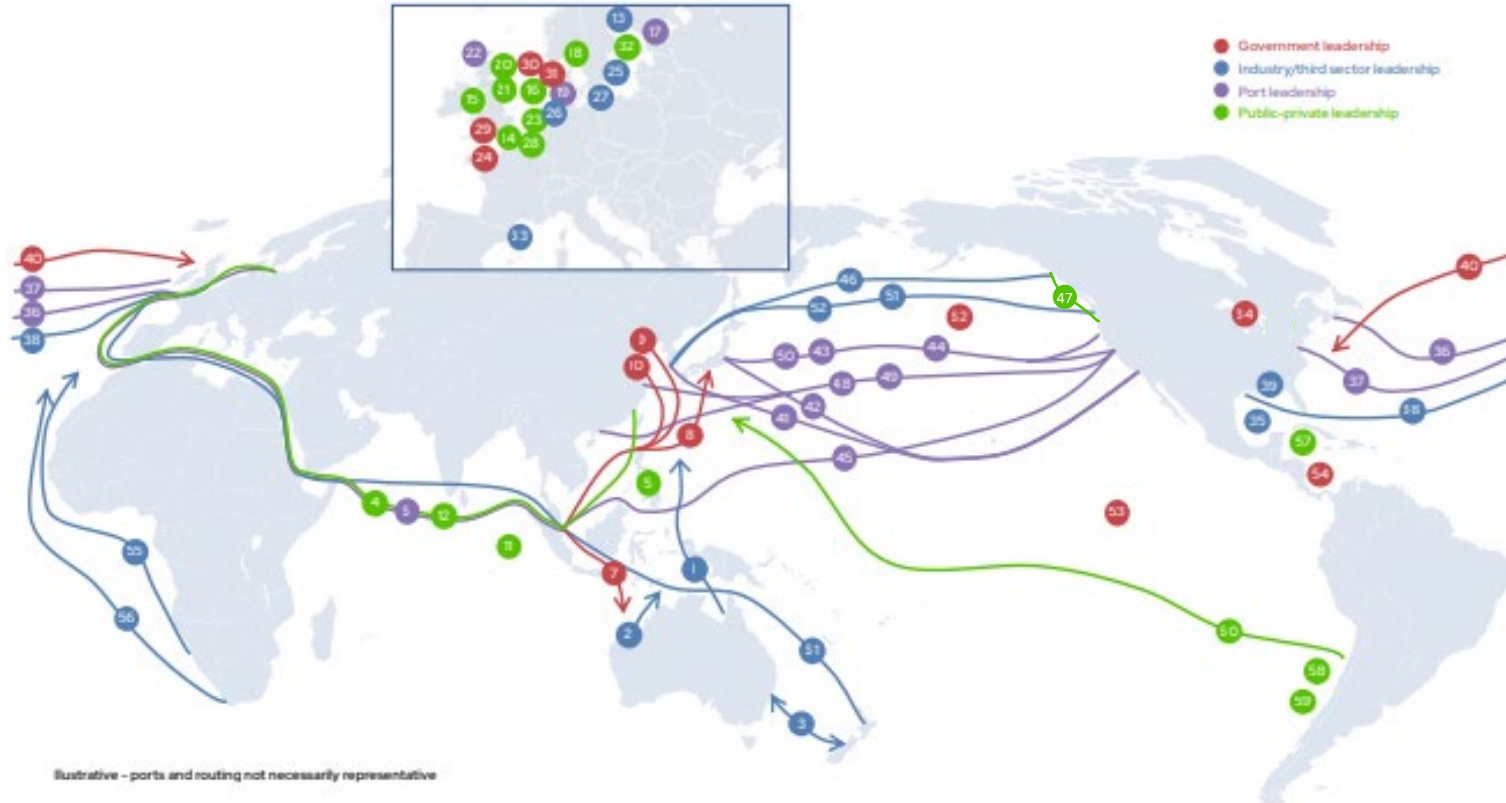


What is a Green Corridor?

A shipping route where low and zero greenhouse gas emission solutions are demonstrated and supported through collaboration across sectors to accelerate maritime decarbonization



60+ green corridor projects announced worldwide!

- | | | |
|--|--|--|
| 1. Australia Bauxite | 25. Stockholm-Åbo | 45. Los Angeles/Long Beach-Singapore GDSC |
| 2. Australia-East Asia Iron Ore | 26. Sweden-Belgium | 46. North Pacific Green Corridor Consortium |
| 3. Australia-New Zealand | 27. Trelleborg-Lübeck | ★ 47. Pacific Northwest to Alaska Green Corridor |
| 4. Hamburg-Shanghai | 28. Tyne-Ijmuiden | 48. LA-Guangzhou |
| 5. Philippines Corridors | 29. UK-Belgium | 49. Port of Los Angeles-Port of Long Beach-Port of Shanghai |
| 6. Rotterdam-Singapore GDSC | 30. UK-Denmark | 50. Port of Oakland-Yokohama |
| 7. Singapore-Australia GDSC | 31. UK-Norway | 51. Seattle and Tacoma-Busan |
| 8. Singapore-Japan GDSC | 32. Vaasa-Umea | ★ 52. Seattle and Tacoma-Korea PCTC |
| 9. Singapore-Shandong | 33. West Mediterranean Cruise | 53. US and Pacific Blue Shipping Partnership Green Corridors |
| 10. Singapore-Tianjin GDSC | 34. Great Lakes Iron Ore | 54. US and Panama Green Corridors |
| 11. The Silk Alliance | 35. Gulf of Mexico Green Shipping Corridor | 55. Namibia Corridors |
| 12. UK-Singapore-ASEAN | 36. Halifax-Hamburg | 56. South Africa-Europe Iron Ore Corridor |
| 13. Åland Mega Green Port | 37. Ireland-to-Indiana container | 57. The Caribbean Green Shipping Corridor Initiative |
| 14. Dover-Calais/Dunkirk Ferry | 38. Port of Houston-Port of Antwerp-Bruges | 58. Chile Piscicultura |
| 15. Dublin-Holyhead | 39. US Green Bulk | 59. Chile Sulfuric Acid |
| 16. Esbjerg-Immingham | 40. US-UK Green Shipping Corridors Taskforce | 60. Chile-Japan/Korea copper concentrate |
| 17. FIN-EST | 41. Hueneme-Pyeongtaek Green Automotive | 61. Taurange-Zeebrugge |
| 18. Gothenburg-Frederikshavn Pilot Study | 42. Hueneme-Yokohama Green Automotive | 62. West Green Shipping Corridor |
| 19. Gothenburg-Rotterdam | 43. LA-Nagoya | |
| 20. Larne-Liverpool | 44. LA-Yokohama | |
| 21. Liverpool - Belfast | | |
| 22. Northwestern England-Ireland | | |
| 23. Oslo-Rotterdam Pilot Study | | |
| 24. St Helier-St Malo | | |

Image adapted from [Annual Progress Report on Green Shipping Corridors, 2024](#) (Global Maritime Forum & Getting to Zero Coalition, Nov 2024)

The Pacific Northwest to Alaska Green Corridor Project

Port, cruise line, and nonprofit
‘First Movers’ committed to:

- Evaluate conditions to support a green corridor for cruise from the Pacific Northwest to Alaska
- Explore near-term opportunities to reduce emissions



PORT of
vancouver

Vancouver Fraser
Port Authority



BLUE SKY
MARITIME COALITION



GLOBAL
MARITIME
FORUM



Royal
Caribbean
Group



About the Corridor

- **Two Homeports:** Seattle and Vancouver (BC)
- **5 Ports of Call:** Victoria (BC), Juneau, Sitka, Skagway, Haines
- **Major cruise lines** participating
- **Seasonal:** April-October
- **Average duration:** 7-day round-trip
- **~900 nautical miles** Seattle-Juneau via Inside Passage

Alaska

- Home Port
- Port of Call



Progress

2022

- Launched partnership (May)
- Established monthly First Mover meetings
- Defined objectives, governance structure

2023

- Signed Project Charter
- Public webinar (200 attendees)
- **Partnered with the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping to scope feasibility study**

2024

- Public webinar (200 attendees)
- Negotiated and signed Project Commitment Letter
- Launched Green Methanol Feasibility Study

On-Going: Technical Working Groups

Stakeholder Engagement | GHG Emissions Baseline | Policy Advocacy

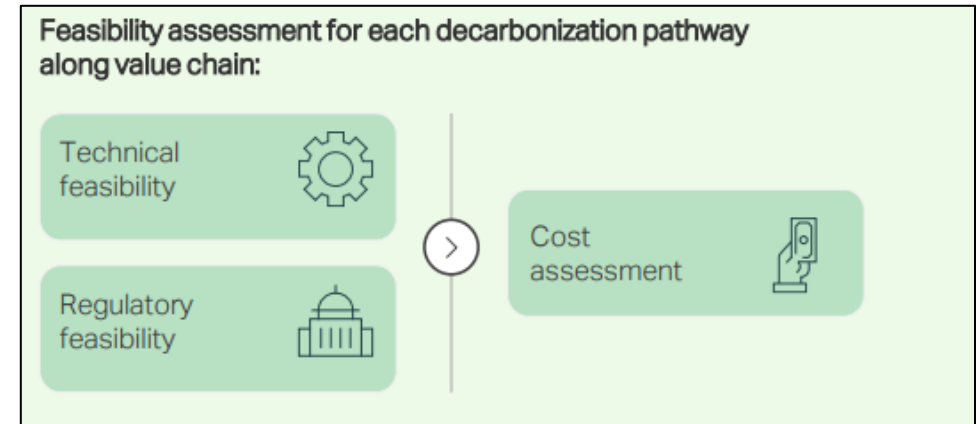


About the Green Methanol Feasibility Study

- Led by the **Maersk Mc-Kinney Møller Center for Zero Carbon Shipping**
- **Project Goal:** Assess the feasibility of 4 cruise vessels sailing on green methanol to Alaska by 2032
 - Bunkering at homeports: Seattle and Vancouver, BC
 - First methanol ship in water by 2030
- **Key Output:** corridor-specific cost gap
- **Timeline:** Results late 2025



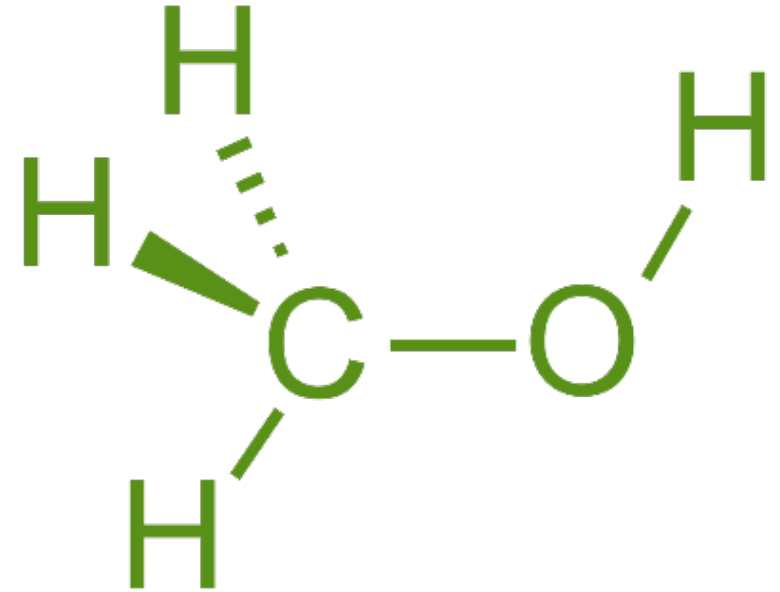
Mærsk Mc-Kinney Møller Center
for Zero Carbon Shipping









Excerpt from the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping [Green Corridor Feasibility Study Phase Methodology](#)

What is Methanol?

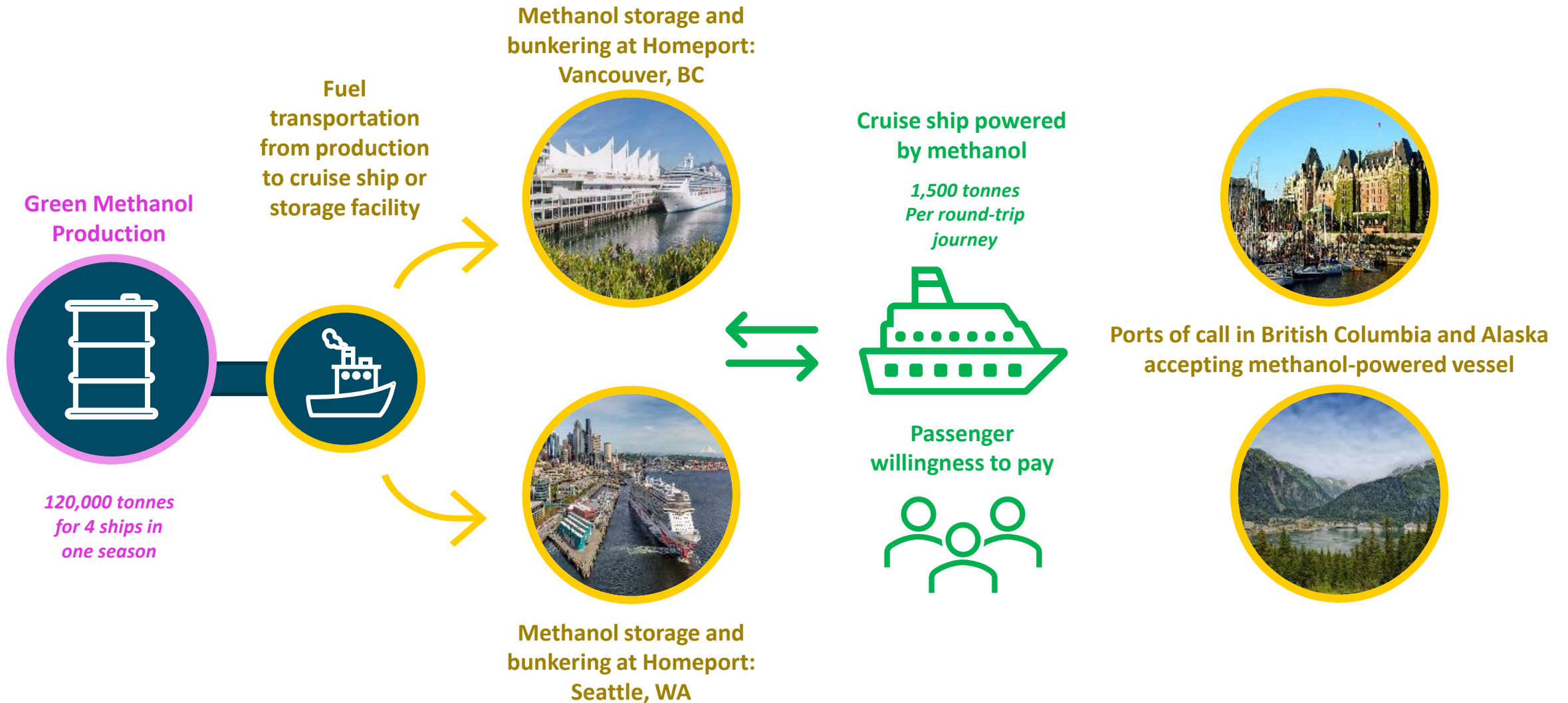
- **Pros:**
 - Liquid at ambient temperatures, easy to store
 - Lower air pollutant emissions
 - No bioaccumulation
- **Cons:**
 - Lower energy density than petroleum-based fuels
 - Flammable
 - Toxicity with acute ingestion/inhalation
 - Formaldehyde from incomplete combustion
- **Green Methanol** requires net-zero carbon source. Two types:
 - Bio-Methanol: produced using waste biomass or biogas
 - E-Methanol: produced using renewable hydrogen and captured CO₂.



Green Methanol Feasibility Study Project Consortium

Workstream	Scope of Analysis	Lead Organization
Alternative Fuel Supply Chain	Feasibility and cost of producing green methanol	 HY2GEN <small>USA INC.</small> <i>Green methanol fuel producer</i>
Port and Bunkering Infrastructure	Feasibility and cost of transporting, storing, bunkering methanol	 Port of Seattle <i>Supported by Vancouver and ports of call</i>
Vessel Decarbonization Pathway	Feasibility and cost of methanol-capable cruise ship deployment	 CLIA CRUISE LINES INTERNATIONAL ASSOCIATION <i>Supported by cruise lines</i>
Passenger Willingness to Pay	Impact of passenger willingness to pay for greener cruising to offset GHG footprint or contribute to the uptake of cleaner fuels	 CLIA CRUISE LINES INTERNATIONAL ASSOCIATION <i>Supported by cruise lines</i>
Consolidation	Summarize results and final cost gap, identify funding opportunities	 Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping
Roadmap	Develop roadmap and commitments for next phases of project toward implementation	 Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping

Green Methanol Feasibility Study Scope



Consortium roles:

Fuel Provider: HY2GEN

Ports: Port of Seattle / VFPA / Victoria / Juneau

Vessel Operators: Cruise Lines International Association / Carnival Corporation & plc. / Norwegian Cruise Line Holdings, LTD. / Royal Caribbean Group

In partnership with:



Other Initiatives

- **Stakeholder Engagement and Policy Advocacy:**
 - Shared messaging
 - Two webinars to update public on progress
 - Developing policy advocacy framework and strategy to engage policymakers
- **Greenhouse Gas (GHG) Emissions Baseline and Tracking**
 - Objective: quantify CO₂ emissions from Alaskan itineraries (round-trip) for homeport ships involved in Pacific Northwest to Alaska Green Corridor
 - Output: GHG emissions for the 2019 and 2023 seasons for the corridor
 - Methodology: Uses verified fuel consumption and GHG data submitted to IMO, data aggregated and anonymized by CLIA
 - Next Steps: Finalize baseline, begin regular reporting to track GHG reduction progress

Next Steps for 2025

- **Green Methanol Feasibility Study**
 - Technical and cost gap analysis completed in Q3
 - Implementation Roadmap (Commission engagement opportunity)
- **Other Initiatives:**
 - Educating policymakers in U.S. and Canada on the corridor and advocating for policy and resource support
 - Finalize GHG emissions baseline and share results; begin regular reporting
 - Communicate progress via public webinar/communication moment

