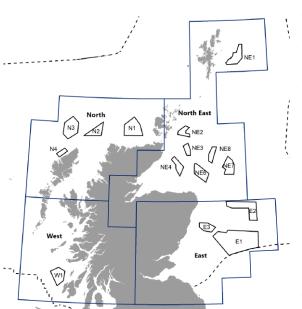


## NORTH OF SCOTLAND **HYDROGEN**PROGRAMME

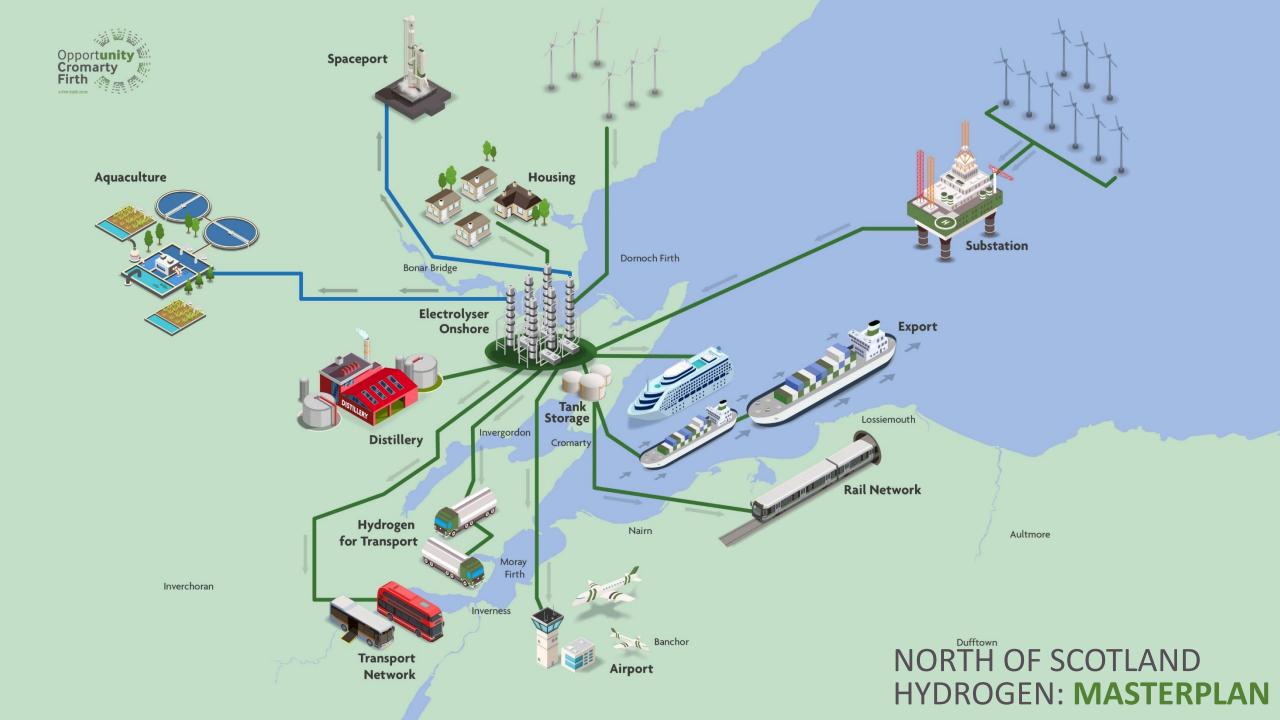






## RENEWABLE ENERGY BOOM - WHY MORAY FIRTH?

- The Highland Region, and the Cromarty Firth in particular, has a 50-year pipeline of £multi billion offshore wind construction projects on its doorstep
- We are in the right place at the right time: 15 development sites identified in the Marine Plan; 14 in close proximity to the Cromarty Firth
- Step change in offshore wind deployment from 1GW installed capacity to 11GW by 2030
- We have the right facilities, track record and supply chain: Over £100m already invested and the Firth has accommodated and supported more windfarm projects than any other Scottish Port: Beatrice and Moray East Offshore Windfarms, Hywind and Kincardine Floating Windfarms
- > 50 year pipeline: construction timeline 2025-2050, plus 25-30 year operations and maintenance followed by repowering/decommissioning
- No other location is better positioned
- Find constraint issues led to us looking at hydrogen





## **DISTILLERY FEASIBILITY STUDY**



- Partners are ScottishPower, Glenmorangie, Whyte & Mackay, Diageo, Pale Blue Dot and Port of Cromarty Firth
- Pale Blue Dot are leading the study, which is being privately funded by the partners
- Scope: Explore the feasibility of a large scale electrolysis facility in the Cromarty Firth producing green hydrogen from renewable power for local use and export to other areas/ countries. This will include production, storage and distribution to the distillery partners.
- Kick-starter for North of Scotland Hydrogen Programme first customers and proof of concept
- Feasibility study will complete in June 2021
- Engineering & Design Phase to follow and hopefully demo project / early Phase.





## **OTHER PROJECTS/NEWS: UPDATE**

- FRM & OGTC Study into the Bulk Marine Transport of Hydrogen
- Freeport / Greenport bid
- The PowerHouse: Field studies / applied research centre, focused on floating offshore wind and green hydrogen technologies, research and development, and education.

Aim: To become a global centre of excellence and position Scotland as world leaders in floating offshore wind and green hydrogen technologies. The centre's USPs will be in floating wind and green hydrogen substructure manufacture and deployment and large multi MW scale electrolyser development

Combining the best international research and development with leading industry at the point of industrial deployment. Hosted by University of Highlands & Islands.

Actively seeking academic and industry partners across Europe