



Webinar - Ammonia Energy Association

Building the world's first green ammonia fueled tanker -
MS Green Ammonia

31st March 2022

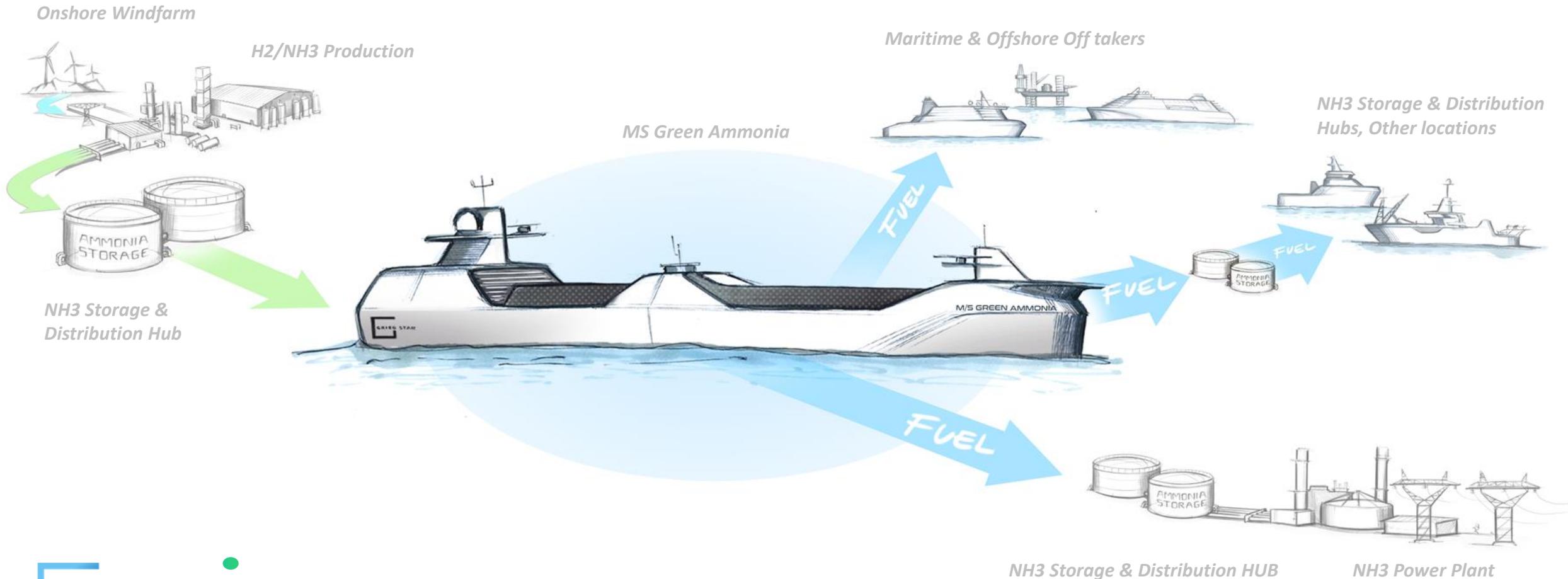


Grieg Edge is the dedicated innovation unit within the Grieg Maritime Group

We invest in ocean ventures and create new, innovative energy solutions together with industry partners!

Establishing an ammonia network

Developing a new value chain together with industrial partners



Green Ammonia Berlevåg and Grieg Edge to Establish One-Stop Shop for Deliveries of Green Ammonia in the Arctic



- Creating one-stop shop for end-users of green ammonia based on fuel supply from Green Ammonia Berlevåg and fuel distribution by MS Green Ammonia
- The ammonia tanker M/S Green Ammonia that is currently being developed by Grieg Edge will ensure fuel distribution and ship-to-ship bunkering
- Aker Clean Hydrogen and Varanger Kraft will together with Grieg Edge establish a joint venture to handle offtake delivery contracts including fuel supply and distribution
- Builds on the good cooperation from the ZEEDS initiative

Timeline

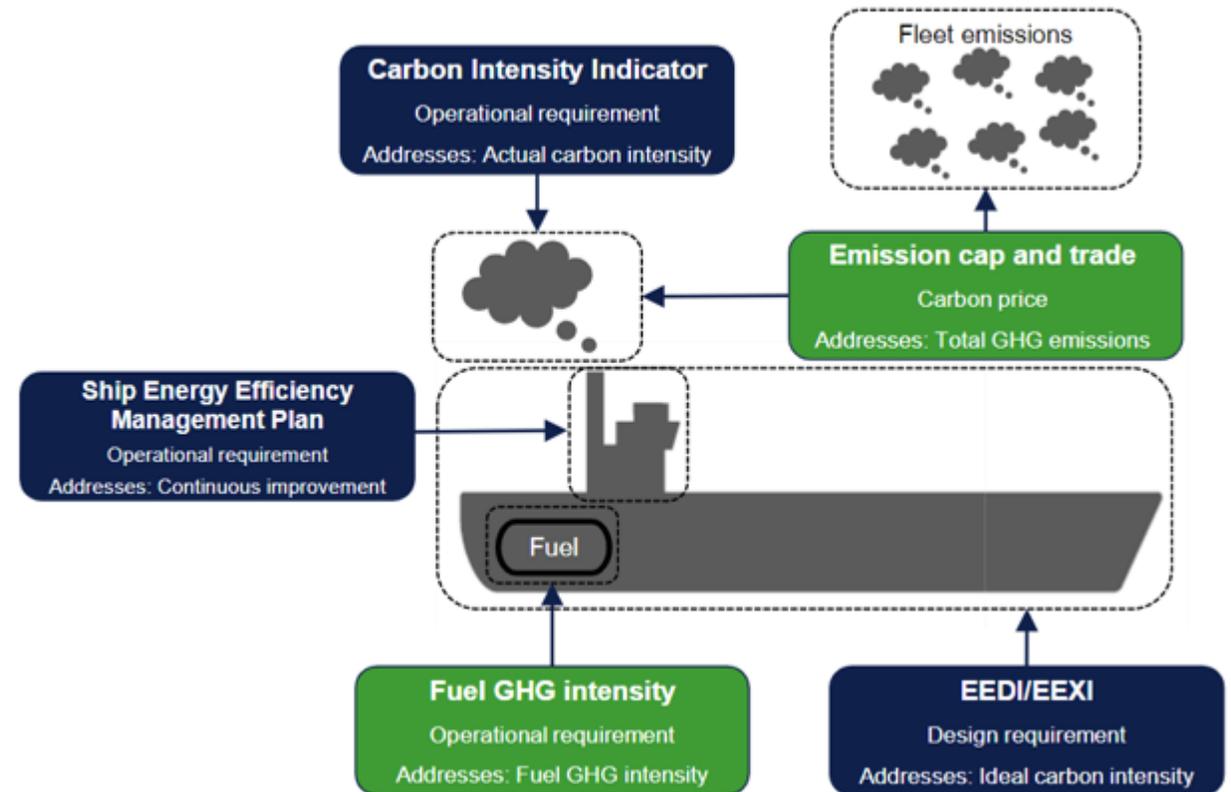


Collaboration - the key to accelerate the hydrogen economy

- Players in the industry need to collaborate to move the industry forward and accelerate on;
 - Technical solutions
 - Market demand
 - Infrastructure
 - Funding
 - Rules & Regulations

Regulatory Framework

EU Green Deal | Fit for 55 | EU ETS | Fuel EU Maritime



Source: DNV



We will restore our oceans

Green Ammonia Berlevåg



AKER CLEAN HYDROGEN



VARANGER KRAFT



Raggovidda wind farm

- 200 MW Concession

Raggo 1

- 191 GWh/year – 49% Capacity Factor
- 15 turbines
- 45 MW

Raggo 2

- 215 GWh AEP
- 12 turbines
- 51,6 MW

Green hydrogen from wind power

- Pilot, 1 ton compressed H₂/day



Green Ammonia Berlevåg

- Mature and locally wanted

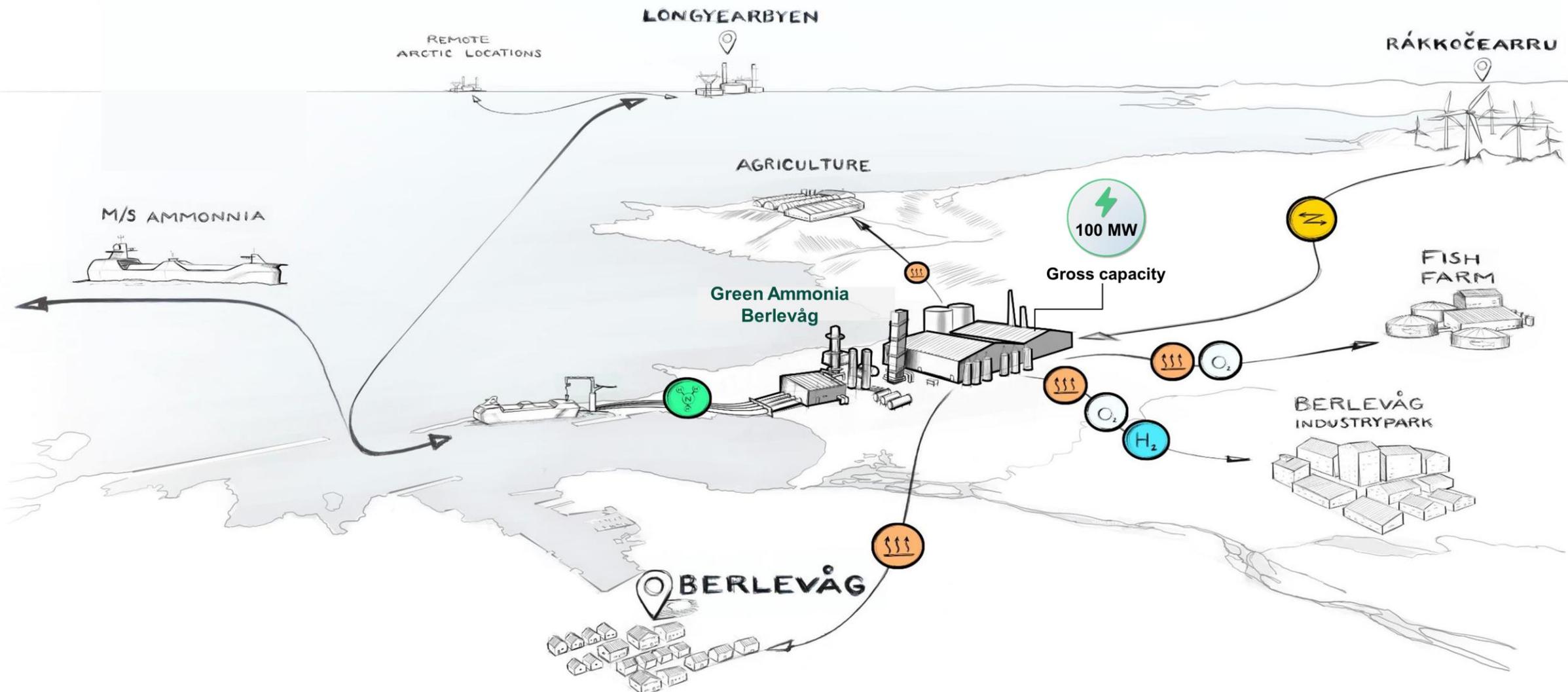


Power
Phase 1: 100MW
Phase 2: 200MW

Hydrogen
Phase 1: 2t/hr
Phase 2: 4t/hr

Nitrogen
Phase 1: 10t/hr
Phase 2: 20t/hr

Ammonia
Phase 1: 12t/hr
Phase 2: 23t/hr





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GAB Green
Ammonia
Berlevåg



AKER CLEAN HYDROGEN



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