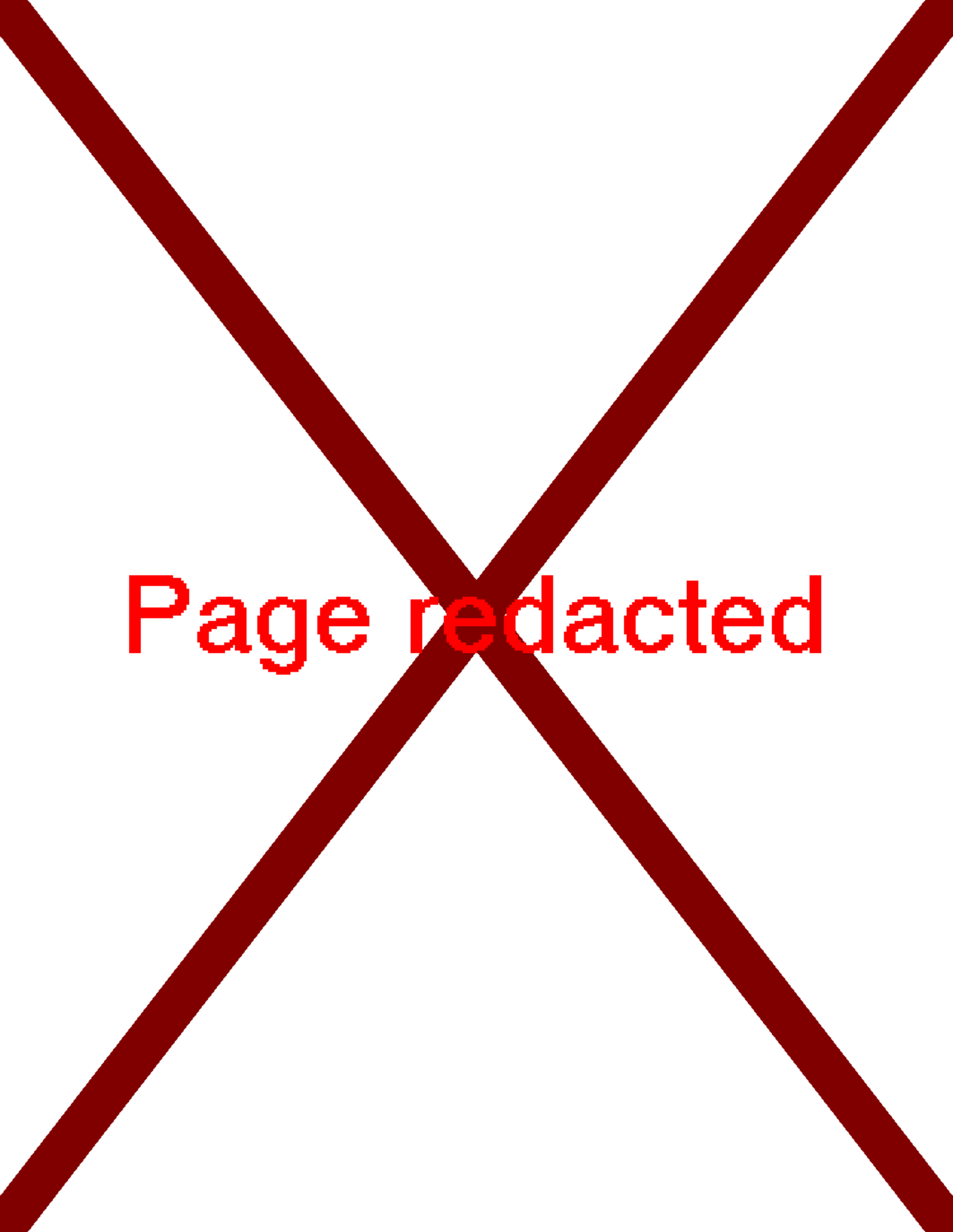
Background and Current Status:

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- In 2017, the Canadian Free Trade Agreement (CFTA) outlined that a number of working groups be established to do future work in areas such as financial services, cannabis, alcohol, etc. that were unable to be concluded during the original negotiations.

- ITRs are the table of FPT officials who are responsible for the day-to-day work related to the CFTA. ITRs sit on various CFTA working groups, liaise with stakeholders, oversee the Internal Trade Secretariat Corporation (ITSC) and carry out directions provided by CIT Ministers.

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**Committee on Internal Trade (CIT) – Background Note – Government Procurement
Intergovernmental Affairs Secretariat**

Issue: Committee on Internal Trade Ministers will discuss the recommendation to adopt CanadaBuys as the single point of access for all procurement notices covered by the Canadian Free Trade Agreement.

Background and Current Status:

- Canadian Free Trade Agreement (CFTA) Article 506.4 commits Parties to adopt a single point of access (SPA) portal for procurement notices covered by the CFTA. Through the implementation of the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), the federal government collaborated with provincial and territorial (PT) governments to create a SPA portal for all CETA-covered procurement notices. The resulting platform, CanadaBuys, was launched on September 21, 2022.
- CanadaBuys was designed so it could be expanded to support additional procurement notices such as procurements covered by the CFTA.

29(1)(a), 34(1)(a)(i)

Speaking Points/Key Messages

Prepared/Reviewed by: R. Squires/ J. Dredge/ M. Janes in consultation with PPA
Approved by: P. Hearn, DM

September 20, 2024

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NEG-ECP – Backgrounder – Massachusetts Maritime Academy Intergovernmental Affairs Secretariat

Issue: As part of the NEG-ECP Conference, Premiers and Governors will visit the Massachusetts Maritime Academy (MMA or “the Academy”). This note provides an overview of MMA’s ocean technology and renewable energy innovations, as well as Newfoundland and Labrador’s (NL) related ocean technology and expertise.

Background and Current Status:

- As part of the NEG-ECP Conference, Premiers and Governors will visit the MMA on Monday, September 9, 2024, where they will experience the Mærsk Mc-Kinney Møller Bridge Simulator and tour the cutting-edge facility that is training the workforce for maritime fields, including the offshore wind industry. An event scenario is available in this tab for more information. The MMA was part of visualization studies and simulation exercises for the Vineyard Offshore Wind Project.
- MMA is a public university in Buzzards Bay, Massachusetts (MA), focused on maritime-related fields. Established in 1891, MMA is the second oldest state maritime academy in the United States (US).
- As of October 2023, there were 1,362 students enrolled in MMA (1,271 undergraduate students and 91 graduate students). The Academy has seven undergraduate programs (emergency management; energy systems engineering; facilities engineering; international maritime business; marine engineering; marine science, safety, and environmental protection; and marine transportation), and three graduate programs (maritime business management, facilities management, and emergency management).
- MMA houses the Maritime Center for Responsible Energy (MCRE). MCRE was established to deliver training to the renewable energy industry (e.g. offshore wind programs); develop robust, collaborative relationships with renewable energy stakeholders; and coordinate all the Academy’s renewable energy efforts.
- The Academy has comprehensive classroom and practical training facilities. For example, the offshore wind training facilities include an Olympic-size swimming pool, Crew Transfer Training Vessel (CTTV), Working at Height facility and Crew Transfer Training Facility (CTTF). The CTTF is used to deliver Global Wind Organization (GWO) Sea Survival Training. It simulates the transition piece of an offshore wind turbine where students learn safe transfer procedures between a vessel and a turbine as well as emergency evacuation techniques. The Academy is the first facility in the US to offer all five modules of GWO Basic Safety Training for Offshore Wind.
- Other examples of the Academy’s simulators (see Annex A for simulator pictures) include:
 - the Mærsk Mc-Kinney Møller Ship’s Bridge simulator centre, which enables students to learn specialized skills and teamwork to prepare for situations they will encounter in commercial shipping and navigation;
 - the Clean Harbors Emergency Management Simulator, an Emergency Operations Center and Incident Command Post that can integrate and display both legacy and emergent technologies to simulate command and control in a realistic environment; and,
 - the Wartsilla Tug Simulator, which provides Marine Transportation students with tools for both ship assistant training tasks and professional training in tug and barge operations, including simulation training in mooring operations (ship-to-ship and ship-to-pier), anchoring operations, and tug and towing operations.

- The MMA also has an Oceanographic Data Portal (ODATA) that provides unique marine academic data to the public, with the intent to inspire and educate. The Academy also has several marine research projects, hydrokinetic energy (e.g. tidal flow) systems and aquaculture programs, generating precise oceanographic data.
- In August 2023, MMA received a \$1 million award from the Massachusetts Clean Energy Center (MassCEC) for the expansion, design, development, and implementation of an Offshore Wind Vessel Simulation and Training Center (OWVSTC), a facility that will serve to create, support, and increase offshore wind development initiatives while delivering workforce training for offshore wind to workers and students. The project includes design and installation of a full-service simulation platform capable of training a range of functions related to offshore wind support vessels from basic tug handling maneuvers for maritime related trainees to advanced seamanship methods for master mariners.

Analysis:

- NL is an international center for ocean expertise and marine technology, a leading force in Canada's ocean economy and its Ocean Supercluster (OSC). The OSC is an industry-led, national ocean cluster that brings together startups, scaleups, as well as mature organizations from coast-to-coast-to-coast across the fishery, aquaculture, bioresources, offshore resources, marine renewables, defense, transportation, and ocean technology sectors.
- The NL ocean technology sector will play a pivotal role in OSC's Ambition 2035 initiative, which aims to grow Canada's ocean economy by five times its size to \$220 billion by 2035. Given NL's strategic location as a gateway to the Arctic, and closest points to both European markets and India via the Suez Canal, it is ideally positioned to increase its reputation as a Center of Excellence for marine and cold ocean research and development and technology commercialization.
- Companies comprising NL's ocean technology sector have gained global recognition for innovative technology applications and solutions in the areas of subsea imaging, remote sensing, training simulation, collaborative engineering, energy efficiency, environmental monitoring, offshore/onshore geotechnics, airborne intelligence, surveillance, and reconnaissance.
- NL also boasts a world-class ocean institute, the Fisheries and Marine Institute of Memorial University (MI). MI is Canada's most comprehensive Centre for education, training, applied research and industrial support for the ocean's industries.
- MI facilities are the setting for education and research in the areas of fisheries resource management, ocean technology, aquaculture, ocean mapping, remotely operated vehicles (ROVs), autonomous underwater vehicle (AUVs), agri-seafood processing, post-harvest technology, food safety, quality management systems, marine environment, fisheries technology, marine communications, marine safety and navigation. Total enrollment for Fall 2023 was 1,021 students.
- Like the Massachusetts Maritime Academy, MI is home to simulation and training facilities aimed at supporting offshore activity, including:
 - Centre for Marine Simulation - recognized as North America's largest suite of marine simulators for training, education, research, and development providing a competitive edge in ocean technology, including its offshore bridge simulator. The offshore simulator features a Canadian Aviation Electronics 6 Degrees of Freedom (DOF) Platform, a

Kongsberg dynamic positioning system, a Rutter Technologies Ice radar display, a Christie Digital Matrix 3000 projection system, and many in-house technologies.

- Flume Tank Facility - the world's largest flume tank and is used to carry out performance evaluations and gear tests, provides technical services for fisher people/fishing equipment, and demonstrates the operations and behaviour of fixed and mobile fishing gear in water to the public and industry.
- Annex B provides greater detail on our province's ocean technology educational and research Institutes. Opportunity exists for international Institution-to-Institution partnerships (research training, technology development, safety etc) as both Newfoundland and Labrador and the New England region develop their capacity to support offshore wind projects.

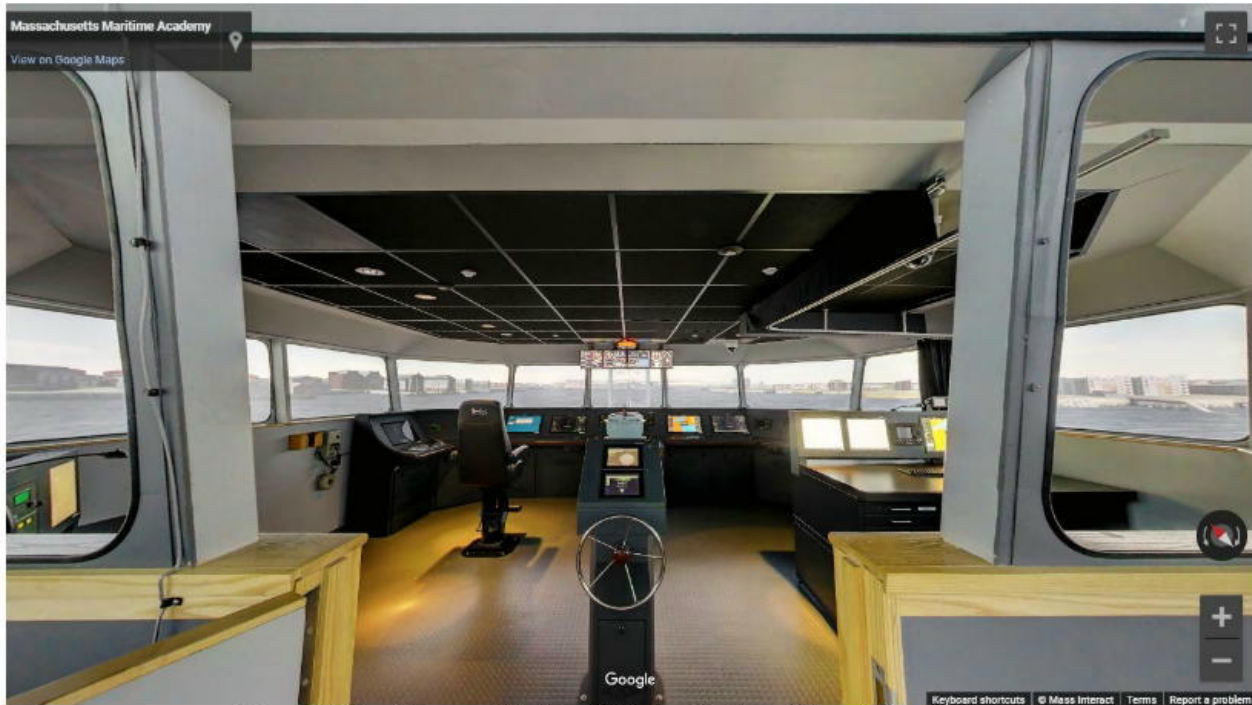
Prepared/Reviewed By: K. Moreno / L. MacDonald / D. Macmillan, ADM

Approved By: P. Hearn, DM

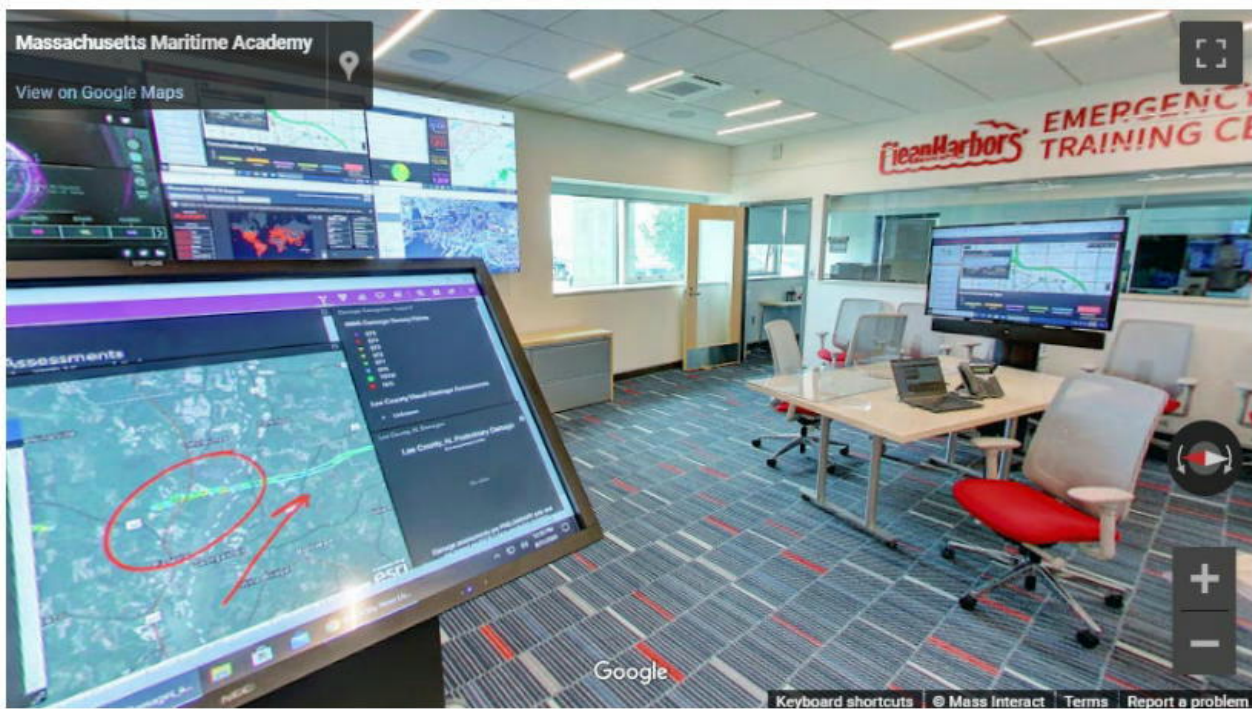
August 26, 2024

ANNEX A

Pictures of Massachusetts Maritime Academy's Simulators



Mærsk Mc-Kinney Møller Ship's Bridge Simulator Centre



Clean Harbors Emergency Management Simulator



Wartsilla Tug Simulator

ANNEX B

NL's Educational & Research Institutes on Ocean Technology

- **Memorial University of Newfoundland & Labrador** – the only university in Canada listed among the world's top post-secondary institutions for the study of marine/ocean engineering. Over 40% of its research is ocean related.
 - Faculty of Engineering & Applied Science
 - Department of Ocean and Naval Architectural Engineering
 - Advanced Marine Hydrodynamics Laboratory
 - Autonomous Oceans Systems Centre (AOSCENT)
 - Autonomous Oceans Systems Laboratory
 - Extreme Loads on Arctic Structures Laboratory (ELAS)
 - Safety at Sea Laboratory
 - Towing Tank
 - Faculty of Science, Department of Ocean Sciences
 - Cold-Ocean Deep-Sea Research Facility – a state of the art facility with infrastructure and equipment for the study of aquatic organisms, especially those from the cold waters of the Arctic and North Atlantic oceans. The facility has a host of analytical equipment used to support academic and industry-led research projects (e.g., containment labs, aqua biolabs multi-tank systems, deep-sea research laboratory).
- **Marine Institute of Memorial University**
 - School of Fisheries
 - Centre for Aquaculture and Seafood Development
 - Centre for Fisheries Ecosystem Research
 - Centre for Sustainable Aquatic Resources
- **School of Maritime Studies**
 - School of Ocean Technology
 - Centre for Applied Ocean Technology
 - Acoustics Tank
 - **The Launch** - The Marine Institute's state-of-the-art living laboratory bringing the world's harshest cold-ocean environments to clients and researchers. Located in Holyrood, NL just outside provincial capital City of St. John's, it provides access to safe, reliable, deep-water at the southernmost reach of the Arctic's Labrador Current. The Launch is a major cornerstone facility for the Canadian oceans ecosystem. With the applied research capabilities at the facility, it can accelerate the Technology Readiness Levels (TRL) from concept through to commercialization. This testing is supported by remote operations and digital twin capacity and a state-of-the-art communications system.
 - Remote Operations Centre** – in collaboration with partners in Norway. Staff with The Launch have piloted a work-class ROV in the waters off Trondheim, over 4,000 kms away.
 - Maritime Autonomous Systems Testbed (MAST)** – The Launch is currently working towards the development of Canada's first maritime autonomous systems testbed in the waters off Holyrood in Conception Bay. This area will be safe, reliable, in deep-water and be in near-Arctic conditions.
 - NATO Defence Innovation Accelerator for North America (DIANA) Test Centre** – The Launch provides cutting edge infrastructure where companies and researchers can de-risk, demonstrate and validate dual-use technologies for both defence and civilian purposes.
 - Smart Atlantic** – The Launch is home to Smart Atlantic, the largest applied ocean observatory system in Canada, and data provider to the Canadian Integrated Ocean Observation System (CIOOS). This open access platform provides vital ocean observing

Information in key areas of ocean research including fisheries and ocean management, climate change and ocean safety. It provides realtime data for more informed operational decisions.

- National Research Council of Canada (NRC)
 - Offshore Engineering Basin Research Facility – one of the most advanced indoor model ocean facilities in the world. The basin is used to assess the performance, efficiency and safety of marine systems, evaluate concepts in a controlled environment and test models at a significantly large scale to obtain quality, true-to-life results.
 - Towing Tank Research Facility – one of the largest in the world. Deep enough to test underwater vehicles and has a tow carriage fast enough to test high-speed vessels like warships. Used to simulate marine conditions and evaluate the performance of a range of marine systems including bulk carriers, patrol vessels, sailing yachts, ice breakers and submarines among others.
 - 90m Ice Tank Research Facility – one of the largest in the world. This indoor temperature-controlled facility simulates Arctic and northern marine conditions with temperatures ranging down to -25°C. All types of full-scale ice conditions can be modelled from grey ice to multi-year ice as well as level ice, drifting pack ice, columnar ice, ice ridges, glacial and multiyear ice, bergy bits and growlers, among others.
 - Frazil Ice Research Facility – a unique facility that can create frazil ice that in real-world scenarios is formed in rivers, lakes, and reservoirs where water is in a turbulent state. Frazil ice is also well known for contributing to ice flooding events, which can cause millions of dollars in property damage. By studying frazil ice and its impact, our researchers are able to develop innovative engineering solutions to address these challenges.
- Co-Innovation Centre (COIC)
 - COIC is a new facility that aims to address the technology development needs of both established and growing companies especially the ones, but not limited to pursuing remote operations in sectors such as ocean, energy, healthcare, mining, fisheries, transportation, and defense. COIC will support transformative advancements in technology, business, and sustainable development through programming that directly responds to the needs of its members. It aims to achieve this through a focus on digitalization and technology development, collaboration, and demonstration. This multi-sectoral space will allow established and growing companies to converge, collaborate and co-create.

NEG-ECP – Background Note – Overview of NEG-ECP Conference Intergovernmental Affairs Secretariat

Issue: To support the Premier's attendance at the Meeting of New England Governors and Eastern Canadian Premiers (NEG-ECP) from September 9 to 10, 2024 in Boston, Massachusetts, this note provides an overview of the NEG-ECP forum, including current priorities and key outcomes.

Background and Current Status:

- NEG-ECP is a United States - Canada intergovernmental forum that was established in 1973 to work cooperatively on shared interests and challenges. Jurisdictions meet annually to share ideas and advance common interests, such as trade and economy, energy, transportation, environment, oceans, forestry, agriculture, fisheries, IT, and tourism. Examples of NEG-ECP's accomplishments are included in Annex A.
- NEG-ECP has 11 member jurisdictions from the U.S. and Canada:
 - New England Governors: Connecticut (CT), Maine (ME), Massachusetts (MA), New Hampshire (NH), Rhode Island (RI), and Vermont (VT); and,
 - Eastern Canadian Premiers: Newfoundland and Labrador (NL), Nova Scotia (NS), Prince Edward Island (PE), New Brunswick (NB), and Québec (QC).
- The conference location rotates each year, alternating between the U.S. and Canada. NL last hosted in August 2015. NL is currently co-chair and is scheduled to host in 2025.
- Over the last five years, NEG-ECP was cancelled in 2019 (NB), 2020 (CT), and 2022 (ME) in a large part due to the COVID-19 pandemic. In 2021, NS hosted a virtual meeting, which focused on COVID-19 and economic recovery, climate change, and Canada-U.S. relations. In 2023, QC hosted an in-person meeting which focused on sustainable mobility, critical minerals, energy security, and renewable energy.
- MA is hosting the 2024 NEG-ECP meeting in Boston from September 9 to 10. The meeting will focus on hard-to-decarbonize sectors and the offshore wind energy supply chain. This year's meeting is NEG-ECP's 51st anniversary.

Structure of NEG-ECP:

- When NEG-ECP first began, it was informal and focused primarily on relationship building and information sharing; however, in 1978, the establishment of energy programs prompted a more formal approach. Consequently, the Secretary of Maritime Premiers (now the Council of Atlantic Premiers) was directed to act as the Canadian co-secretary to the Conference.
- NEG-ECP is currently composed of:
 - Coordinating Committee Officials (CCO): comprised of one to two senior officials appointed by Governors and Premiers and is responsible for governance and logistics of the conference.
 - Standing Committees: ongoing groups that conduct and oversee collaborative work on key NEG-ECP priorities. See Annex B for an overview of Standing Committees.
 - Steering Committees/Working Groups: established based on specific regional issues, steering committees and working groups are responsible for researching and advancing work on resolutions passed at annual conferences, as well as other priorities. See Annex B for an overview of the steering committees/working groups.

- Due to the impacts of COVID-19 and the cancellations of NEG-ECP in recent years, standing committees and steering committees/working groups have not been meeting regularly to advance work committed to through NEG-ECP's resolutions.

Current Shared Priorities of NEG-ECP:

- NEG-ECP's priorities and dominant themes of the conferences have shifted over the years. The current priority of NEG-ECP is supporting the development of the green economy through focusing on the areas of:
 - the Offshore Renewable Wind Supply Chain; and
 - Hard-to-Decarbonize sectors.

Analysis:

- One anticipated outcome of the 2024 NEG-ECP is for MA and NL to sign two new resolutions. The first resolution would be to reconvene the Northeast International Committee on Energy (NICE) to create working groups to facilitate regional collaboration on the topics of transmission, the offshore wind supply chain, and hard-to-decarbonize sectors. The second resolution would reconvene the Committee on the Environment to evaluate progress made on recent resolutions. See Tab 5 for the proposed resolutions.
- It is anticipated that a Joint Statement will be released, and a press conference will occur at the conclusion of the conference. The Joint Statement can be found in Tab 3.

Prepared/Reviewed By: N. Chancey / L. MacDonald

Approved By: D. Macmillan, ADM

August 29, 2024

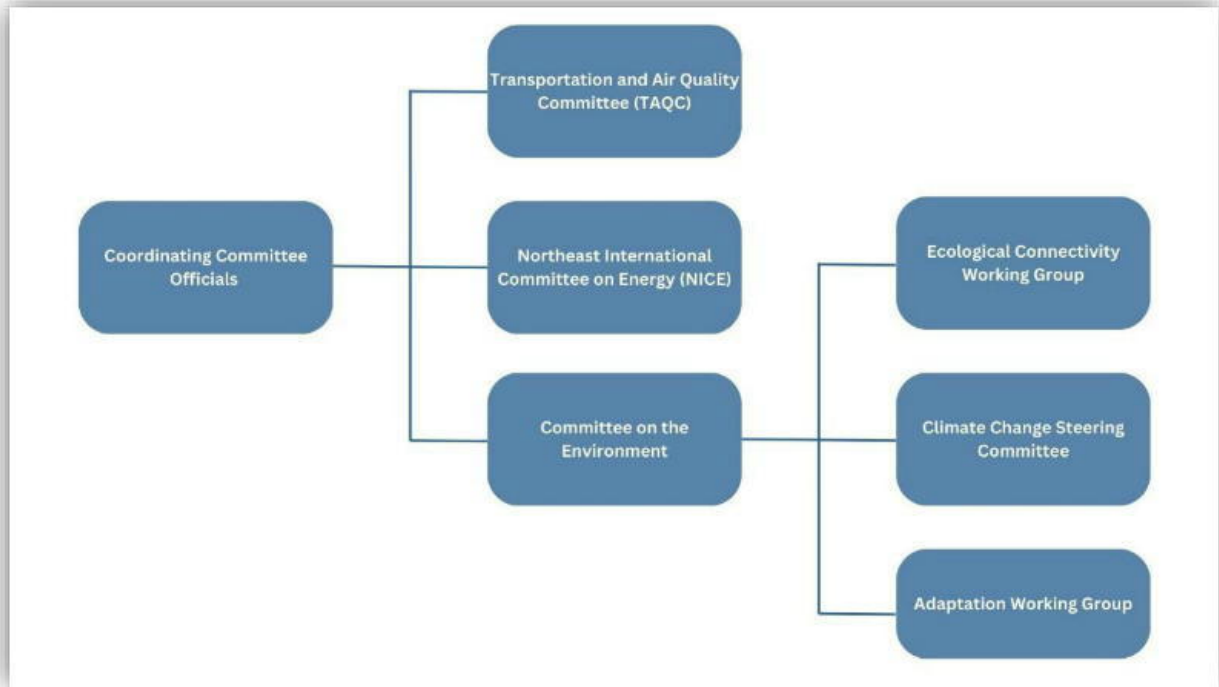
ANNEX A

Examples of NEG-ECP's Accomplishments

- **Examples of NEG-ECP's accomplishments include:**
 - Building relationships between Premiers and Governors.
 - Receiving awards from Bloomberg and The Climate Group for reducing greenhouse gas emissions and growing the economy.
 - The region has grown its gross domestic product (GDP) by 55 per cent since 1990. As of 2020, the region's GDP is the equivalent of the 17th largest economy in the world according to the International Monetary Fund GDP estimates for countries.
 - Increasing the use of electric vehicles (EVs) in the region and establishing an EV corridor connecting states and provinces with fast-charging stations.
 - Adopted action plans to reduce the impacts of climate change (2001), acid rain (1998), mercury deposition (1998), and greenhouse gas emissions from the transportation sector (2008).
 - Adoption of the Mystic Covenant, a pledge to strengthen and promote trade relations.
 - Established agreements for International assistance In Emergency Management and Preparedness, including signing the International Emergency Management Assistance Compact in July 2000 to provide mutual assistance among the signing parties in managing any emergency or disaster when the affected jurisdiction asks for help.
 - Establishing the International Emergency Management Group and the Gulf of Maine Council.

ANNEX B

Overview of NEG-ECP Standing Committees and Steering Committees/Working Groups



- **NEG-ECP's standing committees and their priorities include:**
 - **Transportation and Air Quality Committee (TAQC):** This standing committee was formed in 2007 to develop transportation policies to reduce greenhouse gas (GHG) emissions and improve air quality. The TAQC has been active in recent years reporting on light-duty electric vehicles and identifying options to increase the market penetration rate of alternative fuel vehicles and establish an EV charging corridor, as directed in the statement regarding the 2019 NEG-ECP. The committee has not been assigned work through a resolution since 2017.
 - The Co-Chairs of TAQC are NB and CT.
 - The Department of Environment and Climate Change (ECC) represents NL on this committee.
 - **Northeast International Committee on Energy (NICE):** The oldest standing NEG-ECP committee, NICE was formed in 1978 to facilitate information sharing on various energy-related issues, including security, affordability and transportation. Most recently, NICE was executing Resolution 42-2: Resolution Concerning Energy Security and Affordability. The committee has not met since 2019 and has not been assigned work through a resolution since 2018.
 - The Co-Chairs of NICE are QC and MA.
 - The Department of Industry, Energy and Technology (IET) represents NL on this committee.
 - **Committee on the Environment (COE):** This standing committee was formed in the 1980s. This committee initially focused on addressing acid rain, but responsibilities evolved to include overseeing the implementation of the regional Climate Change Action Plans and

the work of several sub-committees/working groups, including the Climate Change Steering Committee, Ecological Connectivity Working Group, and the Adaptation Working Group. The committee has not met since 2020.

- The Co-Chairs of COE are PE and ME.
- ECC most recently represented NL on this committee.

- **Steering committees/working groups and their priorities include:**

- **Ecological Connectivity Working Group (ECWG):** This group reports to the COE and was formed in 2016 to advance work in relation to Resolution 40-3: Resolution on Ecological Connectivity, Adaptation to Climate Change, and Biodiversity Conservation. This working group had an initial mandate from 2016-2020. The ECWG created a resolution to extend their mandate; however, that resolution has not been considered.
 - The Co-Chairs of ECWG are QC and VT.
 - The Department of Fisheries, Forestry and Agriculture (FFA) represented NL on this group.
- **Climate Change Steering Committee (CCSC):** This group reports to the COE and was formed after the adoption of the 2001 Regional Climate Change Action Plan. This committee worked to implement resolutions and reports concerning climate change, including the 2017 Update of the Regional Climate Change Action Plan. CCSC is composed of representatives from both the environmental and energy sector. NEG-ECP's regional GHG targets are: 10 per cent below 1990 levels by 2020; at least 35-45 per cent below 1990 levels by 2030; and, 75-85 per cent below 2001 levels by 2050. The CCSC has not been assigned new direction since the 2017 Regional Climate Action Plan.
 - The Co-Chairs of CCSC are QC and NH.
 - ECC represented NL on this committee.
- **Adaptation Working Group (AWG):** This group was formed in 2018 and is under the direction of the CCSC and the COE. The group was created to advance work on an Resolution 42-1: Resolution Concerning Adaptation, which sought to explore opportunities for regional collaboration on science, adaptation planning, and strategies to build resilience. The AWG had an initial mandate from 2018-2021. The AWG created a resolution to extend their mandate; however, that resolution has not been considered.
 - ECC represented NL on this group.

NEG-ECP – Background Note – Overview of the Offshore Wind Supply Chain Intergovernmental Affairs Secretariat

Issue: During NEG-ECP roundtable discussions, Premiers and Governors are expected to discuss offshore wind (OSW) supply chains. This note provides a regional overview of the state of play of OSW supply chains.

Background and Current Status:

- OSW technology uses wind turbines located in the offshore to generate electricity from the wind. It is more productive than land-based wind due to higher and more consistent wind speeds. However, selecting a location, constructing, and operating OSW farms is more challenging and costly due to the already busy offshore space and rigorous development conditions. As the technology advances and supply chains develop, the cost of OSW is expected to decline and become an important source of electricity for many states in North America and beyond.
- OSW supply chains include the various skills, services, materials, technologies, logistics, and infrastructure required to develop OSW projects over their entire lifecycle (i.e. from planning to decommissioning) across a broad range of sectors, including: marine science and engineering; environmental monitoring technologies; mechanical and electrical technicians; marine vessels and ports; steel fabrication; OSW turbine and equipment manufacturing; and, supporting services/expertise (e.g., insurance, business, legal, and financial services).
- Some of the major global players in OSW supply chain include (but are not limited to):
 - **Siemens Gamesa** - offers an extensive range of onshore and offshore wind turbine technologies to cover all wind classes and site conditions.
 - **GE Vernova** - one of the world's leading OSW energy companies, which offers an extensive range of onshore and offshore wind turbine technologies to cover all wind classes and site conditions, including a portfolio of OSW turbines ranging from 6 megawatt (MW) to 14 MW.
 - **Vestas** - Vestas offers a range of onshore and offshore wind products across three wind turbine platforms (from 2 to 4.5 MW). Vestas recently secured a 1,089 MW order with Pattern Energy in New Mexico, US, which is to become the largest single onshore project globally.
 - **Ørsted** - a winning bidder in US northeast OSW leases. The Denmark-based energy company is a global leader in OSW and one of the largest renewable energy companies in the world, focusing on wind, solar, hydrogen, biomass and energy storage.
 - **Equinor** - is an international energy company headquartered in Norway with a portfolio encompassing oil and gas, renewables and low carbon solutions. Equinor is pursuing the development of OSW projects in its bid to become a net-zero company by 2050 and is rapidly becoming a leader in the US' growing OSW industry.
 - **Thyssenkrupp** - a leading materials and supply chain services supplier to manufacturing companies throughout North America. Thyssenkrupp supplies components like slewing bearings and rings for nine out of ten wind turbine manufacturers.
- According to the International Renewable Energy Agency (IRENA), as of the end of 2022 (latest data available), there was approximately 63.2 gigawatts (GW) of OSW energy installed around the world. Of this capacity, approximately 30.5 GW was installed in China and 30.7 GW installed in Europe, including the United Kingdom (UK).

- Supply chain issues such as project delays, design flaws and higher costs in the OSW industry due to the harsher environment has put dozens of projects at risk of not being delivered in time may take time to balance out since global demand for wind power is growing so quickly. The Global Wind Energy Council expects wind power capacity to increase 12 per cent per year between 2023 and 2027 to help meet this demand.

Offshore Wind in Canada

- While no OSW projects have been built in Canada to date, Natural Resources Canada suggests that market conditions are improving because of the introduction of proposed legislative and regulatory changes, which are expected to pave the way to an OSW market on Canada's Atlantic coast, as well as federal government financial commitments and incentives with respect to clean energy development, including the introduction of the Clean Technology Investment Tax Credit, which is a refundable tax credit for capital invested in the adoption and operation of new clean technology property (including wind) in Canada from March 28, 2023, to December 31, 2034.
- According to the Atlantic Economic Council's (AEC) January 2024 report on wind supply, wind power is expected to be the leading energy source in the Maritime provinces by 2050. The Canadian Energy Regulator projects wind power generation to grow from about 6 per cent of electricity production in Atlantic Canada in 2022 to 70 per cent by 2050 in its Canada net-zero scenario (see Annex A).
- The report also notes that the OSW industry in Atlantic Canada could create a market worth over \$7 billion by 2030, generate a first wave of 5,000 jobs and deliver significant local benefits to the regional economy. Nova Scotia (NS), Newfoundland and Labrador (NL) and New Brunswick (NB) have all made commitments to explore OSW power for future electricity generation. The wind used in these regions could be used for planned hydrogen projects, exported or used to support expected growth in electricity demand in the region.
- On December 2023, NL and the Government of Canada signed a Memorandum of Understanding (MOU) on offshore renewable energy, enabling NL to take the regulatory lead on OSW projects within its inland bays to enable the development of OSW that will power the province's economy forward. The MOU also outlines the framework for NL to administer land tenure and life-cycle regulation, including revenues for offshore renewable energy projects within provincial bays.
- Federal and provincial governments have also been spearheading legislative and regulatory processes needed for this industry, including the establishment of a joint management regime by amending the **Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act** and **Canada-Newfoundland and Labrador Atlantic Accord Implementation Act** ("The Accord Acts"), the commencement of Regional Assessments (RA) for both offshore NL and NS, as well as the development of federal Offshore Renewable Energy Regulations.
- On April 5, 2022, NL and the Government of Canada announced their intention to rename the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) to the Canada-Newfoundland and Labrador Offshore Energy Board (C-NLOEB) to better reflect its new mandate to include the regulation of offshore renewable energy development, such as OSW and clean hydrogen. To implement these changes, the federal and provincial governments committed to amend their respective versions of the **Canada-Newfoundland and Labrador Atlantic Accord Implementation Act**.

- Also in April 2022, the Minister of Environment and Climate Change (ECCC) initiated a Regional Assessment (RA) of OSW development in NL and NS to help inform future project-specific federal impact assessments and decisions for OSW in these areas. There will be two separate RAs with some aspects shared. To date, the NL Committee has conducted over 60 meetings and engaged with nearly 700 individuals, including Indigenous peoples, fish harvesters, ocean users, municipal leaders, federal and provincial agencies, environmental organizations, research groups and OSW developers.

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- The RA Committee for OSW in NL released an interim report in March 2024, providing early recommendations and a preliminary map of potential areas for development. The committee identified preliminary areas where OSW development may be of greatest interest to developers and where it may avoid/minimize potential impacts. The Committee also identified information gaps (e.g., data gaps).

Offshore Wind in the United States

- In 2021, the US federal government announced a goal to reach 30 gigawatts (GW) of OSW capacity by 2030, with various lease and planning processes underway along the country's east, west and gulf coasts (see Annex B for eastern US areas). Nine OSW projects totaling 13 GW of installed capacity have been approved to date, three of which will provide electricity to New England:
 - Block Island Wind Farm, RI – 30 MW (completed in 2016);
 - Vineyard Wind 1, MA – 806 MW (planned completion in 2024); and,
 - Revolution Wind, RI/Connecticut (CT) – 704 MW (planned completion in 2025).
- In North America, there are currently 42 MW of OSW capacity installed, all in the eastern United States (US) near Virginia (VA) and Rhode Island (RI). In March 2024, the 132 MW South Fork Wind project was completed, near the states of New York (NY), Massachusetts (MA), and RI.
- Recently, the US has experienced some setbacks with its OSW industry. Supply chain constraints have had impacts on its development of OSW, contributing to increased costs and even canceled projects. The International Energy Agency notes that Russia's invasion of Ukraine sent energy markets into turmoil and inflationary pressures hit many parts of the global economy hard, straining project supply chains and increasing raw material and labour costs. Many projects—particularly those with an expected start of commercial operations between 2025 and 2028—have faced challenges in maintaining economic viability because of rising capital costs and interest rates. As a result, some projects have asked their offtake counterparties or states to renegotiate the terms of their offtake agreements.
- In July 2024, pieces of broken a GE Vernova (GEV) wind turbine, part of Vineyard Wind's OSW project off MA, fell into the ocean, with shards of a blade washing ashore on the island of Nantucket, closing beaches. Environmentalist group Green Oceans has since called for a federal and state moratorium on all OSW development in the wake of the incident. As part of the meetings of NEG-ECP, meeting delegates were due to tour this project; however, the visit was cancelled following the incident. The Boston Globe noted that “public outrage has added to the problems already facing the industry as rising interest rates and supply-chain woes plague projects.”
- On August 22, 2024, a further failure occurred with an installed GEV turbine at the Dogger Bank wind farm off the coast of England. An RBC Capital Market's brief noted that the incident

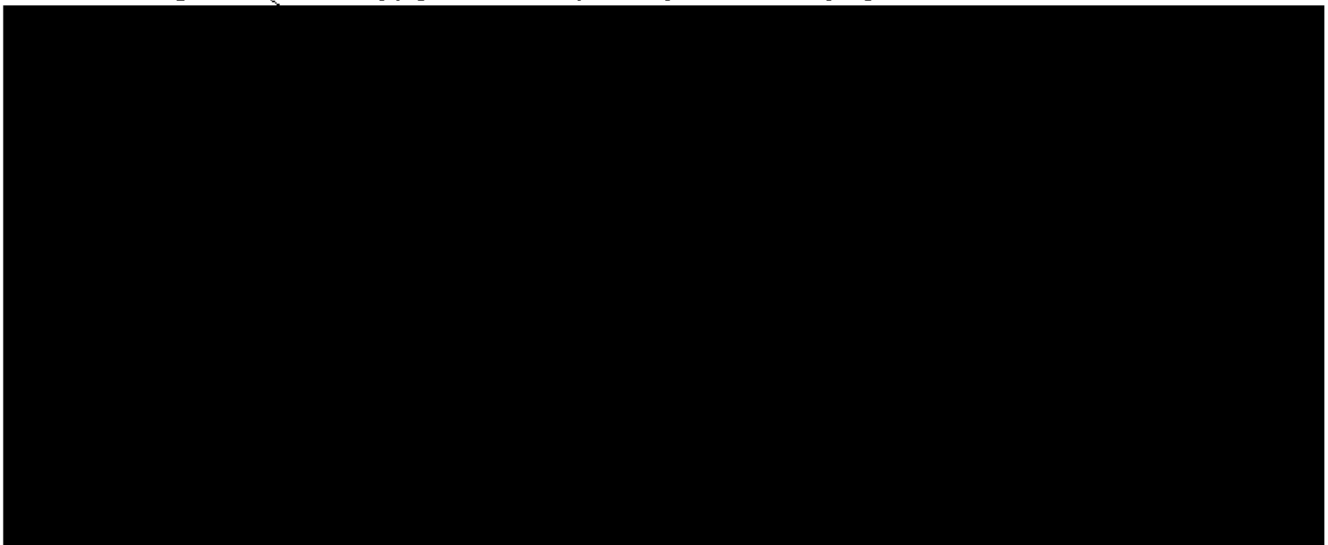
raises concerns about the manufacturing quality of the company's offshore wind blades, further noting "damages for extended downtime also need to be accounted for and could have the bigger financial impact." Dogger Bank is expected to be the world's largest OSW farm upon completion in 2026.

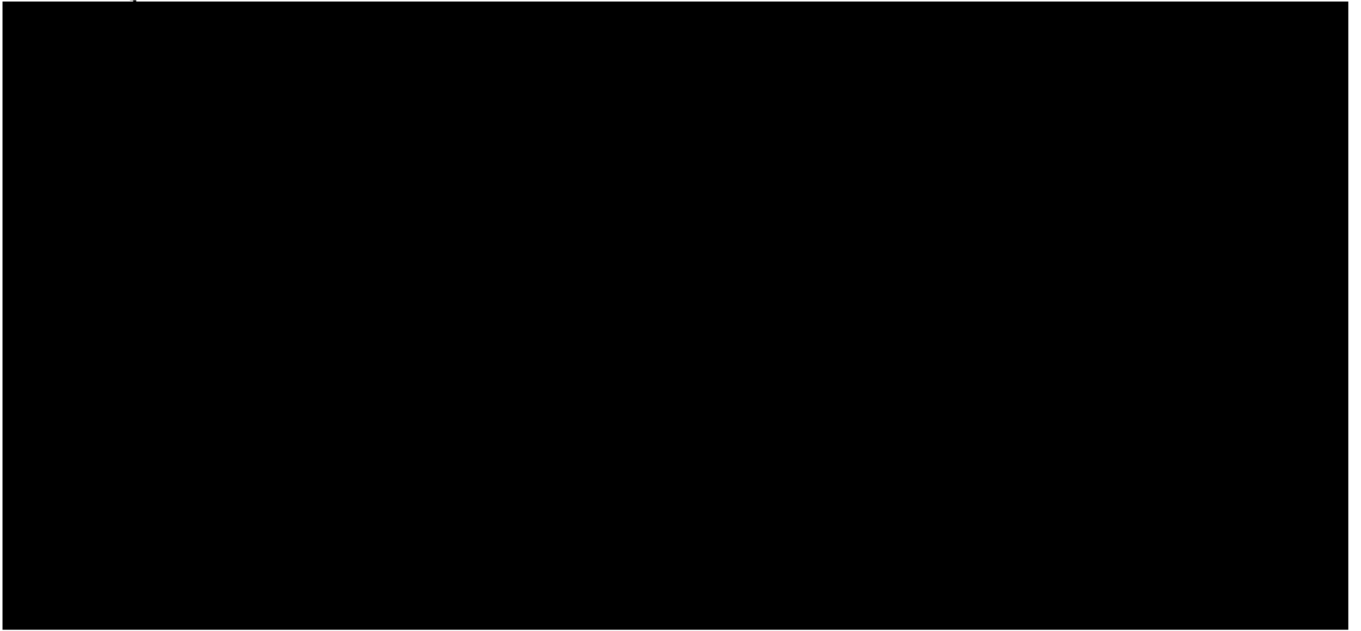
- As of August 2024, Ørsted, the Danish OSW developer, is pushing back the planned operating date for Revolution Wind from 2025 to 2026 because of construction delays on the onshore substation that will connect the 65-turbine OSW farm to the regional power grid. Ørsted noted that permitting and site preparation have proved to be more challenging than anticipated. Ørsted reported that the delay will add about \$310 million in additional costs to the project because of the longer construction period.

Analysis

- While Canada does not currently have any installed OSW capacity, the federal government has indicated its intent to work with the governments of NL and NS to support OSW development, including:
 - conducting federal regional assessments of OSW development for offshore areas near both provinces, to help inform future project-specific federal impact assessments and decisions for potential OSW projects in those areas (see Annex C for maps); and,
 - advancing Bill C-49 to amend the **Atlantic Accord Acts** to expand the current joint management regime for offshore petroleum resources to include offshore renewables. As of June 6, 2024, the Senate completed its second reading and the bill has been referred to the Senate Committee on Energy, the Environment and Natural Resources.
- Additionally, various Canadian companies (e.g., Northland Power Incorporated, Enbridge, and other Canadian financial institutions like Canadian Imperial Bank of Commerce (CIBC), Bank of Montreal (BMO), and National Bank), and port authorities have been involved in the development of the US OSW sector's supply chain, as suppliers of:
 - materials for wind turbine and transmission line construction (e.g. critical minerals, steel);
 - engineering and technical services in the ocean science and technology and sectors (e.g. remote sensing, ice monitoring, sub-sea imaging and robotics, wind resource modelling); and,
 - OSW logistics (e.g. the Port of Argentia serving as a marshalling port for OSW turbine foundations, known as "monopiles," en route to OSW projects in the eastern US).
- The US National Renewable Energy Laboratory is undertaking work in several research areas related to OSW supply chains, including: 1) developing a trained, educated, and safe OSW workforce; 2) supporting a domestic supply chain and manufacturing workforce; and, 3) building a domestic supply chain and ports system for deployment.

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- In August 2022, the US signed the **Inflation Reduction Act (IRA)**, which provides incentives for investing in offshore wind energy and the domestic supply chain. It is the single largest investment in climate and energy in American history. Within its energy and climate provisions, IRA appropriates approximately \$11.7 billion in total for the Loan Programs Office (LPO) to support issuing new loans. These amounts increase loan authority in LPO's existing loan programs by approximately \$100 billion.
 - According to the Government of Canada, the IRA poses a major challenge to the country's ability to compete in the industries that will drive Canada's clean economy. Canada has taken a market-driven approach to emissions reduction. In contrast, the US has chosen to rely heavily on new industrial subsidies to reduce its emissions. The IRA has introduced subsidies for the production of clean technologies and clean products. The IRA's federal clean growth incentives are officially estimated at US\$369 billion by the US Congressional Budget Office. As a result of these uncapped subsidies, private sector estimates suggest that the IRA could mobilize as much as US\$1.7 trillion of private and public investments in the US clean economy over ten years.
 - The centerpiece of Canada's federal Budget 2023's economic investments included a series of new green investment tax credits intended to drive new clean electricity generation projects including hydrogen and hydroelectricity, committing a total of \$21 billion over 5 years, moving to \$80 billion by 2034. However, the tax credits have been slow to roll out, with the first investment tax credits being unveiled on June 21, 2024. These included the Clean Technology Investment Tax Credit, a refundable tax credit for capital invested in the adoption and operation of new clean technology property (including wind) in Canada from March 28, 2023 to December 31, 2034.
 - According to the federal government, as the US's closest trading partner—and with economies so closely intertwined— Canada stands to benefit from the IRA, both from the accelerated pace of technological development, and from new opportunities in North American supply chains for clean energy and technologies.

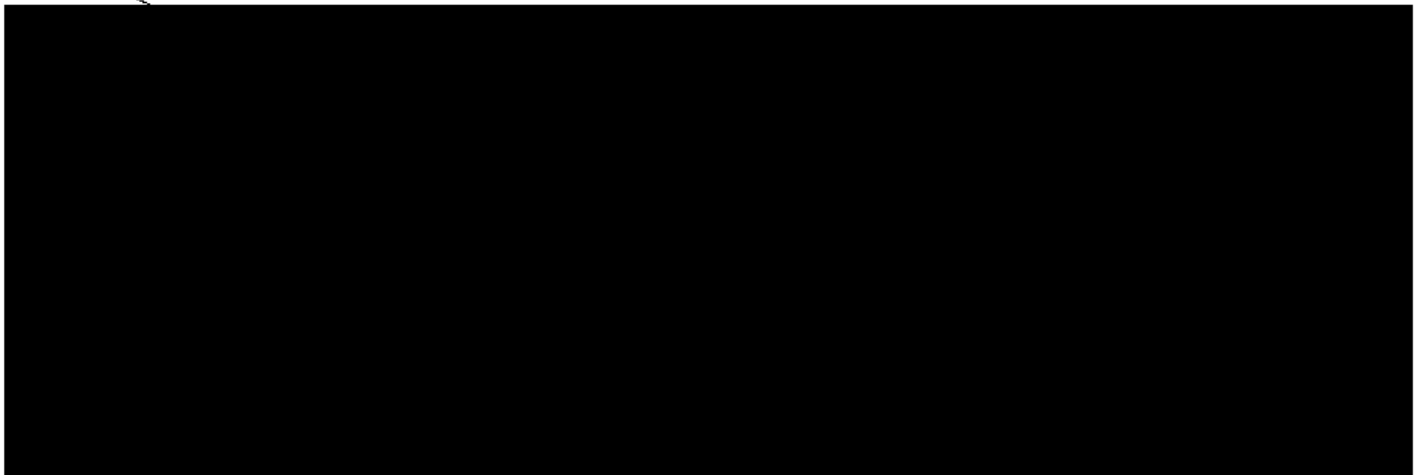
Newfoundland and Labrador

- NL's strategic advantages in OSW supply chains include: a strategic position along Atlantic

international shipping lanes; numerous deep-sea, ice-free ports; a wealth of natural resources (e.g. critical minerals, iron ore processing); a skilled workforce with experience in offshore energy and ocean technology; and a large marine coastline and world-class OSW wind speeds that are ideal for utility-scale power generation.

- Furthermore, Newfoundland and Labrador's robust offshore oil and gas industry provides the industrial infrastructure (e.g. Bull Arm Fabrication Site), supply and service capabilities, highly skilled workforce, harsh environment expertise, technical capabilities (e.g. remote sensing) and research and development activity needed to support the burgeoning OSW industry.
- The Province's Renewable Energy Plan and Hydrogen Development Action Plan outline several actions and initiatives aimed at supporting supply chains for OSW, including:
 - exploring market opportunities for developing the Province's renewable energy resources, within and beyond the Province;
 - using Industrial benefit arrangements for applicable renewable energy projects, to build supply chain capacities and capabilities to supply the industry locally and globally;
 - exploring further electrification opportunities for offshore oil and gas platforms; and,
 - continuing to work with the Federal Government regarding relevant regulation/policy.
- NL has taken significant and swift steps to advance the province's hydrogen sector. The Call for Bids for wind-hydrogen development on Crown lands in the province has been completed with four companies advancing developments: EverWind NL Company – Burin Peninsula; Toq'lukut'i'k Wind and Hydrogen Ltd. (ABO) – Avalon Peninsula /Isthmus Region; Exploits Valley Renewable Energy Corporation – Central NL; and World Energy GH2 Inc. – Western NL.
- The first hydrogen/wind development project released from environmental assessment (EA) happened in April 2024 – World Energy GH2's project is a hydrogen/ammonia plant with an electrolyzer capacity of 1,200 MW.
- A fifth company, Pattern Energy, advancing a project on privately owned land, has recently filed its environmental assessment application.
- A sixth company, North Atlantic Refining Limited (NARL), has also recently received a Wind Hydrogen Hub Land Reserve to upgrade, expand and leverage its existing infrastructure and operations as a Green Energy Hub capable of servicing and supporting the developing wind-hydrogen sector while establishing a wind energy project to power the production, storage and export of Liquid Organic Hydrogen Carriers.

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Prepared/Reviewed by: K. Moreno et.al / L. MacDonald
Approved by: D. Macmillan

August 29, 2024

ANNEX A

Overview of the Atlantic Economic Council Report – January 2024

Assessment of opportunities in Atlantic Canada

- Wind power is expected to be the leading energy source in the Maritime provinces by 2050. The Canadian Energy Regulator projects wind power generation to grow from about 6% of electricity production in Atlantic Canada in 2022 to 70% by 2050 in its Canada net-zero scenario. That is over ten times the 2022 level of production. Nova Scotia is expected to experience the largest growth in the region at 11 times the 2022 level.

Role in net-zero energy transition: high

- > Wind power will be a leading source of carbon free emissions as the region transitions to net-zero.
- > The technology is proven, cost-effective and scalable.

Potential economic impact of onshore wind: moderate

- > The construction of new onshore wind farms will have a positive impact on the region's economy over the next decade.
- > The overall economic benefit is limited due to our lack of wind power manufacturing in the region.

Potential economic impact of offshore wind: high

- > Offshore wind power offers greater economic potential, compared to onshore wind, due to offshore installation, subsea work, research and development and other supply chain support.
- > Higher construction costs may limit growth in the near term.

Onshore wind energy plans in Atlantic Canada

- The technology that onshore and offshore wind turbines use to generate electricity is essentially the same. Where the two differ is in their position, size, scale and how the electricity they generate is transferred.
- Onshore wind has been the main source of renewable energy growth in Atlantic Canada over the last two decades. Wind generation capacity is currently about 1.1 gigawatts. This could nearly double by 2027 based on current plans by utilities and provinces.
- Nova Scotia and Newfoundland and Labrador could see several gigawatts of wind power constructed if planned hydrogen projects move ahead. Most of that power would be used for hydrogen and ammonia production but some could be sold back to the grid during peak demand in the winter.
- Firms in the region are adding capacity to support the growth of wind power. Irving Equipment is adding cranes to support the installation of new wind turbines, towers and blades. Several local and international wind power firms are expanding operations in the region to support projects. Indigenous communities are heavily involved in wind and other renewable projects and will benefit from the revenues generated.

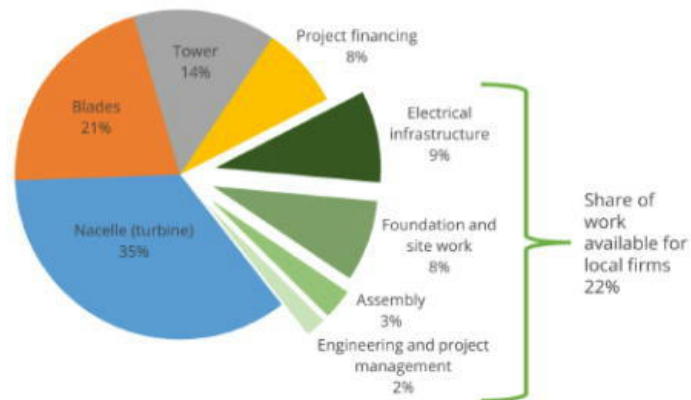
Offshore wind energy plans

- The offshore petroleum boards in Nova Scotia and Newfoundland and Labrador are being redeveloped to help regulate the offshore wind power industry. The offshore fishery has raised concerns about where offshore wind farms may be located and will need to be consulted before projects can proceed. Any delays in finalizing the new regulation could impact the pace of new project development.
- Most large components for an onshore wind farm are imported. Turbines, blades and towers are built in other countries such as China, Germany, Denmark and the US. About 60% of current turbine production comes from China.

- Less than 25% of onshore wind project costs are likely to be spent in the region during the construction phase. Spending in the region would include site preparation, assembly and electrical infrastructure. Occupations required to build and operate these wind farms are as follows: heavy equipment and crane operators, truck drivers, construction labourers, electricians, welders, engineers and wind turbine technicians. Spinoff impacts on the local community would occur during construction. Spending on accommodation and food. Governments receive ongoing tax revenues from the projects.

Economic benefits of onshore wind limited to on-site work

Share of onshore wind generation installation cost by component, US (%)



Source: [National Renewable Energy Laboratory](#)

- Operational onshore wind farms have modest labour requirements and maintenance costs. Wind turbine technicians monitor and maintain the facility. The annual operating cost is about 3% of the total capital cost.
- The volume of wind projects in the region could be considerable if wind projects to support hydrogen development move ahead at the same time as the provinces expand wind power generation. There may be worker and equipment shortages that could delay some projects. Stakeholders should work with training institutions to ensure that there enough workers to keep these projects moving.

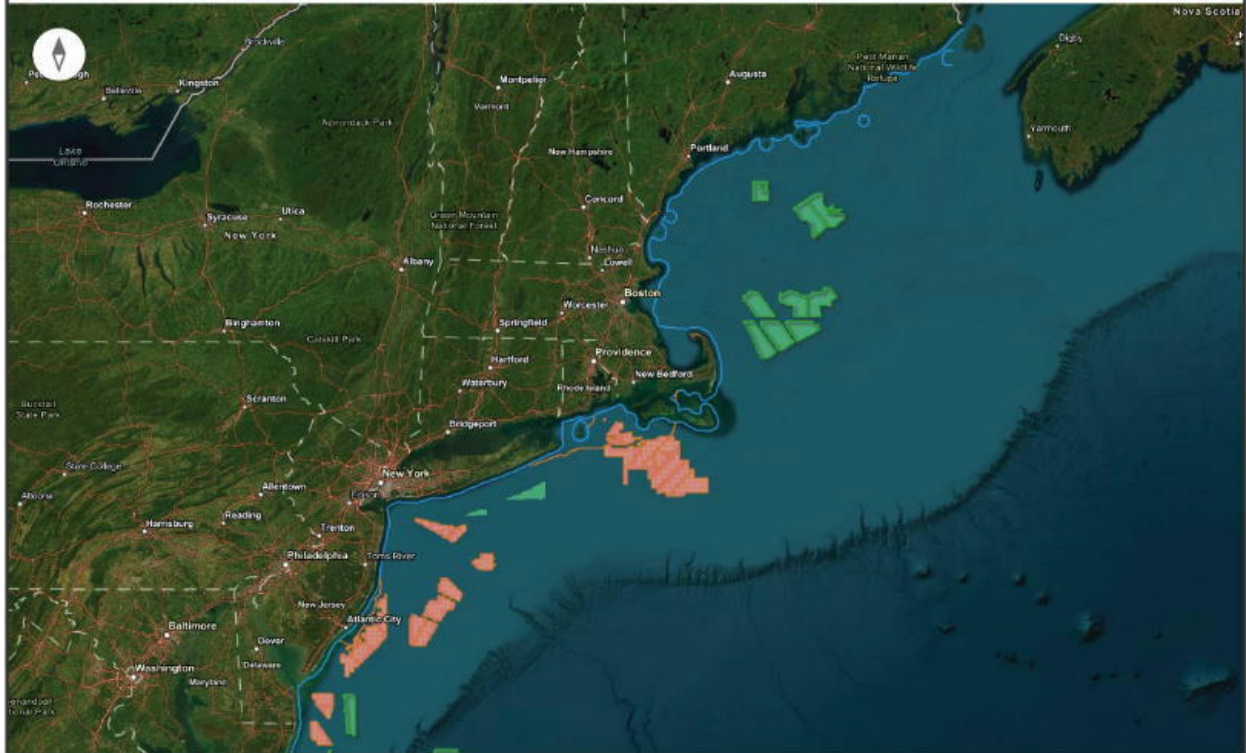
ANNEX B

Map of Key OSW Areas In the Eastern US

**U.S. Department of the Interior
Bureau of Ocean Energy Management
Office of Renewable Energy Programs**



Renewable Leases & Planning Areas



Outer Continental Shelf Active Wind Leases (Outlines) Outer Continental Shelf Active Wind Leases (Blocks)



Offshore Wind Planning Areas (Outlines) Offshore Wind Planning Areas (Blocks)



Marine Hydrokinetic Leases and Planning Areas State/Federal - Submerged Lands Act Boundary

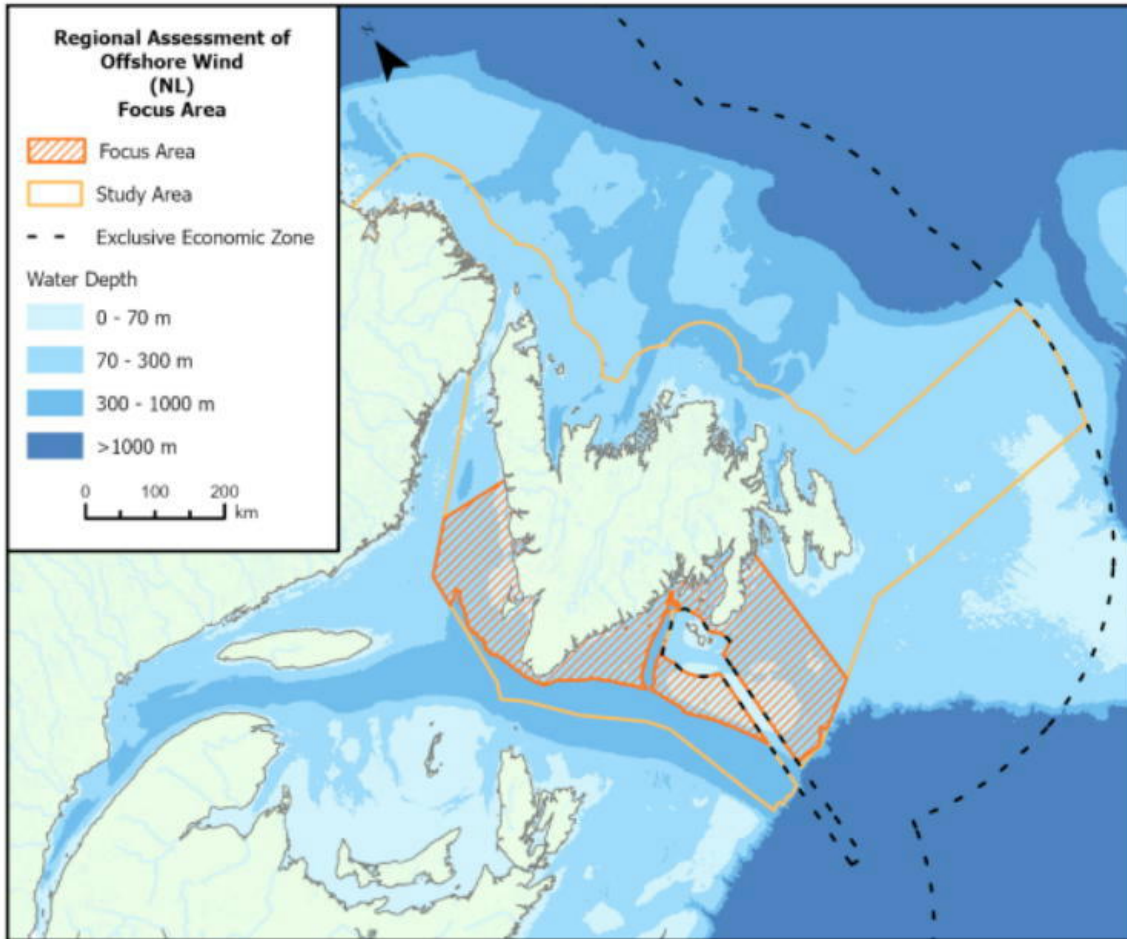
OCS-P 0560 - Oregon State University



ANNEX C

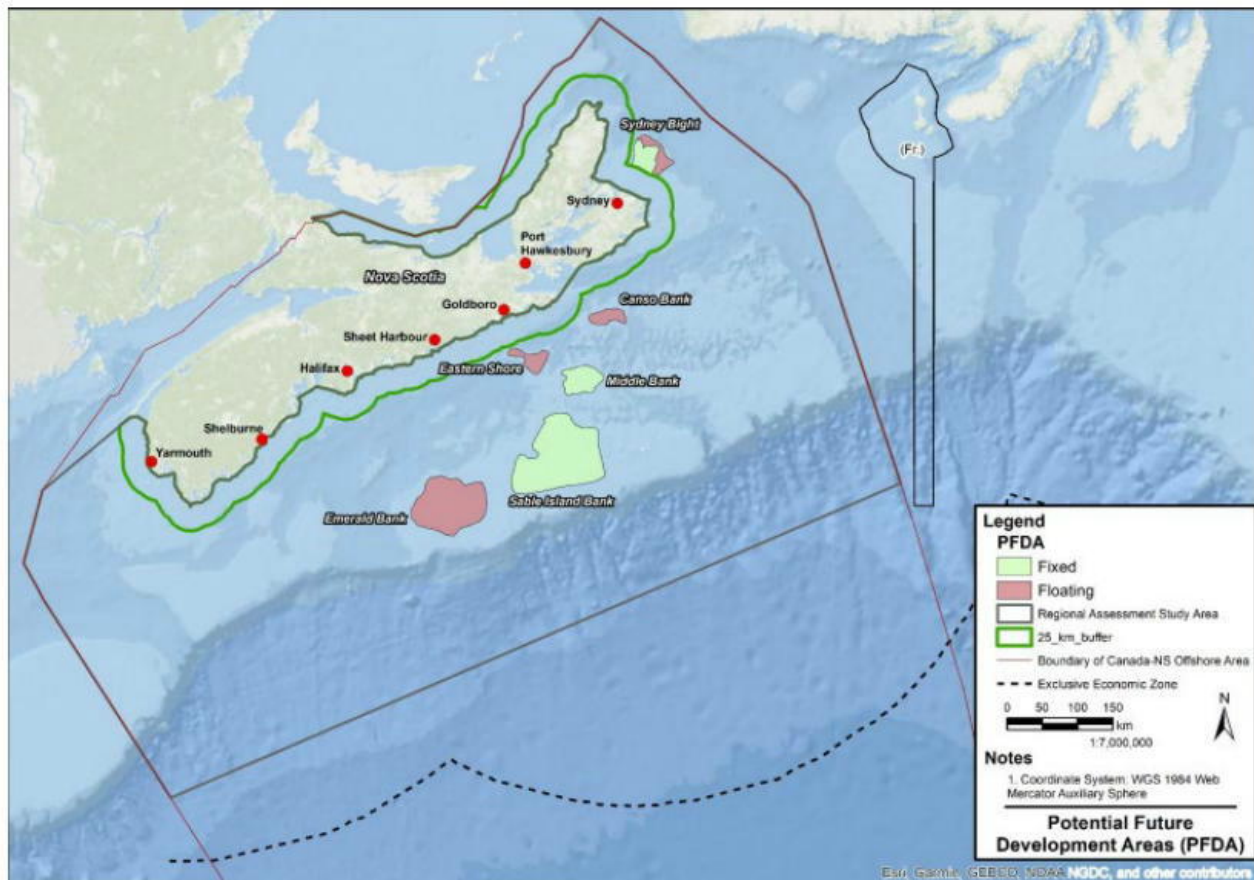
Maps of OSW Regional Assessments In Newfoundland and Labrador and Nova Scotia

Regional Assessment of Offshore Wind Development In Newfoundland and Labrador – Focus Area



This map depicts the Focus Area the Committee decided on in November 2023. The map additionally shows the Study Area set out in the Agreement and information on water depth.

Regional Assessment of Offshore Wind Development In Nova Scotia – Potential Future Development Areas



NEG-ECP – Background Note – Hard-to-Decarbonize Sectors

Intergovernmental Affairs Secretariat

Issue: As part of the NEG-ECP meeting, Premiers and Governors are expected to discuss hard-to-decarbonize sectors, including transportation, aviation, and commercial and industrial buildings. Premier Furey may wish to also discuss efforts to decarbonize the mining and electricity generation sectors.

Background and Current Status:

- Hard-to-decarbonize sectors are industries/activities that face significant technical and/or economic challenges in reducing their emissions. These sectors typically rely heavily on fossil fuels for complex and/or high-temperature production processes, or to enable operation in conditions or areas where direct electrification is difficult or cost-prohibitive.
- Key examples of hard-to-decarbonize sectors include:
 - Heavy Industry, including steel, cement, and chemical production, which require high-temperatures and/or carbon-intensive chemical feedstocks;
 - Heavy-duty transport, including heavy-duty vehicles, marine transport, and aviation; and,
 - Electricity generation in remote regions, where fossil fuel-fired generation is often employed to provide reliable, cost-effective electricity to areas where geographic and climatic considerations make it unfeasible and/or cost-prohibitive to construct transmission lines to connect to regional electricity grids.
- According to the United Nations Framework Convention on Climate Change, the Industrial sector currently accounts for around 34 per cent of all global emissions, with approximately 70 per cent of Industrial emissions stemming from hard-to-decarbonize Industries.
- The International Renewable Energy Agency (IRENA) and other energy research institutes have identified green hydrogen (i.e. hydrogen produced via electrolysis using water and renewable energy), and other clean fuels (e.g. biofuels such as renewable diesel and sustainable aviation fuel), as promising focus areas for reducing emissions from hard-to-decarbonize sectors and supporting global efforts to achieve net-zero by 2050.

New England States and Eastern Canadian Provinces Context

- In 2001, New England Governors and Eastern Canadian Premiers approved the *2001 Regional Climate Change Action Plan*. In 2017, an *Update of the Regional Climate Change Action Plan* was developed, fulfilling the requirements of Resolution 39-1, which set a 2030 regional greenhouse gas (GHG) reduction maker range of 35-45 per cent below 1990 levels.
- The 2017 update identified a set of strategies, policies and measures where GHG reductions are possible, including in energy supply and transmission, end-use and distributed energy, transportation, natural resources, other cross-cutting measures, and government leadership.
- In 2022, the US released its Industrial Decarbonization Roadmap, focusing on five of the highest carbon dioxide (CO₂)-emitting industries where industrial decarbonization technologies can have the greatest impact, including petroleum refining, chemicals, iron and steel, cement, and food/beverage. The Roadmap identifies four key technological pillars to reduce emissions in these subsectors: energy efficiency; industrial electrification; low-carbon fuels, feedstocks, and energy sources; and carbon capture, utilization, and storage (CCUS).
- The New England states also participate in regional initiatives to reduce emissions in hard-to-decarbonize sectors. Examples include:
 - **Greenhouse Gas Initiative** - a cooperative, market-based effort among Eastern US states to cap and reduce CO₂ emissions from the power sector. It represents the first cap-and-invest regional initiative implemented in the US. All six New England States are participants, as well as Delaware, Maryland, New Jersey, New York and Pennsylvania.

- **Transportation and Climate Initiative (TCI)** - a regional collaboration of 13 Northeast and Mid-Atlantic states and the District of Columbia seeking to improve transportation and reduce the sector's emissions. All six New England States are participants.
- **Transportation & Climate Initiative Program (TCI-P)** - MA, CT, RI, and the District of Columbia Initiative aiming to cut GHG pollution from motor vehicles in the region by an estimated 26 per cent from 2022 to 2032, generate a total of more than \$3 billion dollars over ten years for the participating jurisdictions to invest in equitable, less polluting transportation options and to help energize economic recovery.
- According to ISO New England, an independent, non-profit regional transmission organization, even with substantial investment made to modernize the transmission system and enable the free flow of low-cost power, additional transmission (and distribution) system upgrades will be needed to accommodate large amounts of diverse clean-energy resources. To achieve decarbonization goals, the region must be proactive in developing infrastructure that aligns with supply growth and is available when needed.
- The New England states and Eastern Canadian provinces each have climate action plans and strategies guiding efforts to reduce GHG emissions, including in hard-to-decarbonize sectors. Common commitments include taking action to reduce emissions in the transportation sector, buildings, electricity sector, and more. See Annex A for a jurisdictional scan for details.

Newfoundland and Labrador Context

- Canada and Newfoundland and Labrador (NL) have both committed to net-zero GHG emissions by 2050, which requires a transition to a low-carbon economy by significantly reducing emissions and offsetting any remaining emissions elsewhere in the economy. In 2019, NL released its Climate Change Action Plan, which committed the province to reducing GHG emissions by 30 percent below 2005 levels by 2030 (7.2 MT). This builds on the 2020 target to reduce GHG emissions by 10 percent below 1990 levels (8.5 MT), which was achieved in 2021.
- In 2021, approximately 42 per cent of NL's GHG emissions came from large industry and electricity generation, about 42 per cent from transportation (adjusted for mining trucks being reallocated to industry), and approximately 10 per cent from other energy sources, such as heating oil in buildings and off-grid electricity generation. The remainder is from non-energy sources such as agriculture and waste.
- Currently, over 92 per cent of the NL's electricity is generated from renewable energy resources and will increase to 98 per cent when the province's most recent hydroelectric project is fully complete and when Holyrood is decommissioned. When this occurs, the province will have approximately 3.2 terawatt hours of energy per year in surplus of the province's current electricity needs, which will be available primarily during summer months. The Province is also planning for more renewable energy from Churchill Falls in 2041.
- The Province has also made significant progress positioning the oil and gas sector to meet the world's energy needs during the energy transition, as demonstrated by increasingly improved emissions intensity over time, with a 29 per cent reduction in upstream carbon intensity since 2019.
- The Province continues to implement its Climate Change Action Plan and additional GHG reduction measures have since been announced, such as:
 - Continued electrification programming, such as passenger transport and buildings.
 - Amendments to the industrial carbon pricing system for 2023 to 2030.
 - Investments in new technology including new energy supplies, such as hydrogen.

- Investments in negative emissions opportunities to enhance carbon storage and sequestration, including improved forest management and silviculture, and permanent carbon storage in depleted offshore petroleum reservoirs.
- NL is currently developing a new Climate Change Mitigation Action Plan (2025-2030) to reduce GHG emissions and a new Climate Change Adaptation Action Plan (2025-2030) to help prepare for and reduce the impacts of climate change.
- In 2021, the Province also released its five-year Renewable Energy Plan, which provides a long-term vision for NL to maximize its renewable energy future. The Plan contains four specific focus areas: 1) Energy Uses and Markets, 2) Regulatory Framework, 3) Partnerships, Innovation and Industry Support, and 4) Training and Jobs.
- Companies, such as Braya Renewable Fuels, demonstrate NL's potential for supporting the transition to renewable energy sources. Braya's refinery in Come By Chance is a world-class converted renewable fuels production facility, currently producing up to 18,000 barrels per day of renewable diesel. The refinery is supporting the energy transition by decarbonizing hard-to-abate sectors, such as heavy-duty transport, aviation, and heavy industry.

Analysis

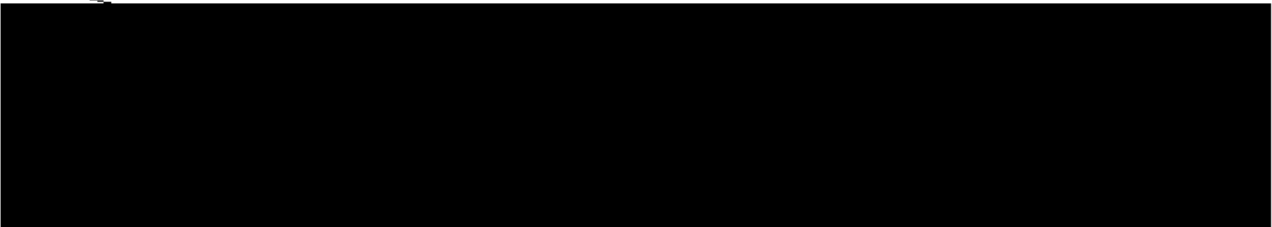
- NL has made significant progress and investment in renewable energy development, including development of a wind/hydrogen sector and critical minerals. The Province also continues to promote the global requirement for responsibly produced fossil fuels and the need for continued investment in emissions reduction technologies for the energy sector. These represent opportunities to reduce emissions, including in hard-to-decarbonize sectors.

Hydrogen

- NL is advancing the province's hydrogen sector. When the four (of the six) wind-hydrogen projects being pursued through the expressions of interest process come online, they will be anticipated to produce over 900,000 metric tonnes of hydrogen annually and over 4.5 million metric tonnes of ammonia annually, reducing global emissions and mitigating the impacts of climate change. This green hydrogen could displace almost 12 million metric tonnes CO₂ if used to replace coal-fired electricity generation or almost 5 million metric tonnes CO₂ if used to replace gas-fired electricity generation.
- In May 2024, the Province released its Hydrogen Development Action Plan, which outlines several actions pertaining to hard-to-decarbonize sectors, including:
 - pursuing opportunities for the local green hydrogen supply chain to support the industrial, mining, electricity generation and marine and heavy-duty vehicles sectors;
 - helping industry identify opportunities and provide supports including through the Department of Environment and Climate Change programming, to reduce GHG emissions by transitioning their fossil fuel powered operations to renewable energy;
 - continuing to work with the Federal Government on implementing Canada's Hydrogen Strategy, as well as a Collaborative Framework for the Regional Energy and Resource Table, which includes initiatives on green hydrogen, electrification, and critical minerals;
 - exploring opportunities to develop a hydrogen hub; and,
 - working with the other Atlantic Canadian provinces to facilitate the establishment of a green hydrogen industry in the region.
- The Provincial Government has also announced several investments/initiatives that could help support hydrogen applications in hard-to-decarbonize sectors, including:
 - launching the Green Transition Fund, a \$100-million program providing financial support to businesses, organizations, post-secondary institutions, and industry associations to assist with the province's transition to a green economy;

- Introducing a Green Technology Tax Credit for companies in the Province that invest in equipment for green activities (e.g., energy conservation, clean energy generation, and efficient use of fossil fuels); and,
- administering a Crown Lands Call for Bids for Wind Energy Projects, which provided opportunities for wind-hydrogen developers to obtain exclusive rights to pursue their projects on certain Crown lands.

29(1)(a)(i)

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- Several New England states (i.e. Connecticut, Maine, Massachusetts, Rhode Island, and Vermont) were involved in a proposed Northeast Regional Clean Hydrogen Hub, which was not selected for US Clean Hydrogen Hubs funding. The proposal included 12 projects to advance clean electrolytic hydrogen production, consumption, and infrastructure projects, for hard to decarbonize sectors, including transportation and heavy industry.
- Resolution 42-2 on Energy Security and Affordability, passed at the 2018 Conference of New England Governors and Eastern Canadian Premiers, included references to reducing the use of diesel generation systems in remote regions – a key issue for NL.
- IET continues to work with Indigenous governments and organizations with respect to their renewable energy priorities for isolated diesel communities (e.g. Nunatsiavut Government's Nain Wind Microgrid project).
- To date, IET has primarily focused on European markets for potential hydrogen exports, given European Union hydrogen import commitments and targets in relation to energy security and geopolitical risks, as well as Canada's intergovernmental agreements on hydrogen (e.g. the Canada-Germany Hydrogen Alliance). However, NL's established trading relationships with the northeastern US, including New England, could present additional opportunities for hydrogen trade.

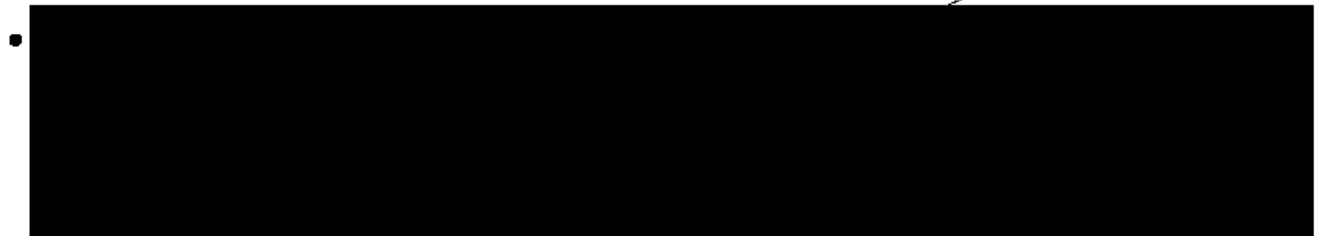
Critical Minerals

- NL released its Critical Minerals Strategy in 2023 and committed to invest \$4.3 million to support its implementation. The strategy aims to support critical mineral supply as the basis of realizing further opportunities downstream within the jurisdiction and with partner jurisdictions.
- As much of NL's critical mineral potential is located in remote areas, the Strategy commits the Province to "working to support access to and development of clean renewable energy for our mineral development industry." IET advises that decarbonizing off-grid mining operations can be challenging due to the constant demand for firm power, making it difficult to reduce the requirement for diesel generation. For critical minerals that are anticipated to feed supply chains for the products needed to decarbonize globally, there will be increasing pressure to achieve the lowest emissions possible. Ultimately, minerals produced with lower GHG intensities will be advantaged.
- In February 2024, the federal government announced its plans to accelerate mining of rare earth elements essential in making electric vehicles and wind turbines: lithium, graphite, nickel, cobalt, copper, and so-called rare earth elements. Canada also plans to reduce the time to approve mining permits by better funding the regulatory agency to get rid of paperwork backlogs and running permitting and environmental assessment processes at the same time.

- In June 2024, the federal government added three minerals to its critical minerals list: high-purity iron, phosphorous and silicon metal. These materials are integral to a variety of products, critical to the energy transition and are often those in short supply.
- NL has 25 of Canada's 34 critical minerals, representing a real opportunity for the province. In addition to existing critical mineral production, the province has rare earth elements, tungsten, molybdenum, uranium, vanadium and zinc projects with advanced economic studies, and/or resource estimates.
- NL has 13 mines producing iron ore, nickel, copper, cobalt, gold, silver, antimony, fluorspar, barite, dolomite, limestone, gypsum, peat and pyrophyllite. NL has seven developing projects including gold, iron ore and rare earth elements. There are two processing facilities: Vale's Long Harbour Processing Plant (nickel, copper and cobalt) and Rambler/Maritime's Nugget Pond Facility (copper and gold).
- The Labrador Trough of western Labrador is home to an abundance of high-grade, low-impurity iron ore, allowing for cheaper and lower emissions steel production. Several major open pit deposits within the Trough have already produced more than 2 billion tonnes of iron ore and existing reserves and resources suggest production could continue for decades.

Carbon Capture and Storage (CCUS)

- An emerging field in climate science involves the ocean's ability to store carbon. The ocean holds 50 times more carbon than the atmosphere, with the ability to absorb more carbon than all global rainforests combined. The North Atlantic Ocean is the most intense carbon sinks on the planet, accounting for approximately 30 per cent of the global ocean carbon dioxide.
- NL's offshore, which initial estimates suggest has a gigaton-level storage potential for carbon dioxide, is an ideal candidate for establishment of a significant CCUS industry. This would enable the province to maximize the lifespan of current oil-producing assets by enabling further de-carbonization of existing production activities and storage of imported CO₂.
- On October 17, 2023, NL launched a new CCUS Innovation challenge in an effort to maximize and accelerate the decarbonization of NL's offshore. Through the CCUS Innovation Challenge, IET is inviting expressions of interest for financial support to qualifying businesses, organizations and researchers engaged in research and development focused on the development of CCUS in NL's offshore. Up to \$6 million in funding has been allocated for two streams of work:
 - The first stream contains a total of up to \$3 million to study the potential for employing CCUS in active production and reservoirs to decarbonize ongoing oil production. In May 2024, IET published a Call for Proposals for Stream 1 funding. The deadline for submissions of applications closed on August 9, 2024.
 - The second stream contains a total of up to \$3 million to study the potential of NL's offshore to serve as a regional CCUS hub for the storage of provincial and imported CO₂.
- Some other Canadian provinces have released frameworks for or taken action to enable CCUS, including BC, AB, SK, MB, ON, QC, and PE. 29(1)(a)(i)



Approved by: P. Hearn, DM

August 26, 2024

ANNEX A

Jurisdictional Scan of Efforts to Decarbonize Hard-to-Abate Sectors

Jurisdiction	Main Decarbonizing Efforts
NEW ENGLAND STATES	
Maine	• In December 2020, <i>Maine Won't Wait</i>, Maine's (ME) four-year climate plan was released. It contains strategies and goals to emit less carbon, produce energy from renewable sources, and protect natural resources, communities and people from the effects of climate change. Examples of actions that tackle hard-to-abate sectors include: ◦ Pursuing transition strategies and innovative solutions in the transportation sector, which accounts for 54 per cent of ME's annual GHGs, through accelerating the transition to electric vehicles, increasing fuel efficiency and alternative fuels, and reducing vehicle miles traveled; ◦ Modernizing ME's buildings through transitioning to cleaner heating and cooling systems and efficient appliances, accelerating efficiency improvements to existing buildings, and advancing the design and promotion of climate-friendly building products, investigating options for a Renewable Fuels Standard; ◦ Reducing emissions through clean-energy innovation, including through ensuring adequate affordable clean-energy supply; accelerating emissions reductions of industrial uses and processes, and encouraging highly efficient combined heat and power facilities; and, ◦ Increasing carbon sequestration through, among other things, developing new incentives to increase carbon storage.
Vermont	• Vermont's (VT) Climate Change Action Plan was released in December 2021 and outlines steps to cut climate pollution and help Vermonters prepare for extreme weather and other impacts caused by climate change. Examples of actions that tackle hard-to-abate sectors include: ◦ Cutting climate pollution through: ▪ Transportation - accelerating adoption of zero emission or low carbon fuels such as electricity (noting that for medium to heavy duty vehicles, there may be a limited but important role for biofuels or hydrogen, especially in the near term), and making the vehicles and the transportation system more efficient and accessible; ▪ Buildings - reducing energy use in buildings through weatherization and energy efficiency improvements, and reducing building-related carbon content of the fuels buildings use; and, ▪ Electricity - enabling Vermonters to choose electrification and managing the energy load and optimizing the grid. ◦ Capturing carbon through reducing the sources and enhancing the sink of GHGs and support and empower Vermont's farmers, foresters, and land workers to capacitate renewable energy and building product transitions.
Connecticut	• The CT Governor's Council on Climate Change's phase 1 report was released in 2022. Examples of recommendations and actions related to hard-to-decarbonize sectors include: ◦ Building sector – accelerate adoption of building thermal energy conservation improvements, transition building fossil fuel thermal loads to efficient renewable thermal technologies, and transition building fossil fuel thermal loads to efficient renewable thermal technologies; ◦ Electricity sector – commit at least 50 megawatts of demand reduction per year to the ISO- New England forward capacity market and achieve at least 66 percent zero-carbon electricity generation by 2030; ◦ Transportation sector – maintain increasing fuel economy and low- and zero-emission standards, expand EV charging network, develop a State fleet transportation Lead by Example program that sets annual emissions-reduction

Jurisdiction	Main Decarbonizing Efforts
	targets and enables increasing adoption of zero-emission vehicles, advance initiatives that increase adoption of zero-emission medium- and heavy-duty vehicles, reduce emissions from freight transportation; and ◦ Working and natural lands - evaluate approaches and best practices for siting of renewable and non-renewable energy infrastructure to avoid loss of forests, farmland and other sensitive lands, increase mitigation of greenhouse gases in CT's forests through sequestration and storage of carbon, and more.
Rhode Island	• Rhode Island (RI) 2022 Climate Update outlines strategic actions to take in three of the state's sources of GHGs. Examples of actions are: ◦ Electric sector – implement the 100 per cent renewable energy standard, modernize the electric grid, deploy advanced meters, procure offshore wind, continue energy efficiency work, and complete the Regional Greenhouse Gas Initiative review and implement suggested changes; ◦ Transportation sector – target ten per cent penetration of EVs by 2030, decarbonize RI's transit fleet, adopt advanced clean trucks rule, incentivize electric mobility, and more; and, ◦ Thermal sector – energy efficiency programs and weatherization, target 15 per cent penetration of energy efficient electric heating by 2030, efficient heat pump incentives, increase biofuel blending, begin developing a renewable thermal standard, and more.
Massachusetts	• In December 2020, MA released their plan for reaching net-zero carbon emissions by 2050, the MA 2050 Decarbonization Roadmap. It identifies policies and overall systems strategies that will be necessary to achieve net-zero by 2050 in the areas of transportation, buildings, energy supply, non-energy, and land use. • The map outlines several strategies to achieve the 85 per cent greenhouse gas (GHG) reduction by the 2050 goal. These strategies are included, in varying degrees, across the different pathways. ◦ Light-Duty Transportation – this includes switching from light-duty fossil fuel vehicles to zero-emission electric vehicles in an accelerated manner while also enhancing public transportation options. ◦ Medium- and Heavy-Duty Transportation, Aviation, and Shipping – various technologies, such as battery-electric, hydrogen fuel cells, and zero-carbon fuels, will need to be adopted. ◦ Residential and Commercial Buildings – two main components include electrifying building energy use by installing high-performance heat pumps and other electric appliances and making buildings more energy efficient. ◦ Electricity and Energy – electricity supply will be decarbonized largely through the deployment of renewables and fossil fuel generation retirements; improved electric transmission and distribution systems will be needed to support increased regional trading and dispersed resources. ◦ Non-Energy and Industry – tighter emissions standards and increased efficiency standards for industry, agriculture, solid waste, and wastewater, along with limits on hydrofluorocarbon sales, will be needed. ◦ Natural Carbon Sequestration – strategic management of forests and other natural and working lands will be needed to enhance carbon sequestration while also developing sequestration accounting and market frameworks. ◦ Additional Carbon Dioxide Removal – natural carbon sequestration from neighboring states, along with possible mechanical and other carbon dioxide removal technologies, will be needed.
New Hampshire	• The 2024 New Hampshire (NH) Priority Climate Action Plan includes a list of priority measures that could reduce the state's GHG emissions. Examples of actions that tackle hard-to-abate sectors include: ◦ Transportation sector – Electric charging infrastructure for EVs, incentives for consumer purchase of electric passenger vehicles, and expanded public transit options;

Jurisdiction	Main Decarbonizing Efforts
	○ Residential building sector – improving energy efficiency of buildings through heat pumps, and weatherization and pre-weatherization of residential buildings; and, ○ Local government sector – resilient local energy systems, and energy efficiency improvements at wastewater and drinking water systems.
EASTERN CANADIAN PROVINCES	
Québec	Quebec's 2030 Plan for a Green Economy maps out the government's support to the entire innovation chain for electrification and climate change, from research and development to commercialization and deployment. Other efforts include: ○ Innovating on green and smart buildings by building expertise through the life-cycle analysis of buildings and calculation of greenhouse gas emissions in construction; ○ Develop a promising disruptive technology (e.g., e ELYSIS project) to reduce greenhouse gas emissions in industrial processes. If fully implemented, the ELYSIS technology could eliminate more than 5 million tons of carbon dioxide equivalent per year in Québec; ○ Harnessing green hydrogen and other renewable energies, such as bioenergies, to replace fossil fuels in the industrial and transport sectors (particularly the heavy and long-distance transport sectors) and in building heating; ○ Employing innovation and research to strengthen dialogue and collaboration with key players in the research and innovation community; ○ Adding electricity generation capacity, particularly through Québec's wind power industry and other renewable energy sources; ○ Prioritizing the electrification of Québec's economy by electrifying areas that can feasibly be electrified given technical and economic realities. Electricity generation, and improving access to this important energy source, will also be covered; and ○ Sequestering the greenhouse gas emissions using carbon capture and storage technologies.
New Brunswick	New Brunswick's Climate Change Action Plan (CCAP) 2022-2027, lays out the next steps and opportunities to achieve their greenhouse gas reduction target for 2030, address the impacts of climate change and build resilience. Examples of actions that tackle hard-to-abate sectors include: • Supporting energy efficiency programs for large industry and explore opportunities for improvements; • Requiring large industry to report GHG emissions and submit GHG; • Administer New Brunswick's Output-Based Pricing System to drive GHG reductions and address the trade-exposed nature of New Brunswick's large industry reducing reliance on personal vehicles, continuing to support the adoption of electric vehicles, and using alternative forms of transportation; • Work to have six percent of new light-duty vehicles (e.g. passenger cars, sport utility vehicles, pickup trucks) sales be electric vehicles by 2025 and 50 percent by 2030, using incentives and programs to promote electric vehicles and support charging infrastructure in New Brunswick; and • Completing a Zero-emission Freight Strategy by 2024 that will include market research, fleet assessments, targets, and piloting clean fuel and charging infrastructure.
Nova Scotia	Nova Scotia's 2030 Clean Power Plan informs how the province aims to reduce its greenhouse gas emission in 2030, by adding more renewable energy and efficient electrification of the building and transportation sectors. Key actions to address hard-to-abate sectors are:

Jurisdiction	Main Decarbonizing Efforts
	- Decarbonizing light-duty passenger and public transit vehicles through electrification; - Decarbonizing electricity generation through rapidly growing electric vehicles (EVs) to bring new load, new grid management tools; - Leveraging the use of offshore wind in Nova Scotia after 2030, as well as hydrogen (potentially before 2030); - Replacing grey or brown hydrogen by generating electricity using the waste heat produced when green hydrogen is combusted. Such 'combined heat and power' systems can increase energy efficiency and save costs for industrial facilities; - Producing low-carbon value-added products using green hydrogen can be used as an input to create low-or zero-carbon alternatives to common industrial chemicals and fuels. These value-added products represent an opportunity to develop additional economic activity along the green hydrogen value chain.
Prince Edward Island	Prince Edward Island's 2040 Net Zero Framework provides target metrics and timelines for its path to net zero and outlines initiatives and targets to help address household emissions (the highest in Canada). Key actions to address hard-to-abate sectors are: - Targeting a 55 per cent to 65 per cent reduction of transportation emissions by 2040. This will be accomplished by transitioning light and medium duty vehicles to EVs more rapidly, and by converting medium to heavy duty vehicles to non-emitting clean fuels not yet commercially available such as biofuels and hydrogen. The province will also be looking to increase ride sharing and access to public transit to all areas of the province (rural and urban), among other initiative; - Transitioning residential and commercial buildings to be cleaner and more efficient by providing financial support and incentives will be offered to Islanders and businesses to switch to cleaner energy sources (including biomass); and - Increase carbon sequestration by maintaining forested areas, expanding wetlands, improving soil health and deploying better land management practices, among others. Importantly, the province is looking to invest in new technologies for carbon capture and storage.

NEG-ECP – Backgrounder – Resolution 45-1
Intergovernmental Affairs Secretariat

Issue: As part of this year's NEG-ECP Conference, Massachusetts (MA) has proposed that Premiers and Governors endorse Resolution 45-1 concerning the committee on energy and regional collaboration. This note provides an overview and analysis of the draft Resolution.

Background and Current Status:

- New England Governors and Eastern Canadian Premiers (NEG-ECP) have historically worked to foster regional collaboration as it relates to the green economy, and energy development and adequacy, including energy independence and the transition to clean and renewable energy.
- The Northeast International Committee on Energy (NICE) was formed to implement resolutions concerning all matters within the energy sector. NICE is the oldest standing NEG-ECP committee and is comprised of representatives from all 11 jurisdictions within the Northeast International Region. The committee has recently become inactive.
- As host of this year's NEG-ECP Conference, MA is proposing that Premiers and Governors endorse Resolution 45-1 concerning the committee on energy and regional collaboration. MA advises the Resolution aims to reconvene the committee to enhance collaboration in the energy sector. The Resolution would be signed by the co-chairs (MA and NL) at the end of this year's NEG-ECP Conference.
- Resolution 45-1 reaffirms Premiers' and Governors' commitments to working together to encourage policies that diversify energy supplies, promote energy independence through clean power deployment, enable mutually beneficial and responsible infrastructure development, leverage collaborative efforts to reduce consumer prices, and achieve a just transition to a clean energy future.
- Resolution 45-1 proposes that Governors and Premiers:
 - Request that NICE reconvene, and,
 - Request that NICE form working groups as needed to pursue regional collaboration and planning on the topics of transmission, offshore wind supply chain, and hard-to-decarbonize sectors, and,
 - Request that NICE coordinate as appropriate with the Climate Change Steering Committee, and report back to the Committee on progress in 2025.

Analysis:

29(1)(a)(i), 34(1)(a)

Prepared/Reviewed By: S. Snook / L. MacDonald (*in consult w/ET*)
Approved By: D. Macmillan

September 6, 2024

NEG-ECP – Backgrounder – Resolution 45-2

Intergovernmental Affairs Secretariat

Issue: As part of this year's NEG-ECP Conference, Massachusetts (MA) has proposed that Premiers and Governors endorse Resolution 45-2 concerning ecological connectivity, climate adaptation, and food security. This note provides an overview and analysis of the draft Resolution.

Background and Current Status:

- New England Governors and Eastern Canadian Premiers (NEG-ECP) have historically acted to address environmental protection issues and climate change, including through establishing greenhouse gas emission reduction targets and implementing regional Climate Change Action Plans.
- The NEG-ECP Committee on the Environment (COE) oversees this work and the work of several steering committees/working groups, including the Climate Change Steering Committee, Ecological Connectivity Working Group (ECWG), and the Adaptation Working Group (AWG). The COE has not met since 2020, and the initial mandate of some of these steering committees/working groups has ended without further direction.
- For instance, the ECWG was formed in 2016 to advance work on Resolution 40-3 concerning ecological connectivity, adaptation to climate change, and biodiversity conservation (Resolution available in this tab). The group had an initial mandate from 2016-2020. The Department of Fisheries, Forestry and Agriculture (FFA) represented Newfoundland and Labrador (NL) on this group.
- In addition, the AWG was formed in 2018 to advance work on Resolution 42-1 concerning adaptation, which sought to explore opportunities for regional collaboration on science, adaptation planning, and strategies to build resilience (Resolution available in this tab). The AWG had an initial mandate from 2018-2021. The Department of Environment and Climate Change (ECC) represented NL on this group.
- Both the ECWG and AWG created resolutions to extend their respective mandates; however, the resolutions have not been considered.
- As host of this year's NEG-ECP Conference, MA is proposing that Premiers and Governors endorse Resolution 45-2 concerning ecological connectivity, climate adaptation, and food security. MA advises the Resolution is broadly reflective of previous resolutions and aims to reinvigorate collaboration in these areas. The Resolution would be signed by the co-chairs (MA and NL) at the end of this year's NEG-ECP Conference.
- Resolution 45-2 reaffirms Premiers' and Governors' commitments to working together to address climate change, including through Resolutions 40-3 and 42-1. It also notes that climate change is impacting food security at global, regional and local levels by disrupting food availability, reducing access to food, and affecting food quality, and that changes in oceanic conditions impact seafood availability.
- Resolution 45-2 proposes that Governors and Premiers:
 - Reaffirm their support for Resolution 40-3 and Resolution 42-1; and,

- Direct the Committee on Environment to reconvene to evaluate progress made since effectuation of Resolution 40-3 and Resolution 42-1 and consider and further any additional steps needed to advance this collective work.

29(1)(a)(i), 34(1)(a)

Analysis:



Prepared/Reviewed By: C. Kenny / L. MacDonald / D. Macmillan (*in consult w/ECC and FFA*)
Approved By: P. Hearn, DM

August 26, 2024

EVENT SCENARIO

Event Name: NL Reception

Participants: Honourable Dr. Andrew Furey, Premier
Peter Miles, Chief of Staff
Melissa Royle Critch, Deputy Chief of Staff
Rod Etheridge, Senior Advisor
IGAS and IET Officials
NL Mission Delegates (see complete list in Annex A)

Event time: 7:00 p.m.

Date: Tuesday, September 10, 2024

Location: The Elk Room, 1st Floor, Courtyard Boston Downtown – 275 Tremont St., Boston, MA, 02116

Order of Events:

6:30 p.m. IET staff arrive to ensure preparations are complete.

7:00 p.m. NL delegates begin to arrive.

7:30 p.m. Premier Furey and team arrive.

7:45 p.m. Premier Furey addresses the NL delegates.

8:30 p.m. Reception concludes.

Event set-up:

- Podium and microphone set up. LCD screen displays tourism photos of NL.
- Staffed registration desk with lanyards and name badges
- Business casual attire
- Number of people attending: 43
- Standing reception with cocktail tables
- Hors d'oeuvres (including gluten free options), soft drinks, and water

Annex A: NL Delegate RSVP List

ORGANIZATION	PARTICIPANT	TITLE
Port of Argentia Inc.	Scott Penney	CEO
ASL Energy	Noah Zambilowicz	President
Compusult Ltd.	Paul Mitten	Vice President
NL Hydro	Jennifer Williams Deanne Fisher	CEO Director of Public Affairs, Customer Service & Stakeholder Relations
World Energy GH2	Gene Gebolys Cathy Doman Bob Schlatter	Director and Partner; CEO of World Energy in the US Chief Corporate Affairs Officer Chief Operations Officer
Memorial University	Dr. Tana Allen	Vice President-Research
College of the North Atlantic	Elizabeth Vincent Shirley Woodward	Vice President, International Associate Vice President, Campus Operations
The Launch at M.I.	Kelley Santos	Director of the Launch
eSonar	Gary Dinn	Chief Technology officer
EnergyNL	Ken Morrissey	Senior Advisor of Communications, Research & Policy
econext	Kieran Hanley	CEO
Oceans Advance	Shelly Petten	Executive Director
Angler Solutions Inc.	Chad Fowlow Bill Donovan Caron Hawco	Founder & Principal Consultant Senior Manager of Strategy & Growth Representative of Angler Solutions
OPAS Mobile	Vince Payne	CEO
Cahill	James Parmiter	Sr. Vice President of Strategy and Development
Vortex Energy	Paul Sparkes	CEO
PolyUnity Tech Inc.	Dan Brake	CTO
Nucliq Biologics Inc	Nikitha Kendyala	CEO
Avalon Holographics	Wally Haas Ron Collier Toni Jerrett Katie Joyce	Founder & President Director of Customer Development Director of Business Development Sales Engineer
Pan-Maritime Energy Services	Moya Cahill Jon Machin Mia Gaudet	CEO and President Director of Pan Maritime Project Engineer
Swiftsure	Deanne McCarthy	CEO <i>Note – Ms. McCarthy will be joining this reception as she is in Boston on separate business.</i>

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with Secretary Rebecca Tepper, Secretary of the Executive Office of Energy and
Environmental Affairs, State of Massachusetts
Wednesday, September 11, 2024 at 8:00am
Boston, MA 100 Cambridge Street

Attendees:

- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador
- The Honourable Rebecca Tepper, Secretary, Executive Office of Energy and Environmental Affairs, State of Massachusetts

34(1)(a)(i)

Purpose of the Meeting:

- As part of the mission to Boston, Premier Furey will be meeting with Rebecca Tepper, Secretary of the Executive Office of Energy and Environmental Affairs.

Background:

- Massachusetts is a significant energy importer as it consumes about 17 times more energy than it produces with an energy consumption breakdown of 90 per cent for residential, commercial, and transportation sectors and 10 per cent for the industrial sector, which includes agriculture.
- The states' total in-state electricity net generation in 2022 was half of what it was in 2010, in part because of a reduction in coal and petroleum-fired generation and the retirement of the state's only nuclear power plant.
- According to the U.S. Energy Information Administration, wind power accounted for one per cent of Massachusetts' total net generation in 2022. The state has 21 utility-scale wind power facilities with a combined 102 megawatts of generating capacity. Offshore winds in the east and onshore winds on Massachusetts' western mountain ridges provide the state with substantial energy resources. Further information on renewable energy sources in Massachusetts can be found in **Annex A**.
- On August 11, 2022, Massachusetts Governor Charlie Baker signed H. 5060, An Act Driving Clean Energy and Offshore Wind (the Act). The Act codifies the goal of procuring 5,600 megawatts of offshore wind generation by June 30, 2027. Additionally, the Act removes the price cap required for project developers submitting bids in solicitation for offshore wind generation, provides for the potential procurement of transmission infrastructure, and gives preference to proposals that demonstrate investments in local manufacturing, mitigation and avoidance of detrimental environmental and socioeconomic impacts, support for workforce training and diverse and equitable employment opportunities, and commitments to enter long-term contracts with businesses, nonprofits, or municipalities to purchase offshore wind energy.
- Massachusetts renewable portfolio standard (RPS) set a goal that 40 per cent of electricity sales be from renewables by 2030, with a one per cent increase required each year after that. The RPS applies to investor-owned utilities and retail electricity suppliers.

POTENTIAL DISCUSSION TOPIC: NL Electricity Supply and Interconnections

- Clean energy exports will assist other jurisdictions achieve their decarbonization goals but will not assist NL achieve GHG reductions.
- Churchill Falls (Labrador) Corporation Limited (CFLCo), a subsidiary of Newfoundland and Labrador Hydro (NLH), entered into a long-term power contract with Hydro-Quebec (HQ) in May 1969. The Churchill Falls Generating facility has a capacity of 5,428 megawatts (MW).
- NLH and HQ jointly own CFLCo, with NLH owning 65.8% of the common shares and HQ 34.2% of the common shares. This arrangement does not expire with power contract in 2041.
- HQ's generating fleet comprises 61 hydroelectric generating stations and 24 thermal plants with a total installed capacity of 37,200 MW. Its hydropower facilities also include 28 large reservoirs with a combined storage capacity of over 176 TWh, as well as 681 dams and 91 control structures.
- In addition, HQ relies on other sources including wind (3,508 MW installed), biomass/biogas (257 MW), independent small hydro plants (65 MW), and other suppliers (1,056 MW) (<https://www.hydroquebec.com/generation/generating-stations.html>). Wind is an intermittent source of power and according to NLH's Reliability and Resource Adequacy study, HQ applies a 30% capacity value to its wind fleet. This implies HQ's firm wind capacity is 1,052 MW.
- This public data indicates HQ has access to 39,700 MW of firm capacity, excluding CF.
- HQ operates 15 interconnections with neighboring markets: NL, Ontario, New Brunswick, New York State and New England. Additional interconnections with the U.S. (Quebec-Maine Interconnection and Hertel-New York Interconnection) are currently under study.

Options for New Hydro Development In Newfoundland and Labrador

- The undeveloped Gull Island site is one of three hydroelectric resource sites on the Churchill River in the Labrador portion of the Province. It is downstream from the generating station and upstream from the 824 MW Muskrat Falls hydroelectric station commissioned in late 2021.
- The Gull Island project was included in the Lower Churchill Project as Phase 2 with a planned capacity of 2,250 megawatt (MW) and an average energy output of 11.9 terawatt hours (TWh) per year.
- Significant technical work has been completed on the Gull Island project, including studies and an environmental assessment for generation; assessment of potential transmission routes; aboriginal agreement with Innu Nation; a water management agreement with Churchill Falls (Labrador) Corporation Limited (CFLCo); and extensive hydrological data and analysis.
- Traditional development approaches primarily envisaged bulk power export via Quebec transmission infrastructure to deliver power to external markets. Labrador's significant mining operations and mineral deposits such as iron, nickel, copper and rare earth minerals coupled with emerging trends in environmental sustainability, such as green hydrogen and green ammonium storage, suggest potential for value added uses of Gull Island renewable energy.
- 1,200+ MW of additional capacity can be developed at CF and other renewable energy resources on the Island have not been fully developed including smaller hydro, wind, and

biomass. The CF power contract expires in 2041 with its 5,428 MW of output, including NL Hydro's 225 MW Twinco Block and 300 MW recapture block.

Exports and Interconnections

- NL Hydro currently generates a surplus of energy annually above and beyond its contractual obligations to Nova Scotia utility Emera for the LCP and Hydro Quebec for CF. Surplus energy sales totaled 2.4 terawatt hours (TWh) in 2023 and 2.1 TWh in 2022. Hydro has estimated total annual surplus will be approximately 3 TWh in the near term, but subject to any changes in domestic demand and any future generation additions and retirements.
- NL Hydro exports surplus energy to New England up to 250 MW via a transmission reservation through Quebec to New York and up to 260 MW via a transmission reservation through NS to NB to Maine, subject to certain limitations and options.
- In 2017 in response to a Massachusetts Clean Energy RFP calling for approximately 9.45 terawatt hours of wind and/or hydro energy, Emera proposed a 1,000 MW HVDC subsea transmission link called the Atlantic Link from NB to Mass, but suspended the project in 2018 after failing to advance through the RFP process. On the RFP closing date July 27, 2017, Emera announced it had formally proposed the 1,000 MW line in response to the RFP and noted generation suppliers included Nalcor Energy with 1.1 terawatt hours of hydropower annually.

Analysis:

- There are a variety of challenges associated with cross board transmission between Canada and the US including:
 - **Regulatory Differences:** The regulatory frameworks in Canada and the United States differ significantly. In the U.S., the Federal Energy Regulatory Commission (FERC) oversees interstate electricity sales, while in Canada, provincial authorities regulate electricity. This discrepancy can lead to complex coordination and approval processes;
 - **Infrastructure Costs:** Building and maintaining the necessary infrastructure for cross-border transmission lines is expensive. This includes the costs of new transmission lines, upgrades to existing infrastructure, and ongoing maintenance. For example, the cost of constructing high-voltage transmission lines can be substantial, often running into billions of dollars;
 - **Grid Compatibility:** Ensuring that the grids are compatible in terms of frequency and voltage is a technical challenge;
 - **Environmental and Social Concerns:** Projects often face opposition due to environmental impacts and social concerns. For instance, the construction of new transmission lines can disrupt local ecosystems and communities, leading to resistance from environmental groups and local residents;
 - **Security and Resilience:** Protecting the interconnected grid from cyber threats and ensuring resilience against natural disasters is a continuous challenge. The interconnected nature of the grid means that a disruption in one area can have cascading effects across the network;
 - **Market Dynamics:** Differences in market structures and electricity pricing between the two countries can complicate cross-border electricity trade. For example, the U.S. has a more deregulated market compared to Canada, which can lead to challenges in aligning market operations and pricing mechanisms.

Potential Speaking Points:

- **My province is an energy powerhouse with a tremendous wealth and diversity of natural resources spanning mineral and hydro resources, to offshore oil and gas, to the wind, water, land, and a coastline that can sustainably produce the energy and fuel of the future. Right now, in our province, some of the world's first large scale land-based wind-to-hydrogen projects – true green hydrogen projects are underway.**
- **Our vast hydroelectricity resources include the 5,428-megawatt Churchill Falls generating station and associated transmission facilities in Labrador – one of the largest power plants in Canada. Most of the energy from Churchill Falls is sold to Hydro-Québec under a long-term contract that expires in 2041.**
- **As we look to the future and the expiry of the Upper Churchill contract in 2041, we are working now to ensure future electricity partnerships maximize long-term benefits from this tremendous asset.**

POTENTIAL DISCUSSION TOPIC: Green Hydrogen

- **On December 16, 2021, the Province launched a Renewable Energy Plan, titled '*Maximizing our Renewable Future*'.**
- **On February 23, 2023, the Province released a wind-hydrogen fiscal framework for Newfoundland and Labrador (Annex B). The framework is applicable to wind-hydrogen projects in the Province and ensure the Provincial Government receives benefits for the use of its resources from wind-hydrogen projects. The fiscal framework includes a Crown land reserve fee of 3.5 per cent annually of the market value of the reserved Crown Lands.**
- **To ensure long-term viability of the industry and positive financial impact, a progressive royalty, based on the residual value of water used in the hydrogen conversion process, is in place for green hydrogen projects in provincial jurisdiction. This royalty structure also allows investors fiscal predictability, as their royalty commitments will progressively grow along with their investment.**
- **Currently, there are four companies that are receiving Wind Application Recommendation Letters as a result of the call for bids for wind-hydrogen development in the Province. The construction, operations, and decommissioning phases of the four wind-hydrogen projects are anticipated to have an overall economic impact (GDP) of \$206.2 billion, and revenue to the Province of \$11.7 billion. Those companies are EverWind NL Company, Exploits Valley Renewable Energy Corporation, Toqlukuti'k Wind and Hydrogen Ltd. (ABO), and World Energy GH2 Inc.**
- **In the past two years, the Provincial Government has signed Memorandums of Understanding (MOUs) with the City of Hamburg and the Port of Rotterdam for the export of green hydrogen into the European Union. Additionally, an MOU with the Federal Government has been signed to enable the Province to take the regulatory lead on offshore wind projects within its inland bays to enable the development of offshore wind projects in the Province that will power the Province's economy forward.**

Analysis:

- **Both Canada and the United States are committed to achieving net-zero by 2050. With a developing wind-energy sector, the Province is well-positioned to assist in the green transition and provide renewable energy needs at home and abroad.**

- The Province's combination of abundant wind, water and land, a highly renewable grid, a skilled workforce, and a strategic location with numerous deep-sea, ice-free ports make the Province an optimal destination to produce and export renewable energy.
- With mutual aspirations when it comes to climate change goals, there is potential opportunity to work with partners in the United States to achieve mutual climate goals.

Potential Speaking Points:

- **Newfoundland and Labrador recognizes the importance of renewable sources of energy, including wind-energy, to power the global green transition.**
- **The Province has the conditions necessary along with the interest needed from stakeholders to significantly develop the renewable energy sector in the Province to accomplish our goals of being net zero by 2050.**
- **With our mutual climate goals, Newfoundland and Labrador is in a position to assist our close and long-standing partners on the eastern seaboard in achieving objectives for a prosperous and renewable energy future.**
- **Massachusetts, and Boston in particular, is home to various companies operating in the wind-hydrogen sector. Newfoundland and Labrador's developing wind-hydrogen sector represents an opportunity for companies in Massachusetts to expand their base and collaborate with like-minded companies in the Province.**

POTENTIAL DISCUSSION TOPIC: Offshore Wind (OSW) Sector

- On December 2023, NL and the Government of Canada signed a Memorandum of Understanding (MOU) on offshore renewable energy, enabling NL to take the regulatory lead on OSW projects within its inland bays to enable the development of OSW that will power the province's economy forward. The MOU also outlines the framework for NL to administer land tenure and life-cycle regulation, including revenues for offshore renewable energy projects within provincial bays.
- Federal and provincial governments have also been spearheading legislative and regulatory processes needed for this industry, including the establishment of a joint management regime by amending the **Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act** and **Canada-Newfoundland and Labrador Atlantic Accord Implementation Act** ("The Accord Acts"), the commencement of Regional Assessments (RA) for both offshore NL and NS, as well as the development of federal Offshore Renewable Energy Regulations.
- On April 5, 2022, NL and the Government of Canada announced their intention to rename the **Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)** to the **Canada-Newfoundland and Labrador Offshore Energy Board (C-NLOEB)** to better reflect its new mandate to include the regulation of offshore renewable energy development, such as OSW and clean hydrogen. To implement these changes, the federal and provincial governments committed to amend their respective versions of the **Canada-Newfoundland and Labrador Atlantic Accord Implementation Act**.

- Also in April 2022, the Minister of Environment and Climate Change (ECCC) initiated a Regional Assessment (RA) of OSW development in NL and NS to help inform future project-specific federal impact assessments and decisions for OSW in these areas. There will be two separate RAs with some aspects shared. To date, the NL Committee has conducted over 60 meetings and engaged with nearly 700 individuals, including Indigenous peoples, fish harvesters, ocean users, municipal leaders, federal and provincial agencies, environmental organizations, research groups and OSW developers.

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- The RA Committee for OSW in NL released an interim report in March 2024, providing early recommendations and a preliminary map of potential areas for development. The committee identified preliminary areas where OSW development may be of greatest interest to developers and where it may avoid/minimize potential impacts. The Committee also identified information gaps (e.g., data gaps).

Analysis:

- While Canada does not currently have any installed OSW capacity, the federal government has indicated its intent to work with the governments of NL and NS to support OSW development, including:
 - conducting federal regional assessments of OSW development for offshore areas near both provinces, to help inform future project-specific federal impact assessments and decisions for potential OSW projects in those areas (see Annex C for maps); and,
 - advancing Bill C-49 to amend the Atlantic Accord Acts to expand the current joint management regime for offshore petroleum resources to include offshore renewables. As of June 6, 2024, the Senate completed its second reading and the bill has been referred to the Senate Committee on Energy, the Environment and Natural Resources.
- Additionally, various Canadian companies (e.g., Northland Power Incorporated, Enbridge, and other Canadian financial institutions like Canadian Imperial Bank of Commerce (CIBC), Bank of Montreal (BMO), and National Bank), and port authorities have been involved in the development of the US OSW sector's supply chain, as suppliers of:
 - materials for wind turbine and transmission line construction (e.g. critical minerals, steel);
 - engineering and technical services in the ocean science and technology and sectors (e.g. remote sensing, ice monitoring, sub-sea imaging and robotics, wind resource modelling); and,
 - OSW logistics (e.g. the Port of Argentia serving as a marshalling port for OSW turbine foundations, known as "monopiles," en route to OSW projects in the eastern US).
- The US National Renewable Energy Laboratory is undertaking work in several research areas related to OSW supply chains, including: 1) developing a trained, educated, and safe OSW workforce; 2) supporting a domestic supply chain and manufacturing workforce; and, 3) building a domestic supply chain and ports system for deployment.
- Similar work is also being undertaken in Canada, including the following initiatives on which the Department of Industry, Energy and Technology (IET) has been engaged to provide provincial input and context:

- Net Zero Atlantic will conduct a port infrastructure study in 2024, with the intention of assessing port feasibility to support OSW requirements and establish an understanding of potential port investments needed to meet demand; and,]
- In July 2024, Marine Renewables Canada (MRC), with funding support from the Atlantic Canada Opportunities Agency (ACOA), NS Department of Natural Resources and Renewables, and PEI Energy Corporation, requested proposals from third-party consultants to lead a project that will help support an overall goal of developing a Canadian OSW supply chain and further growing capacity in the onshore wind supply chain in time to meaningfully support the installation of future OSW and onshore wind projects that will be in the pipeline – onshore projects are already in queue and the OSW pipeline will begin with NS's leasing targeted for 2025-2026. NL considerations and developments are included in the scope of this regional study (e.g., planned onshore wind-hydrogen projects; ongoing federal-provincial collaboration to expand the joint management regime for offshore petroleum resources to include offshore renewable energy; and, NL's renewable energy policy framework).
- IET supports OSW supply chain development through key investments/initiatives, including:
 - releasing a Critical Minerals Plan aimed at unlocking the full potential and value of the Province's critical mineral resources and their role in supporting the development of renewable energy, including OSW supply chains;
 - a \$15 million investment in the Port of Argentina's Multi-Tenant Docking Infrastructure Project under IET's Innovation and Business Development Fund, to capitalize on emerging opportunities in the offshore and renewable energy industries;
 - and, issuing a Wind-Hydrogen Hub Application Recommendation Letter to North Atlantic Refining Limited, which will allow that company to pursue Crown lands for a project to upgrade and expand its existing infrastructure and operations in Come by Chance to better of service and support the developing wind-hydrogen sector.
- In August 2022, the US signed the Inflation Reduction Act (IRA), which provides incentives for investing in offshore wind energy and the domestic supply chain. It is the single largest investment in climate and energy in American history. Within its energy and climate provisions, IRA appropriates approximately \$11.7 billion in total for the Loan Programs Office (LPO) to support issuing new loans. These amounts increase loan authority in LPO's existing loan programs by approximately \$100 billion.
- 29(1)(a) [REDACTED] Canada has taken a market-driven approach to emissions reduction. In contrast, the US has chosen to rely heavily on new industrial subsidies to reduce its emissions. The IRA has introduced subsidies for the production of clean technologies and clean products. The IRA's federal clean growth incentives are officially estimated at US\$369 billion by the US Congressional Budget Office. As a result of these uncapped subsidies, private sector estimates suggest that the IRA could mobilize as much as US\$1.7 trillion of private and public investments in the US clean economy over ten years.
- The centerpiece of Canada's federal Budget 2023's economic investments included a series of new green investment tax credits intended to drive new clean electricity generation projects including hydrogen and hydroelectricity, committing a total of \$21 billion over 5 years, moving to \$80 billion by 2034. However, the tax credits have been slow to roll out, with the first investment tax credits being unveiled on June 21, 2024. These included the Clean Technology

Investment Tax Credit, a refundable tax credit for capital invested in the adoption and operation of new clean technology property (including wind) in Canada from March 28, 2023 to December 31, 2034.

- According to the federal government, as the US's closest trading partner—and with economies so closely intertwined—Canada stands to benefit from the IRA, both from the accelerated pace of technological development, and from new opportunities in North American supply chains for clean energy and technologies.

Potential Speaking Points:

- **I commend the State of Massachusetts and other partners undertaking steps to transition to offshore wind. The positive and proactive steps taken give us hope for a net zero future.**
- **Newfoundland and Labrador's offshore wind sector is less mature and still developing. The Province has highly sustained wind speeds, land and sea resources, which lend themselves well to the developing industry.**
- **We are currently collaborating with the Federal Government to pass Bill C-49. This Bill will set the regulatory framework for offshore wind projects in the Province and can potentially give companies the confidence to do business in the Province.**
- **Newfoundland and Labrador has a strong ocean-tech sector to assist potential companies in establishing and operating offshore wind energy projects.**
- **The Marine Institute in St. John's is a world-leader in marine technology training. They provide many resources and world-class educators and students that Massachusetts companies could potentially utilize when conducting offshore wind projects in the Province.**

Prepared/Reviewed By: M. Janes in consultation with IET

Approved By:

**Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs,
State of Massachusetts**



In 2015, Rebecca Tepper joined the Office of Attorney General Maura Healey, first serving as Deputy Chief of EEB and Chief of AG Healey's Energy and Telecommunications Division before being appointed Chief of the Energy and Environment Bureau. During her time at the AG's office, she advised on energy policy and served as the state's ratepayer advocate before regulators and courts. Prior to joining the AG's Office, Tepper was General Counsel to the Massachusetts Department of Public Utilities (DPU), serving as the chief legal advisor and overseeing all DPU adjudicatory and rulemaking proceedings. Tepper also served as Director of the Massachusetts Energy Facilities Siting Board and represented the state on the Eastern Interconnection States' Planning Council. Before working for the Commonwealth, Tepper was a partner at Rubin and Rudman in Boston, representing developers throughout the Northeast in siting, permitting, financing and contracting of renewable, distributed generation and conventional energy facilities. A graduate of Boston University School of Law and the University of Wisconsin, Tepper resides in Lexington with her husband and twin sons.

Annex A**Information on Massachusetts Renewable Energy Sources**

- Petroleum-fired generation has decreased from more than 20 per cent of the state's net generation in 2021 to about 3 per cent in 2022.
- Solar arrays and rooftop panels contribute the largest share of Massachusetts' renewable generation and are found statewide. In 2022, nearly one-fifth of the state's total net generation, including small-scale generation, came from solar power, and the state ranked 10th in the nation in the amount of electricity generated from solar photovoltaic (PV) panels. As of mid-2023, the state had about 3,900 megawatts of installed solar capacity.
- In 2022, renewable energy provided almost twice as much power as it did in 2015. With overall declines in the state's generation from all fuels, the share of the state's total generation from renewable resources more than doubled between 2015 and 2022. The largest source of renewable energy in the state came from solar power, and the state ranked 10th in the nation in the amount of electricity generated from solar photovoltaic panels.
- Conventional hydroelectric power and biomass supply almost equal amounts of power. In 2022, hydropower was the second-largest source of in-state renewable electricity and accounted for about four per cent of the state's total net generation. There are currently 31 hydroelectric power plants in Massachusetts and two hydroelectric pumped storage facilities.
- Biomass, primarily from urban waste, fuels several power plants in the eastern half of the state. Massachusetts biomass power plants had a total of about 278 megawatts of capacity as of mid-2023, and those fueled with municipal solid waste accounted for 81% of the state's total capacity at biomass plants.
- Natural gas fueled two-thirds of Massachusetts total in-state electricity net generation in 2022. 30 per cent of Massachusetts' total in-state generation came from renewable resources, with the largest share coming from solar energy.

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with Climate Chief Melissa Hoffer
9am Wednesday, September 11, 2024

Participants:

The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador
Melissa Hoffer, Climate Chief, Government of Massachusetts

Purpose of Meeting:

- This meeting provides an opportunity to discuss common challenges related to climate change and how Newfoundland and Labrador is positioned to aid decarbonization.

Background:

- On the first full day of her administration, Governor Maura Healey signed an Executive Order establishing the position of Climate Chief - becoming the first US state to create such a cabinet-level position - and creating an Office of Climate Innovation and Resilience (OCIR) within the Governor's Office. The OCIR is charged with advancing Massachusetts' climate innovation, mitigation, adaptation and resilience policies.
- Melissa Hoffer has been appointed as Massachusetts' first Climate Chief, serving as the principal policy advisor to the Governor on all matters relating to climate and leading the development and implementation of policy across executive department agencies and offices.
- In October 2023, Climate Chief Hoffer issued comprehensive recommendations to advance MA's climate goals that can be summarized under the following broad categories:
 - Funding - Agencies should find creative ways to fund clean energy, decarbonization, and resilience projects. Massachusetts needs to analyze the investments required to meet greenhouse gas reduction goals and climate adaptation plans. They should also explore policies that reduce emissions and generate revenue for further decarbonization. The Division of Insurance should manage climate risks for the insurance market.
 - Capital Investment, Asset Management, Grants, Procurement, and Environmental Justice - State spending should support emissions reduction goals. The administration should formalize a protocol to evaluate capital projects for alignment with these goals. Recommendations include focusing on environmental justice, electrifying state-owned vehicles, using grants to boost decarbonization efforts, and updating procurement practices to disclose emissions and climate risks.
 - Emissions Mitigation - To achieve Net Zero emissions by 2050, the report suggests reviewing the use of funds for building decarbonization, establishing a decarbonization clearinghouse, issuing annual climate progress reports, reducing aviation emissions, and ensuring new housing and schools meet electrification and decarbonization standards.
 - Public Health and Resilience - Massachusetts must address the impacts of climate change on communities, ecosystems, and infrastructure. Recommendations include creating consistent climate guidance, developing a Coastal Resilience Plan, investing in energy-resilient infrastructure like microgrids, and preparing for climate impacts such as flooding, heat, and health issues.

- Workforce - Massachusetts needs to build a workforce for the clean energy transition and community resilience. This includes creating a cross-agency plan with measurable goals and establishing a Climate Service Corps to raise awareness, engage residents, and develop career paths in clean energy and resilience.
- Economic Development - The state should develop a clean energy and climate economic development plan to create new jobs and boost long-term economic growth. An investment strategy should ensure climate tech companies have access to the capital needed to innovate and grow.
- Education - Efforts should be made to educate communities, including students, about the climate crisis. This includes promoting climate science understanding and helping communities deploy climate solutions. The administration will support the adoption of a K-12 climate change curriculum in public schools.
- In December 2023, the OCIR released the Massachusetts Climate Report Card which notes that MA and states throughout the region “face significant challenges deploying clean energy at the scale and pace necessary.” The Report further notes that “cleaning the power sector is the linchpin of all other GHG reduction strategies: without substantial additions of clean energy, the transition to electric vehicles and building heating and cooling will not result in adequate GHG reductions. In addition to finding ways to improve and expedite the siting, permitting, and interconnection of new clean energy generation, distribution and transmission, optimally managing and mitigating new electric loads will be essential to efficiently integrate new sources of electric infrastructure and avoid building some entirely.”
- According to the Report Card:
 - 48.2% of the state's electricity consumption was met with in-state and out-of-state clean sources in 2021.
 - There were 113 MW of in-state wind capacity in 2022.
 - There were 3,325 MW AC of in-state solar capacity in 2022.
- The Report Card also cites the following challenges to power decarbonization:
 - Macroeconomic forces, such as high inflation, interest rates, and ongoing supply-chain challenges are increasing project costs, and causing several offshore wind projects on the east coast to terminate existing power purchase agreements.
 - Revenues that can be earned through existing energy market structures are not certain enough to facilitate long-term financing of new generation outside of state-run procurements for clean energy.
 - Insufficient grid capacity is preventing large volumes of clean energy projects from coming online and new grid infrastructure can take up to ten years to develop.
 - Uncertainties around cost allocation, or the amount each party pays for new grid infrastructure, is delaying interconnection and negatively impacting project finance.
 - Restrictions on project siting and lengthy permitting battles are slowing project completion.
 - Transmission constraints make it challenging to bring new generation capacity online, particularly for onshore and offshore wind.
 - Utilities are incentivized to build new infrastructure as opposed to optimizing use of the existing electric grid, managing demand, or encouraging distributed resources.
 - Electrifying the transportation and buildings sectors will increase electric load, possibly by as much as 50% by 2035 and by more than 100% by 2050.

- In March 2024, MA released its Priority Climate Change Action Plan which outlines the following priority measures:

Sector	Measure
Transportation	Adopt Zero Emission Medium- and Heavy-Duty Vehicles
	Adopt Zero Emission Light-Duty Vehicles
	Increase Alternatives to Personal Vehicle Use
Buildings	Increase Building Efficiency
	Decarbonize Building Heating Systems
Power	Develop New Renewable Energy Facilities
	Implement Building-Scale Renewables
	Maximize Utilization of Clean Energy
Natural and Working Lands	Implement Nature-Based Solutions
Waste	Reduce Organic Waste Through Composting

Options for New Hydro Development

- The undeveloped Gull Island site is one of three hydroelectric resource sites on the Churchill River in the Labrador portion of the Province. It is downstream from the generating station and upstream from the 824 MW Muskrat Falls hydroelectric station commissioned in late 2021.
- The Gull Island project was included in the Lower Churchill Project as Phase 2 with a planned capacity of 2,250 megawatt (MW) and an average energy output of 11.9 terawatt hours (TWh) per year.
- Significant technical work has been completed on the Gull Island project, including studies and an environmental assessment for generation; assessment of potential transmission routes; aboriginal agreement with Innu Nation; a water management agreement with Churchill Falls (Labrador) Corporation Limited (CFLCo); and extensive hydrological data and analysis.
- Traditional development approaches primarily envisaged bulk power export via Quebec transmission infrastructure to deliver power to external markets. Labrador's significant mining operations and mineral deposits such as iron, nickel, copper and rare earth minerals coupled with emerging trends in environmental sustainability, such as green hydrogen and green ammonium storage, suggest potential for value added uses of Gull Island renewable energy.
- 1,200+ MW of additional capacity can be developed at CF and other renewable energy resources on the Island have not been fully developed including smaller hydro, wind, and biomass. The CF power contract expires in 2041 with its 5,428 MW of output, including NL Hydro's 225 MW Twinco Block and 300 MW recapture block.

Offshore Wind

- Vineyard Wind is an ongoing 806 MW offshore wind project 14 miles off the coast of Martha's Vineyard, MA. It is a joint venture of Avangrid, Inc. and Copenhagen Infrastructure Partners (CIP), through its affiliate Vineyard Offshore. The project began construction in 2022 and is MA's first offshore wind project. SouthCoast Wind is developing another potential 2,200 MW offshore wind project located over 30 miles south of Martha's Vineyard and 20 miles south of Nantucket. Pending state and federal approvals, construction is anticipated to begin in 2025.
- On February 22, 2024, MA announced that Vineyard Wind 1, that project's first phase, delivered power to the New England electric grid and has five turbines of the 62 planned operating at full capacity generating 68 MW of power, enough to power 30,000 homes in Massachusetts. MA anticipates the full project will supply power to 400,000 homes and businesses in the state.
- In 2022, the Federal and Provincial Governments announced their commitment to expand the mandate of the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) to include offshore renewables (e.g., offshore wind). Amendments to the Atlantic Accord Act have passed third reading in the House of Commons and are at committee in Senate.
- In March 2023, the Federal and Provincial Governments launched a Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. The goal of the Regional Assessment is to provide information, knowledge and analysis regarding future offshore wind development activities in the Study Area and their potential effects, in order to inform and improve future planning, licencing and impact assessment processes for these activities in a way that helps protect the environment and health, social and economic conditions while also

creating opportunities for sustainable economic development. The Regional Assessment committee submitted its interim report on March 22, 2024. The final report is anticipated in January 2025.

Hydrogen

- Six companies are pursuing wind-hydrogen projects in Newfoundland and Labrador: EverWind, Exploits Valley Renewable Energy Corporation (EVREC), Toqlukuti'k Wind and Hydrogen (ABO), World Energy GH2 (WEGH2), Pattern Energy and North Atlantic Refining Limited (NARL). These projects are largely to generate green hydrogen to make green ammonia and other hydrogen derivatives for export.
- NARL is pursuing its project to upgrade, expand and leverage its existing infrastructure and operations as a Green Energy Hub capable of servicing and supporting the developing wind-hydrogen sector while establishing a wind energy project to power the production, storage and export of Liquid Organic Hydrogen Carriers.
- Pattern Energy's project is on private land at the Port of Argentia. In addition to the Pattern Energy project, the Port of Argentia is serving as an offshore wind turbine marshalling area to support the transshipment of wind-turbine components (e.g., foundations) for a confidential US offshore wind project.
- Based on their plans, the six wind-hydrogen projects will have a total capital spend of \$72 billion, will have a total wind installed capacity of 18.2 GW and total hydrogen electrolyzer capacity of 13.7 GW, producing about 1 million tons of hydrogen and 4.7 million tons of ammonia annually subject to securing offtaker agreements.
- In May 2024, the Province released its Hydrogen Development Action Plan, which outlines several actions pertaining to hard-to-decarbonize sectors, including:
 - pursuing opportunities for the local green hydrogen supply chain to support the industrial, mining, electricity generation and marine and heavy-duty vehicles sectors;
 - helping industry identify opportunities and provide supports including through the Department of Environment and Climate Change programming, to reduce GHG emissions by transitioning their fossil fuel powered operations to renewable energy;
 - continuing to work with the Federal Government on implementing Canada's Hydrogen Strategy, as well as a Collaborative Framework for the Regional Energy and Resource Table, which includes initiatives on green hydrogen, electrification, and critical minerals;
 - exploring opportunities to develop a hydrogen hub; and,
 - working with the other Atlantic Canadian provinces to facilitate the establishment of a green hydrogen industry in the region.
- The Provincial Government has also announced several investments/initiatives that could help support hydrogen applications in hard-to-decarbonize sectors. These initiatives can assist with reducing GHG emissions in the province as well as assisting other jurisdictions decarbonize through clean energy exports. These include:
 - launching the Green Transition Fund, a \$100-million program providing financial support to businesses, organizations, post-secondary institutions, and industry associations to assist with the province's transition to a green economy;
 - introducing a Green Technology Tax Credit for companies in the Province that invest in equipment for green activities (e.g., energy conservation, clean energy generation, and efficient use of fossil fuels); and,

29(1)(a)

- administering a Crown Lands Call for Bids for Wind Energy Projects, which provided opportunities for wind-hydrogen developers to obtain exclusive rights to pursue their projects on certain Crown lands.

- Several New England states (i.e. Connecticut, Maine, Massachusetts, Rhode Island, and Vermont) were involved in a proposed Northeast Regional Clean Hydrogen Hub, which was not selected for US Clean Hydrogen Hubs funding. The proposal included 12 projects to advance clean electrolytic hydrogen production, consumption, and infrastructure projects, for hard to decarbonize sectors, including transportation and heavy industry.
- Resolution 42-2 on Energy Security and Affordability, passed at the 2018 Conference of New England Governors and Eastern Canadian Premiers, included references to reducing the use of diesel generation systems in remote regions – a key issue for NL.
- IET continues to work with Indigenous governments and organizations with respect to their renewable energy priorities for isolated diesel communities (e.g. Nunatsiavut Government's Nain Wind Microgrid project).

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Potential Speaking Points

- **Newfoundland and Labrador has abundant resources and other competitive advantages that support the large-scale production of green hydrogen in the province. We have ample industrial water supply eliminating the need for water desalination; on and offshore wind speeds in excess of 9 m/s, ideal for utility scale wind power generation; and we are adjacent transatlantic shipping routes.**
- **Because of our significant hydroelectric capacity, our electrical grid is already over 90 per cent renewable. We are developing our wind-hydrogen industry to largely serve export markets and help the world decarbonize with green hydrogen and green ammonia.**
- **Subject to final project designs and offtaker agreements, the six wind-hydrogen projects underway onshore will have a total wind installed capacity of 18.2 GW and total hydrogen electrolyzer capacity of 13.7 GW, producing about 1 million tons of hydrogen and 4.7 million tons of ammonia annually for export.**

- **We are also focusing on the offshore and in cooperation with the Government of Canada are expanding the mandate of our offshore energy regulator to include offshore renewables, such as offshore wind. A Regional Assessment of Offshore Wind Development in Newfoundland and Labrador is underway.**
- **Our Port of Argentia, the location of a former strategically important US military base, is already acting as a service centre for the US offshore wind sector.**
- **The province would be interested in exploring further potential cooperation with your state with respect to renewable energy.**

Prepared by: M. Janes in consultation with IET

Approved By: P. Hearn, DM

September 5, 2024

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with Consul General of Canada In Boston, United States, the Honourable
Bernadette Jordan
Wednesday, September 11, 2024 at 12 p.m.
Canadian Consulate, 3 Copley Place

Attendees:

- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador
- The Honourable Bernadette Jordan, Consul General of Canada in Boston, United States (Annex A)

Purpose of the Meeting:

- As part of the trade mission to Boston, Premier Furey will meet with the Consul General to Canada in Boston, United States (U.S.), the Honourable Bernadette Jordan. This meeting will offer the Premier an opportunity to discuss establishing a Boston office and recent trade developments.

Potential Discussion Topic #1: Boston Office

- In April 2024 Newfoundland and Labrador decided to open a Provincial Office in Boston, Massachusetts by availing of Global Affairs Canada's (GAC) co-location model. This approach is widely used among PTs, and sees jurisdictions enter a Memorandum of Understanding with GAC where the co-located jurisdiction funds operations that are extensively supported by GAC and housed within Canadian missions abroad.
- GAC signed the MOU with NL in August 2024 allowing for approval by GAC's Committee on Representation Abroad in September 2024, and for the subsequent creation of two positions for locally engaged staff (LES) to support the 'Canada-based staff' (CBS) that will be appointed by the Province to lead the Boston office (Annex B).
- The office will be announced at the NL reception being held at 6pm on September 11, 2024 in Boston.

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Analysis:

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- While QC maintains a presence in the region, no other PT is co-located at the Boston Consulate.

Potential Speaking Points:

- I would like to thank you and your staff for all the support provided to help us in preparing to come join you here.
- I understand it will still be several months before we're fully up and running, but we intend to active in the region as soon as possible.

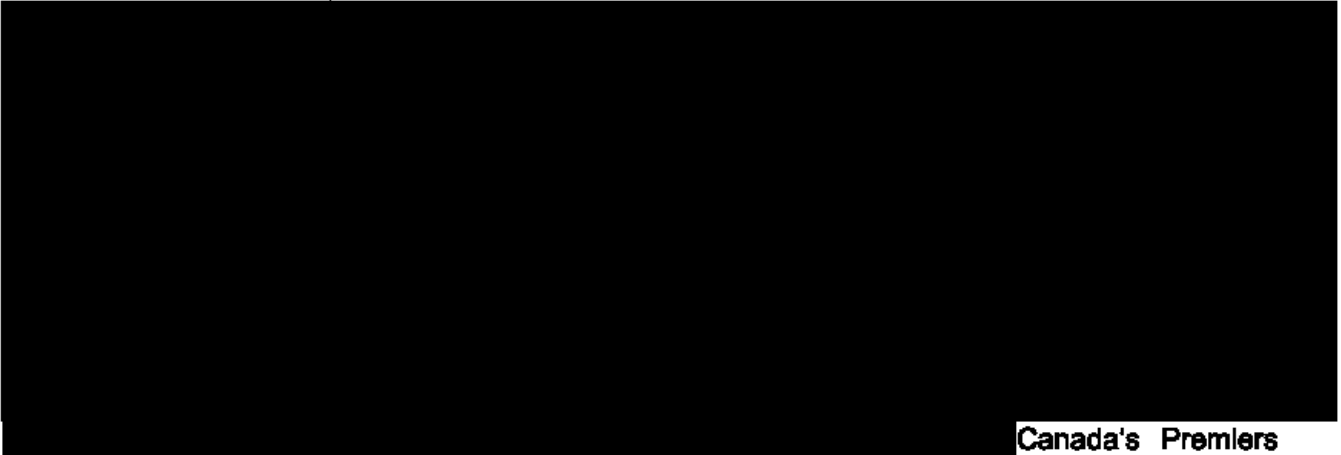
Potential Discussion Topic #2: Canada – U.S. Relations

- The trading relationship between Canada and its biggest trading partner, the U.S., is formally governed by the Canada-U.S.-Mexico Agreement (CUSMA). CUSMA contains a provision which requires a formal review of the agreement every 6 years with the initial review in 2026.
- In January 2024, the federal government launched the "Team Canada Approach to U.S. Relations" in anticipation of the November 2024 Presidential Election. Led by federal ministers, The Honourable Mary Ng, Minister of Export Promotion, International Trade and Economic Development; the Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry, the goal of the strategy is to engage a full-court press on Canadian interests with all levels of government in the U.S., as well as business and union leaders.
- On August 21, 2024, GAC launched its initial call for public consultations to gather Canadians' views on CUSMA. Minister Ng has written a letter to the Premier to receive "views about CUSMA and [to learn] about Newfoundland and Labrador's specific interests, priorities and potential sensitivities". The Province's response is due October 31, 2024.
- The Prime Minister held a Cabinet retreat in Halifax, Nova Scotia, from August 25 to 27, 2024. The retreat focused on the federal government's work to "strengthen the middle class, grow the economy, and deliver fairness for every generation". The retreat agenda included a discussion on ways to strengthen Canada's relationship with the United States of America, anchored by the federal government's Team Canada engagement strategy.

Analysis:

- While the Democratic and Republican candidates for the upcoming U.S. Presidential Election differ significantly on social issues, both are expected to maintain the current protectionist trade policy stance taken by the United States. Examples of this policy stance include recent amendments to Buy American Act and Buy America regulations requiring increased government procurement of U.S. goods and services to which Canada has no carve outs at this time.
- It is notable that Republican candidate, former President Donald Trump, has indicated a desire to enforce a minimum 10% tariff on all global imports while Democratic candidate, current Vice-President Kamala Harris, has criticized this proposed tariff and framed it as a "Trump Tax" that will raise prices for families. 29(1)(a), 34(1)(a)(i)

- 



Canada's Premiers recognized the significance of Canada-U.S. relations and are focusing on raising awareness of PTs in the U.S., including planning a mission to the U.S. early in 2025 following the presidential inauguration.

Potential Speaking Points:

- **Newfoundland and Labrador is committed to the Team Canada approach to maintaining and enhancing Canada-US relations.**

Prepared/Reviewed By: R. Squires / J. Dredge / M. Janes

Approved By: P. Hearn

September 5, 2024

ANNEX A**Biographies****The Honourable Bernadette Jordan, Consul General of Canada In Boston, United States**

Bernadette Jordan (BA [Political Science], St. Francis Xavier University, 1984) was raised on the South Shore of Nova Scotia in a small fishing community. Her love of her community and desire to see it grow and thrive started at a young age when she became a community volunteer while in junior high school.

Bernadette started her working career in the field of economic development and built an extensive network. She then went on to a career in community news, spending almost 12 years as the special projects manager for the award-winning newspaper publisher Lighthouse Publishing. She received multiple awards in the areas of advertising, promotion, business campaigns and volunteerism. During this time, she also served as the president of the Atlantic Canadian Newspapers Association and as a member of the board of the Canadian Community Newspapers Association.

In 2006, Bernadette left community news to take on a new role in fund development with the Health Services Foundation of the South Shore. Her work helped the foundation raise millions of dollars for health care in her community. She was an active member of the Association of Fundraising Professionals, received their Rising Star Award and led a campaign that won their Ten Star Chapter Award.

In 2015, Bernadette ran for and won the federal riding of South Shore–St. Margarets by the largest margin ever in the riding and became the first woman to hold the seat. In her first years in government, she was the chair of the Atlantic Liberal Caucus, a member of the standing committees on the Status of Women and on the Scrutiny of Regulations, and the chair of the Standing Committee on Fisheries and Oceans. During that time, she introduced a motion calling on the government to deal with abandoned and derelict vessels in Canada's waterways, which led to legislation passed in 2018 to address this ongoing problem. She was then appointed parliamentary secretary to the minister of democratic institutions. In 2019, she became the first minister of rural economic development. Later that same year she became minister of fisheries, oceans and the Canadian Coast Guard. This made Bernadette the first woman elected in Nova Scotia to hold a seat at the Cabinet table.

After leaving politics In 2021, Bernadette went back to her fund development roots, accepting a position as the national director of philanthropy with Shelter Movers, a volunteer-powered charity providing free moving and storage services to people, primarily women and children, leaving abuse.

Bernadette and her husband, David, live on the beautiful South Shore. They have raised 3 children and enjoy the beach, kayaking and their dog Alfie. She continues to volunteer with organizations in her community. Bernadette was recently the recipient of the Queen's Platinum Jubilee Medal (Nova Scotia) for service to Nova Scotia and Canada. In her spare time, Bernadette is a fabric artist and speaker at many events involving women in leadership.

ANNEX B

Government of Newfoundland and Labrador's Trade Policy and Promotion Program

Mandate: To advance the trade policy interests of Newfoundland and Labrador while promoting its economic opportunities and assets in strategic markets abroad.

The Role of Canada-Based Staff: They will lead all advocacy efforts and manage any locally-engaged staff deemed necessary to the success of the office and will engage in a range of activities including, but not limited to:

- Strengthening and building new networks to provide economic opportunities for the Province;
- Raise the international profile of the Province through strategic relationships with a variety of stakeholders both in the foreign office location and in other parts of the country;
- Act as a gateway for Newfoundland and Labrador companies seeking to pursue opportunities in-market;
- Attract Foreign Direct Investment into Newfoundland and Labrador;
- Support research and development agreements between the Province and international organizations;
- Advocate on behalf of Newfoundland and Labrador interests and stakeholders;
- Provide strategic advice to the Minister of Intergovernmental Affairs that will serve to advance the interests of the Province abroad; and
- Provide strategic advice to the Intergovernmental Affairs Secretariat on current and emerging issues/developments regarding in-market economic, social, trade, and political matters.

The Role of Locally-Engaged Staff: These individuals will be vital supporting members of Canada-Based Staff. They will ensure administrative excellence and operation of the office while providing an in-depth understanding of the local market. The locally-engaged staff can vary significantly depending on the location and needs of the office and will engage in a range of activities including, but not limited to:

- Serving as the central point-of-contact for the office and maintaining the network of office contacts, suppliers, and vendors;
- Scheduling and coordinating meetings among other administrative duties such as: making travel and accommodation arrangements, drafting requisite correspondence and taking meeting notes, making photocopies and managing files, and ensuring the office is properly supplied, maintained, and general office processes are adhered to;
- Monitoring budget expenditures and drafting budget correspondence as needed;
- Fills any administrative reports required by the Government of Newfoundland and Labrador and liaises with Government staff as needed; and
- Coordinating and operating as a lead planner for any events, meetings, and so forth.

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with GE Vernova
Wednesday, September 11, 2024 at 10:30 a.m.
58 Charles Street, Cambridge, MA

Participants:

- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador
- Ms. Heather Chalmers, President Growth Markets
- Ms. Carolina Gallo, LLB Vice President Government Affairs, Canada

Purpose of the Meeting:

- As part of Premier's meetings in Boston, Massachusetts (MA) representatives from Boston-based GE Vernova (GEV) will meet with Premier Furey to discuss the company's strategic imperatives and interest in Newfoundland and Labrador (NL). Biographies in **Annex A**.
- This meeting is in follow-up to the Premier's meeting with Ms. Heather Chalmers, GEV's President of Growth Markets, and Ms. Carolina Gallo, GEV's LLB Vice President Government Affairs, Canada, held in St. John's in January 2024. During GEV's visit to the province, Ms. Chalmers and Ms. Gallo met with local industry players aligned with GEV's business interests, including the CEO of Exploits Valley Renewable Energy Corporation, the CEO of NL Hydro, and the CEO of the St. John's Port Authority.

Background

- Founded in 1892 by a group headed by famed inventor Thomas Edison, General Electric (GE) is a multinational conglomerate that has seen several changes through periods of both turbulence and strength.
- In 2021, according to Forbes, after several years of weak financial and market performance, GE announced its plan to bolster business that included a split of the company into three publicly traded companies - GE HealthCare, GE Aerospace, and GEV.
- In 2023, GE completed divestment of its health care segment, launching GE HealthCare Technologies Inc. as a separate company. GE now consists of three businesses: aerospace, power and renewable energy and has publicly indicated intentions to also spin-off GE Aerospace and GEV into independent and separate companies in 2024. On April 2, 2024, GEV officially completed this process and is now an independent, publicly traded company.
- Today, GEV consists of three segments: power (gas, hydro, nuclear and steam); wind (offshore, onshore and wind turbine blades); and electrification (digital, grid solutions, power conversions and solar and storage solutions). GEV invests approximately \$1 billion annually in research and development to commercialize breakthrough technologies such as energy storage, hydrogen, carbon capture, small modular nuclear reactors, advanced wind turbines and electrification software.
- Headquartered in Cambridge, MA, GEV employs ~75,000 employees across over 100 countries and has 55,000 wind turbines and 7,000 gas turbines - making GEV's technology base generate approximately 25 per cent of the world's electricity.

POTENTIAL DISCUSSION TOPIC: NL Business Interests

- GEV's portfolio for hydropower generation includes a broad range of solutions and services from water to wire, from individual equipment to complete turnkey solutions, for new plants and the installed base - delivering power to the world's largest economies and the most remote communities.
- GE has projected the offshore wind industry to grow from 17 to 90 GW in the next decade, and offshore wind power is expected to account for 15 percent of the global wind industry going forward.
- GE has invested more than \$400 million to develop offshore wind turbines—an investment that they expect will also drive down offshore wind farms' levelized cost of energy, helping make offshore wind energy more competitive for customers.
- GEV is one of the world's leading offshore wind energy and services providers with proven performance to 14 MW. This includes their Haliade-X – the industry's most powerful wind turbine on the market.
- GEV also offers a comprehensive suite of 'smart and modular' onshore wind energy turbines, uniquely tailored to a variety of wind environments. Their technology aims to help improve cost, capacity and performance over the life of an onshore wind power plant, with its newest turbines equipped with a digital infrastructure that allows operators to connect, monitor, predict and optimize unit and wind farm energy performance.
- GEV is also an industry-leading designer and manufacturer of advanced, rotor blades for on and offshore turbines.
- On January 9, 2024, GEV announced a new equipment and long-term services deal with Pattern Energy to supply 674 wind turbines that will provide more than 2.4 gigawatts (GW) of power at the SunZia Wind project in New Mexico. SunZia Wind, which is expected to be the largest wind project in the Western Hemisphere at over 3.5 GW total project size, will bring GEV's installed base with Pattern Energy in North America to approximately 4.3 GW upon completion. Pattern's world-wide portfolio includes the Argentina-based renewable energy powered green hydrogen and ammonia production and export facility project.
- GEV is also a partner in the first commercial-scale offshore wind project in North America in waters off Martha's Vineyard, MA. That project will consist of 62 wind turbines to generate 806 megawatts - enough to power more than 400,000 homes and businesses in MA.
- On August 27, 2024, GEV unveiled its new GRIDEA portfolio, a comprehensive suite of solutions aimed at decarbonizing the electrical grid. The portfolio is designed to support the global transition to a more sustainable energy future by reducing emissions and improving grid efficiency. The portfolio incorporates recycled materials, such as copper, aluminum, and oil and replacing copper wiring with fiber optics.

Analysis

- As part of the meetings of New England Governors and Eastern Canadian Premiers (NEG-ECP), meeting delegates were due to tour the offshore wind project off Martha's Vineyard. However, the visit was cancelled following a blade falling off a GEV turbine, with shards of the blade washing ashore on the island of Nantucket, closing beaches. The Boston Globe noted that "public outrage has added to the problems already facing the industry as rising interest rates and supply-chain woes plague projects."

- On August 22, 2024, a further failure occurred with an installed GEV turbine at the Dogger Bank wind farm off the coast of England. As a result, GEV's shares fell almost 7 per cent. An RBC Capital Market's brief noted that the incident raises concerns about the manufacturing quality of the company's offshore wind blades, further noting "damages for extended downtime also need to be accounted for and could have the bigger financial impact." Dogger Bank is expected to be the world's largest offshore wind farm upon completion in 2026.
- External factors, including U.S. climate legislation and constraints in the European energy market, are increasing investment in new decarbonization technologies in an area where GEV is positioned to lead.
- The US Inflation Reduction Act (IRA) has been significant for GEV as it provides the certainty and stability renewable energy customers need to make long-term investments, particularly in onshore and offshore wind. GEV's decarbonization technologies are aligned with the \$370 billion in tax credits the IRA provides. With Europe seeking to address energy security concerns, there is renewed urgency to reduce emissions and make energy more resilient.
- In response to the US IRA, the centerpiece of Canada's federal Budget 2023's economic investments included a series of new green investment tax credits intended to drive new clean electricity generation projects including hydrogen and hydroelectricity, committing a total of \$21 billion over 5 years, moving to \$80 billion by 2034. However, the tax credits have been slow to roll out, with the first investment tax credits being unveiled on June 21, 2024. These included the Clean Technology Investment Tax Credit, a refundable tax credit for capital invested in the adoption and operation of new clean technology property (including wind) in Canada from March 28, 2023 to December 31, 2034.
- NL has an abundance of critical minerals, with 25 of the 34 minerals designated by the federal government present in its territory in one form or another. The transition to a green and digital economy requires minerals for renewable energy and clean technology applications such as batteries, permanent magnets, solar panels and wind turbines. The projected increased demand for many of the minerals to transition to a low-carbon economy is exponential and will require both new supply and new supply chains.
- NL has a wealth of resources that positions it well to produce and export green hydrogen and ammonia. These advantages include: the highest and most consistent wind speeds in North America to support wind-generated electricity; approximately 350,000 square kilometers of sparsely populated Crown lands for development; a readily available supply of fresh water; and, an ideal location along transcontinental shipping lanes.

Potential Speaking Points:

- **Newfoundland and Labrador has an abundance of developed and undeveloped renewable energy resources, as well as experience and expertise in its technology and energy sectors. This positions the province well to meet its net-zero commitments, fight climate change, and to grow clean energy jobs and economic development.**
- **The province has a tremendous wealth and diversity of natural resources spanning from mineral and hydro resources, to oil and gas, to the wind, water, land, and coastline that can produce the energy and fuel of the future.**
- **While other provinces may have certain resources in greater amounts, no province can match the diversity of resources that can be found in Newfoundland and Labrador.**

- **This is a particularly promising moment for the Province with regard to its natural resources. We are in a position to help meet Canada's and the world's needs for electricity, critical minerals and precious metals, low-carbon oil, and the renewable energy and clean fuels that are in rapidly rising demand.**
- **In doing so the Province can help to strengthen energy security for Canada and its allies at a critical time, while addressing the threats presented by climate change.**
- **The hydroelectricity generated in Newfoundland and Labrador powers homes and businesses across eastern Canada and in the northeastern U.S. We export approximately 75 per cent of the power that we generate and can potentially add significant additional capacity, including through the 2,250 megawatt Gull Island project, which is one of the largest undeveloped hydro projects in North America.**
- **Whether this power is exported, consumed locally, used in downstream critical mineral processes, or used to produce clean fuels like green hydrogen, Newfoundland and Labrador is ready to generate power for itself, North America and Europe alike.**
- **As American and European consumers of Canadian energy supplies accelerate their shift toward renewable energy and clean fuels, so must we if we are to remain competitive and prosperous.**
- **Newfoundland and Labrador is in a very fortunate position in this regard, as we have all the natural resources required to be a significant producer of wind energy and key exporter of green hydrogen. Moreover, our geography gives us close access to both European and North American markets.**
- **The Province is well-positioned to produce green hydrogen due to its abundant developed and undeveloped hydropower resources, surplus grid energy, strong wind resources, available Crown land and fresh water, deep and ice-free marine ports, and proximity to markets in North America and Europe. According to some estimates, the Province may have up to 40 per cent of Canada's developable wind resources.**
- **Companies and governments on both continents have taken notice of the Province's unique advantages, and throughout the course of this year, interest in our renewable energy and clean fuel potential has grown exponentially. The Province is moving as quickly as possible to take advantage of this opportunity and its great resources.**

Prepared/Reviewed By: L. MacDonald / D. Macmillan, ADM
Approved By: P. Hearn, DM

August 27, 2024

ANNEX A**Biographies**

**Heather Chalmers, President, Growth Markets, GE Vernova
and President and Chief Executive Officer, GE Canada**



Heather Chalmers leads Growth Markets for GE Vernova, and is the President and Chief Executive Officer for GE Canada.

Heather's leadership supports the future of the energy transition and Canadian economy in addressing the climate crisis for sustainable, affordable, and reliable electricity in partnership with business and government leaders. This responsibility includes both domestic and international advocacy directed to enabling the technology ecosystem, with regulatory and fiscal policy required for a net-zero future. A recognized Canadian thought leader, she is co-chair of the Canadian Chamber's Net-Zero Council (2021-22; 2022-23) and is solicited by national and global organisations to provide advisory for business, economy, and sustainability forums.

Throughout her extensive career with GE, Heather has consistently developed and led high performing teams that are industry leaders in bringing innovative technology and digital solutions to solve complex challenges in both Canadian and global markets. Heather joined GE Plastics in 1995 and held both engineering and commercial roles. Following that she moved to GE Healthcare and was promoted to President in 2014. She's had the pleasure of leading the GE Canada team since 2018.

The Canadian Chamber of Commerce awarded Heather as 2023 Business Leader of the Year Award and awarded the Rotman School of Management's 2022 Arbor award and Women Leaders in Digital Health 2020 award.

She holds a Chemical Engineering degree from Queens University, an MBA from the Rotman School of Business, is a director on the C.D. Howe Institute Board, Business Council of Canada Board, and Vice-Chair Ontario Brain Institute Board. She is also a member of the Rotman School of Management's Healthcare and Life Sciences Advisory Council and formerly part of the GTA United Way Cabinet and Vice-Chair Medtech Canada Board.

Bio Ms. Carolina Gallo, VP, Government Affairs and Policy, GE Canada

Ms. Carolina Gallo is the VP, Government Affairs and Policy with GE Canada. She leads engagement across government departments for the energy transition and industry path for decarbonization in Canada. Carolina has a diverse background in external relations, communications and marketing, and government relations.

Her time as owner and developer of Papiers Alexandrie Inc, a specialty mineral paper made of chrysotile fibre used for fuel cells, led to her product being awarded Best Innovation & Design in Quebec 2004.

EVENT SCENARIO

Event Name: NL Reception

Participants: Premier's Office and IGAS Staff
Honourable Dr. Andrew Furey, Premier
Peter Miles, Chief of Staff
Melissa Royle Critch, Deputy Chief of Staff
Rod Etheridge, Senior Advisor
Patricia Hearn, Deputy Clerk
Doriann Macmillan, Associate Deputy Minister, Intergovernmental Affairs
Mark Janes, ADM, Trade

IET Staff

Julian Ludmer, ADM, Business and Innovation Branch
Dana Grant, Director, Accelerated Growth
Gillian Chatman, Manager, Internationalization

Canadian Consulate Staff

Honourable Bernadette Jordan, Consul General of Canada in Boston
Dina Santos, Consul and Senior Trade Commissioner
Chris Begley, Consul and Senior Trade Commissioner
Erin Donahue, Trade Commissioner
Andrew Maker, Trade Commissioner
(all participating Consulate staff listed in Annex A)

NL Mission Delegates

Invited guests from New England (RSVP list as of Sept. 4 in Annex A)

Event time: 6:00 p.m.

Date: Wednesday, September 11, 2024

Location: Library Room, Courtyard Boston Downtown – 275 Tremont St.,
Boston, MA, 02116

Order of Events:

5:30 p.m. IET staff arrive to ensure setup is in order, AV prepared, etc.

6:00 p.m. Premier Furey and team arrives. Guests begin to arrive and network.

7:00 p.m. Consul General Bernadette Jordan brings opening remarks and introduces Premier Furey, inviting him to give remarks.

7:05 p.m. Premier Furey gives remarks.

8:00 p.m. Reception concludes.

Event set-up:

- Podium and microphone set up. LCD screen displays tourism photos of NL
- Staffed registration desk with lanyards and name badges
- Business casual attire
- Number of people attending: 80
- Standing reception
- Hors d'oeuvres (including gluten free options), pop, juice, water, and cash bar will be available.

Other Details:

- Select special guests will be invited - TBC by Canadian Consulate and NL organizing team.

Annex A: Full RSVP List as of September 4, 2024

Note: An updated RSVP list will be provided on the ground in Boston.

Name	Title	Company
Scott Penney	CEO	Port of Argentia Inc.
Noah Zambilowicz	President	ASL Energy
Paul Mitten	VP & Co-Owner	Compusult Ltd.
Jennifer Williams	CEO	NL Hydro
Deanne Fisher	Director of Public Affairs, Customer Service & Stakeholder Relations	NL Hydro
Sean Leet	CEO	World Energy GH2
Cathy Doman	CCAO	World Energy GH2
Dr. Tana Allen	Vice President-Research	Memorial University
Elizabeth Vincent	Vice President, International	College of the North Atlantic
Shirley Woodward	Vice President, Academic and Applied Research (Interim)	College of the North Atlantic
Kelley Santos	Director of the Launch	The Launch at M.I.
Gary Dinn	Chief Technology officer	eSonar
Ken Morrissey	Senior Advisor of Communications, Research & Policy	EnergyNL
Kieran Hanley	CEO	econext
Shelly Petten	Executive Director	Oceans Advance
Chad Fowlow	Founder & Principal Consultant	Angler Solutions Inc.
Bill Donovan	Senior Manager of Strategy & Growth	Angler Solutions Inc.
Caron Hawco	Representative of Angler Solutions	Angler Solutions Inc.
Vince Payne	CEO	OPAS Mobile
James Pamiter	VP	Cahill
Paul Sparkes	CEO	Vortex Energy
Dan Brake	CTO	PolyUnity Tech Inc.
Nikitha Kendyala	CEO	Nucliq Biologics Inc
Wally Haas	Founder & President	Avalon Holographics
Ron Collier	Director of Customer Development	Avalon Holographics
Toni Jerrett	Director of Business Development	Avalon Holographics
Katie Joyce	Sales Engineer	Avalon Holographics
Julian Ludmer	ADM, Business and Innovation Branch	IET
Dana Grant	Director, Accelerated Growth Division	IET
Gillian Chatman	Manager, Internationalization	IET
Hon. Dr. Andrew Furey	Premier	Premier's Office
Brian Cook	RNC	Premier's Office
Peter Miles	Chief of Staff	Premier's Office
Melissa Royle Critch	Deputy Chief of Staff	Premier's Office
Rod Etheridge	Senior Advisor	Premier's Office
Patricia Hearn	Deputy Clerk	IGAS
Doriann Macmillan	Assistant Deputy Minister	IGAS

Mark Janes	ADM, Trade	IGAS
Hon. Bernadette Jordan		Consulate
Meaghan Sunderland		Consulate
Lisa Carrier		Consulate
Michael Pizziferri		Consulate
Dina Santos		Consulate
Chris Begley		Consulate
Andrew Maker		Consulate
Erin Donahue		Consulate
Heather Sullivan		Consulate
Phil Bunsick		Consulate
Serban Georgescu		Consulate
Chase Hageman	Director of Economic Development	State of New Hampshire
Elizabeth (Liz) Tanner	Rhode Island Commerce Secretary	State of Rhode Island
Wendy Diltz	Consultant	ATW
Collette Løkborg	Consultant	ATW
Darlene Duggan	Consultant	ATW
Mark Cooper		Stockbridge Plastics
Cindy Cooper	Guest	
Delia Warren	Lead Renewables Consultant	Xodus Group
Bruce Culleton	CEO	ProKidney
Chris Winrow		Lucy Therapeutics
Justin Manley		MTS
Tibor Toth	Investment Director - Sustainability Fund	Aramco Ventures
Robert (Bob) Garces	PhD/MBA	MITRE Engenuity
James (Jim) Healey	Senior VP	Eastern Bankshares Inc
Russell Roberts		ESRI
Shayan Haque	Business Development Manager	exail
Dr. George (Buzz) Kenney	Co-Founder, President & CEO	Great Dome Associates
Tom Samoluk	U.S. General Counsel & Head of U.S. Government Relations	John Hancock
Thirumaal Mahalingam	Head of Energy & Procurement Strategy	electra
Susannah Hatch	Chief of Staff	MA Dept. of Energy Resources
James De Vellis		Foley & Lardner
Jalil Afnan	Assoc. Dean for Grad Medical Education, Director of Innovation, Vice Chair of Radiology	Lahey Hospital & Medical Centre
Christopher Niezrecki	Co-Director	Rist Institute for Sustainability and Energy, University of Massachusetts - Lowell
Amy Allen	Director of Business Operations	Rist Institute for Sustainability and Energy, University of Massachusetts - Lowell

Juliette Rooney Varga		Rist Institute for Sustainability and Energy, University of Massachusetts - Lowell
Ruairi O'Mahony	Senior Executive Director	Rist Institute for Sustainability and Energy, University of Massachusetts - Lowell
Brian Ó Gallachóir	Associate Vice President of Sustainability	University College Cork
Alistair Pim	Vice President - Innovation & Partnerships	Northeast Clean Energy Council & NECEC Institute
Magdalena Wilk	Director of Navigate Program	Northeast Clean Energy Council & NECEC Institute
Jay Ash	President & CEO	Massachusetts Competitive Partnership
Yuxi Wang	International Business Strategy Manager	Mayor's Office of Economic Opportunity & Inclusion, City of Boston
Adam Boltik	International Trade Resource Manager	Division of Economic Development, Dept. of Business and Economic Affairs, State of New Hampshire
Chris Weeks	Director of Programs, Autonomous & Undersea Systems	Saab, Inc.
Jay Lustig	Maritime Domain Business Operations Manager	Mitre
Andrew Saunders	Port Manager	New Bedford Foss Marine Terminal, LLC
Trevor Decker		New Bedford Foss Marine Terminal, LLC
Sean Murphy		ABL Group
Sarju Ganatra	Medical Director of Sustainability	Lahey Hospital & Medical Centre
Jim Hildenbrand	Director	Line Vision
Hudson Gilmer	CEO	Line Vision
Angle Benolt		Avallity Clinical Solutions
Dennis Hogan	Product Sales Lead	Kraken Robotics
Ellen Bragalone	Director of Retail	MFA
Timothy Donohue	Executive Vice President	IHRDC
Rob Taylor	Vice President of Global Business Development	IHRDC

NEG-ECP – Background Note – Canada-U.S. Relations Intergovernmental Affairs Secretariat

Issue: This note provides information on recent Team Canada initiatives, the upcoming U.S. Gubernatorial and Presidential elections and Canada-U.S. trade to support the Premier's participation in the New England Governors Eastern Canadian Premiers (NEG-ECP) Conference from September 9 to 10, 2024 in Boston, Massachusetts.

Background and Current Status:

- In January 2024, in an effort to strengthen U.S. relations ahead of the November 2024 U.S. Presidential Election, the federal government launched the "Team Canada Approach to U.S. Relations". This initiative is being led by Federal Ministers François-Philippe Champagne (Industry) and Minister Mary Ng (Export Promotion, International Trade, and Economic Development) and is intended to coordinate businesses, entrepreneurs, organized labor, civil society groups, and different orders of government to ensure that Canadians may continue to benefit from a strong relationship with the U.S.
- The Province is continuing with its advocacy efforts in the U.S., including participation in key intergovernmental forums, such as the upcoming New England Governors and Eastern Canadian Premiers Conference taking place in Boston, Massachusetts from September 9-10, where the agenda will focus on regional collaboration on renewable energy and hard-to-decarbonize sectors. Premier Furey will co-host this meeting with Governor Healey of Massachusetts, in advance of the Province hosting this forum in 2025.
- The province continues to participate in trade shows like the annual Seafood Expo North America held in Boston, Massachusetts. These forums serve as opportunities to strengthen relationships, cultural ties, and promote the Province's business opportunities.
- The trading relationship between the two nations is governed by the Canada-United States-Mexico Agreement (CUSMA), which entered into force in 2020. CUSMA includes a 6-year review clause and a 16-year term (sunset clause), should agreement from all parties to extend CUSMA not occur.
- The first scheduled full review of the CUSMA is due to take place in 2026, with Environment and Labour Chapters slated to be reviewed in the 5th year of the Agreement in the lead-up to the full agreement review. The review of these two chapters is slated to begin in July 2024 and end in July 2025.
- Canada has recently enacted a Digital Services Tax targeting multinational digital companies on the revenue they earn in Canada. Since the tax received royal assent on June 20, 2024, the U.S. has publicly communicated that they deem the tax discriminatory and are considering challenging the tax via CUSMA.

Council of the Federation

- Canada-U.S. relations was a key discussion topic among Premiers during the July 2024 Council of the Federation meeting. Premiers emphasized the importance of maintaining strong and mutually beneficial relations across North America, including strengthening Arctic security, maintaining well-functioning integrated supply chains, and continuing open, rules-based trade.
- Premiers called on the federal government to fulfill its NATO obligation of two per cent of Gross Domestic Product (GDP) spending on defence. Premiers recognized that spending two

per cent of GDP on defence is an “element of being a stable ally and strong economic partner” as well as the “importance of meeting the commitment for the U.S. economic and security partnership.”

Federal Cabinet Retreat

- The Prime Minister held a Cabinet retreat in Halifax, Nova Scotia, from August 25 to 27, 2024. The retreat focused on the federal government’s work to “strengthen the middle class, grow the economy, and deliver fairness for every generation”. The retreat agenda included a discussion on ways to strengthen Canada’s relationship with the United States of America, anchored by the federal government’s Team Canada engagement strategy.
- U.S. National Security Adviser, Jake Sullivan met with the Prime Minister and Cabinet as part of the retreat to discuss a range of national security priorities in the U.S.-Canada bilateral relationship. Sullivan indicated publicly issues for discussion included the climate crisis, artificial intelligence, the war against Ukraine and “the immense changes taking place underneath our feet, on technology, on the clean energy transition, on geopolitics...”.
- Post retreat, Minister François-Philippe Champagne, Minister Mary Ng and Canadian Ambassador to the U.S., Kirsten Hillman addressed media to provide an update on the Team Canada U.S. engagement strategy, indicating that since January the trio has visited 33 states and met with 42 governors, as well as mayors, senators, trade officials, business executives and labour groups.
- Retreat discussions also reportedly included: former Canadian Ambassadors David MacNaughton and Frank McKenna for a session with ministers specifically dedicated to Canada-U.S.; C.J. Mahoney, the former U.S. deputy trade representative who previously led the new NAFTA talks; and, Steve Verheul, Canada’s former chief trade negotiator who led those talks for Canada.

Chinese Electric Vehicle Tariffs

- In response to significant subsidies going into China’s electric vehicle (EV) industry, the U.S. has been urging Canada to match U.S. tariffs on Chinese-made EVs, as not just an economic threat but as a security concern against cheap imports flooding the market. The U.S. has specifically expressed concerns related to data security, critical infrastructure and national security issues associated with connected EVs.
- During this week’s Cabinet retreat, the PM announced a 100 per cent surtax on all Chinese-made EVs and 25 per cent surtax on imports of steel and aluminum products from China, effective October 15, 2024. China is widely expected to respond with counter tariffs, though China also publicly vowed to retaliate against the U.S. when the tariffs were announced in May 2024, but it has yet to follow through.

Canadian National Railway (CN) and Canadian Pacific Kansas City (CPKC) Strike

- On August 22, 2024, just after midnight, Canadian National Railway (CN) and Canadian Pacific Kansas City (CPKC), locked out nearly 9,300 workers after failing to secure a deal with the Teamsters union.
- Later on, August 22, the Canadian federal government announced it would force the union and rail companies into binding arbitration. As a result, picket lines came down and workers at Canadian National Railway (CN) were ordered to return to work on Friday, August 23. Teamsters announced the stoppage at Canadian Pacific Kansas City (CPKC) would continue as they waited for an order from Canada’s Industrial Relations Board.

- On August 26, the Canada Industrial Relations Board ordered both companies and their workers to resume operations ahead of binding arbitration. CPKC has said it anticipates it will take several weeks for the railway network to recover, and more time after that for supply chains to stabilize.
- According to CNBC, approximately 20 per cent of U.S. trade first arrives in the Canadian ports of Vancouver and Prince Rupert, while roughly two-thirds (66%) of cargo arriving at the Port of Vancouver is moved by rail to final destinations in Canada or in the U.S. Midwest.
- According to CNBC, approximately \$277 billion USD worth of goods move annually on Canada's railways, and 75% of all exports are moved into the U.S. via CN and CPKC. The Canadian rails connect the pivotal U.S. hubs of Chicago, New Orleans, Minneapolis, and Memphis.
- According to the U.S. Department of Transportation, cross-border rail trade accounted for 14 per cent (\$535,360,000 USD) of total bilateral trade (\$382.4 billion USD) between Canada and the U.S. for the first half of 2024.

Canada-U.S. Relations with Mexico

- On August 27, 2024, Mexico's President Andrés Manuel López Obrador announced he is halting diplomatic relations with the US and Canadian embassies after their ambassadors criticized his proposal to have judges elected by popular vote.
- López Obrador announced the "pause" is with the embassies and not the countries. He has said that relations will be reestablished once the diplomats are "respectful of the independence of Mexico, of the sovereignty of our country."
- Both Canada's Ambassador to Mexico, Graeme Clark and the United States Ambassador to Mexico, Ken Salazar have expressed concerns with the proposed judicial reforms, citing concerns that "critical economic and security interests" the countries share would be threatened.

U.S. Criticism of Canadian Immigration Policy

- In response to a significant increase in the number of U.S. Customs and Border Protection (CBP) encounters of migrants at the Canadian border, over two dozen U.S. House Republicans formed a northern border security caucus to identify and quantify the immigration problem at the Canada-U.S. border.
- Some US lawmakers have been critical of Canada's immigration system noting people from Mexico can fly and enter Canada if they obtain an eTA, or an online visa waiver, which entitles them to stay for up to six months which they suggest allows opportunity for migrants to be smuggled from the Canadian border into the U.S. by car. Concerns have also been raised in U.S. around Canada's immigration policies regarding Palestinians, urging Canada to increase screening measures to ensure continental security.

Gubernatorial Elections

- Gubernatorial elections typically occur every four years, though specific timing can vary depending on the State. Some States, like Vermont and New Hampshire have two-year terms for Governors.
- There are two New England states participating in the upcoming gubernatorial elections happening on November 5, 2024. Republican Governor Phil Scott of Vermont will seek

reelection for an additional two-year term while Republican Governor Chris Sununu of New Hampshire will not seek reelection.

- The next gubernatorial elections for Massachusetts, Connecticut, Rhode Island, and Maine are scheduled for November 3, 2026.
- To date, Democrat Governor Ned Lamont of Connecticut has stated he was "open" to a third term, Democrat Governor Dan McKee of Rhode Island has stated he was "open" to a second term, while Democrat Governor Maura Healey has not publicly said if she will seek reelection. Democrat Governor Janet Mills of Maine has reached the successive term limit and is not eligible to seek reelection.

U.S. Election

- On July 19, 2024, Donald Trump accepted the Grand Old Party (GOP) nomination for president on the fourth and final day of the 2024 Republican National Convention in Milwaukee, Wisconsin. Four days prior, on July 15, 2024, Trump named J.D. Vance as his vice-presidential running mate.
- On August 22, 2024, Kamala Harris accepted the Democratic nomination for president on the fourth and final day of the 2024 Democratic National Convention in Chicago, Illinois. On August 5, Harris named Minnesota Governor Tim Walz as her vice-presidential running mate.

Newfoundland and Labrador-U.S. Trade

- The U.S. was the largest export destination country for Newfoundland and Labrador in 2023, with exports totaling \$4.6 billion (36.8 per cent of total exports). A large portion of exports came from the oil and gas sector, accounting for \$3.1 billion. Seafood was the second-largest industry export, accumulating \$700 million in export value. The Province imported \$822 million (37.33 per cent of total imports) in goods from the U.S. in 2023, making it the largest importing destination for the Province as well. Full trade statistics are available in Annex A.
- Trade between Newfoundland and Labrador and the US plays a significant role in the economic landscape of both regions – across multiple sectors including energy, fisheries, minerals, tourism and educational services, with growing activity in the ocean technology and biotechnology space.

Analysis:

- While the democratic and republican candidates for the upcoming U.S. Presidential Election differ significantly on social issues, there is expected to be little change in the current protectionist trade policy stance taken by the United States. Examples of this policy stance include recent amendments to Buy American Act and Buy America regulations requiring increased government procurement of U.S. goods and services to which Canada has no carve outs at this time.

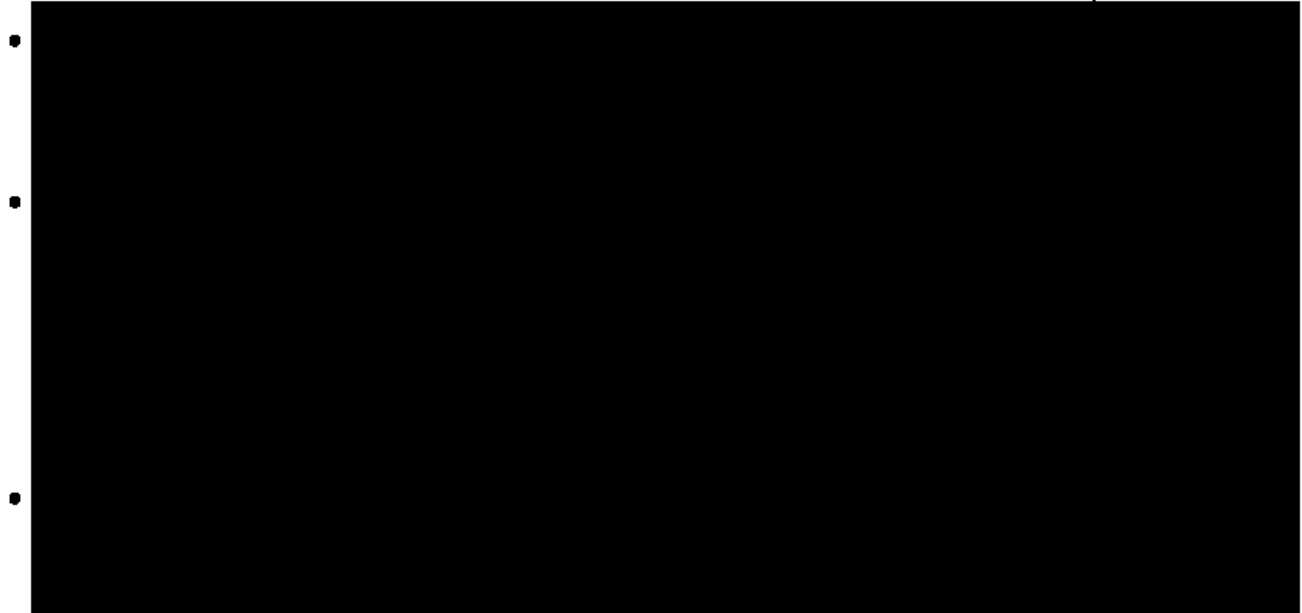
29(1)(a)

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- During a mission to Washington, D.C. in March 2024, Premier Furey emphasized to Ambassador Hilman the need to create awareness within the federal government and the U.S. about the deep and highly integrated relationship provinces and territories (PTs) have with U.S. states, as well as a greater understanding of the jurisdictional responsibilities of Premiers.

- While in Washington, Premier Furey also met with U.S. congressional leaders, including Senator Angus King, and participated in an episode of the Woodrow Wilson Center's Canusa Street podcast highlighting what Newfoundland and Labrador offers the US.
- As part of the mission, Premier Furey traveled to Boston, where he participated in meetings with various Massachusetts based technology companies, as well as a networking event with Newfoundland and Labrador and U.S.-based fishing industry companies and stakeholders.

29(1)(a), 34(1)(a)(i)



- The Federal Government announced on August 21, 2024, that initial public consultations on the CUSMA review will be held until October 31, 2024.
- While in Boston in September 2024, Premier Furey will lead a business-to-business trade and investment mission of Newfoundland and Labrador-based companies and organizations doing and pursuing business in the U.S. Northeast. Premier Furey is also expected to launch the opening of the province's first international office to be based in Boston.

Prepared/Approved by: N. Chancey / L. MacDonald / J. Dredge

Approved by: M. Janes

August 28, 2024

Annex A

Canada / Newfoundland and Labrador – Latest U.S. Trade Statistics

	Canada-U.S. Trade (2024, \$ millions)						
	January	February	March	April	May	June	Total
Exports	48,498.1	49,787.6	47,488.4	48,273.8	48,646.8	50,674.3	293,369.0
Import	39,775.1	41,042.5	40,361.0	41,163.5	40,450.4	41,294.5	244,087.0
Trade Balance	8,723.0	8,745.1	7,127.4	7,110.3	8,196.4	9,379.8	49,282.0

Newfoundland and Labrador – United States Direct Trade Overview (2023)	
Total Newfoundland and Labrador Exports to the United States	\$4,581,353,000
Total Newfoundland and Labrador Imports from the United States	\$822,601,000
Balance of Trade	\$3,758,752,000

Newfoundland and Labrador – United States Trade (2023)			
Total Exports: \$4.58 billion <i>(A decrease from \$7.23 billion in 2022)</i>	1. Petroleum oil and other oils - \$3.1 billion 2. Seafood - \$702.2 million 3. Nickel, not alloyed - \$464.0 million 4. Electrical energy - \$68.6 million 5. Newsprint, in rolls or sheets - \$28.7 million	Total Imports: \$822.6 million <i>(An increase from \$706.8 million in 2022)</i>	1. Petroleum oils and other oils - \$777.6 million 2. Aircraft and associated parts - \$12.2 million 3. Machines and mechanical appliances and associated parts - \$8.6 million 4. Fish, shellfish, and aquatic invertebrate products - \$876 thousand
Newfoundland and Labrador Trade Balance: \$3.76 billion			
<i>Source: Industry Canada</i> <i>Note: Original product titles have been shortened for the purposes of clarity</i>			

NEG-ECP – Background Note – Overview of the New England Economy Intergovernmental Affairs Secretariat

Issue: This note provides an overview of the New England economy as well as Newfoundland and Labrador's imports from and exports to the region to support the Premier's participation in the New England Governors - Eastern Canadian Premiers (NEG-ECP) Conference from September 9 to 10, 2024 in Boston, Massachusetts.

Background and Current Status:

- According to the World Bank, the Gross Domestic Product (GDP) in the United States (US) was \$27.36 trillion USD in 2023, which is an increase of 6.3 per cent over 2022. This represents 25.9 per cent of the world economy.
- The New England (NE) region is comprised of six states: Massachusetts (MA), Connecticut (CT), New Hampshire (NH), Maine (ME), Rhode Island (RI), and Vermont (VT). The following table provides an economic snapshot for each state (all amounts in USD):

State	GDP (2023)	Key Sectors (2024)	Key Sectors' GDP Contribution ¹ (2024)	Unemployment Rate (July 2024)	Total Merchandise Exports (2023)
MA	\$734 billion USD	- Professional, scientific and technical services; - Real estate and rental and leasing; - Healthcare and social assistance.	43.5 per cent of state GDP	3.5 per cent	\$35.2 billion USD
CT	\$340 billion USD	- Real estate and rental and leasing; - Finance and insurance; - Manufacturing.	41.3 per cent of state GDP	3.6 per cent	\$15.8 billion USD
NH	\$111 billion USD	- Real estate and rental and leasing; - Professional, scientific and technical services. - Manufacturing.	38.1 per cent of state GDP	2.5 per cent	\$7.8 billion USD
ME	\$91 billion USD	- Real estate and rental and leasing; - Health care and social assistance; - Retail trade.	41.8 per cent of state GDP	2.8 per cent	\$3.0 billion USD
RI	\$77 billion USD	- Real estate and rental and leasing; - Health care and social assistance; - Professional, scientific and technical services.	39.2 per cent of state GDP	4.5 per cent	\$3.0 billion USD
VT	\$43 billion USD	- Real estate and rental and leasing; - Health care and social assistance; - Professional, scientific and technical services.	39.2 per cent of state GDP	2.1 per cent	\$2.0 billion USD
NE	\$1.38 trillion USD	N/A	N/A	3.4 per cent	\$66.6 billion USD

Sources: U.S. Bureau of Economic Analysis (2023 Data), Office of the United States Trade Representative (2023 Data), and IBISWorld (2024 Data)

- According to IBISWorld, GDP growth per each New England state ranked relative to the other states for the period between 2019-2024 was as follows: MA 2.4 per cent (18th), VT 1.7 per cent (33rd), NH 2.3 per cent (21st), RI 1.8 per cent (32nd), CT 1.3 per cent (38th) and ME 2.9 per cent (10th). For a breakdown of each states Key Sectors' GDP contribution and their associated growth see Annex A.

¹ See Annex A for details.

- According to the Federal Reserve Bank of Boston, in June 2024, average hourly earnings in the US were \$30.14 USD/hour (\$40.99 CAD) while average hourly earnings in New England ranged from \$31.62 USD/hour (\$43.00 CAD) in ME to \$41.30 USD/hour (\$56.17 CAD) in MA.
- According to Statistics Canada, the average hourly wage in Canada in July 2024 was \$34.97 CAD. In Newfoundland and Labrador, the average hourly wage in July 2024 was \$31.64 CAD. The averages in PE, NS, NB, and QC were \$29.38, \$30.82, \$29.89, \$33.74 CAD respectively.
- According to the Federal Reserve Bank of Boston, the educational- and health-services sector in New England grew more than 3 per cent from May 2023 to May 2024, while the information sector lost 3.7 per cent of its employment over that one-year period.
- Job opening rates in the New England region continued trending downward in April 2024, but they were similar or somewhat higher compared to pre-pandemic rates for February 2020. All of the New England states (excluding MA) saw an increase in the rate of layoffs and discharges compared with 12 months prior while the country experienced a slight year-over-year decrease in the layoffs and discharges rate.
- According to the Federal Reserve Bank of Boston, the cost of consumer goods increased 2.97 per cent year over year in June 2024 in the US while the cost of consumer goods increased in New England by 3.82 per cent over that same time frame.
- The increased price of consumer goods was largely driven by increasing housing costs. According to the Federal Reserve Bank of Boston, average home prices in the US increased 6.26 per cent year over year in January 2024, while average home price increases in New England ranged from 7.87 per cent in MA to 10.65 per cent in RI over that same period.
- Unemployment rates in Atlantic Canada and Québec were among the highest in Canada in July 2024. Unemployment rates were as follows; Newfoundland and Labrador 9.6 per cent, PE 8.9 per cent, NS 7.0 per cent, NB 7.2 per cent, QC 5.7 per cent. The unemployment rate of all six New England states was lower than any of the Canadian provinces, with the average being 3.4 per cent.

Analysis:

- Newfoundland and Labrador's largest export to the New England region in 2023 was seafood. Seafood was the province's top export to four out of six New England states and accounted for \$357,155,751 or approximately 75 per cent of exports to the region. Newfoundland and Labrador's second largest export in 2023 was electric energy. All exported electrical energy to the region went to Maine with an export value of \$57,380,228.
- Total exports to the New England Region accounted for \$478,654,086 in 2023. This represents approximately 10.4 per cent of all exports to the United States.
- While imports to Newfoundland and Labrador from New England were limited relative to exports in 2023, the largest import was Aerospace product and parts manufacturing, which accounted for \$2,699,547 or 61 per cent of imports to Newfoundland and Labrador from the region. See Annex B for Newfoundland and Labrador/New England trade data.

Prepared/Reviewed by: N. Chancey/ L. MacDonald/ D. Macmillan

Approval: P. Hearn, DM

August 26, 2024

Annex A
New England's Key Sector Statistics (IBISWorld Data)

MASSACHUSETTS

Sector	GDP	Growth 2024 (%)	Annualized Growth 2019-24
Professional, Scientific and Technical Services	109,155,523,437	5.6%	6.6%
Real Estate and Rental and Leasing	84,769,203,125	2.4%	2.7%
Healthcare and Social Assistance	59,333,277,343	2.9%	2.2%
Information	51,325,812,500	9.7%	9.3%
Finance and Insurance	47,302,996,093	-1.7%	-0.3%

CONNECTICUT

Sector	GDP	Growth 2024 (%)	Annualized Growth 2019-24
Real Estate and Rental and Leasing	37,512,847,656	0.5%	0.2%
Finance and Insurance	36,610,515,625	0.0%	-0.9%
Manufacturing	35,627,824,218	3.1%	2.1%
Healthcare and Social Assistance	25,747,621,093	3.9%	2.7%
Professional, Scientific and Technical Services	23,733,552,734	4.4%	4.0%

NEW HAMPSHIRE

Sector	GDP	Growth 2024 (%)	Annualized Growth 2019-24
Real Estate and Rental and Leasing	12,904,779,296	0.8%	2.9%
Professional, Scientific and Technical Services	10,897,534,179	8.2%	9.3%
Manufacturing	8,793,487,304	0.4%	1.1%
Healthcare and Social Assistance	8,655,044,921	1.9%	1.6%
Retail Trade	6,853,958,984	3.4%	1.7%

MAINE

Sector	GDP	Growth 2024 (%)	Annualized Growth 2019-24
Real Estate and Rental and Leasing	12,111,638,671	2.8%	4.2%
Healthcare and Social Assistance	8,516,203,125	1.5%	1.6%
Retail Trade	6,671,474,121	4.9%	3.0%
Manufacturing	6,592,151,855	-0.6%	1.0%
Professional, Scientific and Technical Services	5,246,234,375	5.4%	6.2%

RHODE ISLAND

Sector	GDP	Growth 2024 (%)	Annualized Growth 2019-24
Real Estate and Rental and Leasing	9,883,387,695	4.6%	5.2%
Healthcare and Social Assistance	6,998,816,894	4.4%	2.5%
Professional, Scientific and Technical Services	5,151,841,308	6.3%	6.4%
Manufacturing	5,117,630,859	0.9%	1.8%
Finance and Insurance	4,622,895,996	-6.4%	-5.6%

VERMONT

Sector	GDP	Growth 2024 (%)	Annualized Growth 2019-24
Real Estate and Rental and Leasing	4,809,847,656	1.3%	2.0%
Healthcare and Social Assistance	3,916,673,339	1.5%	1.1%
Professional, Scientific and Technical Services	3,473,593,017	7.0%	8.4%
Manufacturing	2,982,068,847	-1.2%	-0.3%
Retail Trade	2,838,079,345	3.6%	1.0%

Annex B
NL Imports/Exports with New England States

Imports from New England States (Values In Canadian Dollars)

	2019	2020	2021	2022	2023
New Hampshire	337,214	672	77,709	12,860	962
Vermont	—	—	479	—	—
Massachusetts	21,720	76,582	76,492	640,552	186,407
Connecticut	10,558,666	3,873,969	1,803,182	2,791,011	3,233,804
Rhode Island	703,504	366,000	251,824	393,328	834,740
Maine	2,055,905	107,347	125,276	324,659	135,728
Total	11,555,073	4,424,570	2,334,962	4,162,410	4,391,641

Exports to New England States (Value In Canadian Dollars)

	2019	2020	2021	2022	2023
New Hampshire	485,394,112	66,250,690	38,537,439	23,137,419	34,877,883
Vermont	81,102	377,696	470,548	840,105	991,037
Massachusetts	640,481,942	404,935,622	567,114,121	312,507,814	351,016,284
Connecticut	267,180,033	26,717,620	882,143	1,115,318	576,497
Rhode Island	468,741,380	200,850,700	11,584,173	44,584,272	23,251,024
Maine	61,329,765	42,499,628	33,776,666	53,771,788	67,941,261
Total	1,923,208,334	741,631,956	652,365,090	435,956,716	478,654,086

Top 25 NL Imports from New England States (value in Canadian dollars)

	2023
33641 - Aerospace product and parts manufacturing	2,699,547
11411 - Fishing	834,740
33531 - Electrical equipment manufacturing	322,831
33241 - Power boiler and heat exchanger manufacturing	165,405
33391 - Pump and compressor manufacturing	21,051
11299 - All other animal production	15,167
33324 - Industrial machinery manufacturing	11,031
32611 - Plastic packaging materials and unlaminated film and sheet manufacturing	9,011
33441 - Semiconductor and other electronic component manufacturing	7,897
33291 - Metal valve manufacturing	6,178
33512 - Lighting fixture manufacturing	4,323
33999 - All other miscellaneous manufacturing	1,827
33131 - Alumina and aluminum production and processing	1,709
32192 - Wood container and pallet manufacturing	1,366
32541 - Pharmaceutical and medicine manufacturing	772
33149 - Non-ferrous metal (except copper and aluminum) rolling, drawing, extruding and alloying	645
11121 - Vegetable and melon farming	492
33911 - Medical equipment and supplies manufacturing	484
33341 - Ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing	389
33451 - Navigational, measuring, medical and control instruments manufacturing	257
33272 - Turned product and screw, nut and bolt manufacturing	223
32599 - All other chemical product manufacturing	221
41832 - Seed merchant wholesalers	52
33299 - All other fabricated metal product manufacturing	50
Sub-total	4,105,668
Others	285,973
Total (All Industries)	4,391,641

Top 25 NL Exports to New England States (values in Canadian dollars)

	2023
31171 - Seafood product preparation and packaging	357,155,751
22111 - Electric power generation	57,380,228
11411 - Fishing	32,108,012
11251 - Aquaculture	18,023,137
32111 - Sawmills and wood preservation	5,942,561
33451 - Navigational, measuring, medical and control instruments manufacturing	3,350,208
32212 - Paper mills	2,081,807
33641 - Aerospace product and parts manufacturing	878,113
33441 - Semiconductor and other electronic component manufacturing	441,121
21239 - Other non-metallic mineral mining and quarrying	385,038
31181 - Bread and bakery product manufacturing	283,448
33331 - Commercial and service industry machinery manufacturing	122,411
33392 - Material handling equipment manufacturing	105,248
33324 - Industrial machinery manufacturing	68,181
33711 - Wood kitchen cabinet and counter top manufacturing	59,331
33341 - Ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing	55,827
31161 - Animal slaughtering and processing	50,098
33512 - Lighting fixture manufacturing	43,936
31182 - Cookie, cracker and pasta manufacturing	31,495
71151 - Independent artists, writers and performers	18,916
33421 - Telephone apparatus manufacturing	15,172
31111 - Animal food manufacturing	14,183
32191 - Millwork	10,778
33311 - Agricultural implement manufacturing	9,010
32619 - Other plastic product manufacturing	5,101
Sub-total	478,639,111
Others	14,975
Total (All Industries)	478,654,086

NEG-ECP – Background Note – New England Energy Profile

Intergovernmental Affairs Secretariat

Issue: The purpose of this note is to provide information on New England's energy mix, regional climate change initiatives and climate targets.

Background and Current Status:

- Energy regulation in New England is overseen by several organizations and operates within a regional framework to ensure the reliable supply of electricity and natural gas; promote competition; and, address environmental concerns.
- Operating New England's grid is ISO New England, an independent, not-for-profit established in 1997 that aims to keep electricity supply and demand in balance, administer wholesale electricity markets, ensure open access to transmission lines and plan for the region's future power system needs.
- Headquartered in Holyoke, Massachusetts, ISO New England is one of nine regional transmission organizations (RTO) or independent system operators (ISO) that exist throughout the United States to control multi- or single-state electric grids. The majority of RTOs and ISOs are overseen by the Federal Energy Regulatory Commission, commonly referred to as FERC.
- ISO New England provides daily reports on the region's energy mix based on usage. Their current energy mix breakdown, as of August 27, 2024, is:
 - 64 per cent natural gas;
 - 26 per cent nuclear;
 - 8 per cent renewables (50 per cent solar, 21 per cent refuse, 15 per cent wood, 12 per cent wind, 2 per cent land fill gas); and,
 - 3.6 per cent hydro.
- According to ISO New England, the region currently has about 29,700 MW of generating capability. The all-time summer peak demand, set in August 2006, reached 28,130 MW. The all-time winter peak demand, set in January 2004, was 22,818 MW. Net electricity use is expected to increase, by an average of 1.8 per cent annually to 2033 (the current end of its long-term forecast).
- Approximately \$6.3 billion traded in wholesale electricity markets in 2023 across the region. The average real-time price for wholesale power in New England for 2023 was \$35.70 per MW hour. About 13 per cent of the region's energy needs were met by imports in 2023.
- In 2023, renewable energy accounted for 12 per cent of energy generation in the New England Region, while nuclear accounted for 23 per cent of generation. The largest source of generation for the region was gas at 55 per cent. For a full breakdown of ISO New England's sources of electricity in 2023 see Annex A.
- According to ISO New England, hydroelectricity is not considered renewable in calculations because the various sources that make up hydroelectric generation (i.e., conventional hydroelectric, run-of-river, pumped storage) are not universally defined as renewable in the six New England states. Hydroelectricity accounted for 10 per cent of generation in 2023.
- All six New England states have renewable portfolio standards, which require electricity suppliers provide customers with increasing percentages of renewable energy. As deadlines come closer, ISO New England notes that New England states are looking for quicker

transformations of the power grid to renewables and for electrification of the economy. The states are promoting the development of specific clean-energy resources to meet their goals.

- According to ISO New England, several states have established policies that direct electric power companies to enter into ratepayer-funded, long-term contracts for large-scale carbon-free energy. About 97 per cent of resources currently proposed for the region are grid-scale wind, solar and battery projects. As of January 2024, about 40,000 MW have been proposed. Of this, about 44 per cent of the projects are wind.
- Even with substantial investment made to modernize the transmission system and enable the free flow of low-cost power, ISO New England notes that additional transmission (and distribution) system upgrades will be needed to accommodate large amounts of diverse clean-energy resources—from large-scale offshore wind, to remote Canadian hydropower, to hundreds of thousands of distributed solar and storage resources.

Overview of New England States Climate Change Mandates and Positioning

- Several of the New England states have their own greenhouse gas (GHG) emissions reduction mandates, others have questioned the green transition for its impact on energy affordability.
 - Governor Mills (Maine): passed ***An Act to Establish the Maine Climate Change Council to Assist Maine to Mitigate, Prepare for and Adapt to Climate Change*** in 2019 that established mandates to reduce GHG emissions 45 percent below 1990 levels by 2030, 80 percent by 2050 and achieve carbon neutrality by 2045. The ***Act*** also establishes a renewable energy mandate of 80 per cent renewable energy by 2030 and a goal of 100 per cent by 2050.
 - Governor Lamont (Connecticut): passed ***Executive Order 3*** in 2019 that reaffirms 2008 commitments that require the state to reduce its GHG emissions to 45 per cent of 2001 levels by 2030 and to 80 percent below 2001 levels by 2050.
 - Governor McKee (Rhode Island): passed ***An Act on Climate*** in 2021 that requires the state to reduce GHG emissions to 45 per cent below 1990 levels by 2030, 80 percent below 1990 levels by 2040, and net-zero emissions by 2050.
 - Governor Healy (Massachusetts): passed ***An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy*** in 2021 committing that, over the next eight years, they reduce greenhouse gas emissions by 50 percent below 1990 levels.
 - Governor Scott (Vermont): vetoed the ***Renewable Energy Standard Reform bill*** in May 2024 which would require all Vermont utilities to reach 100 per cent renewable energy by 2035. Governor Scott cited that cost of the transition would raise Vermonters' utility rates by hundreds of millions of dollars.
 - Governor Sununu (New Hampshire): Governor Sununu has also vetoed several pieces of climate change emission reduction legislation citing the negative impacts of the green transition on energy affordability.

Analysis:

- According to ISO New England, retail power supply rates vary significantly across the New England States (ranging from 17.47 cents/kWh to 29.28 cents/kilowatt hour USD). This is due to the different laws and power procurement practices of each state and the utilities within each state. The ISO New England grid has 7.4 million retail electricity customers and serves a population of 15.1 million.
- In Newfoundland and Labrador, current domestic electricity rates on the island of Newfoundland are approximately 15.3 cents/kWh CAD.

- As of August 1, 2024, and based on Newfoundland Power's average residential monthly usage of 1,278 kWh, electricity rates for their customers are the lowest in Atlantic Canada.
- With four out of six New England States having commitments to reducing GHG emissions, the province is well positioned to provide renewable energy exports. This is particularly relevant given a study published in May 2023 by the Montreal Economic Institute predicting that Québec will, over the next decade, fall short of the generating capacity needed to meet increasing demand for power in the province.
- The New England Region relies heavily on burning imported fossil fuels like natural gas to generate electricity. These fuels are costly and their prices have steadily increased over time. A substantial portion of the liquefied natural gas (LNG) imported in the region is shipped through ports.
- The Region has been limited by a lack of pipeline infrastructure capacity. Currently the pipelines to New England cannot carry enough natural gas for both home heat and electricity generation.
- The cost of electricity in the New England region is substantially higher than the majority of other US states mostly because of the high cost of importing fuels. For a full breakdown of each states approximate cost per kWh see Annex B.
- Prior to the idling of the North Atlantic Refinery in Come-By-Chance, Newfoundland and Labrador was a significant exporter of refined petroleum product (RPP) to the Northeastern United States. Exporting biofuels to the region, now that the Braya Renewables facility is operational, may be a viable option for the province.
- Hydro-Québec (HQ) operates 262,474 km of transmission and distribution lines. Fifteen interconnections link Québec's electricity system with systems in Ontario, New Brunswick, and the U.S. Northeast.

Status of Québec/New England Collaborative Energy Projects

New England Clean Energy Connect

- The New England Clean Energy Connect (NECEC) is a cross-border electricity transmission project connecting Québec and Maine to deliver hydroelectricity to the New England grid. The project is expected to supply clean electricity to approximately 1.2 million homes in the New England region.
- The NECEC is being developed through a partnership between Iberdola's US-based sub-holding company Avangrid and HQ. The NECEC, involving the construction of approximately 233 km of high-voltage direct current (HVDC) transmission line, will be capable of transmitting 1,200 MW of clean renewable electricity from Canada to the US.
- Large-scale hydropower from Canada has been controversial in New England, which already gets a significant portion of its electricity from HQ. Critics say structuring so much of the region's renewable energy around that resource does not actually help bring new clean power online. The NECEC has further faced scrutiny from environmental groups, and Indigenous communities critical of ecosystem harm on ancestral territory of First Nations and elsewhere.
- Debated for years with several legal challenges, Maine voters blocked the project in a 2021 ballot question. In August 2022, Maine's highest court ruled the statewide vote rebuking the project was unconstitutional. On May 17, 2023, the Maine Department of Environmental

Protection announced it would be lifting its suspension of construction on the project.

- US media outlets have reported on HQ's energy shortfalls and the need to reinforce power plants, build wind farms, and consider building new dams and transmission lines.
- Construction on the NECEC project officially restarted in August of 2023. The project team is now working on a substation that will eventually connect the hydropower coming from Québec to the New England grid.
- In July 2024, a progress report submitted by the NECEC to the Maine Public Utilities Commission informed of key developments:
 - Service agreements for the Project, including program management, legal and permitting support, communications, and engineering design, are in place. All contracts that were in place before construction stoppage have been renegotiated.
 - Prior to Project construction stopping in November 2021, a total of 139 miles of the Project's high-voltage direct current (HVDC) right-of-way had been cleared, 107 pole bases had been installed and 78 poles were erected. Construction on the transmission line resumed in October 2023. Currently the line is 100% cleared and processed, 504 pole bases have been set, 441 poles have been erected and 178 poles have had wires installed.

Twin State Clean Energy Link

- The Twin State Clean Energy Link – is a 211-mile, \$2 billion project proposed to bring renewable energy, primarily hydropower from Canada (Québec) to New England via an underground transmission line through northern Vermont to Londonderry, New Hampshire.
- The transmission line, being developed by electric utility National Grid and Citizens Energy, was one of three transmission projects receiving a total of \$1.3 billion under a new federal program funded by the Bipartisan Infrastructure Law announced in October 2023. The other two projects would develop transmission interconnections between Nevada and Utah and link renewable energy produced in New Mexico with markets in Arizona that rely on fossil fuels.
- In March 2024, National Grid indicated that the project was canceled due to viability concerns. A spokesperson for Vermont Electric Power Company (VELCO), Vermont's grid operator, said at the time the National Grid project would have helped to connect emerging offshore wind with what he called "the largest battery in North America," referring to Hydro Québec. However, VELCO also indicated the project would have had minimal impact on Vermont's grid – though it was projected to potentially lower regional electricity prices.

Prepared/Reviewed by: L. MacDonald / D. Macmillan

Approval: P. Hearn, DM

August 28, 2024

Annex A

ISO New England 2023 Sources of Energy Generation

	GIGAWATT-HOURS (GWh)	% OF GENERATION	% OF NEL	
Total Generation (a)	101,303	100.0%	87%	(a) As of January 2016, this chart approximates the amount of generation by individual fuels used by dual-fuel units, such as natural-gas-fired generators that can switch to run on oil and vice versa. Previously, the report attributed generation from such units only to the primary fuel type registered for the unit. The new reporting flows from changes related to the Energy Market Offer Flexibility Project implemented December 2014. See the notes in the Net Energy and Peak Load by Source Report for more details. (b) Hydro is not included in the renewables category primarily because the various sources that make up hydroelectric generation (i.e., conventional hydroelectric, run-of-river, pumped storage) are not universally defined as renewable in the six New England states. (c) "Other" represents resources using a fuel type that does not fall into any of the existing categories. Other may include new technologies or new fuel types that come onto the system but are not yet of sufficient quantity to have their own category. (d) Tie lines are transmission lines that connect two balancing authority areas. A positive value indicates a net import; a negative value represents a net export. (e) The energy used to operate pumped storage plants. (f) Generation + net interchange - pumping load.
Gas	55,586	55%	49%	
Nuclear	23,204	23%	20%	
Renewables	12,116	12%	11%	
Wind	3,302	4%	3%	
Refuse	2,681	3%	2%	
Wood	1,787	2%	2%	
Solar	3,851	4%	3%	
Landfill Gas	454	0.45%	0.40%	
Methane	41	0.04%	0.04%	
Steam	0	0.0%	0.0%	
Hydro (b)	9,645	10%	8%	
Coal	182	0.18%	0.16%	
Oil	322	0.32%	0.28%	
Price-Responsive Demand	11	0.01%	0.01%	
Other (c)	237	.23%	.21%	
Net Flow over External Ties (d)	15,104		13%	
Québec	10,548			
New Brunswick	1,945			
New York	2,611			
Pumping Load (e)	1,679		-1.46%	
Net Energy for Load (f)	114,727		100.00%	

Annex B

Average Price of Electricity to Ultimate Customers by End-Use Sector By State, May 2024 (cents per Kilowatthour)

	Residential	Commercial	Industrial	Transportation	All Sectors
New England	26.40	19.06	15.76	12.30	21.48
Connecticut	26.76	19.37	15.82	16.03	22.15
Maine	20.48	18.10	12.56	—	17.96
Massachusetts	28.70	18.90	17.52	8.74	22.40
New Hampshire	23.01	19.44	15.91	—	20.09
Rhode Island	28.09	19.85	19.83	20.63	22.88
Vermont	22.30	18.75	11.14	—	18.13
Middle Atlantic	20.02	15.14	8.29	12.82	15.39
New Jersey	18.58	14.83	11.75	10.96	15.97
New York	23.6	17.72	8.72	13.77	18.48
Pennsylvania	18.1	11.31	7.75	9.9	12.62
East North Central	17.07	12.36	8.08	9.06	12.26
Illinois	18.71	12.73	9.1	9.01	12.91
Indiana	15.27	12.59	7.98	12.6	11.12
Michigan	19.44	14.39	8.67	14.62	14.26
Ohio	16.65	10.41	6.97	6.44	11.02
Wisconsin	17.82	12.6	8.37	18.37	12.57
West North Central	13.73	9.95	7.5	10.38	10.23
Iowa	14.23	10.11	6.26	—	9.01
Kansas	14.14	10.67	7.66	—	10.78
Minnesota	15.69	12.19	9.28	13.76	12.31
Missouri	12.62	9.46	7.27	8.43	10.32
Nebraska	12.22	8.28	7.68	—	9.08
North Dakota	13.04	7.3	7.12	—	7.95
South Dakota	13.63	10.35	8.32	—	10.93
South Atlantic	14.48	10.65	7.44	10.04	11.71
Delaware	17.27	11.53	7.69	—	13.13
District of Columbia	17.76	16.93	11.12	9.67	16.75
Florida	13.63	10.47	8.32	9.94	12.01
Georgia	14.92	11.15	6.42	5.73	11.46
Maryland	17.63	12.46	10.21	11.62	14.47
North Carolina	14.18	10.27	7.54	10.21	11.33

South Carolina	14.07	10.04	6.47	—	10.33
Virginia	15.02	9.55	8.76	10.49	11.1
West Virginia	15.98	12.07	7.98	—	11.13
East South Central	13.44	11.97	6.49	—	10.67
Alabama	14.73	12.98	7.06	—	11.34
Kentucky	12.94	11.65	6.22	—	9.93
Mississippi	13.86	11.95	6.65	—	10.82
Tennessee	12.46	11.46	5.85	—	10.52
West South Central	13.85	8.86	5.95	8.21	9.42
Arkansas	12.27	10.04	5.91	13.49	8.99
Louisiana	11.49	10.03	5.26	12.32	8.2
Oklahoma	11.7	8.04	5.26	—	8.21
Texas	14.74	8.73	6.28	4.22	9.91
Mountain	14.44	11.11	7.41	10.46	11.07
Arizona	15.5	12.84	7.77	11.43	13.12
Colorado	14.74	11.71	8.83	9.22	11.86
Idaho	11.55	9.19	7.1	—	9.03
Montana	13.26	12.2	6.82	—	10.74
Nevada	16.18	10.25	7.87	11.85	11.38
New Mexico	13.84	10.23	5.99	—	9.05
Utah	11.01	8.43	6.21	12.06	8.56
Wyoming	12.81	9.12	7.61	—	8.81
Pacific Contiguous	25.07	19.96	14.46	15.46	20.35
California	34.31	23.79	21.23	16.08	26.37
Oregon	15.03	11.49	7.4	12.61	11.29
Washington	12.16	10.46	6.17	11.01	10.07
Pacific Noncontiguous	36.22	30.89	31.14	—	32.58
Alaska	25.02	21.06	19.75	—	22.01
Hawaii	44.14	39.76	35.57	—	39.38
U.S. Total	16.43	12.48	7.95	12.29	12.6

Source: U.S. Energy Information Administration

**NEG-ECP – Background Note – State of Massachusetts – Offshore Wind and
Decarbonization
Intergovernmental Affairs Secretariat**

Issue: To support the Premier's attendance at the Meeting of New England Governors and Eastern Canadian Premiers (NEG-ECP) from September 9 to 10, 2024 in Boston, Massachusetts, this note provides an overview of Massachusetts' state profile and a summary of its efforts in the development of offshore wind (OSW), role of state agencies, and the Massachusetts Decarbonization Roadmap 2050.

Background and Current Status:

- Massachusetts (MA) is the second-largest New England state in size and is home to almost half of the region's residents. Although MA has no fossil fuel reserves, the state does have several renewable energy resources, including solar energy, hydroelectric power, biomass, and wind.
- Wind power accounted for about 1 per cent of Massachusetts' total net generation in 2022. The state has 21 utility-scale wind power facilities with a combined 102 megawatts (MW) of generating capacity.
- MA has increased its offshore wind (OSW) energy goals and now intends to solicit proposals for 5,600 MW of OSW power by 2027. Because of the rising costs of OSW power projects, OSW development companies have been struggling with project economics. As a result, through a first of its kind Memorandum of Understanding (MOU), Rhode Island, Connecticut, and MA agreed in October 2023 to assist OSW development by promising to jointly purchase 6,000 MW of OSW power from energy companies in 2024. Together, the jurisdictions will seek multi-state offshore wind proposals that would expand benefits for the region and allow cost reductions by developing projects at scale.
- In 2022, then MA Governor Charlie Baker signed House Bill 5060, **An Act Driving Clean Energy and Offshore Wind**, which codifies a goal of procuring 5,600 MW of offshore wind no later than June 30, 2027. The Act also allows the Commonwealth to coordinate OSW solicitations with other New England states, and removes the price cap that previously guided project developers' bids in response to a state-issued solicitation. The Act sets preferences for project proposals that make commitments to, among other things, developing equitable workforce opportunities and limiting negative environmental and socioeconomic impacts.

Massachusetts Offshore Wind Projects

- OSW development is proceeding in federal waters under leases issued by the U.S. Bureau of Ocean Energy Management (BOEM).
- Since 2021, the BOEM has approved the first nine commercial-scale OSW projects and has held five offshore wind lease auctions (with a schedule set for additional lease sales through 2028). As of August 14, 2024, the BOEM has approved more than 13 gigawatts of OSW – enough to power nearly 5 million homes. The department has also taken steps to grow a sustainable OSW industry by encouraging the use of project labour agreements, strengthening workforce training, bolstering a domestic supply chain and through enhanced engagement with Tribes, fisheries, communities and ocean users.
- In August 2024, the New England states' Power Up New England proposal was awarded \$389 million in federal funding for significant investments in regional electric infrastructure. The proposal included proactive upgrades to points of interconnection in Southeast

Massachusetts and Southeast Connecticut to ready the onshore transmission system for up to 4,800 MW of additional OSW. It also included the deployment of an innovative, multi-day battery energy storage system in Northern Maine to enhance grid resilience and optimize the delivery of renewable energy.

- In February 2024, MA's first OSW farm, Vineyard Wind 1, an 806 MW project, delivered power for the New England electric grid. The project has already created nearly 2,000 skilled jobs since 2017, including close to 1,000 union jobs. However, in July 2024, pieces of Vineyard Wind's broken turbine fell into the ocean off the shores of Nantucket, with the project thereafter temporarily halted. Environmental groups have since called for a federal and state moratorium on all OSW development in the wake of the incident. The project was clear to resume construction in August 2024.

Key Agencies Supporting Offshore Wind Development in Massachusetts

Massachusetts Clean Energy Center

- The MA Clean Energy Center (MassCEC) is a state economic development agency that supports the OSW industry with programs and funding for workforce and supply chain development, interagency planning, technology innovation, wildlife research, and strategic port investments. In 2021, MassCEC distributed \$1.6 million in grants to OSW education and training programs that aim to overcome specific barriers faced by minority and low-income workers, such as lack of transportation needed to access training sites.
- Some of MassCEC initiatives include: OSW sector development, planning analysis and engagement, research and innovation, and infrastructure development and maintenance.

MA Department of Energy Resources

- The MA Department of Energy Resources (DOER) develops and implements policies and programs to ensure the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply to create a clean, affordable, and resilient energy future for all residents, businesses, communities, and institutions.
- DOER and the electric distribution companies in MA periodically invite proposals from OSW developers for cost-effective long-term contracts for OSW energy and renewable energy certificates, pursuant to relevant legislation.

Massachusetts 2050 Decarbonization Roadmap

- In December 2020, MA released their plan for reaching net-zero carbon emissions by 2050, the *MA 2050 Decarbonization Roadmap*. It identifies policies and overall systems strategies that will be necessary to achieve net-zero by 2050 in the areas of transportation, buildings, energy supply, non-energy, and land use.
- The map outlines several strategies to achieve the 85 per cent greenhouse gas (GHG) reduction by the 2050 goal. These strategies are included, in varying degrees, across the different pathways.
 - *Light-Duty Transportation* – this includes switching from light-duty fossil fuel vehicles to zero-emission electric vehicles in an accelerated manner while also enhancing public transportation options.
 - *Medium-and Heavy-Duty Transportation, Aviation, and Shipping* – various technologies, such as battery-electric, hydrogen fuel cells, and zero-carbon fuels, need to be adopted.
 - *Residential and Commercial Buildings* – two main components include electrifying building energy use by installing high-performance heat pumps and other electric appliances and making buildings more energy efficient.
 - *Electricity and Energy* – electricity supply will be decarbonized largely through the

deployment of renewables and fossil fuel generation retirements; improved electric transmission and distribution systems will be needed to support increased regional trading and dispersed resources.

- *Non-Energy and Industry* – tighter emissions standards and increased efficiency standards for industry, agriculture, solid waste, and wastewater, along with limits on hydrofluorocarbon sales, will be needed.
- *Natural Carbon Sequestration* – strategic management of forests and other natural and working lands will be needed to enhance carbon sequestration while also developing sequestration accounting and market frameworks.
- *Additional Carbon Dioxide Removal* – natural carbon sequestration from neighboring states, along with possible mechanical and other carbon dioxide removal technologies, will be needed.

Clean Energy and Climate Plan for 2030 (CECP)

- On December 21, 2022, MA released its Clean Energy and Climate Plan (CECP) for 2050 (2050 CECP). It highlights a broad suite of specific goals, strategies, policies, and actions to reduce statewide gross GHG emissions by at least 85 per cent below the 1990 baseline level, and to conserve and enhance carbon sequestration on natural and working lands to help achieve Net Zero in 2050.
- 2050 CECP key benchmarks include:
 - 97 per cent of light-duty vehicles (5 million) electrified.
 - 93 per cent of medium- and heavy-duty electrified vehicles (over 350,000) electrified or non-emitting.
 - 80 per cent of homes (over 2.8 million) heated and cooled by electric heat pumps.
 - 87 per cent of commercial space heated by either electricity or alternative fuels.
 - 2.5-fold increase in electric load compared to 2020.
 - 97 per cent of electricity consumed is from clean and renewable sources.
 - 52 per cent of industrial energy use electrified.
 - 90 per cent reduction in solid waste disposal.
 - 40 per cent of lands and reserves permanently conserved.
 - 64,400 acres of new riparian and urban tree cover.
 - 65,000 additional full-time jobs created from the clean energy transition.
 - \$4.7 billion in health benefits.

Prepared/Reviewed By: K. Moreno / L. MacDonald

Approved By: D. Macmillan, ADM

August 26, 2024

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with the Ambassador of the Republic of Korea to Canada
Tuesday, September 3, 2024 at 4:40 p.m. to 5:00 p.m.
8th Floor, East Block Confederation Building

Participants:

- His Excellency Woongsoon Lim, Ambassador of the Republic of Korea to Canada
- Ms. Hejin Kim, Counsellor for Political Affairs, Embassy of Republic of Korea to Canada
- Mr. Donghwan Kim, Commercial Attaché, Embassy of Republic of Korea to Canada
- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador

**Biographies in Annex A.*

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Purpose of the Meeting:

- His Excellency was appointed as Ambassador of the Republic of Korea to Canada in 2022. This is his first official visit to Newfoundland and Labrador. There is no formal agenda for this courtesy meeting. Protocol Office has advised there will be an exchange of gifts at the end of the meeting.

- While not listed in the program, the Korean delegation will also meet with World Energy GH2 on September 5. A representative from the Department of Industry, Energy and Technology (IET) will join the meeting.

Background:

- The Republic of Korea (commonly referred to as South Korea) has a population of approximately 52 million (2024 estimate) with a total area of 99,720 km². It is located in Eastern Asia and constitutes the southern half of the Korean Peninsula, bordering the Sea of Japan and the Yellow Sea. South Korea borders North Korea along the Korean Demilitarized Zone.
- South Korea is a presidential republic, with a president elected every five years by simple majority popular vote. The last election was held May 9, 2022. President Yoon Suk Yeol, an opposition candidate with the conservative People Power Party, won the election and was inaugurated as the 20th President of the Republic of Korea on May 10, 2022.
- According to data from Global Affairs Canada (GAC), South Korea is the world's 15th largest economy and the fourth largest in Asia. According to the World Bank, the total gross domestic product (GDP) of South Korea was approximately CAD\$2.3 trillion in 2023.
- GAC advises that the bilateral relationship between Canada and South Korea is positive and rooted in a history of strong people-to-people ties. The countries share similar views on a range of global issues and share membership in forums such as the G20, the Asian Infrastructure Investment Bank, the Asian Development Bank, the Organization for Economic Co-operation and Development, and the World Trade Organization.
- Recent notable federal meetings with South Korea include:
 - Under the Indo-Pacific Strategy, from April 21 to 25, 2024, Minister Ng led a Team Canada Trade Mission to South Korea with more than 240 people representing over 160 Canadian organizations from various priority sectors, including five Newfoundland and Labrador companies (details below);

- Prime Minister Trudeau and President Yoon Suk Yeol last met at the NATO Summit in Washington (July 9-11, 2024);
 - In May 2023, the Prime Minister, with Ministers Joly and Champagne, visited South Korea to commemorate the 60th anniversary of diplomatic relations between the two countries. During that visit, the Memorandum of Understanding (MOU) on Cooperation in Critical Mineral Supply Chains, the Clean Energy Transition and Energy Security was signed, and the inaugural Canada-Korea High Level 2+2 Economic Security Dialogue took place; and,
 - In September 2022, during President Yoon's visit to Canada, Canada and Korea upgraded the relationship to a Comprehensive Strategic Partnership to strengthen relations in five shared priority areas including human rights, security, trade, health and culture. Minister Joly and Foreign Minister Cho Tae-Yul launched the Canada-Korea Comprehensive Strategic Partnership Action Plan on July 18, 2024 in Seoul.
- In September 2022, Prime Minister Trudeau and Korean President Yoon Suk Yeol officially declared 2024–2025 as the Canada-Korea Year of Cultural Exchanges.
 - GAC advises that recent investment projects by South Korean companies include:
 - In August 2023, Ford Motor Company, EcoProBM, and SK On (a South Korean multinational manufacturing and services conglomerate headquartered in Seoul) announced an investment of more than \$1.2 billion towards the construction of a new battery materials production plant in Bécancour, Québec specializing in cathode active materials.
 - In early 2022, a South Korean greenfield investment was announced with General Motors and POSCO Future M Co., Ltd. making a \$600 million investment for a cathode active material plant in Bécancour, Québec.
 - In March 2022, automaker Stellantis and South Korea's LG Energy Solution announced a \$5 billion investment to develop an electric vehicle (EV) battery production facility in Windsor by the end of 2024. The joint venture, NextStar Energy Inc., will produce batteries to supply Stellantis' EV production in the region.

POTENTIAL DISCUSSION TOPIC #1: Newfoundland and Labrador-South Korea Relations

Trade

- Newfoundland and Labrador has a significant trading surplus and South Korea (\$126.8 million). This trading relationship is shaped by the Canada-Korea Free Trade Agreement (CKFTA) which came into force January 1, 2015.
- In 2023, total exports from Newfoundland and Labrador to Korea were valued at \$127.5 million and consisted mainly of a variety of critical minerals (\$122.1 million), such as iron ore and nickel, which are vital for South Korea's manufacturing and technology sectors. The CKFTA helps to ensure a steady and tariff-free supply of critical minerals from the province. With the ongoing development of technology in South Korea in areas such as EVs and renewable energy technologies, the demand for minerals is expected to rise.
- See Annex C for Newfoundland and Labrador-South Korea trade statistics.

Analysis:

Trade and Internationalization

- IET supported five Newfoundland and Labrador companies to attend the April Team Canada Trade Mission to South Korea, including the College of the North Atlantic (CNA), Kraken Robotics, MeddAI, Memorial University (MUN) and Pragmaclin. Companies reported positive outcomes, including productive meetings in support of cross-border collaboration; strengthening and developing ties with partners/potential partners in the region; generating interest from distributors; and, the opportunity to gain access to the Indo-Pacific market.

Seafood

- The Department of Fisheries, Forestry and Agriculture (FFA) advises that the CKFTA has created significant market access opportunities for Newfoundland and Labrador's seafood industry by eliminating high tariffs on seafood products entering Korea. Many seafood products benefit from reduced or zero tariffs, including frozen mollusks, capelin, snow crab, lobster, and shrimp. Before this agreement, tariffs for many Newfoundland and Labrador fish products ranged between 10 and 20 per cent.
- From 2018 to 2022, retail sales of fish, seafood, and processed seafood in South Korea increased, with the overall market expanding at a compound annual growth of 4.8 per cent. Crustaceans saw the highest growth, and projections to 2027 suggest that all categories will continue to experience growth.
- FFA advises that South Korea has been a traditional market for the province's seafood industry since the 1980s. In 2023, South Korea was the province's 10th largest export destination for fish products with 956 tonnes of product exported at a value of \$5 million. Top provincial seafood product exports to Korea in 2023 were lobster (45 tonnes valued at \$1.3 million), shrimp (160 tonnes valued at \$1.1 million), and redfish (453 tonnes valued at \$879,000).
- Comparatively, Newfoundland and Labrador exported 1,415 tonnes of fish products valued at \$7.6 million to South Korea in 2022. This represents a year over year decrease of 33 per cent in quantity and 34 per cent in value compared to 2023. This decrease is primarily due to decreased quantities of lobster and shrimp exported in 2023 compared to 2022. While there have been fluctuations in exports to Korea in the last number of years, the province's ten-year average export value to South Korea is \$6.4 million.
- In recent years, FFA has worked with other provinces and the Canadian Trade Commissioner Service in Korea on promotional and business-to-business events, with the most recent event being an Export Café series in February 2024 which visited Seoul, South Korea with an aim to reinforce the strong brand image of Canadian fish and seafood products and foster export diversification to the Korean market. This event featured meetings and additional in-market site visits to retailers, logistical supports, and importers.

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Immigration

- According to 2021 Census data, 105 residents in Newfoundland and Labrador selected Republic of Korea as place of birth. Additionally, 225 residents selected they are of Korean ethnicity or cultural origin.
- The Department of Immigration, Population Growth and Skills (IPGS) advises that from 2019 to 2024 (Q1), Newfoundland and Labrador has welcomed 56 new permanent residents from the Republic of Korea, of which the most common occupation is Early Childhood Educators and Assistants (12).
- According to IPGS, from 2019 to August 21, 2024, Newfoundland and Labrador has supported 19 Korean nationals for permanent residence through provincial immigration programs, including the Provincial Nominee Program (NLPNP) and Atlantic Immigration Program (AIP), in addition to these applicants' accompanying family members.

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Education

- GAC advises that South Korea is Canada's third-largest source of international students: in 2021, 10,610 Koreans studied in Canada.
- The Department of Education (EDU) advises that for the Fall 2024 semester, MUN has 16 students enrolled from South Korea, including 14 undergraduate and two graduate students. Four short-term students from South Korea went to MUN's Grenfell Campus in Summer 2024 for English as an Additional Language (EAL) courses, as MUN is working on a new EAL agreement with the Busan University of Foreign Studies in South Korea.
- There was one Inbound exchange student at MUN during the Spring 2024 semester and four prospective exchange students for the Fall 2024 semester. MUN has MOUs and student exchange agreements with a variety of institutions in South Korea, including Chonnam National University, Chung-Ang University, Chungnam National University, Inha University, Kookmin University, Kyung Hee University, Pusan National University, Seokyeong University, Sookmyung Women's University, Sungkyunkwan University, and University of Seoul.
- The Marine Institute (MI) also has connection in Korea related to research contract work with the Korea Ship Safety Technology Authority (KST); and collaborative research related remotely operated vehicles (ROVs).

POTENTIAL DISCUSSION TOPIC #2: Clean Energy

Critical Minerals

- In June 2022, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, the United Kingdom, the United States, and the European Commission announced the signing of the Minerals Security Partnership. The partnership commits member countries to building robust, responsible critical mineral supply chains to support economic prosperity and climate objectives. Newfoundland and Labrador continues to work with the federal government as part of international engagements.

The May 2023 MOU between Canada and South Korea on collaboration in critical mineral supply chains, the clean energy transition, and energy security solidifies both countries' trade and

Investment across critical mineral supply chains. On July 5, 2024, a related action plan was launched to implement the partnership.

- IET advises that South Korea has identified 33 minerals as being critical for the country, with the province having mineral potential for 28, including current production of nickel, cobalt, copper, recent production of antimony and advanced projects in manganese and rare earth elements. In addition, Newfoundland and Labrador has rare earth elements, tungsten, molybdenum, vanadium and zinc projects with advanced economic studies, and/or resource estimates.
- Of South Korea's 33 minerals, ten are categorized as strategic critical minerals that are deemed necessary to stabilize the country's supply chain. Newfoundland and Labrador has the mineral potential to supply all ten including lithium, nickel, cobalt, manganese, graphite and rare earth elements.

Hydrogen

- It was reported in the media in May 2023 that World Energy GH2 signed an investment agreement with South Korea-based SK ecoplant, the environment and energy arm of SK Group, one of the world's largest sustainable infrastructure companies. SK ecoplant is reportedly initially investing USD\$50 million (CAD\$67.38 million) in World Energy GH2's Project Nujio'qonik on the Port au Port peninsula, acquiring a 20 per cent stake in the first phase of the project. The company is looking to build a multibillion-dollar wind-hydrogen project, which would include 164 wind turbines powering a hydrogen and ammonia plant in Stephenville.

Analysis

Critical Minerals

- IET advises that the Province is currently seeking expressions of interest for development of the Julianne Lake iron ore deposit, with an estimated total measured and indicated resource of 867 million tonnes at 33.7 per cent iron. This is a unique opportunity to develop a major new high-purity iron ore mining project to feed green steel production in the heart of an established mining district in a reliable, responsible, and politically stable country. The Province will be working with Invest In Canada to market the Julianne Lake opportunity internationally, including to South Korea's steel manufacturing industry.

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Hydrogen

- Given its expertise in green hydrogen and engineering, SK ecoplant will continue to be an important partner in this project. The company has completed a green hydrogen value chain that includes renewable energy sources such as wind power and electrolysis. SK ecoplant has established itself as a leading company in wind power generation, evidenced by its ongoing development of a 2.6 GW offshore wind power project off the southern coast of Korea.

POTENTIAL DISCUSSION TOPIC #3: Early Childhood Education Memorandum of Understanding

- The Province, through EDU, is collaborating with the South Korean Ministry of Education in the area of early childhood educator (ECE) recruitment. In Fall 2023, a delegation from Newfoundland and Labrador travelled to the Republic of Korea and engaged in stakeholder discussions focusing primarily on early childhood education. The provincial delegation included representatives from IPGS, EDU, YMCA, Association for Early Childhood Educators of

Newfoundland and Labrador, and the Early Childhood Education Human Resources Council. During the visit, the delegation participated in the Korea International Education and Emigration Fair to promote Newfoundland and Labrador as a place to live and work, speaking to more than 1,000 attendees.

- A significant outcome of the trip was the YMCA signing a five-year MOU on Labour Cooperation with two Korean Universities (Daejin University and Ulsan University) regarding ECEs, as well as ongoing recruitment of ECEs in South Korea to the province, including directly to the YMCA.
- In May 2024, a delegation of officials representing the South Korean Ministry of Education and the Office of International Cooperation visited Newfoundland and Labrador and toured early learning and child care centres.
- In June 2024, EDU signed a five-year MOU with the South Korean Ministry of Education and the College of the North Atlantic (CNA) to enable eligible Korean students to participate in an ECE work placement program in Newfoundland and Labrador. The program is managed by EDU and CNA, with EDU coordinating with work placement sites to ensure continued programming and supports for students.

Analysis

- As part of the MOU with South Korea and CNA, EDU advises that 14 students and one manager arrived from South Korea in June 2024 to complete the 12-week work placement program. The program includes six weeks of ECE and English as a Second Language training at CNA followed by a six-week work placement at six different local child care services.
- This first cohort will complete their work placement program on August 29, 2024. CNA is hosting a celebration of program completion on August 30, 2024 with representatives from EDU and IPGS in attendance.

Potential Speaking Points:

- **We are committed to continuing the strong collaboration between our province and the Republic of Korea, including through educational partnerships, labour cooperation, and opportunities related to the green energy transition.**
- **We are grateful for the partnership between our two jurisdictions, including in the area of early childhood education. I understand that the first cohort of students from South Korea have recently completed their work placements at child care services in our province. We look forward to continuing this partnership and welcoming more students from South Korea in 2025.**
- **Newfoundland and Labrador is on track to become the energy capital of North America – with oil, critical minerals, renewables, and hydroelectric capacity.**
- **Our pipeline-free, offshore oil can easily be shipped anywhere it is needed with a lower carbon footprint.**
- **We are decarbonizing the energy of today while developing the energy of tomorrow.**
- **Newfoundland and Labrador is known for our wind, and we are on the cusp of harnessing this wind energy to create hydrogen and make big strides towards a global green transition.**
- **International companies have taken notice. One South Korean company, SK ecoplant, has been at the forefront of this opportunity, investing in World Energy GH2's Project on the west coast of Newfoundland and Labrador.**

- **Newfoundland and Labrador has tremendous potential in the area of critical minerals, with 34 minerals identified. These critical minerals will play an important role as we transition to the green economy and take action on climate change.**
- **Opportunities for collaboration in the green energy transition are limitless and we look forward to exploring how Newfoundland and Labrador and South Korea can continue to work together to advance these mutual goals.**

Prepared/Reviewed By: C. Kenny / A. Ledwell / D. Macmillan, ADM (*in consultation with IPGS, EDU, IET and FFA*)

Approved By: P. Hearn, DM

August 29, 2024



ANNEX A**Biographies of South Korean Delegation****H.E. WOONGSOON LIM, Ambassador of the Republic of Korea to Canada**

Mr. Woongsoon Lim, Ambassador of the Republic of Korea (ROK), arrived in Ottawa on October 13, 2022. His recent assignments include Deputy Chief of Mission (DCM) and Political Minister in the Korean Embassy in Washington D. C., and Deputy Consul-General in New York.

Mr. Lim joined the ROK Ministry of Foreign Affairs in 1988. He served as Principal Secretary to the Minister of Foreign Affairs and Trade (2002), Director of European Division II (2005), Director of Humanitarian Assistance Division (2006), Deputy Director-General for North Korean Nuclear Affairs Bureau (2011), and Director-General for Human Resources (2014). His previous overseas postings to ROK embassies include Vienna (1995), Nairobi (1998), Washington D.C. (2002 & 2016), Rome (2008), Paris (2012), and Madrid (2019).

He holds a B.A. in Economics from Yonsei University in Seoul, Korea (1988) and has received an Order of Service Merit (Red Stripes) in 2013. He is married to LEE Eun Sun with one son and one daughter.

Ms. HEJIN KIM, Counsellor for Political Affairs, Embassy of Republic of Korea to Canada



Education

- Aug. 06 ~ May. 08, SYRACUSE UNIVERSITY, New York, USA, M.A. International Relations
- Mar. 96 ~ Feb. 00, EWHHA WOMANS UNIVERSITY, Seoul, Republic of Korea, B.A. English Language & Literature, French Language & Literature (Magna Cum Laude)

Professional Experience

- Sep.23 ~ Present, EMBASSY OF ROK TO CANADA, Counsellor for Political Affairs
- Feb.22 ~ Sep. 23, MINISTRY OF FOREIGN AFFAIRS, Director for ASEAN Cooperation, ASEAN Affairs Bureau
- May. 19 ~ Feb.22, ASEAN-KOREA CENTRE, Head of Information and Data Unit
- Feb. 18 ~ Oct. 18, MINISTRY OF FOREIGN AFFAIRS, Director for ASEAN Cooperation, South Asia & Pacific Affairs Bureau
- Aug. 15 ~ Feb.18, EMBASSY OF ROK TO THE SOCIALIST REPUBLIC OF VIETNAM, Counsellor for Political Affairs
- Feb. 14 ~ Aug. 15, MINISTRY OF FOREIGN AFFAIRS, Deputy Director, ASEAN Cooperation Division, South Asia & Pacific Affairs Bureau
- Aug. 11 ~ Feb. 14, CONSULATE GENERAL OF ROK IN NEW YORK, Consul for Political Affairs
- Feb. 10 ~ Aug. 11, MINISTRY OF FOREIGN AFFAIRS & TRADE, First Secretary, Disarmament & Nonproliferation Division, International Organizations Bureau
- Feb. 09 ~ Feb. 10, OFFICE OF THE PRIME MINISTER, Assistant Director, Protocol Office
- Aug. 08 ~ Feb. 09, MINISTRY OF FOREIGN AFFAIRS & TRADE, Assistant Director, Foreign Language Training Division, Office of Education and Training
- Jul. 05 ~ Aug. 06, MINISTRY OF UNIFICATION, Assistant Director, Bureau for International Cooperation, Office of Planning for Light Water Reactor Project
- Dec. 03 ~ Jul. 05, MINISTRY OF FOREIGN AFFAIRS & TRADE, Assistant Director, Public Relations Division, Cultural Affairs Bureau
- Dec. 02 ~ Dec. 03, MINISTRY OF FOREIGN AFFAIRS & TRADE, Assistant Director, Division 2, North American Affairs Bureau
- Jun. 02, Passed High Civil Service Examination for Foreign Service

Special Academic Training

- Jul. 02 ~ Sept. 02, FOREIGN SERVICE OFFICER TRAINING, Seoul, Korea

Language Abilities

- KOREAN, Fluent (native language)

- ENGLISH, Fluent
- FRENCH, Reading Capability

Honors

- December 2015, Foreign Ministers' Award on High Achievements
- December 2004, Foreign Minister's Award on High Achievements

Mr. DONGHWAN KIM, Commercial Attaché, Embassy of Republic of Korea to Canada



Date of Birth: 1980-02-07

Place of Birth: Seoul, Republic of Korea

Education

- Bachelor of Chemistry and Bio-Engineering and Bachelor of Business, Seoul National University ('07) (double major)
- Masters degree in Energy Resources Management, University College London, Australia ('17)

Experience

- Commercial Attaché ('23.02.), Ministry of Foreign Affairs ('23.02.~)
 - Korean Embassy in Canada ('23.02.~)
- Director ('19.10.), Ministry of Trade, Industry and Energy ('08.12.~'18.03.)
 - Europe and Americas Division ('08.12.~'10.08.)
 - IT Innovation Division ('10.08.~'10.12.)
 - Software Convergence Division ('11.01.~'13.03.)
- Electronics Technology Division ('13.03.~'13.04.)
- Media Relations Division ('13.04.~'14.04.)
- Nuclear Power Industry Policy Division ('14.04.~'15.10.)
- Overseas Study (Australia)('15.10.~'17.12.)
- Logistics and Distribution Division ('18.01.~'19.03.)
- Electric Power Division ('19.03.~'21.04.)
- Spokesperson for Foreign Press, Public Relations Office ('21.04.~'21.05.)
- Secretary of Minister's Office ('21.05.~'22.06.)
- Nuclear Power Plant Support TF Leader, Nuclear Power Plant Cooperation Team ('22.06.~'23.02.)
- Dep. Director ('07.04.), Intellectual Property Office ('08.04.~'08.12.)
 - Information Cooperation Team

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ANNEX C

Overview of Newfoundland and Labrador – South Korea Direct Trade (2023)*

Newfoundland and Labrador - South Korea Direct Trade Overview (2023)	
Total Newfoundland and Labrador Exports to South Korea	\$127,575,378
Total Newfoundland and Labrador Imports from South Korea	\$768,488
Balance of Trade	\$126,806,890

Newfoundland and Labrador – South Korea Trade (2023)			
Total Exports: \$127.5 million <i>(A decrease from \$214.3 million in 2022)</i>	1. Iron ore and concentrates - \$110.0 million 2. Nickel (not alloyed) - \$12.0 million 3. Seafood - \$4.4 million 4. Snails - \$556 thousand 5. Radar apparatus - \$169 thousand	Total Imports: \$768 thousand <i>(A decrease from \$146.5 million in 2022)</i>	1. Electric conductors - \$226 thousand 2. Luminaires and lighting fittings - \$85 thousand 3. Iron or steel wire, ropes, and cables - \$60 thousand
Newfoundland and Labrador Trade Balance: \$126.8 million			
<i>Source: Statistics Canada</i>		<i>Note: Original product titles have been shortened for the purposes of clarity</i>	

**The capture of Imports to NL are at times not fulsome due to the landing of NL Imports are other Ports (i.e. Montreal) and data being recorded inaccurately.*

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with Canadian Association of Petroleum Producers (CAPP)
Tuesday, September 24, 2024 at 3:30 p.m.

Participants:

- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador
- Ms. Lisa Baiton, President and CEO, CAPP
- Mr. Paul Barnes, Director, Atlantic and Northern Canada Regulatory and Operations, CAPP

Purpose of the Meeting:

- While in St. John's for a speaking engagement with the St. John's Board of Trade, CAPP CEO Lisa Baiton requested to meet with Premier Furey. Mr. Paul Barnes, Director of Atlantic and Northern Canada Regulatory and Operations will also attend the meeting. Biographies enclosed in Annex A.
- While there is no set agenda for this meeting, IGAS advises topics of mutual interest may include Bill C-49, the federal government's draft regulatory framework to cap oil and gas sector greenhouse gas emissions, and the impact of Canada's regulatory and climate policy environment more broadly.

Background

- The Canadian Association of Petroleum Producers (CAPP) is a non-partisan, research-based industry association that advocates on behalf of member companies that explore for, develop, and produce oil and natural gas throughout Canada.
- According to CAPP, last year the oil and gas industry contributed \$71.4 billion (3.2 per cent) to the country's Gross Domestic Product. CAPP reports that Canadian oil production includes oil sands at 3.2 million barrels per day (MMB/d) (65 per cent), conventional at 1.4 MMB/d (30 per cent), and offshore east coast at 0.2 MMB/d (5 per cent). Canada's offshore oil production is currently exclusively undertaken in Newfoundland and Labrador.
- CAPP's members represent the production of nearly three quarters of Canada's annual oil and natural gas production and provide more than 900,000 direct and indirect jobs in nearly all regions of Canada.
- In December 2023, CAPP's CEO wrote about barriers to Canada's energy competitiveness, pointing specifically to the country's complex regulatory and policy environment. Lisa Baiton stated "...our competitive energy advantage isn't just about resource wealth. It is a combination of a commitment to climate change action, a skilled workforce to produce our resources in a cost effective and responsible manner, a stable and democratic government, and having systems in place that ensure the financial benefits from the resources Canadians own are shared across the country."
- In May 2024, CAPP commissioned a report by S&P Global titled "Economic Impact Assessment of Canadian Conventional Oil and Gas." The report concludes that if oil and gas drillers were required to cut greenhouse gas emissions by 40 per cent by 2030, industry could see \$75 billion less in capital investment over the course of the next 9 years compared with current policy conditions.
- On May 30, 2023, the federal government introduced 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 (Bill C-49). The main purpose of Bill C-49 is to

advance and enable the development of offshore renewable energy in both Newfoundland and Labrador and Nova Scotia.

- The Bill is currently before the Standing Senate Committee on Energy, the Environment and Natural Resources, where an amendment was introduced to remove Clause 28, which focused on mitigating regulatory and legal uncertainty by making clear that the authority to prohibit petroleum activities within the Canada-Newfoundland and Labrador offshore area rests with the **Accord Act**. It is understood that CAPP has written to the Committee on the issue.
- On September 5, 2024, CAPP released its formal submission to the Competition Bureau for developing guidance to the federal government's recent amendments to the Competition Act. Bill C-59, *The Fall Economic Statement Implementation Act*, 2023 took effect on June 20, 2024, bringing significant changes to the Competition Act, including new explicit provisions targeting misleading environmental benefit claims (greenwashing). Significantly, the amendments place the burden of proving that environmental benefit claims are based on adequate and proper testing or substantiation on the party making them, a significant reversal from previous law. CAPP is opposed to the Competition Act's amendments related to environmental representations and believes these amendments should be fully repealed.

POTENTIAL DISCUSSION TOPIC: Federal Emissions Cap Framework

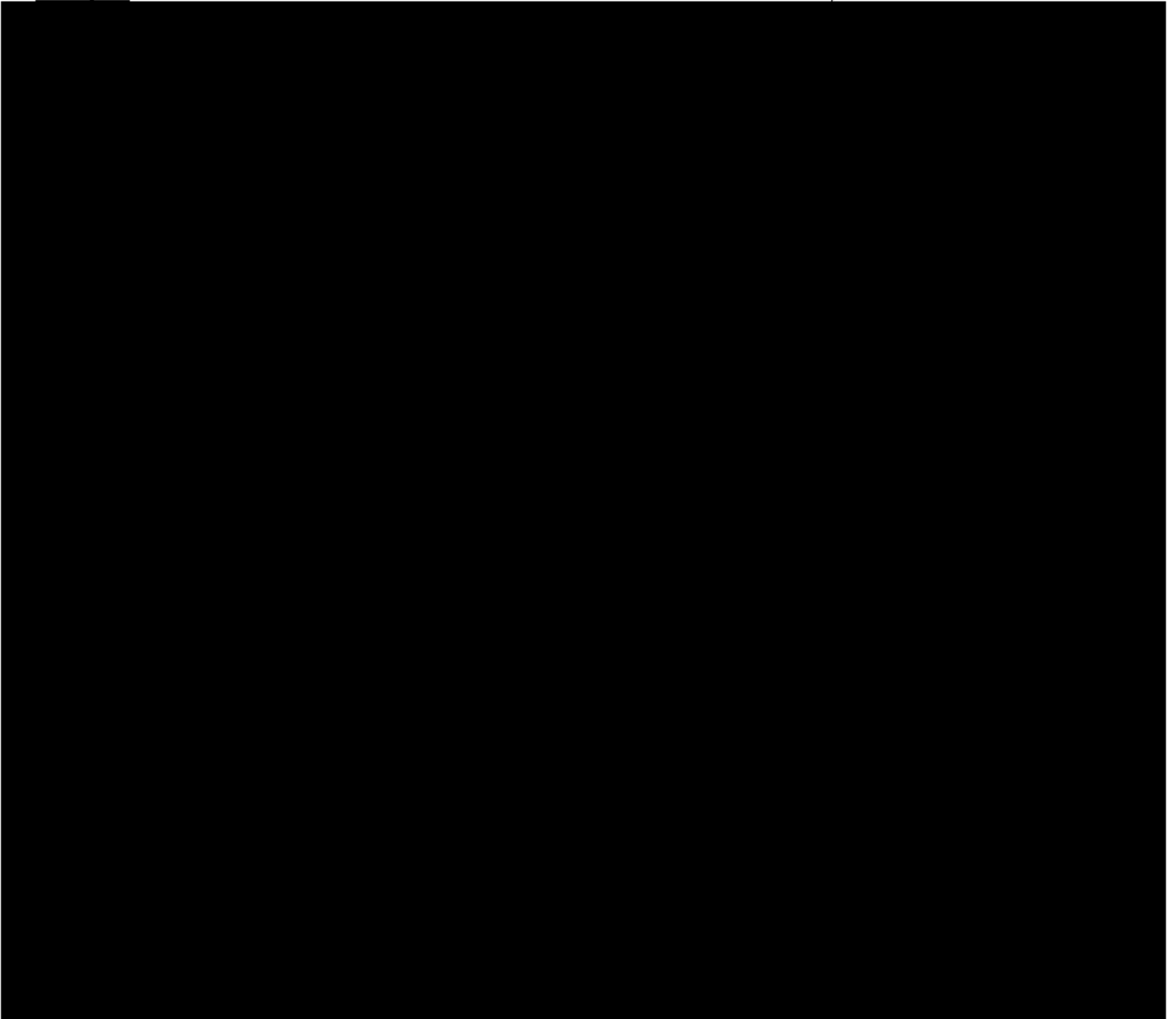
- The Government of Canada has committed to cap and reduce greenhouse gas emissions (GHG emissions) from the oil and gas sector at a pace and scale necessary to contribute to Canada's 2030 climate goals, to achieve net zero GHG emissions by 2050, and in a way that allows the sector to compete in the emerging net-zero global economy.
- In July 2022, the federal government published a discussion paper outlining two regulatory options to cap GHG emissions from the oil and gas sector: (1) a new national GHG emissions cap-and-trade system, and (2) modifications to existing carbon pricing systems. The discussion paper sought feedback on the two options and generated a significant response.
- The stated intent is to enact the regulations in 2025, with the reporting obligations to be effective in 2026, and the emissions cap to be phased in between 2026 and 2030.
- Environment and Climate Change Canada (ECCC) received over 150 submissions from provinces and territories, Indigenous organizations, industry, environmental nongovernmental organizations, and academics, as well as over 25,000 comments from members of the public.
- In December 2023, the federal regulatory framework for the oil and gas sector GHG emission cap was released. The framework outlines that by 2030, conventional oil companies will have to lower their emissions by 35 to 38 per cent of 2019 levels. It will not apply to oil refineries whose emissions are covered by the clean fuel standard regulations. Additionally, the framework will allow for companies to buy offset credits or to contribute to a decarbonization fund that would lower that requirement to cutting 20 to 23 per cent.
- Several sector stakeholders and organizations have publicly released their responses to the draft federal framework, including CAPP. In a letter dated February 2, 2024, CAPP wrote Minister Guilbeault to express its concern with the proposed approach. CAPP has requested the federal government not proceed with the emissions cap on the oil and gas sector.
- CAPP has suggested the design of an emissions cap should consider the impacts and unintended consequences that may result, including: production curtailment; energy security; weakening of existing policy tools (carbon pricing, methane emissions reduction, clean fuel regulations and provincial government policies); competitiveness and the economy, including

the ability to attract investment capital; public impacts and affordability; Indigenous impacts, including for Indigenous communities currently partnered with energy developments; and broader sectoral impacts – with a uniform emission cap having differing impacts within the sector and jurisdictions where they operate.

- Newfoundland and Labrador also provided feedback to Minister Guilbeault on February 5, 2024, regarding the federal government's regulatory framework release (Annex B). The letter states that while the Province recognizes more effort is needed to achieve net zero GHG emissions by 2050, the Province is already successfully lowering emissions faster than targeted (approximately 340,000 tonnes below the 2022 reduction target). Additionally, the letter noted that the Province launched a carbon capture, utilization and storage (CCUS) challenge in Fall 2023 with \$6 million in funding to increase research and development advancement and asked the federal government to accelerate federal programming in this sector, as well as digitalization, electrification, and hydrogen to support the oil and gas sector in lowering its emissions.

Analysis

29(1)(a)(i)



- Energy NL has expressed their concern to the federal government on their approach on the proposed cap to date, including the lack of a pathway to allow future lower-carbon projects and concern for the negative impact on business investment, not just in Canada's offshore, but in Canada's entire energy industry, and Canada as a whole.
- In May 2024, Premier Danielle Smith wrote a letter to Premiers Higgs, Moe, and Furey, beginning a conversation on establishing a coalition to frontier an "Oil and Gas Emissions Pledge." NL has signed onto the Pledge.
- According to the August 2024 Atlantic Economic Council Report, the emissions intensity of oil produced in Newfoundland and Labrador is 25 per cent of conventional oil production in Canada and 16 per cent of Alberta's oilsands.

Potential Speaking Points:

- **Newfoundland and Labrador's carbon pricing system for the Industrial sector, through the Management of Greenhouse Gas Act, has imposed increasing year-over-year GHG emissions reduction requirements on each offshore petroleum production facility since 2019. This approach has proven successful and GHG emissions have declined annually beyond the required targets since 2019.**
- **Under the provincial emissions carbon pricing system, facilities require a 28 per cent reduction in emissions in 2030. The Province's initiatives to reduce GHG emissions, together with reduction targets for large industry, have lowered GHG emissions to 8.3 million tonnes. This is our Province's third lowest GHG emissions on record and well below the 10 million tonnes average of the past decade.**
- **We recognize that accelerated efforts are needed to achieve net zero GHG emissions by 2050 in our Province and seek opportunities for further reductions.**
- **Over the past two decades, the offshore oil and gas sector has accounted for 25 per cent of provincial GDP and 41 per cent of export value. Newfoundland and Labrador is uniquely positioned to play a significant role in the green transition, with its vast renewable energy resources, CCUS potential, and proximity to other markets.**
- **Investments in CCUS are most important to offset emissions derived from our province's offshore oil industry. Federal support will be critical.**
- **It is critical that the federal oil and gas cap does not result in the unintended impact of displacing relatively low emission hydrocarbon production, such as that produced in Newfoundland and Labrador, with more intensive carbon production.**

Prepared/Reviewed By: S. Snook/L. MacDonald/D. Macmillan, ADM (in consult with ECC, IET)
Approved By: P. Hearn, DM

September 23, 2024

ANNEX A**Ms. Lisa Balton, President and CEO, Canadian Association of Petroleum Producers**

Ms. Balton is the 6th CEO of the Canadian Association of Petroleum Producers (CAPP). CAPP represents the Canadian upstream oil and natural gas industry, and CAPP's member companies operate from coast-to-coast and are responsible for nearly three quarters of Canada's annual oil and natural gas production and more than 400,000 jobs in nearly all regions of Canada. Since her appointment in 2022, Lisa has overseen the strategic realignment of CAPP's priorities and advocacy efforts, re-establishing CAPP as a non-partisan evidence-based research advocacy organization and authoritative resource on energy industrial policy.

Prior to joining CAPP, Lisa spent a third of her career through three CEO tenures on the global leadership team of one of the ten largest retirement funds in the world (CPP Investments) as its first Managing Director & Head of Global Public Affairs. Lisa built a new global geopolitical risk management function as the Fund expanded its international footprint, including into emerging markets, and had responsibility for strategy development and program execution covering 56 countries.

Lisa has held other leadership roles including as Vice President & Practice Lead at a North American public affairs firm, and within three federal and provincial governments in Canada.

She has a BA in Political Science from the University of Saskatchewan, a MBA from the Kellogg Graduate School of Management (Northwestern University) and Schulich School of Business (York University), with global electives completed at the Hong Kong University of Science & Technology. Lisa has an Institute of Corporate Directors ICD.D certification (University of Toronto, Rotman School of Management) and has served 20+ years on various boards of directors.

Mr. Paul Barnes, Director, Atlantic and Northern Canada Regulatory and Operations, CAPP

PAUL BARNES is Director - Atlantic Canada and Arctic, for the Canadian Association of Petroleum Producers (CAPP) based in their St. John's, Newfoundland and Labrador office. Paul has over 32 years of experience in the oil and gas industry. Prior to joining CAPP, he was employed with the Canada-Newfoundland & Labrador Offshore Petroleum Board (C-NLOPB) in their Lands Administration and Industrial Benefits departments. He currently serves on a number of Industry Boards and Committees and is a Director on the Board of the Atlantic Canada Chamber of Commerce.

ANNEX B

Government of Newfoundland and Labrador
 Environment and Climate Change
 Office of the Minister

COR-2024-211-1

FEB 05 2024

Honourable Steven Guilbeault P.C., M.P.
 Minister of Environment and Climate Change Canada
 E-mail: ministre-minister@ec.gc.ca

Dear Honourable Steven Guilbeault:

**RE: Federal Regulatory Framework for an Oil and Gas Sector
 Greenhouse Gas Emissions Cap**

Thank you for the opportunity to provide input to the federal government's regulatory framework for a proposed cap on oil and gas sector greenhouse gas (GHG) emissions, released on December 7, 2023.

Newfoundland and Labrador's carbon pricing system for the industrial sector, through the **Management of Greenhouse Gas Act**, has imposed increasing year-over-year GHG emissions reduction requirements on each offshore petroleum production facility since 2019. This approach has proven successful and GHG emissions have declined annually beyond the required targets since 2019. Under the provincial emissions carbon pricing system, facilities require a 28 per cent reduction in emissions in 2030.

The Province's initiatives to reduce GHG emissions, together with reduction targets for large industry, have lowered GHG emissions to 8.3 million tonnes. This is our Province's third lowest GHG emissions on record and well below the 10 million tonnes average of the past decade.

We recognize that accelerated efforts are needed to achieve net zero GHG emissions by 2050 in our Province and seek opportunities for further reductions. We continue to make investments through federal-provincial agreements such as the Low Carbon Economy Fund and the Oil to Heat Pump Affordability Program, as well as through provincial programs such as the 12-year \$100 million Green Transition Fund. The Province launched a carbon capture, utilization and storage (CCUS) challenge to accelerate decarbonization. This initiative provides up to \$6 million to increase research and development efforts on the advancement of CCUS in our offshore. These efforts and others need to be matched and significantly accelerated by federal government funding to decarbonize oil and gas production in Canada.



Federal support will be critical to enabling the green transition. Over the past two decades, the offshore oil and gas sector has accounted for 25 per cent of provincial GDP and 41 per cent of export value. Newfoundland and Labrador is uniquely positioned to play a significant role in the green transition, with its vast renewable energy resources, CCUS potential, and proximity to other markets. Accelerated federal programming and investment will be needed to support workers and businesses that may be adversely impacted by the cap and, more generally, the transition away from fossil fuel production.

The Province maintains its position from October 2022 that the proposed cap should be implemented through existing legislative mechanisms, including, Newfoundland and Labrador's **Management of Greenhouse Gas Act**.

Further, it is critical that the federal oil and gas cap does not result in the unintended impact of displacing relatively low emission hydrocarbon production, such as that produced in Newfoundland and Labrador, with more intensive carbon production.

With the information currently available, it is not possible to confidently determine the impacts this proposed new regulation will have on provincial GHG emissions, the Province's fiscal framework, and economic output more generally. We require more detail on the elements of the proposed framework to evaluate the impact of this new regulation on the Province; these details should be provided before the draft regulations are finalized. We look forward to continued engagement as we strive to achieve net zero GHG emissions by 2050.

Sincerely,

A blue ink signature of Hon. Bernard Davis, consisting of a stylized 'B' and 'D'.

HON. BERNARD DAVIS, MHA

District of Virginia Waters – Pleasantville
Minister

Cc: Honourable Dr. Andrew Furey, Premier
Honourable Andrew Parsons K.C., Minister – Industry, Energy and Technology

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with the British High Commissioner to Canada
Friday, September 20, 2024 at 1:00 p.m. to 1:30 p.m.
8th Floor, East Block Confederation Building (TBC)

Participants:

- Her Excellency Susannah Goshko, British High Commissioner to Canada (Bio in Annex A)
- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador

Purpose of the Meeting:

- Her Excellency was appointed as the British High Commissioner to Canada in September 2021. While there is no formal agenda, this meeting provides an opportunity to discuss: 1) the Titan submersible tragedy; 2) opportunities for collaboration between Newfoundland and Labrador and the United Kingdom (UK), including in the area of clean energy and critical minerals.

34(1)(a)(iii)

- Following the meeting, there will be a media availability at 1:30 p.m.
- 

Background:

- The UK is a unitary state consisting of England, Scotland, Wales and Northern Ireland and has a population of approximately 68 million. The UK has a land mass area of 244,376 km². According to the World Bank Group, the Gross Domestic Product of the UK in 2023 was \$3.34 trillion USD.
- The UK is a parliamentary democracy, and its government has a similar structure to Canada. On July 5, 2024, Keir Starmer, leader of the UK's Labour Party, a center-left party, became Prime Minister with a majority mandate winning 412 seats in the 650-seat House of Commons.
- The United Kingdom is Canada's fifth largest trading partner with exports totalling \$15.23 billion and imports totalling \$9.43 billion in 2023. The top export was gold with a value of \$8.68 billion. The top import was airplane part with a value of \$799.67 million.

100th Anniversary of the Royal Canadian Air Force

- On April 1, 1924, the Canadian Air Force was renamed the Royal Canadian Air Force – the "Royal" having been approved by King George V in 1923. April 1, 2024, marked the 100th anniversary of the RCAF as a distinct military element. The RCAF Centennial honours the RCAF's distinct heritage, recognizes the sacrifices and achievements of its members, and generates excitement and an enduring legacy that will propel Canada's Air Force into the next century of service.
- The Government of Canada is hosting international, national, and regional events throughout 2024 to recognize the RCAF Centennial. Events have included the RCAF Run, RCAF Centennial Ball, air shows (including allied participation), Illuminations (a project which illuminated landmarks in blue); Trees for Heroes (a program which plants RCAF Centennial commemorative Groves); 100 Coins for 100 Canadians (a project recognizing 100 individuals for their RCAF values); and RCAF Game Force (a series of esports and gaming tournaments).

- Newfoundland and Labrador's participation in centennial 100th anniversary celebrations has included a Centennial Mess Dinner hosted by 5 Wing Commander Lieutenant Colonel Aleem Sajan, illuminating Signal Hill and Government House as part of "Illuminations", and the unveiling of a mural painted by Charlie Johnston titled "How Time Flies" in the Town of Botwood. This mural celebrates the 100th Anniversary of the RCAF, in particular the RCAF's operation of Botwood's Airbase during World War II.

POTENTIAL DISCUSSION TOPIC #1: Newfoundland and Labrador-United Kingdom Relations

Trade

- In 2023, Newfoundland and Labrador exports to the UK totaled \$1.49 billion. Top exports included petroleum oils (\$1.19 billion), iron ore (\$205.7 million), and cobalt (\$32.91 million). Other notable exports included fish fillets (\$13.57 million) and newsprint (\$12.91 million).
- In 2023, imports from the UK to Newfoundland and Labrador totaled \$199.5 million. Top imports from the UK included animal feed (\$54 million) and petroleum oils (\$49.96 million).

Education

- Memorial University (MUN) has an international campus located in Old Harlow, Essex, UK. The Harlow Campus is used by both professional schools and academic departments to offer programs and serves as a base for faculty members and graduate students conducting research or further study in the UK. Examples of programs offered at Harlow Campus at varying times include: biology, business, education (internship), fine arts (theatre and visual arts), music, and pharmacy (clinical rotation).

Immigration

- On June 21, 2024, the former IPGS Minister, Hon. Gerry Byrne, announced the Government of NL had partnered with Barrow AFC, a UK professional football club, for the 2024-25 and 2025-26 seasons. This deal aims to promote NL as a welcoming place for immigrants through several strategies:
 - The NL logo and website HomeAwaits.ca is featured on Barrow AFC's jerseys, tickets, and social media.
 - NL is the official club sponsor, with HomeAwaits.ca also highlighted in Sky Sports broadcasts.
 - The club will post five promotional videos per season shared on social media.
 - There will be an opportunity to host an immigration fair at Barrow's stadium.
 - These jerseys will be visible in all EFL broadcasts as well as showcased in EA Sports' FC 25 video game.
- This partnership is complemented by on-going work in the UK. The IPGS In-Country Operations (ICO) team focuses on establishing a presence in specific countries to recruit in-demand workers and build relationships with international partners. The team works with Canadian embassies, educational institutions, and foreign governments to develop agreements and talent pipelines. In the UK, ICO is recruiting for sectors such as nursing, paramedicine, early childhood education, paramedicine, pilots, construction, and social work. In April 2024, ICO attended the Newcomers Canada fair in Birmingham, targeting professionals from various fields. Recently attended and upcoming immigration fairs include:
 - September 6th -7th – Bristol Job Show
 - September 13th -14th – Manchester Job Show
 - September 20th-21st – Milton Keynes Job Show
 - September 27th – 28th – London Job Show
- The partnership has attracted media attention in Canada and the UK, including the Globe and Mail, CTV and the BBC.

- Barrow AFC has advanced in a mid-season tournament known as the Carabao Cup to play the English Premier League side Chelsea FC on September 24 at Stamford Bridge Stadium in London. The match is set to draw significant exposure for the Home Awaits brand since Chelsea FC is one of the top clubs in European football with a massive global fanbase. Minister Stoodley will be travelling to the UK to attend the immigration fairs in Milton Keynes and London and meet with the High Commission of Canada in London. During this visit, she will also attend the Barrow AFC – Chelsea FC match and may do interviews with journalists in the U.K. related to this sporting event.

Analysis:

- Following the UK's exit from the European Union, an interim trade agreement between the UK and Canada, known as the Trade Continuity Agreement (TCA), was agreed upon to ensure that liberalized trade between the UK and Canada continues in a similar manner as they were under Canada's Comprehensive Economic and Trade Agreement (CETA) with the European Union. Both parties have been negotiating a longer-term bilateral trade deal to replace the TCA; however, in January 2024 the UK paused negotiations with Canada. Sticking points in the negotiation include how much access UK producers will have to the Canadian cheese market and the degree of beef and pork access that Canada will have in the UK. The negotiations remain paused at this time, and it is unclear when new UK Prime Minister Starmer will seek to reengage Canada on negotiating a trade agreement to replace the TCA.

POTENTIAL DISCUSSION TOPIC #2: Clean Energy

- Newfoundland and Labrador has invested significantly in clean energy development, including development of a wind/hydrogen sector and critical minerals. The Province also continues to promote the global requirement for responsibly produced fossil fuels and the need for continued investment in emissions reduction technologies for the energy sector.

Hydrogen

- Newfoundland and Labrador is advancing the province's hydrogen sector. When the four (of the six) wind-hydrogen projects being pursued through the expressions of interest process come online, they will be anticipated to produce over 900,000 metric tonnes of hydrogen annually and over 4.5 million metric tonnes of ammonia annually, reducing global emissions and mitigating the impacts of climate change. This green hydrogen could displace almost 12 million metric tonnes of carbon dioxide (CO₂) if used to replace coal-fired electricity generation or almost 5 million metric tonnes CO₂ if used to replace gas-fired electricity generation.
- In May 2024, the Province released its Hydrogen Development Action Plan, which outlines several key actions, such as:
 - pursuing opportunities for the local green hydrogen supply chain to support the industrial, mining, electricity generation and marine and heavy-duty vehicles sectors;
 - helping industry identify opportunities and provide supports including through the Department of Environment and Climate Change programming, to reduce greenhouse gas emissions by transitioning their fossil fuel powered operations to renewable energy;
 - continuing to work with the Federal Government on implementing Canada's Hydrogen Strategy, as well as a Collaborative Framework for the Regional Energy and Resource Table, which includes initiatives on green hydrogen, electrification, and critical minerals;
 - exploring opportunities to develop a hydrogen hub; and,
 - working with the other Atlantic Canadian provinces to facilitate the establishment of a green hydrogen industry in the region.
- The Provincial Government has also announced several investments/initiatives, including:
 - launching the Green Transition Fund, a \$100-million program providing financial support to businesses, organizations, post-secondary institutions, and industry associations to assist with the province's transition to a green economy;

- Introducing a Green Technology Tax Credit for companies in the Province that invest in equipment for green activities (e.g., energy conservation, clean energy generation, and efficient use of fossil fuels); and,
- administering a Crown Lands Call for Bids for Wind Energy Projects, which provided opportunities for wind-hydrogen developers to obtain exclusive rights to pursue their projects on certain Crown lands.

Critical Minerals

- Newfoundland and Labrador released its Critical Minerals Strategy in 2023 and committed to invest \$4.3 million to support its implementation. The strategy aims to support critical mineral supply as the basis of realizing further opportunities downstream within the jurisdiction and with partner jurisdictions.
- In February 2024, the Federal Government announced its plans to accelerate mining of rare earth elements essential in making electric vehicles and wind turbines: lithium, graphite, nickel, cobalt, copper, and so-called rare earth elements. Canada also plans to reduce the time to approve mining permits by better funding the regulatory agency to get rid of paperwork backlogs and running permitting and environmental assessment processes at the same time.
- In June 2024, the federal government added three minerals to its critical minerals list: high-purity iron, phosphorous and silicon metal. These materials are integral to a variety of products, critical to the energy transition and are often those in short supply.
- Newfoundland and Labrador has 25 of Canada's 34 critical minerals, representing a real opportunity for the province. In addition to existing critical mineral production, the province has rare earth elements, tungsten, molybdenum, uranium, vanadium and zinc projects with advanced economic studies, and/or resource estimates.
- Newfoundland and Labrador has 13 mines producing iron ore, nickel, copper, cobalt, gold, silver, antimony, fluor spar, barite, dolomite, limestone, gypsum, peat and pyrophyllite. There are seven developing projects in the province, including gold, iron ore and rare earth elements. There are two processing facilities: Vale's Long Harbour Processing Plant (nickel, copper and cobalt) and Rambler/Maritime's Nugget Pond Facility (copper and gold).
- The Labrador Trough of western Labrador is home to an abundance of high-grade, low-impurity iron ore, allowing for cheaper and lower emissions steel production. Several major open pit deposits within the Trough have already produced more than 2 billion tonnes of iron ore and existing reserves and resources suggest production could continue for decades.

Analysis

- To date, IET has primarily focused on European markets for potential hydrogen exports, given European Union hydrogen import commitments and targets in relation to energy security and geopolitical risks, as well as Canada's intergovernmental agreements on hydrogen (e.g. the Canada-Germany Hydrogen Alliance).

29(1)(a)

- Under Prime Minister Starmer's government, the King's Speech, which sets out the government's priorities for the coming parliamentary session was delivered July 17, 2024. Among other things,

the speech highlighted that the UK government is committed to a clean energy transition and that legislation will be brought forward to set up Great British Energy, a publicly owned clean power company headquartered in Scotland, which will help accelerate investment in renewable energy such as offshore wind, and legislation which will help the country achieve energy independence and unlock investment in energy infrastructure.

- According to Financial Times, in a September 17 speech, UK foreign secretary David Lammy noted the UK will place climate action and nature at the heart of Britain's foreign policy and will create new special representatives in each area. He also pledged to build a global clean power alliance, in which the UK will facilitate the sharing of knowledge and technologies to help more countries decarbonize and to bolster innovation.
- Clean power by 2030 was a core component of the Labour party's 2024 election campaign, which included commitments such as:
 - doubling onshore wind, tripling solar power, and quadrupling offshore wind by 2030;
 - investing in carbon capture and storage, hydrogen and marine energy; and,
 - ensuring the UK has the long-term energy storage it needs.

POTENTIAL DISCUSSION TOPIC #3: Titan Submersible Tragedy

- On June 15, 2023, the Titan's expedition to the wreck of the Titanic departed St. John's harbour aboard the research and expedition ship MV Polar Prince. The ship arrived at the dive site on June 17. On June 18, 2023, the Titan submersible was diving to the Titanic wreck site 325 nautical miles south-southeast of Cape Race, Newfoundland and Labrador. Approximately one hour and 45 minutes after the Titan began its descent, the surface support team lost contact with it. Search and rescue operations were initiated.
- On June 22, 2023, the United States Coast Guard (USCG) confirmed that debris found on the ocean floor near the Titanic wreckage consisted of pieces of the missing submersible. There were no survivors.
- The five passengers aboard the Titan submersible were: Hamish Harding, a British businessman; Stockton Rush, the American chief executive officer of Ocean Gate; Paul-Henri Nargeolet, a French deep-sea explorer and Titanic expert; Shahzada Dawood, a Pakistani-British businessman; and Suleman Dawood, son of Shahzada Dawood.
- The search and rescue operation was performed by an international team organized by the USCG, United States Navy, and Canadian Coast Guard. Support was provided by aircraft from the RCAF and United States Air National Guard, a Royal Canadian Navy ship, as well as several commercial and research vessels and remotely operated vehicles (ROVs).
- The Horizon Arctic, a Canadian-owned offshore supply vessel from Newfoundland and Labrador, played a key role in the operation. It carried a ROV that was used to search the ocean floor near the Titanic wreck for pieces of the Titan submersible.
- A public hearing by the USCG into what may have caused the Ocean Gate Titan submersible to implode started on September 16, 2024 and is expected to last two weeks. The purpose of the public hearing is to uncover facts about the vessel's implosion on its way to the Titanic and prevent similar incidents from happening again.

Analysis:

- Premier Furey met with Her Excellency in St. John's in the days following the Titan submersible tragedy. The Intergovernmental Affairs Secretariat (IGAS) aided the UK government with support for British citizens on the ground in the province and made arrangements for family members

from the UK and United States who traveled to the province while the search (and later recovery) efforts were ongoing.

Potential Speaking Points:

- **As both Newfoundland and Labrador and the United Kingdom continue to chart the course towards clean energy, there are many opportunities for collaboration between our jurisdictions.**
- **Newfoundland and Labrador has tremendous wealth and diversity of natural resources that span critical mineral deposits, hydro resources, low carbon offshore oil and gas, abundant wind with speeds surpassing 9 metres per second, among the highest freshwater runoff in Canada, 350,000 square kilometres of Crown lands and 29,000 kilometers of coastline.**
- **Additionally, we are advantaged by deep, ice-free ports and harbours with untapped capacity; well-established port services; an experienced, capable and competitive supply chain and workforce; academic researchers with expertise in offshore engineering and harsh environment technology; deep experience working in the ocean and in the offshore energy sector; and a reputation as a leader in ocean-based technology. Our proximity to the European markets further adds to our unique strengths.**
- **Today, 92% of the electricity generated in Newfoundland and Labrador is from renewable sources – when you consider what we generate and export to our neighbours, it is 99%. We are quite proud of that.**
- **Our assets and expertise are fuelling the development of both our clean onshore and offshore wind energy resources for export internationally.**
- **My government embarked on an ambitious agenda to develop our wind-hydrogen resources, moving quickly to lift a long-standing moratorium on commercial wind energy projects, launching and concluding a Crown lands nomination and Call for Bids process for wind energy projects, while developing and implementing a streamlined regulatory regime and a robust fiscal framework for our green wind-hydrogen industry.**
- **The Call for Bids has been completed with four companies advancing developments: EverWind NL Company – Burin Peninsula; Toqlukut'k Wind and Hydrogen Ltd. (ABO) – Avalon Peninsula /Isthmus Region; Exploits Valley Renewable Energy Corporation – Central NL; and World Energy GH2 Inc. – Western NL.**
- **During the life of these four projects (35 to 40 years) the anticipated overall economic impact on GDP is an estimated \$206.2 billion; with peak employment an estimated 11,694 full-time equivalents during construction.**
- **The exciting new partnership between professional football club Barrow AFC and Newfoundland and Labrador allows the province to take part in the world's game and be showcased worldwide. As Barrow AFC players wear Newfoundland and Labrador with pride on their jerseys, soon we will all be cheering along with pride of our own as the team takes the field.**

Prepared/Reviewed By: N. Chancey / C. Kenny / A. Ledwell / D. Macmillan, ADM

Approved By: P. Hearn, DM

September 18, 2024

ANNEX A**Biography****H.E. SUSANNAH GOSHKO, British High Commissioner to Canada**

Susannah Goshko is a career Diplomatic Service officer who took up her appointment as High Commissioner to Canada in September 2021.

Susannah was previously Principal Private Secretary to the Foreign Secretary, a role that she held for two years covering the COVID pandemic and the merger of the Foreign Office and the Department for International Development. She has spent much of her career working on national security issues and has had a number of postings in the Americas (twice in Washington and once in Havana). She has also spent time at the Department for Exiting the European Union (EU), where she was responsible for setting up the team that led on the Withdrawal Agreement and has been the UK's Permanent Representative to UNEP and UN Habitat.

ANNEX B

Trade Overview

NL – United Kingdom Direct Trade Overview (2023)	
Total NL Exports to United Kingdom	\$1,499,243,816
Total NL Imports from United Kingdom	\$199,520,377
Balance of Trade	\$1,299,723,439

NL – United Kingdom Trade (2023)			
Total Exports: \$1.49 billion	1. Petroleum oil and oils – \$1.19 billion	Total Imports: \$199.5 million	1. Animal Feed- \$54 million
	2. Iron ore and concentrates - \$205.7 million		2. Petroleum oils - \$49.9 million
	3. Cobalt mattes - \$32.9 million		3. Vessels - \$5.7 million
	4. Seafood products - \$26.58 million		4. Pumps for liquids - \$3.9 million
	5. Newsprint - \$12.9 million		5. Surveying and Hydrographic Equipment- \$2.4 million
NL Trade Balance: \$1.3 billion			
Source: Statistics Canada (Trade Data Online)			
Note: Original product titles have been shortened for the purposes of clarity			

ANNEX C

Event Scenario – British High Commission Reception

Date: Friday, September 20, 2024

Time: 5:00 p.m. – 8:00 p.m.

Location: Alt Hotel, 125 Water Street, St. John's

Event Organizer: British High Commissioner Susannah Goshko

Event Overview:

- The British High Commissioner to Canada, Her Excellency Susannah Goshko, is hosting this exclusive reception to celebrate the longstanding friendship between the United Kingdom (UK) and Newfoundland and Labrador - noting in particular the support Newfoundland and Labrador provided during the international search and rescue operation undertaken in response to the Titan submarine tragedy off the province's coast on June 18, 2023. Premier Furey met with the High Commissioner in St. John's in the days following the disaster that claimed the lives of all five occupants of the submersible, including British businessman and aviator Hamish Harding (details below).
- The reception will also celebrate the 100th Anniversary of Royal Canadian Air Force (RCAF). Weather permitting, the UK's Royal Air Force Aerobatic Team – the Red Arrows – will conduct a fly-past. This event in St. John's marks the last stop on the Red Arrows' five-week Maple Hawk tour of Canada (details below).
- The reception will feature British food and drink, as well as entertainment by Mary Barry, a jazz, blues and chanson singer/songwriter born in St. John's.
- The timeline for the event is as follows:
 - 5:00 p.m. to 5:30 p.m. – Arrival
 - 6:00 p.m. – Speeches
 - 6:30 p.m. - Red Arrows fly-past
 - 8:00 p.m. - Event ends

Attendees:

- Her Excellency Susannah Goshko, British High Commissioner to Canada (Bio in Annex A)
- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador
- Her Honour The Honourable Joan Marie J. Aylward, Lieutenant Governor of Newfoundland and Labrador
- Participation in this reception is by invite only and may include other government officials and stakeholders. The British High Commission will also be offering six invites to members of the public who share their favourite fact about the UK and Newfoundland and Labrador.

Dress Code:

- Not specified.

Transportation:

- Private vehicle.

Background:

100th Anniversary of the Royal Canadian Air Force

- On April 1, 1924, the Canadian Air Force was renamed the Royal Canadian Air Force – the “Royal” having been approved by King George V in 1923. April 1, 2024 marked the 100th anniversary of the RCAF as a distinct military element. The RCAF Centennial honours the RCAF’s distinct heritage, recognizes the sacrifices and achievements of its members, and generates excitement and an enduring legacy that will propel Canada’s Air Force into the next century of service.
- The Government of Canada is hosting international, national, and regional events throughout 2024 to recognize the RCAF Centennial, including the RCAF Run, RCAF Centennial Ball, air shows (including allied participation), and RCAF Game Force – a series of esports and gaming tournaments.
- Other celebratory events have included:
 - Illuminations (April 1, 2024) – a RCAF project in which over 500 landmarks, businesses, city halls, and residences, were illuminated in blue to honour those who have served in the past century. Newfoundland and Labrador participants included Signal Hill and Government House. The RCAF broke the Guinness World Record for most landmarks illuminated in 24 hours.
 - Centennial Mess Dinner at 5 Wing Goose Bay (April 20, 2024) – 5 Wing Commander Lieutenant Colonel Aleem Sajan welcomed military members, guests, and community members to 5 Wing Hangar for this event, which also displayed several aircraft and military vehicles (e.g. CH-145 Griffon Helicopters from 444 Combat Support Squadron).
 - Trees for Heroes Program – In partnership with Trees for Life, the RCAF has been planting trees, shrubs, tulips, and other plants in communities across Canada. These RCAF Centennial Groves serve as a tribute to all RCAF personnel who have served over the last 100 years. ON, AB, NB, PE, and NS all hosted, or are scheduled to host, planting events through the summer into the fall.
 - 100 Coins for 100 Canadians – Recognizes 100 Canadians with a special edition RCAF Centennial coin for their demonstration of RCAF values including loyalty, integrity, courage, excellence, inclusion, and accountability or the positive impact they have made on their community. The list of recipients is expected in the upcoming weeks.
- In addition to these federal initiatives, a mural painted by Charlie Johnston titled “How Time Flies” was unveiled by the Botwood Mural Arts Society on August 27, 2024. The mural celebrates the 100th Anniversary of the RCAF, in particular the RCAF’s operation of Botwood’s Airbase during World War II. Canadian Forces Base 9 Wing Gander was a partner in this project.

Red Arrows

- At the invitation of the RCAF, the UK’s Red Arrows began the Maple Hawk Tour in Canada. Starting on August 20, 2024 in Nova Scotia, the five-week tour will end in St. John’s with the planned fly-past during this event.
- The tour marks the RCAF’s centennial celebration, as well as the Red Arrows’ 60th Diamond Season. During the tour, the Red Arrows visited Nova Scotia, Ontario, and Quebec with a series of flypasts and air displays.
- The Maple Hawk Tour marks the Red Arrows’ return to Canada since 2019 and will close out the Red Arrows’ 2024 season.

Titan Submarine

- On June 15, 2023, the Titan's expedition to the wreck of the Titanic departed St. John's harbour aboard the research and expedition ship MV Polar Prince. The ship arrived at the dive site on June 17.
- On June 18, 2023, the Titan submersible was diving to the Titanic wreck site 325 nautical miles south-southeast of Cape Race, Newfoundland and Labrador. Approximately one hour and 45 minutes after the Titan began its descent, the surface support team lost contact with it. Search and rescue operations were initiated.
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Prepared/Reviewed by: K. Moreno / A. Ledwell / D. Macmillan

Approved by: P. Hearn, DM

September 18, 2024

Meeting Note
Intergovernmental Affairs Secretariat
Meeting with the Ambassador of Belgium to Canada
Friday, September 27, 2024 at 1:15 p.m. to 1:45 p.m.
Confederation Building – 8th Floor, East Block

Participants:

- His Excellency Patrick Van Gheel, Ambassador of Belgium to Canada (see Annex A for Bio)
- The Honourable Dr. Andrew Furey, Premier of Newfoundland and Labrador

Purpose of the Meeting:

- His Excellency was appointed as Ambassador of Belgium to Canada in 2021. This is His Excellency's first official visit to Newfoundland and Labrador. While there is no formal agenda for this courtesy meeting, IGAS notes that the Premier and His Excellency will sign a Memorandum of Understanding (MOU) on reciprocal driver's licenses during this meeting. Protocol Office has advised there will be an exchange of gifts at the end of the meeting.
- From September 24-27, 2024, His Excellency will lead a trade mission of Belgian delegates to Nova Scotia (September 24-25) and Newfoundland and Labrador (September 25-27). As part of this program, the delegation will meet with: senior-level executive from the Department of Industry, Energy and Technology (IET); the Port of Argentia; and bilaterally with Wind-Hydrogen developers (World Energy GH2, Exploits Valley Renewable Energy Corporation (EVREC), North Atlantic Refining Limited (NARL) and ABO Energy. See the program in Annex B for more information, and Annex C for the Ambassador's private program following conclusion of the trade mission.
- Premier Furey has previously met His Excellency in Ottawa in May 2023 when Premier Furey presented to the European Union (EU) Heads of Delegation, in Rotterdam, Netherlands in May 2023, and also in a bilateral meeting in February 2024, when Premier Furey was in Ottawa to announce the signing of an MOU with the federal government on offshore wind development.

Background:

- According to the Organisation for Economic Co-operation and Development (OECD), Belgium has a population of 11.82 million with a total area of 30,688 km². Belgium is in western Europe and borders the Netherlands, Germany, Luxembourg and France. The North Atlantic Treaty Organization (NATO) headquarters are located in Brussels, Belgium. Departments and executive agencies of the European Commission are also located in Brussels.
- According to the World Bank Group, Belgium's Gross Domestic Product (GDP) was \$632.22 billion USD in 2023, up 8.33 per cent from \$583.61 billion USD in 2022. In May 2024, the European Commission forecasted that economic growth in Belgium is expected to remain broadly stable at 1.3 per cent in 2024 and 1.4 per cent in 2025. The unemployment rate is also expected to stay broadly stable at 5.6 per cent in 2024 and 5.4 per cent in 2025.
- According to European Union Employment Services, key economic sectors in Belgium include the service sector, pharmaceuticals, steel production, and car manufacturing.
- Belgium is a federal constitutional monarchy in which the king is the head of state, and the prime minister is the head of government. Decision making powers are divided between three levels of government: the federal government, three communities (Flemish, French-speaking and German) and three regions (Flanders, Wallonia, and Brussels). The communities oversee

language-linked issues such as education, childcare and culture. The regions oversee territorial issues such as mobility, environment, and housing. The federal government is responsible for foreign affairs, defence, justice, finance, social security, and parts of public health and home affairs. Legally, all three levels are equal.

- According to Global Affairs Canada, in 2023, Belgium was Canada's fifth largest trading partner in the EU, with \$13.6 billion in total bilateral goods and services trade. Belgium is also an important source of foreign direct investment (FDI) in Canada. In 2023, FDI stock from Belgium stood at \$4 billion.

POTENTIAL DISCUSSION TOPIC #1: Newfoundland and Labrador-Belgium Relations

- To commemorate Newfoundland's accomplishments, contributions and sacrifices during the First World War, six battlefield memorials have been built in France (4), Belgium (1), and Turkey (1), known as the Trail of the Caribou as each site features a bronze caribou. The memorial in Belgium is located just outside Courtrai in the Flemish province of West Flanders.
- Each year, students from the province participate in a Trail of the Caribou Pilgrimage Student Ambassador Program. Through the program, students travel to France and Belgium to participate in a First World War battlefield tour, visit significant sites where the Royal Newfoundland Regiment fought, including communities where the first five monuments are located. The tour ends with a day in Brussels visiting a selection of the city's historical and cultural landmarks. Starting in 2025, the program will be expanded to increase the number of Newfoundland and Labrador students that can participate from 30 to 100.
- A First World War Victoria Cross recipient, Private Thomas Ricketts from Middle Arm, joined the Newfoundland Regiment on the Western Front near Ypres, Belgium in July 1917. Facing heavy gunfire from German forces on October 14, 1918, Private Ricketts bravely returned for additional ammunition needed for his platoon to continue moving forward. Because of his actions, his platoon successfully captured several machine guns, field guns and German prisoners. He was the youngest soldier and the only member of the Royal Newfoundland Regiment to receive this prestigious medal during the First World War.
- In 2016, human remains found in Belgium were identified as Private John Lambert, a 17-year-old member of the Newfoundland Regiment who died in 1917 during the Battle of Langemarck near Ypres, Belgium in the First World War. Private Lambert's remains were discovered during an archeological dig near St. Julien, Belgium, and his name is memorialized on the Beaumont-Hamel Newfoundland Memorial in Bowring Park, which commemorates soldiers from Newfoundland who died during the First World War and have no known grave.

Trade

- In 2023, total exports from Newfoundland and Labrador to Belgium were valued at \$192.1 million and consisted mainly of critical minerals (\$191.3 million), such as nickel (\$179.1 million), iron ore (\$7.7 million), and cobalt (\$3.3 million).
- In 2023, total imports to the province from Belgium were valued at \$81.5 million and consisted primarily of light oil and petroleum products (\$80.5 million).

Energy

- As a member of the EU, Belgium has committed to reduce greenhouse gas (GHG) emissions by 47 per cent by 2030 in order to support the EU-wide goals of reducing emissions by 55 per cent by 2030 and reaching net zero emissions by 2050.

- Belgium's National Energy and Climate Plan (NECP) includes targets to reduce GHG emissions not covered by the EU Emissions Trading System (ETS) by 35 per cent by 2030, and to reach 17.5 per cent of final energy consumption from renewable energy by 2030. Belgium's three regions have also established their own energy and climate targets.
- In 2022, Belgium's electricity mix was comprised of nuclear (46.3 per cent), gas (24.6 per cent), wind (12.8 per cent), solar (7.7 per cent), bioenergy (4.7 per cent) oil (3.6 per cent), hydro (0.3 per cent), and coal (0.1 per cent).
- As of February 2023, Belgium has nine operational offshore wind farms and is the fourth largest offshore wind energy producer globally (behind the United Kingdom, Germany, and China). In 2022, Belgium had approximately 2.9 gigawatts (GW) of installed onshore wind capacity and approximately 2.3 GW of installed offshore wind capacity.
- In November 2023, Belgium released its hydrogen strategy. The strategy seeks to position Belgium as a hydrogen import and transit hub for Europe and includes a key role for the Port of Antwerp-Bruges, the second-largest seaport in Europe (after the Port of Rotterdam).
- Belgium has set an import target of 20 terawatt hours (TWh) of renewable hydrogen and derivatives in 2030 and between 200 and 350 TWh by 2050. Belgium aims to have a hydrogen transport network interconnected with at least Germany, France, and the Netherlands by 2028 to support its positioning as a renewable energy import hub for Europe.
- In pursuit of its hydrogen goals, Belgium signed MOUs with Oman and Namibia on cooperation in green hydrogen.

Analysis:

Trade

- Belgium has not yet ratified the Canada – European Union Comprehensive Economic and Trade Agreement (CETA), largely due to the country's complex political structure. To sign the treaty, assent is required by all three regional governments as well as the federal government. Wallonia has raised concerns that CETA may undermine labour, environmental, and consumer standards and allow multinational corporations to hurt local companies. Flanders relies significantly on exports.

Energy

- The 2023 draft update to Belgium's National Energy and Climate Plan states that due to "high demographic and geographical constraints," national contributions to the EU's renewable energy targets will be "extremely difficult to reach on Belgian territory," but that the country's location allows for the import for renewable electricity from the North Sea.
- Belgium is a key market of interest for NL due to its import targets and proximity to Germany and the Netherlands. In August and October 2023, IET met with officials from the Port of Antwerp-Bruges. Port representatives indicated that they had met with proponents of Call for Bids projects and that they were interested in signing an MOU with GNL or directly with proponents.
- Exploits Valley Renewable Energy Corporation (EVREC) has signed an MOU with the Port of Antwerp-Bruges, which will support pre-Front-End Engineering Design (FEED) and FEED work on the Port of Botwood, with a possible direct strategic investment in port infrastructure.

Academic Partnerships

- Memorial University currently has one student-exchange agreement with Belgium's Hasselt University. Memorial students in Business Administration have previously held work term placements in Belgium. Memorial University currently has two students enrolled from Belgium.
- In February 2024, the Marine Institute hosted Alexane Harvey, a Cleantech Trade Commissioner with the Embassy of Canada to Belgium and Luxembourg, at the Launch, Marine Institute's ocean research and practical training facility, in Holyrood to discuss opportunities in the Belgium market.
- As a result of this meeting, the Marine Institute is currently engaging in discussions with the Valorisation & Innovation Department of Vlaams Instituut voor de Zee, InnovOcean Campus in Ostend, and the Kenniseconomie Cluster Blue Energy.

POTENTIAL DISCUSSION TOPIC #2: Memorandum of Understanding (MOU) Signings

Reciprocal Driver's Licence MOU Between Belgium and Newfoundland and Labrador

- Currently, valid foreign driver's licences are permitted to be used in Newfoundland and Labrador for the first three months of residency. After this time, new residents must apply for a Newfoundland and Labrador driver's licence to drive in the province.
- Reciprocal agreements of mutual licence recognition are pursued where training and experience are highly equivalent to minimize public safety risk. Newfoundland and Labrador currently have 10 reciprocal agreements. Where agreements exist, licences can be exchanged through the Department of Digital Government and Service NL (DGSNL).

Port of Antwerp MOU

- In February 2023, Ambassador Van Gheel led a delegation of government officials and business leaders to Halifax, Nova Scotia (NS) to explore opportunities to partner on green hydrogen. The program included a Belgium-Atlantic Canada Roundtable on Offshore Wind and Green Hydrogen, which IET's Director of Renewable Energy Policy attended in person.
- Since the February 2023 visit to Halifax, Newfoundland and Labrador has been discussing the possibility of an MOU with Belgium and specifically, the Port of Antwerp.
- The Port of Antwerp has been active in building relationships with Newfoundland and Labrador; attending the Energy NL conference in June 2024 and signing an MOU with Exploits Valley Renewable Energy Corporation (EVREC) in fall 2023 committing to strategic business partnership for the development and use of the Port and other common infrastructure related to EVREC's project. The MOU will form the basis of negotiations between the parties to conclude a definitive agreement containing terms applicable to the purchase or lease of the Port of Botwood.
- In addition to the MOU, the Belgium Embassy has notified IET of an additional announcement during their visit around their pre-certification program, CertifHy.
- In 2024, Brussels-based consultancy firm Hincio launched the CertifHy pilot project to run pre-certification for projects' production of renewable fuels of non-biological origin (RFNBOs) for the Belgian market. The pre-certification acts as a dry run for full commercial production certification, and approval means that fuel produced is essentially ready to receive full certification to ship to Belgium.
- Four Canadian developers have applied for pre-certification through CertifHy. Belgium will announce during their visit that two developers in this province (EVREC and World Energy

GH2) will be the first to receive this designation, a vital step towards export of hydrogen into the European market.

Analysis:

Reciprocal Driver's Licence MOU Between Belgium and Newfoundland and Labrador

- Officials at DGSNL have assessed licensing requirements in Belgium and determined they are of a similar standard to Newfoundland and Labrador. DGSNL, in consultation with IGAS, has negotiated an MOU regarding the mutual recognition of licensing between the Province and Belgium.
- It is expected that the MOU will be signed by Premier Furey and Ambassador Van Gheel during this meeting, followed by a photo opportunity.
- IGAS has reviewed the MOU and DGSNL has confirmed that the necessary approvals are in place to proceed with signing this MOU.

Port of Antwerp MOU

- More than ten businesses are expected to participate in the trade mission, including the Hydrogen Council and the Port of Antwerp. See Annex D for a list of delegates provided by the Belgian Embassy.
- Newfoundland and Labrador is of global interest for its potential as a renewable energy hub to meet world demand for green energy. The Governments of Newfoundland and Labrador and Belgium are forging strong ties to foster successful renewable energy projects.
- The delegation visit provides an opportunity to inform Belgium of Newfoundland and Labrador's priorities for the renewable energy sector and highlight the strategic advantages the province holds in green hydrogen/ammonia production. The visit will also provide valuable opportunities for Belgium companies to make direct connections with stakeholders in wind and hydrogen industry in the province and likewise for the province.
- The MOU with the Port of Antwerp has been reviewed by IET, IGAS, and JPS. Minister Parsons and Mr. Tom Hautekiet, the Port's Chief Business Development and Transition Officer, are expected to sign the MOU on September 26, 2024. The signing of the MOU will be followed by an evening networking reception jointly hosted by Belgium and IET. For a list of invited guests see Annex E.

Potential Speaking Points:

- **Your Excellency, welcome to Newfoundland and Labrador. It is a pleasure to welcome you to the Province and to have this opportunity to discuss shared interests and priorities.**
- **Newfoundland and Labrador and Belgium enjoy strong connections. We are looking forward to the expansion of the Trail of the Caribou Pilgrimage Student Ambassador Program to enable more students in our province to learn about the First World War, including Newfoundland's history and role.**
- **The signing of two Memorandums of Understanding with the Government of Belgium on reciprocal driver's licenses and with the Port of Antwerp is a testament to what we can accomplish when we work closely together.**
- **As both Newfoundland and Labrador and Belgium continue to chart the course towards clean energy, there are many opportunities for collaboration between our jurisdictions.**

Through the Port of Antwerp Memorandum of Understanding, we look forward to working more closely with you on clean energy, specifically hydrogen.

Prepared/Reviewed by: N. Chancey / L. MacDonald / D. Macmillan (in consultation with IET)

Approval: P. Hearn, DM

September 23, 2024



ANNEX A

Biography

H.E. PATRICK VAN GHEEL, Ambassador of Belgium to Canada



Patrick Van Gheel

Embassy of Belgium in Canada
360 Albert Street, 8th floor, Suite 820
Ottawa, Ontario 1(1 R 7X7, Canada

Telephone + 1 613 236 9287

Email: patrickvangheel@diplobel.fed.be

<http://www.diplomatiebelgium.be/>

Date of birth: 16/05/1973

Work Experience

February 2023: Coordinator Groupe des Ambassadeurs francophones à Ottawa

August 2021: Ambassador of Belgium to Canada

August 2018— July 2021: Director for EU — Trade Policy and World Trade Organisation at FPS Foreign Affairs, Foreign Trade and Development Cooperation, Full Member for Belgium in the EU Trade Policy Committee

August 2015 — July 2018: Ambassador of Belgium to Cuba, the Dominican Republic and Haiti based in Havana.

August 2012 — July 2015: Director for EU — Trade Policy and World Trade Organisation at FPS Foreign Affairs, Foreign Trade and Development Cooperation, Deputy Full Member for Belgium in the EU Trade Policy Committee

August 2008 — August 2012: Counselor at the Economic Section of the Permanent Representation of Belgium to the United Nations and the World Trade Organisation in Geneva

November 2004 — July 2008: First Secretary at the Permanent Representation of Belgium to the OCDE in Paris

October 2003— October 2004: Diplomatic Advisor at the Cabinet of the Minister of Home Affairs

October 2000 — September 2003: Attaché at the Permanent Representation of Belgium to the European Union in Brussels

February 1999— August 1999: Attaché at the Embassy of Belgium in Ottawa.

October 1998: Start of Diplomatic Career

Education

Master of Laws

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ANNEX D

Draft List of Delegates

Government Representatives

- Patrick Van Gheel, Ambassador of Belgium to Canada
- Malika Anmi, Policy Officer | Hydrogen, Belgium's Federal Public Service Economy, SMEs, Middle Classes and Energy
- Maxime Ramon, Counselor, Embassy of Belgium in Canada
- Ralph Moreau, Science and Technology Counsellor, Climate and Cleantech, Flanders Investment and Trade (FIT), New York
- Anne Defourmy, Trade Commissioner, Wallonia Export and Investment Agency (AWEX), Montreal (TBC)

Business Delegates

- Artiom Loginov, Canada Business Development and Sales Manager, Accelera by Cummins
- Tomas Polanco, Commercial Director Green Hydrogen Solution, Agf-Gevaert
- Jean-Francois Fournier, Senior Business Manager, Air Liquide
- Jean-Baptiste De Cuyper, Head of Business Development – Green Hydrogen
- Didier Wiot, CEO, Elia Grid International
- James Craig, Project Manager Exmar Offshore Group, Exmar
- Pierre Folléa, International Business development, Fluxys
- Patrick Maio, CEO, Hincio
- Nicolas de Colnagac, Executive Vice President, Global Hydrogen and the Americas, John Cockeril
- Claire Burtin, Head of Strategy and Planning – North America, John Cockeril
- Tom Hautekiet, Chief Business Development and Transition Officer, Port of Antwerp-Bruges
- Bert de Colvenaer, CEO, WaterstofNet

ANNEX E

Draft Attendee List: Newfoundland and Labrador-Belgium Networking Reception

* Invitation list has been developed from previous incoming delegation receptions, such as Denmark (June 2024) and Hamburg (October 2023).

* Guests listed are in addition to the Belgium delegation.

1. The Honourable Fred Hutton, Minister of Rural Economic Development; Minister of Transportation and Infrastructure
2. The Honourable Sarah Stoodley, Minister of Immigration, Population Growth and Skills
3. The Honourable Siobhan Coady, Deputy Premier and Minister of Finance
4. The Honourable Steve Crocker, Minister of Tourism, Culture, Arts and Recreation
5. The Honourable Lisa Dempster, Minister of Environment and Climate Change; Minister of Labrador Affairs; Minister Responsible for Labour; Minister Responsible for Workplace NL
6. The Honourable Andrew Furey, Premier of Newfoundland and Labrador
7. The Honourable John Haggie, Minister of Municipal and Provincial Affairs
8. The Honourable Bernard Davis, Minister of Justice and Public Safety
9. The Honourable Gerry Byrne, Minister of Fisheries, Forestry and Agriculture
10. The Honourable Krista Lynn Howell, Minister of Education
11. The Honourable John Hogan, Minister of Health and Community Services
12. The Honourable Pam Parsons, Minister of Women and Gender Equality
13. The Honourable Paul Pike, Minister of Children, Seniors and Social Development
14. The Honourable Elvis Loveless, Minister of Digital Government and Service NL
15. The Honourable Andrew Parsons, Minister of Industry, Energy and Technology
16. The Honourable John G. Abbott, Minister of Housing; Minister of Mental Health and Addictions
17. John Cowan, Deputy Minister, IET
18. Craig Martin, Associate Deputy Minister, IET
19. Michael King, Executive Assistant to the Minister, IET
20. Patricia Hearn, Deputy Minister, Cabinet Secretariat
21. Doriann Macmillan, Associate Deputy Minister, IGAS
22. Nena Abundo, Executive Director for Oil and Gas, IET
23. Susan Wilkins, Executive Director of Renewable Energy
24. Kelly Day, Director of Renewable Energy and Partnerships
25. Rob Hodder, Director of Renewable Energy and Projects
26. Amanda Hewitt, Director of Renewable Energy and Policy
27. Bob Norman, Manager of Renewable Energy and Partnerships
28. Simon Pokue, Grand Chief, Innu Nation
29. Brad Benoit, Chief, Miawpukek First Nation
30. Jenny Brake, Interim Chief, Qalipu First Nation
31. Johannes Lampe, President, Nunatsiavut Government
32. Todd Russell, President, Nunatukavut Community Council
33. Matthew Borys, Vice President, Corporate Development, EverWind
34. James Colter Eadie, CEO, EVREC
35. Neil Bose, President, Memorial University
36. Baktash Nasiri, Senior Business Developer, Hydrogen, ABO Wind
37. Paul Burton, Refinery Manager, Braya
38. Scoff Tessler, CEO, C-NLOPB
39. Elizabeth Kidd, President, College of the North Atlantic

40. Kieran Hanley, CEO, econext
41. Judy Sparkes-Giannou, Chair, Employers' Council of NL
42. Charlene Johnson, CEO, Energy NL
43. Cathy Dorman, Public Affairs Specialist, World Energy GH2
44. Jamie Beach, CEO, NARL Logistics
45. Ted Lomond, CEO, NARL
46. Scoff Penney, CEO, Port of Argentina
47. Jessica McCormick, President, NL Federation of Labour
48. Jennifer Williams, CEO, NL Hydro
49. Frank Davis, Managing Director - Green Fuels, Pattern
50. Anna Cook, Second Vice Chair, St. John's Board of Trade
51. AnnMarie Boudreau, CEO, St. John's Board of Trade
52. Darin King, Executive Director, TradesNL
53. Bob McCarthy, Vice President, Development, Port of St. John's