

2022 CISMART Workshop on Greening Canada's Marine Transportation
Consideration of Alternative Marine Fuels

April 20-21, 2022

Questions for Discussion Sessions

Day 1 Q&A Session, Discussion How is Canada likely to effect the transition?

Desired session outcome: A sense of how participants think Canada will proceed in introducing clean marine fuel requirements.

Questions

1. What is the likely time period for clean fuel introduction in Canada?
2. Will Canada introduce more stringent requirements for inland waterways and/or the Arctic?

Day 2 General Session 1 What fuels have the most promise?

Desired session outcome: A sense of where participants think the worldwide marine industry is going in terms of changing to zero carbon fuels.

Questions

1. The World Bank says Ammonia/Hydrogen is (are) the endpoint clean fuel(s) of the future ocean going fleet (<https://www.worldbank.org/en/news/feature/2021/04/15/charting-a-course-for-decarbonizing-maritime-transport>). Is there general agreement with this, or are other alternatives thought to be viable?
2. If Ammonia/Hydrogen (or some other alternative) is the end point clean fuel, what is the most likely scenario for alternative fuel adoption in the marine industry worldwide:
 - a. General changeover (over some period of time) to one new fuel?
 - b. Progressive move through alternatives, culminating in a final choice for most?
 - c. Different fuel technologies depending on ship/route type; for example, the Arctic?

Day 2 General Session 2 **What technologies should Canada focus on?**

Desired session outcome: A sense of where participants think Canada should position itself as a possible consumer and/or supplier of clean marine fuels and/or technologies.

Questions

1. How should Canada keep pace with worldwide developments in the marine fuel transition? Will there be regional differences based on ship/trade/route? As examples: Great lakes fleets, fishing fleets, ferry operations, international trade vessels, CCG fleet, Canadian Navy.
2. Canada has an apparent strength in Ammonia/Hydrogen technologies. Should the country expand this capability in anticipation of future marine industry demand? Over what time period?