

Land Acknowledgement

Mi'kma'ki (NS) and Unama'ki (Cape Breton)

The Regional Assessment for Offshore Wind Energy Development acknowledges the ancestral lands and unceded territory of the L'nu (Mi'kmaq) and Wolastoqiyik (Maliseet) people, in which these engagement sessions are taking place.

The communities whose territory we may be visiting include:

Acadia First Nation
Annapolis Valley First Nation
Bear River First Nation
Eskasoni First Nation
Glooscap First Nation
Membertou First Nation
Millbrook First Nation
Paq'tnkek First Nation
Pictou Landing First Nation
Potlotek First Nation
Sipekne'katik First Nation
Wagmatcook First Nation
We'koqma'q First Nation
Abegweit First Nation (PEI)
Lennox Island First Nation (PEI)
L'nuey (PEI)
Mi'gmawe'l Tplu'taqnn Incorporated (NB)
Wolastoqey Nation in New Brunswick



Source: IWK Foundation



Regional Assessment of Offshore Wind Development in Nova Scotia

Welcome!

Please sign in at the Welcome Desk to receive email updates about the Regional Assessment.

Members of the Regional Assessment Committee are here to answer your questions and record your input about future offshore wind development in Nova Scotia.

About This Event

This open house has three stations:

1. **Poster Station:** Read and learn about the Regional Assessment.
2. **Map Station:**
 - See where different ocean uses occur in the Study Area.
 - See where offshore wind could take place.
 - Give us your input on where **YOU** think offshore wind should or should not occur within the Study Area.
3. **Video Station:** Watch a video to learn about offshore wind.

Share Your Input

We want your comments, questions, and concerns.

At every station, you can submit your comments to the Regional Assessment Committee.

Feedback forms are also available.

Thank you for coming!

Background

Objective:
Learn about the Regional Assessment process



Galloper Offshore Wind Farm in the UK, Source: Green Investment Bank

This station provides background information on the Regional Assessment process including:

- Goals and objectives
- Timeline
- Study Area
- Mandate and governance

Share Your Thoughts!

1. Talk to Committee Members
2. Use post-it notes
3. Fill out the feedback form

Overview of the Regional Assessment of Offshore Wind Development in Nova Scotia

Overview

The Committee will conduct the Regional Assessment with consideration of:

- Indigenous and traditional knowledge,
- Community knowledge, and
- Scientific information.

Committee's goal is:

- To provide information, knowledge, and analysis of future offshore wind development activities in the Study Area and potential effects.
- To inform and improve future planning, licencing, and impact assessments.
- To protect environment, health, social and economic conditions, and create opportunities for sustainable economic development.

Summary of Objectives

1. Provide information, knowledge, and analysis of environmental, health, social and economic conditions, and potential effects (including cumulative effects), with consideration of Indigenous knowledge, community knowledge, and scientific information.
2. Provide an understanding of the regional background and evaluate potential effects (including cumulative effects) of future offshore wind development, to inform future planning, licencing, and impact assessments.
3. Recommend mitigation and follow-up to address potential effects for future decision-making for offshore wind development.
4. Describe how recommendations could be used to inform future planning and licencing processes, for sustainability and effectiveness and efficiency of impact assessments.

Please take a copy of the Terms of Reference to read the full details of the Regional Assessment.

Committee

- Committee members: Graham Daborn, Stephen Parsons, Elder Lorraine Whitman, Ann Wilkie (co-chair) and James Wooder (co-chair).

Quick Facts

- The Regional Assessment is not a project.
- The Regional Assessment is not a legislated decision-making process.
- The Regional Assessment does not replace other permitting processes.

Government Commitments

- A net-zero electricity grid by 2035.
- A net-zero emission economy by 2050 using clean electricity for:
 - Transportation,
 - Heating, and
 - Powering industrial activities.
- Ensuring respect for the rights of the Indigenous Peoples of Canada.
- Fostering reconciliation with the Indigenous Peoples of Canada.

About the Regional Assessment

- Regional assessments are studies of areas with existing projects or areas of future development to inform planning and management of cumulative effects and impact assessments.
- There are two separate regional assessments for offshore wind development in Atlantic Canada: one in Newfoundland and Labrador and one in Nova Scotia. Each assessment has its own Committee.
- Information about the Nova Scotia Regional Assessment is posted on-line on the Regional Assessment Registry page. There is also an email address that can be used to submit questions and provide input.

The link for the Registry page and the email address are on the postcard - please take one!

- The Committee's reports will be posted on the Registry for public review and comment and then be submitted to the provincial and federal Ministers.
- The Minister of Environment and Climate Change will decide whether to adopt the recommendations for future offshore wind development.

Committee Mandate for the Regional Assessment

The Committee will conduct the Regional Assessment with consideration of:

- Indigenous and traditional knowledge,
- Community knowledge, and
- Scientific information.

Recognize Indigenous knowledge as an important component of:

- Understanding existing conditions.
- Potential effects (positive and adverse, including cumulative effects).
- Mitigation measures for addressing potential effects.



Provide information, knowledge, and analysis regarding:

- Future offshore wind activities in the Study Area.
- Potential effects (individual and cumulative) within the region.

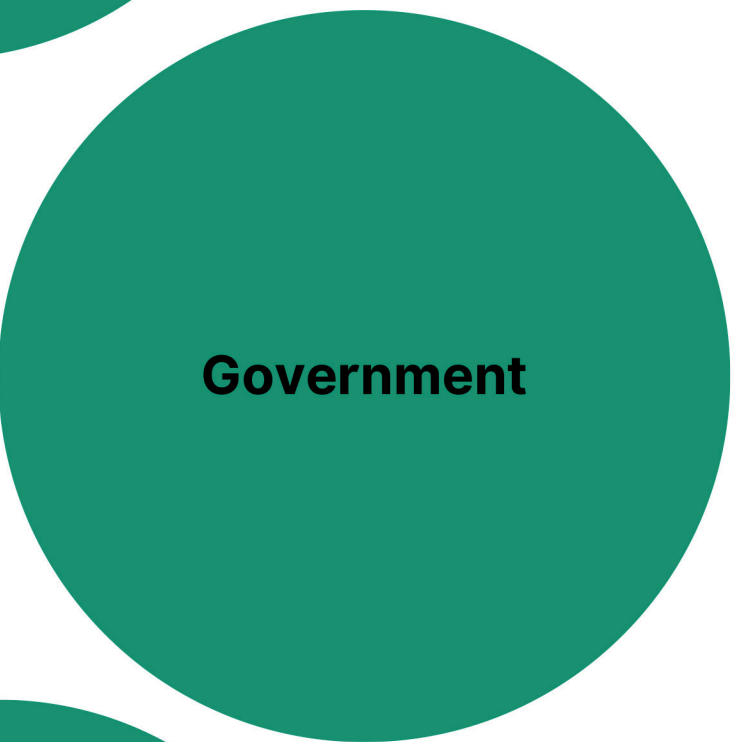
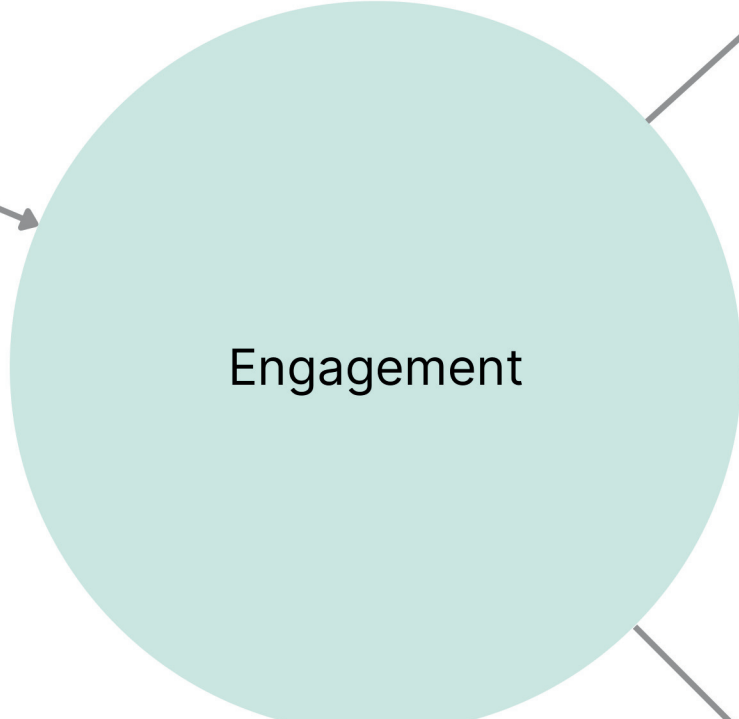
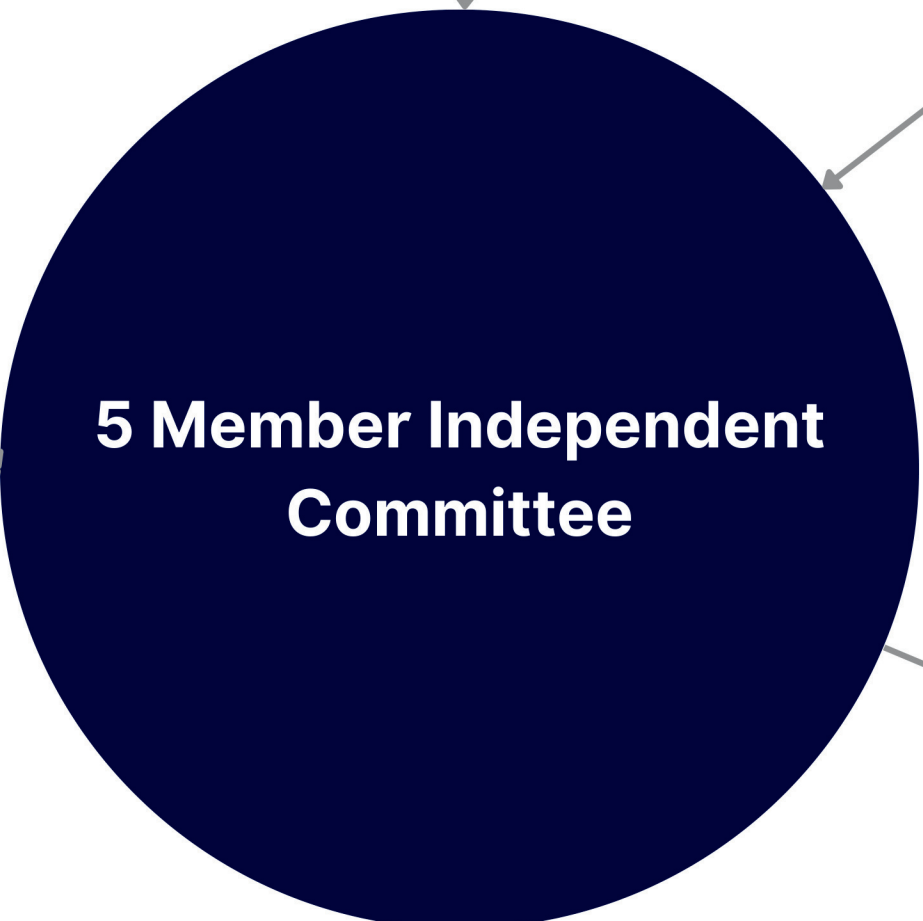
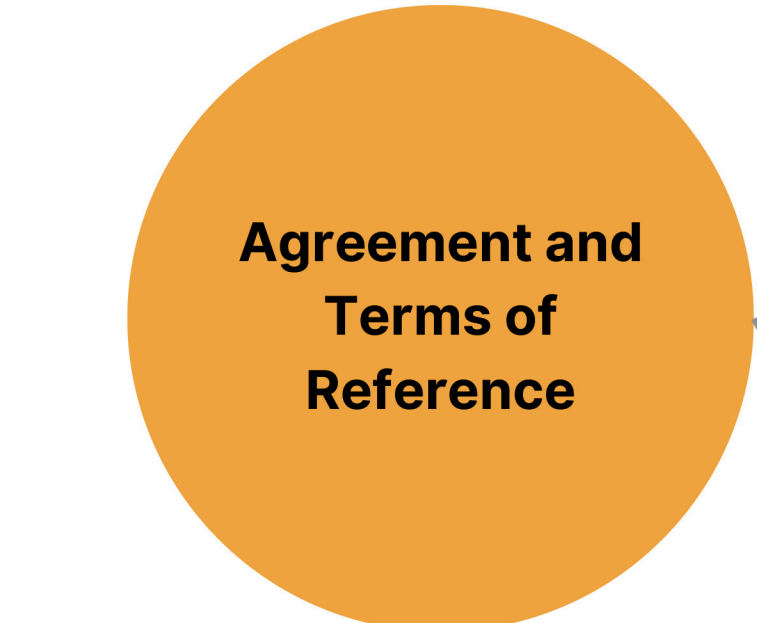
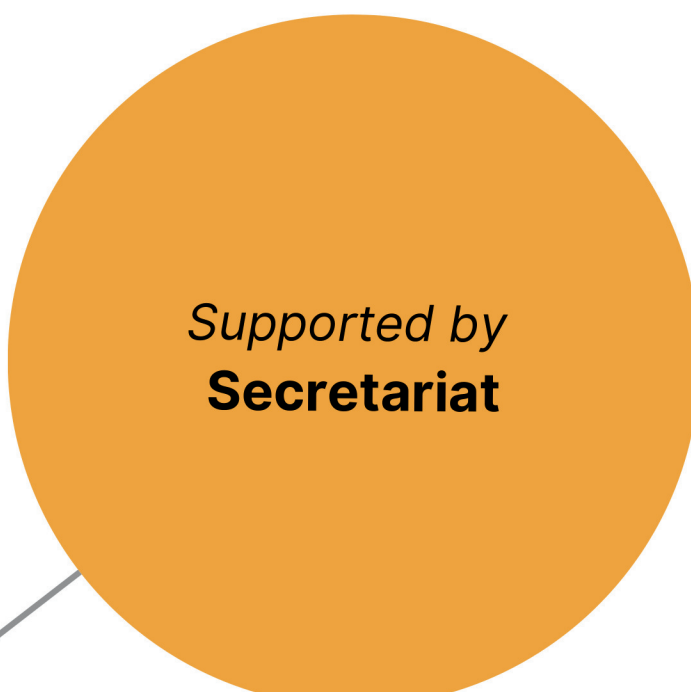
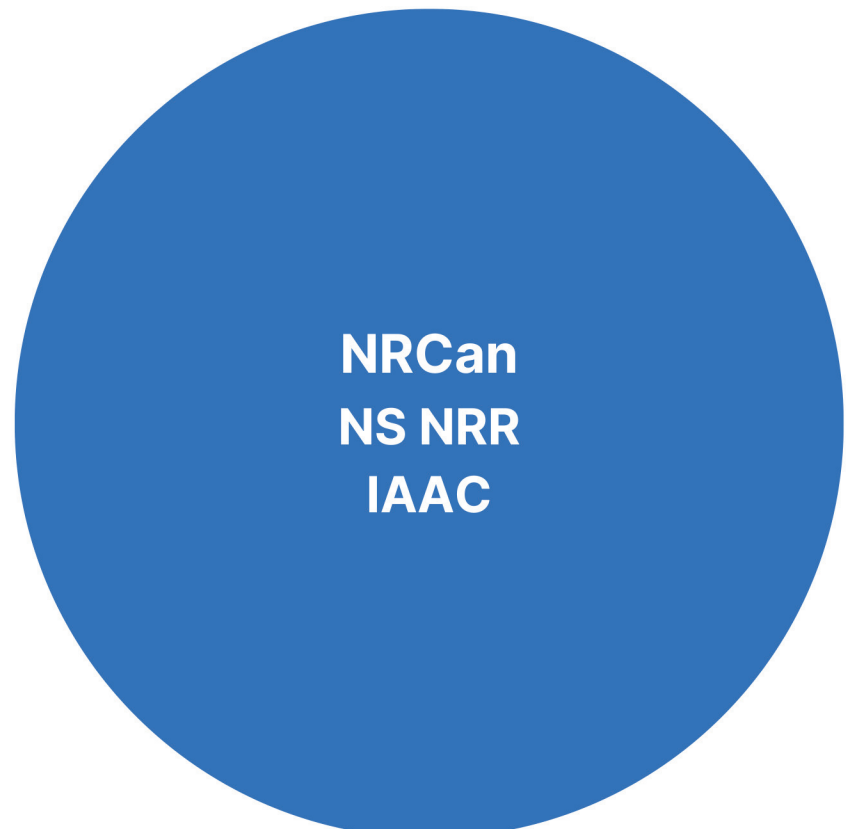
Establish and seek information and advice from stakeholders on:

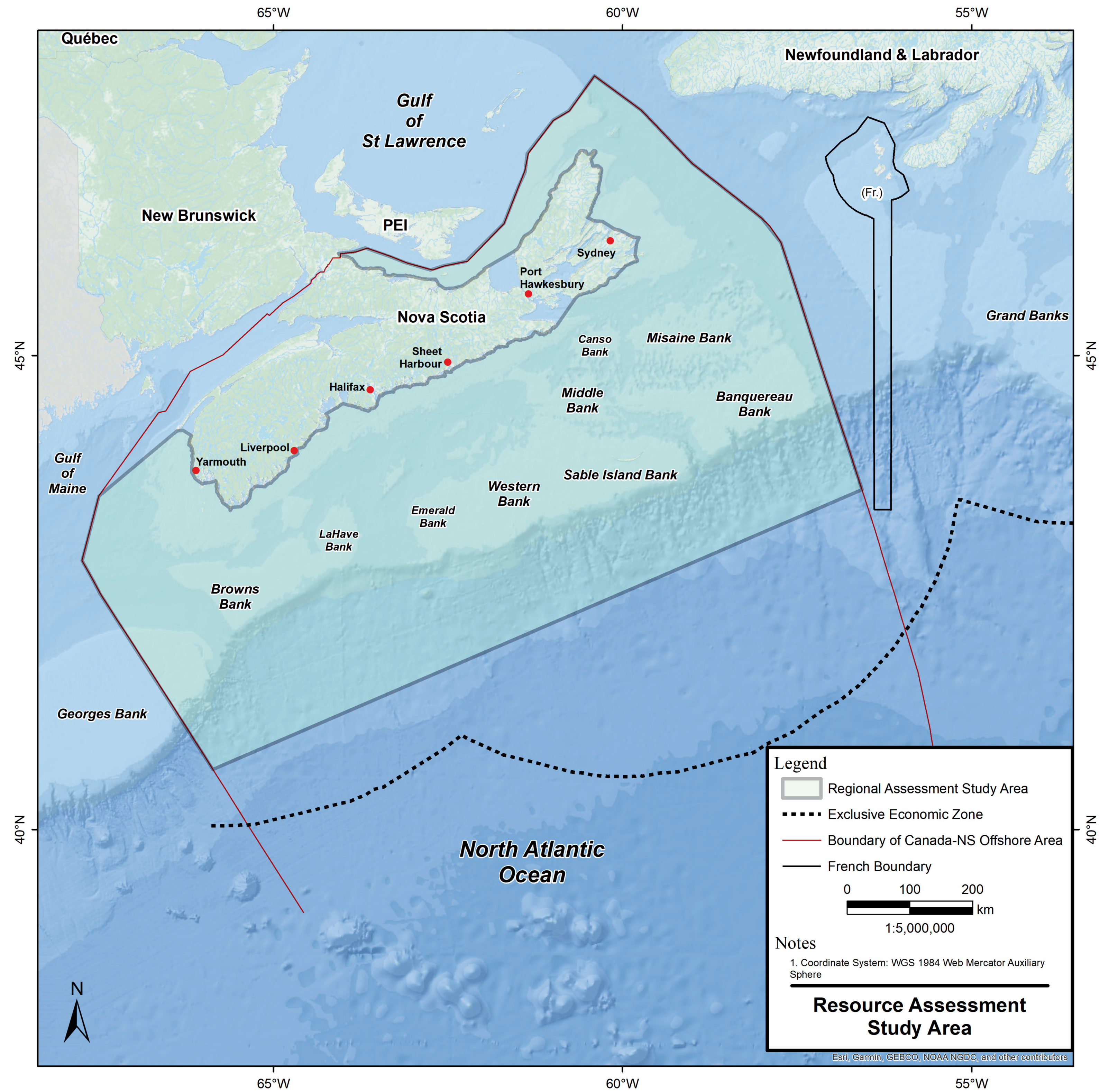
- Regional environment, health, social and economic conditions.
- Information and knowledge gaps, and potential ways to address them.

Provide recommendations that:

- Inform and improve future planning regarding potential locations of future offshore wind licensing and development.
- Inform future project-specific impact assessment processes (e.g., recommendations on mitigation, monitoring, follow-up).

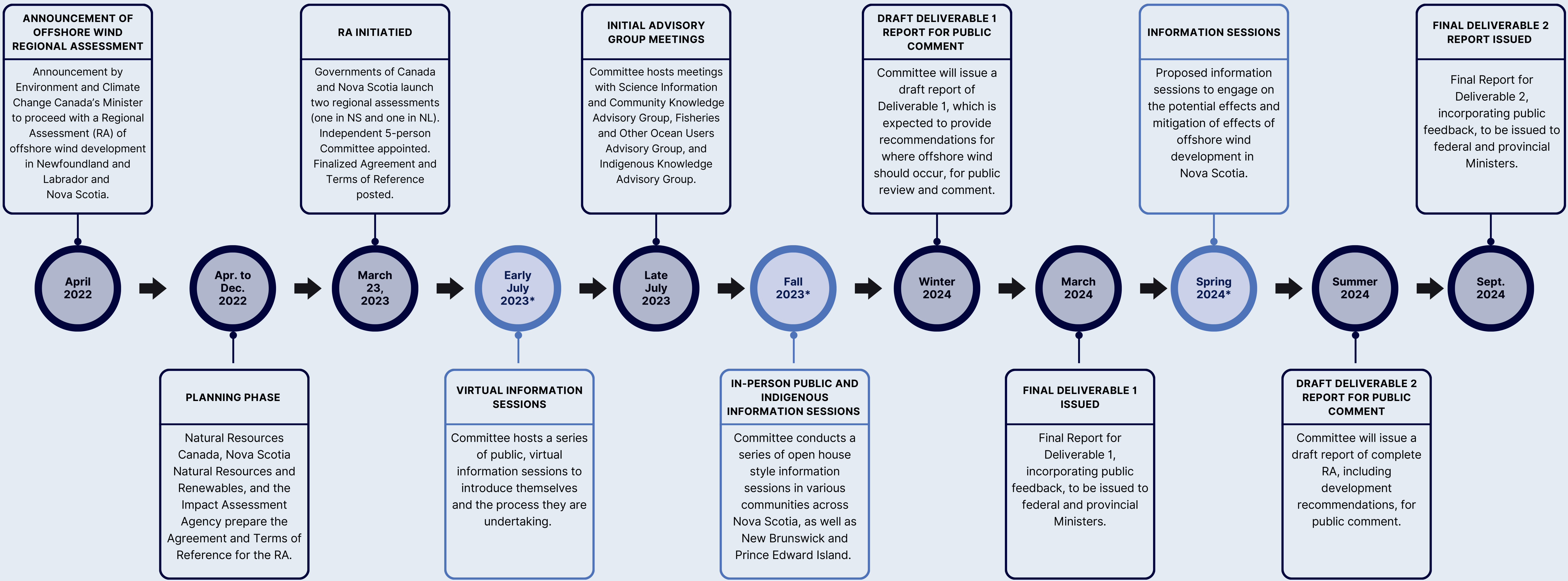
Governance



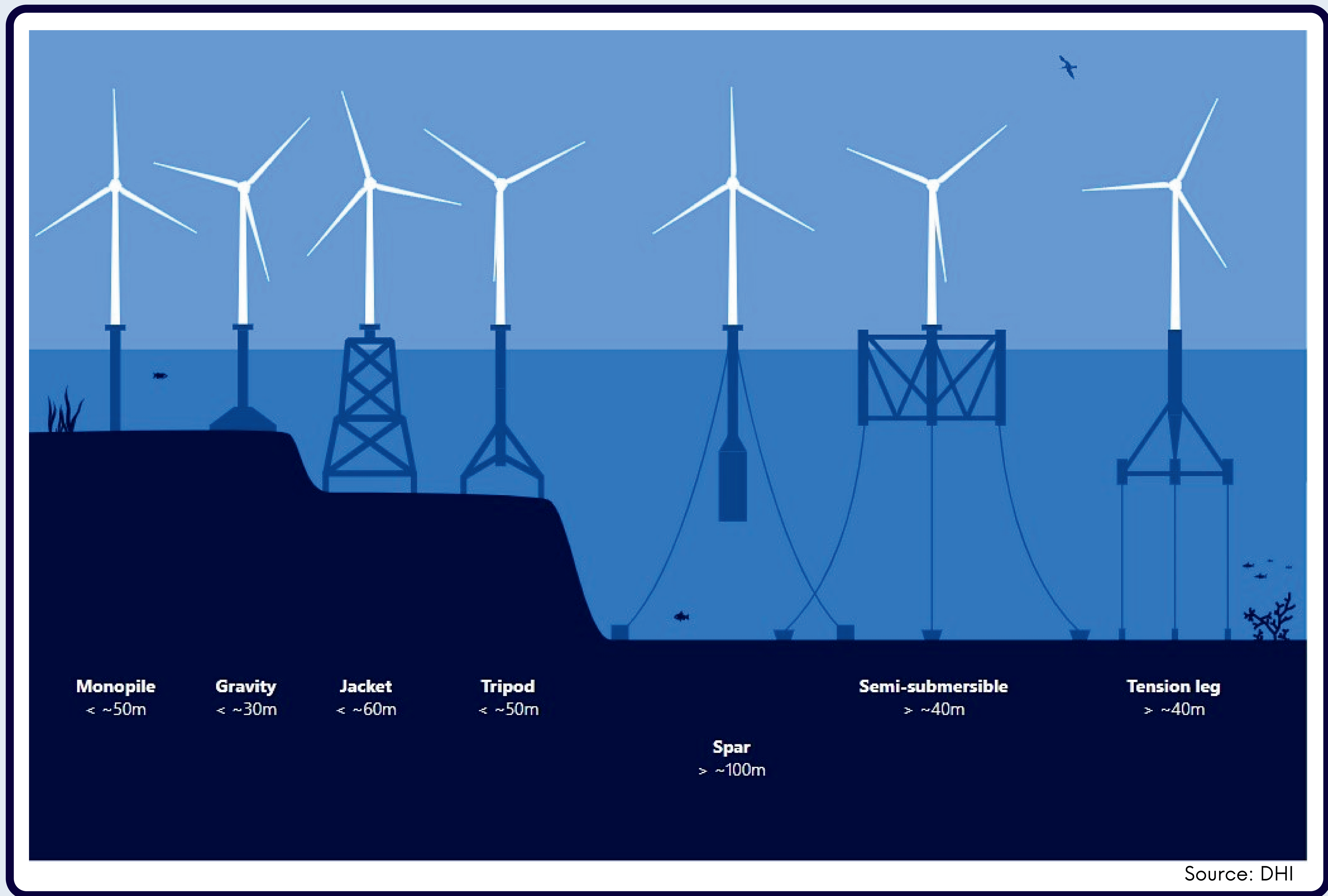


Study Area of the Regional Assessment

Timeline of the Regional Assessment



***PUBLIC AND INDIGENOUS INFORMATION SESSIONS**



Offshore wind foundation types.

From left to right: monopile, gravity, jacket, tripod, spar, semi-submersible platform, and tension leg.

The title is framed by stylized black silhouettes of wind turbines. One large turbine is on the left, and two smaller ones are on the right.

Site Selection for Offshore Wind Development in Nova Scotia

A number of factors are considered when choosing potential offshore wind sites. Some factors are:

Wind conditions

Site conditions

- Depths, wave and currents, and seafloor conditions.

Environmental conditions

- Use of the area by marine mammals, birds, and bats.
- Presence of sensitive habitats, protected areas, and archeological sites.

Other ocean users

- Shipping, fisheries, and military.

Distance to coastal communities

- Need to consider local economies, including tourism.

Distance to Ports with Adjacent Lands

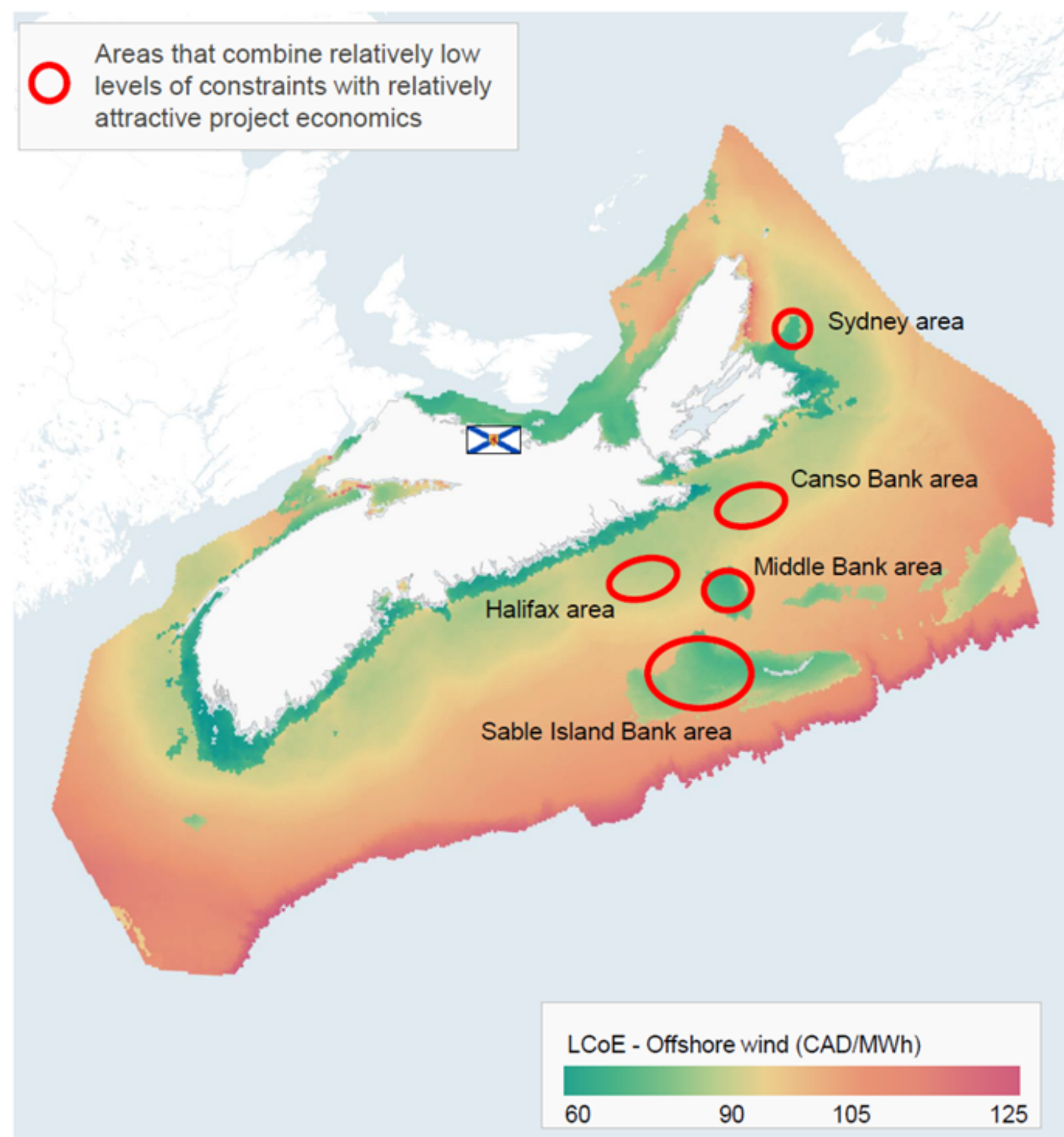
- For use during construction, operation, and maintenance.

Distance to shore

- Affects the length of the cable needed to carry power back to land (greater distance = increased cable costs).

Natural Resources Canada and NS Natural Resources and Renewables will use a competitive process to identify areas where licences **may** be issued.

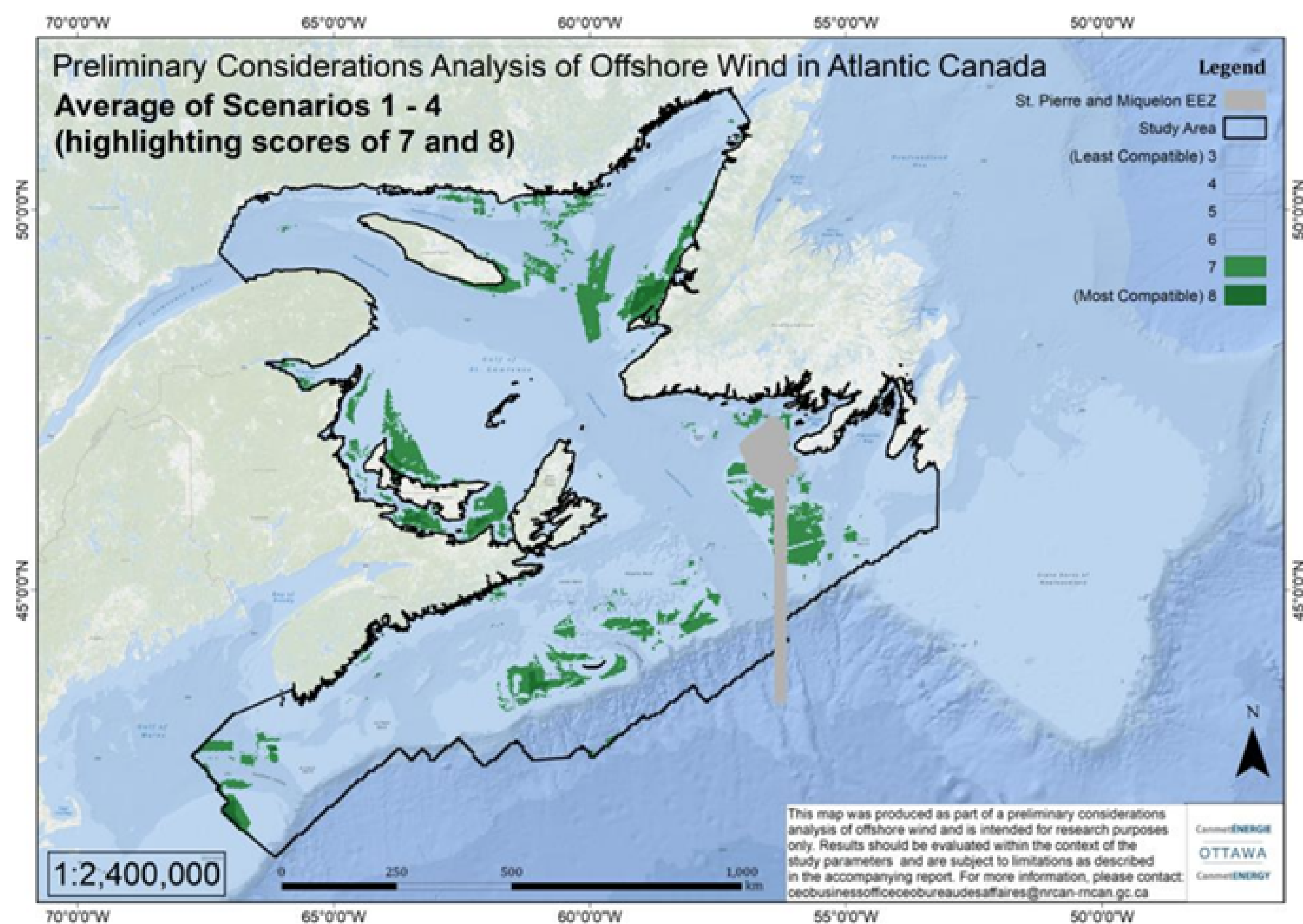
Recommendations made by this Committee, informed by you, the public, will be considered in their process.



Source: AGEIR Insights, 2023. Value mapping Nova Scotia's Offshore Wind Resources.

Summary of Results of AEGIR Report (Spring 2023): Insight's Review of Nova Scotia's Offshore Wind Resource Potential

- Aegir Insights joined with Net Zero Atlantic to analyze offshore wind in Nova Scotia.
- The study did an early-stage and high-level value mapping and visualization of offshore wind project economics.
- The results showed that type of sea bottom, distance to shore, and other ocean uses determine preferred offshore wind locations:
 - Bedrock affects the type of foundation for the wind turbines.
 - Sand and gravel on the west, north, and east coasts of Cape Breton and further offshore are more suitable for fixed monopile foundations.
 - Middle Bank is shallow and has less fishing than other areas.
 - Sable Island Bank is far from shore but includes a large, shallow, sand bank and few other ocean uses (e.g., shipping, fishing, protected areas).
 - The Sydney area is shallow with a sandy seafloor and is close to the power grid but has sea ice, active lobster fishing, and ferry routes.
 - Canso Bank area and Halifax areas are close to shore and ports and the power grid and there is less fishing activity but since the areas are too deep for fixed foundation would have to consider floating wind turbines.



Source: CanmetEnergy 2023. Preliminary Considerations Analysis of Offshore Wind Energy in Atlantic Canada. Figure 26.

Summary of Results of CANMET Energy Study (July 2023): Analysis of Offshore Wind Energy Potential in Atlantic Canada

- CANMET (Canada Centre for Mineral and Energy Technology) completed this study to support the identification of possible regions in Atlantic Canada that could become designated offshore wind energy areas in the future.
- The study included 12 input data layers showing:
 - Geophysical data (geology, distance to shore, water depth, ice cover)
 - Ecological data (important habitat, risk to marine birds)
 - Ocean use data (fishing, vessel density, inshore lobster)
- Six scenarios were developed to show a range of outcomes.
- Further work is needed to assess additional factors not considered in this analysis (e.g., cumulative effects, socio-economics, provincial electricity policies, distance to ports).

***Study results were influenced and limited by data availability (e.g., data on lobster fishery in Northumberland Strait and around PEI is lacking).**

****Note**** The recently announced Nova East Wind Energy Project by Nova Wind Energy Inc., a joint venture between DP Energy and SBM Offshore, roughly corresponds to the Halifax Area indicated on the above map (an area 20-30 km off Goldboro, NS).

The top of the page features a decorative header with the word "Mapping" in a large, bold, dark blue font. On either side of the text are stylized black silhouettes of wind turbines. The background is a light blue gradient.

Mapping

Objective:
Understanding offshore use in Nova Scotia

At this station, you can view maps of the Regional Assessment Study Area and see where different ocean uses take place, including:

- Fisheries
- Shipping lanes
- Marine protected areas

The **Marine Atlas**, created by Fisheries and Oceans Canada, is also available at this station and can be used to view maps of various ocean uses.

Questions for Participants

1. Do you use the marine environment in Nova Scotia? If so, how?
2. Are there areas where you think offshore wind development should or should not occur?
3. Would offshore wind development interfere with your marine activities?

Share Your Thoughts!

1. Talk to Committee Members about the maps
2. Draw directly on the printed maps
3. Use post-it notes
4. Fill out the feedback form

Video

Objective: Learn about Offshore Wind

This video is part of a series of New York State Energy Research and Development Authority (NYSERDA)'s Offshore Wind "Learning from the Experts" Webinars.

How Offshore Wind Works

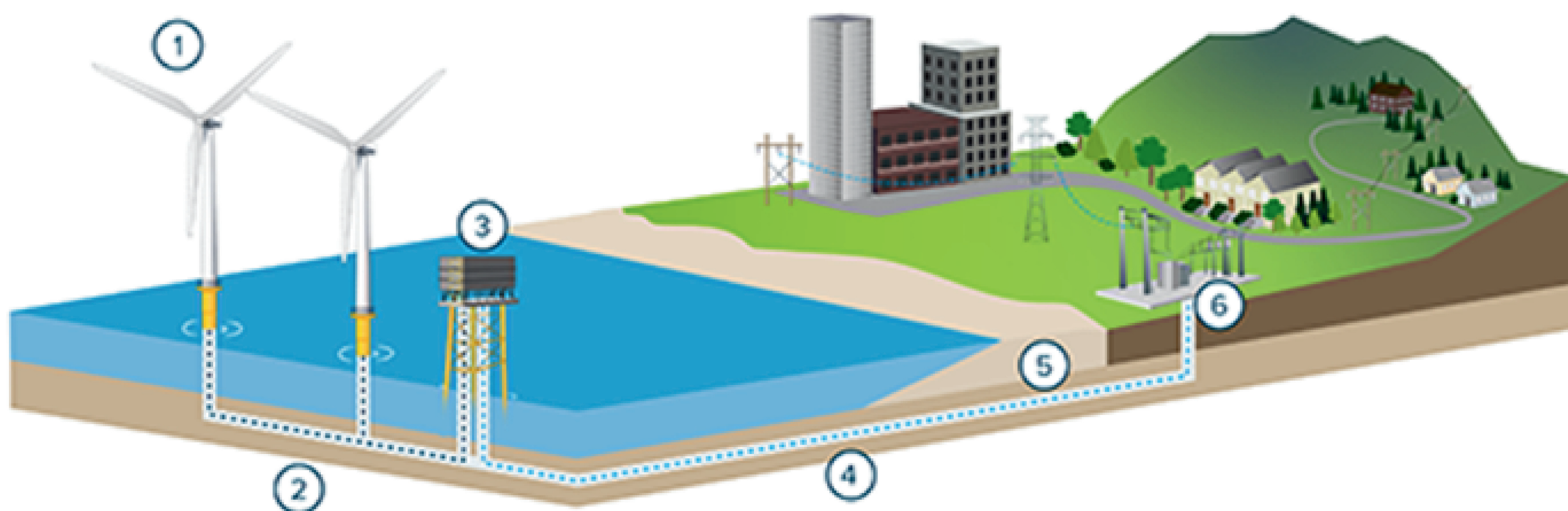


Figure Not to Scale

1. **Offshore Turbines** capture the wind's energy and generate electricity.
2. **Foundations** secure turbines to the ocean floor and cables transmit electricity to an offshore substation
3. **Electricity** flows through a buried cable to an onshore substation and is transferred to the existing transmission network.

- How does a wind turbine work?
- History of wind technology.
- Different types of offshore wind turbines.
- Operations and maintenance.
- Example of an offshore wind farm (e.g. 30-MW Block Island Wind Farm in the United States).

Share Your Thoughts!

1. Talk to Committee Members
2. Use post-it notes
3. Fill out the feedback form