ARCTIC MARINE NATURAL GAS SUPPLY CHAIN STUDY

Perspectives Gathering Workshop
Day Two | January 26, 2022
Project Objective

Investigate the feasibility of Liquefied Natural Gas (LNG) as a marine fuel in Canada’s Arctic Region

- Technology readiness
- Economics and business case
- Environmental risks and benefits
- Infrastructure requirements
- Human resources requirements
- Regulatory aspects
- Implementation scenarios
- Potential benefits to Canada and to the Arctic Region
Why are we considering LNG?

Drivers
• HFO ban
• Black carbon (BC) emissions reduction
• Sulphur Dioxide (SOx) emissions reduction
• GHG reduction
• Air pollution impact (PM, NOx) on human health and environment
• Fuel spill risk reduction

Opportunities
• Clean burning
• GHG reductions of 20 to 30% achievable
• Abundant global supply = lower fuel costs
• Ship technology commercially available now
• Biofuel and synthetic fuel net-zero options

Risks
• Methane emissions
• Fossil fuel supply chain
## Project Timeline

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Status of the Work

- Task 1 – Technology Readiness Review – Completed March 2021
- Task 2 – Economic Aspects and Benefits – Completed October 2021
- Task 3 – Environmental Risks and Benefits – Completed October 2021
- Task 4 – Infrastructure Options – started – to be completed March 2022
- Task 5 – Human Resources – started – to be completed March 2022
- Task 6 – Regulatory – started – to be completed March 2022
- Perspective Sharing Workshop – January 25th and 26th – Arctic; Indigenous; and Environmental perspectives
- Those interested in joining the project can contact Bruce Winchester – Executive Director of CNGVA
- Project Completion – anticipated July 2022
Who is participating?

- Original Equipment Manufacturers – marine engines and fuel systems
- Marine consultants
- Natural gas and LNG consultants
- Ship operators
- Gaseous fuels providers
- Federal Departments and Agencies
- Provincial and Territorial governments
- Arctic Communities and Economic interests
- Indigenous organizations
- Environmental non-governmental organizations
Thank You!

Contact: Bruce Winchester
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bruce.winchester@cngva.org