Challenge Statement/Synopsis:

The VMCC and its members seek end-to-end low-carbon intensity alternative or renewable fuels.

Context:

The maritime sector accounts for 3.6 million tonnes of CO_2e per year in British Columbia, 8.8 million tonnes of CO_2e in Canada and over 1 billion tonnes of CO_2e worldwide, representing close to 5.5% of BC's annual emissions, 1.2% of Canada's annual emissions, and 3% of total annual global anthropogenic emissions. Under a business-as-usual scenario and if other sectors of the economy reduce emissions to keep the global temperature increase below 2 degrees Celsius, shipping could represent some 10% of global GHG emissions by 2050. Global technology trends—such as decentralization, digitization, electrification, and implementation of sustainable practices—are accelerating opportunities for emission reductions and economic growth while deepening the integration between these strategic focus areas.

Response Criteria:

Vessel owners (vessel types include, but are not limited to, tugs, pilot boats, emergency response coastal tugs, small passenger harbour ferries, small coastal ferries and ror-ro ocean going ferries) are looking for solutions which offer lower carbon intensity or renewable fuels. The overall solution should address::

- Provision of a new propulsion system or engine retrofit (if needed)
- Supply of fuel within Salish Sea operations (either onboard, bunkering or jetty)
- Solution can meet all Canadian and international marine safety standards and regulations.
- Solution should have an operational prototype that can be incorporated into a project at the stages of field piloting, commercial demonstration or first-of-kind commercial implementation. Solution must be sustainable and viable for The VMCC geographical region (Salish Seas, British Columbia, Canada).

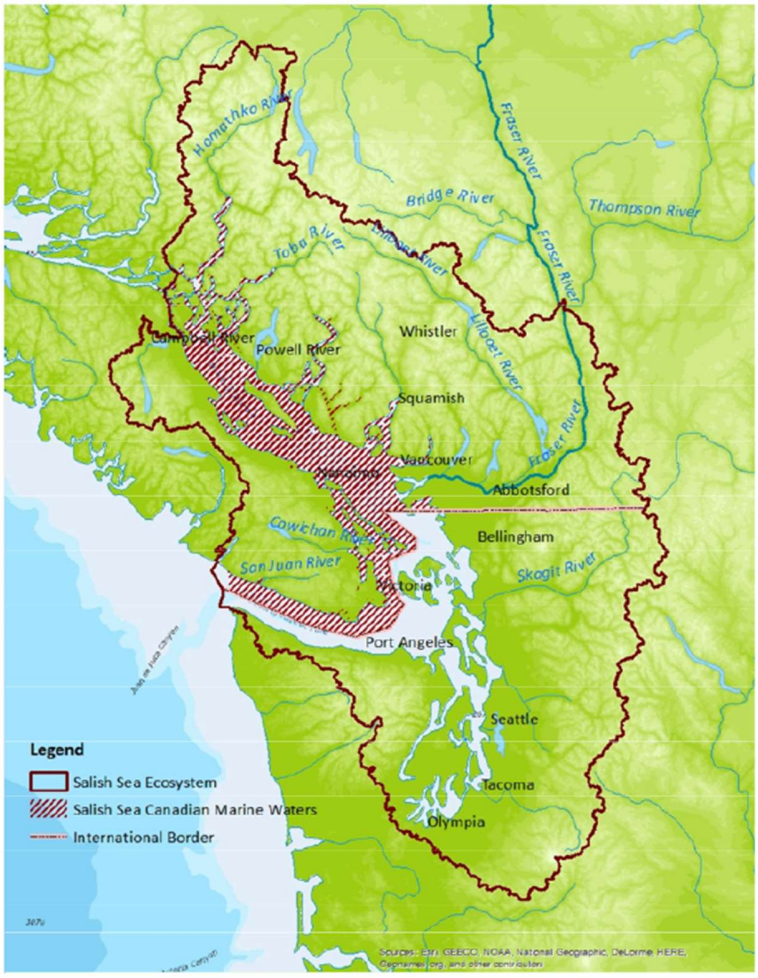

Figure 1 – Salish Sea Region

*Note that The VMCC is running three additional LCBA Canada challenges. Please check all of their opportunities to see which scope best fits your proposed solution. In the event that your solution fits more than one opportunity, please submit an application to each relevant Challenge.

The Opportunity:

- Meet new customers and enter new markets with your product.
- Potential to pitch your technology (if selected) to the VMCC, a leader in the Canadian maritime sector, with dedicated members who are seeking to deploy innovative solutions that drive climate mitigation within the maritime and shipping industry.
- Additionally, the VMCC will provide in-kind resources through its Membership to successful projects, including but not limited to the following:

- Physical assets to host demonstrations;
- Equipment donations;
- In-kind technical help and support;
- High-profile visibility

About the Vancouver Maritime Centre for Climate (VMCC):

The Vancouver Maritime Centre for Climate ("VMCC") is a grassroots, industry-led initiative dedicated to accelerating the transition to a zero emissions shipping industry in British Columbia's maritime waters.

The focus of the VMCC as an organization is to help facilitate the provision of climate solutions and accelerate the implementation of emission reduction solutions through its Operation Flagship, focused on the establishment of pilot projects. The purpose of these pilot projects is to help asset owners such as ship owners, operators, ports & terminals as well as the supporting land-based infrastructure prove solutions for further commercialization and implementation in order to reduce greenhouse gas (GHG) emissions and criteria air contaminants (CACs) or eliminate their emission completely.

The VMCC recognizes that the maritime sector in Canada is currently facing headwinds to reduce emissions with no clear path forward on how to meet established regional and federal targets, including the target of the Province of BC to reduce emissions by 80% below 2007 levels by 2050, and the federal target of net zero emissions by 2050. The VMCC believes that bringing industry together will help to facilitate the mobilization and implementation of clean technologies that will help ship owners and the supporting land-based infrastructure get to zero emissions faster.

***Only non-confidential information should be included in your response ***