

North East Scotland's Hydrogen Ambition & the Energy Transition Zone

Road to Decarbonisation – Hydrogen Skills

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An overview of North East Scotland's strengths



**Oil & gas infrastructure
and expertise**



**Net Zero
Technology Centre**



**Integrated energy
supply chain**



ETZ Ltd



**Underwater engineering
and technology**



**Industry-focused
universities & college**



**Ongoing Energy
Transition projects**



**Port infrastructure
and capability**

A region with the right credentials and a strong track record of delivery to embrace a low carbon energy future

Energy Transition Projects Key

- ScotWind leasing areas
- Existing windfarm
- ETZ
- CO₂ Storage Sites
- Existing Pipeline
- Future Pipeline

North East Scotland current & future Energy Transition projects

Aberdeen City current & future hydrogen projects

Aberdeen Hydrogen Hub (Project) 2024



TECA Electrolyser
350kg H₂ / day



Kittybrewster HRS
360kg H₂ / day

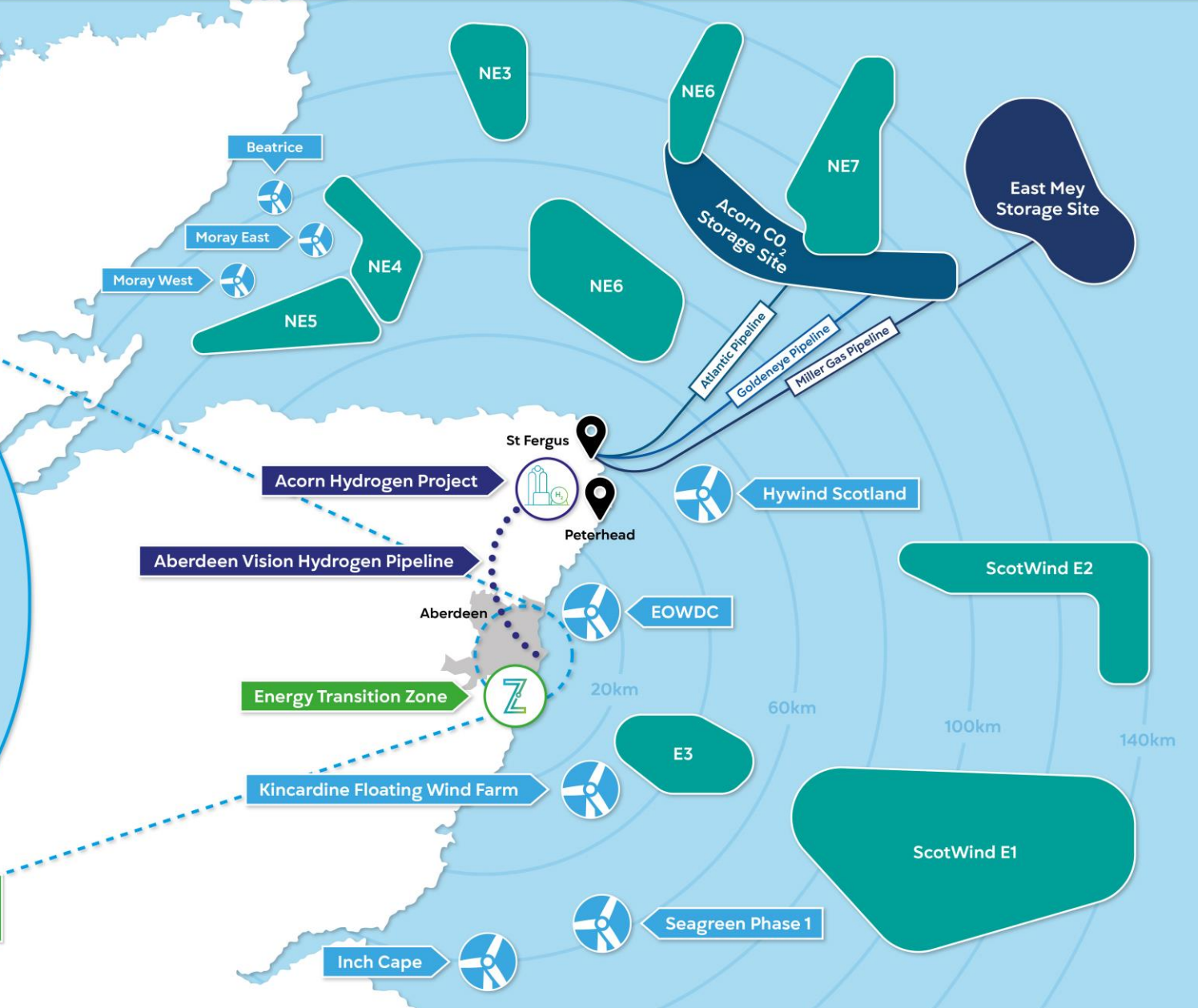


ACHES HRS
360kg H₂ / day

Energy Transition Zone
Hydrogen Campus

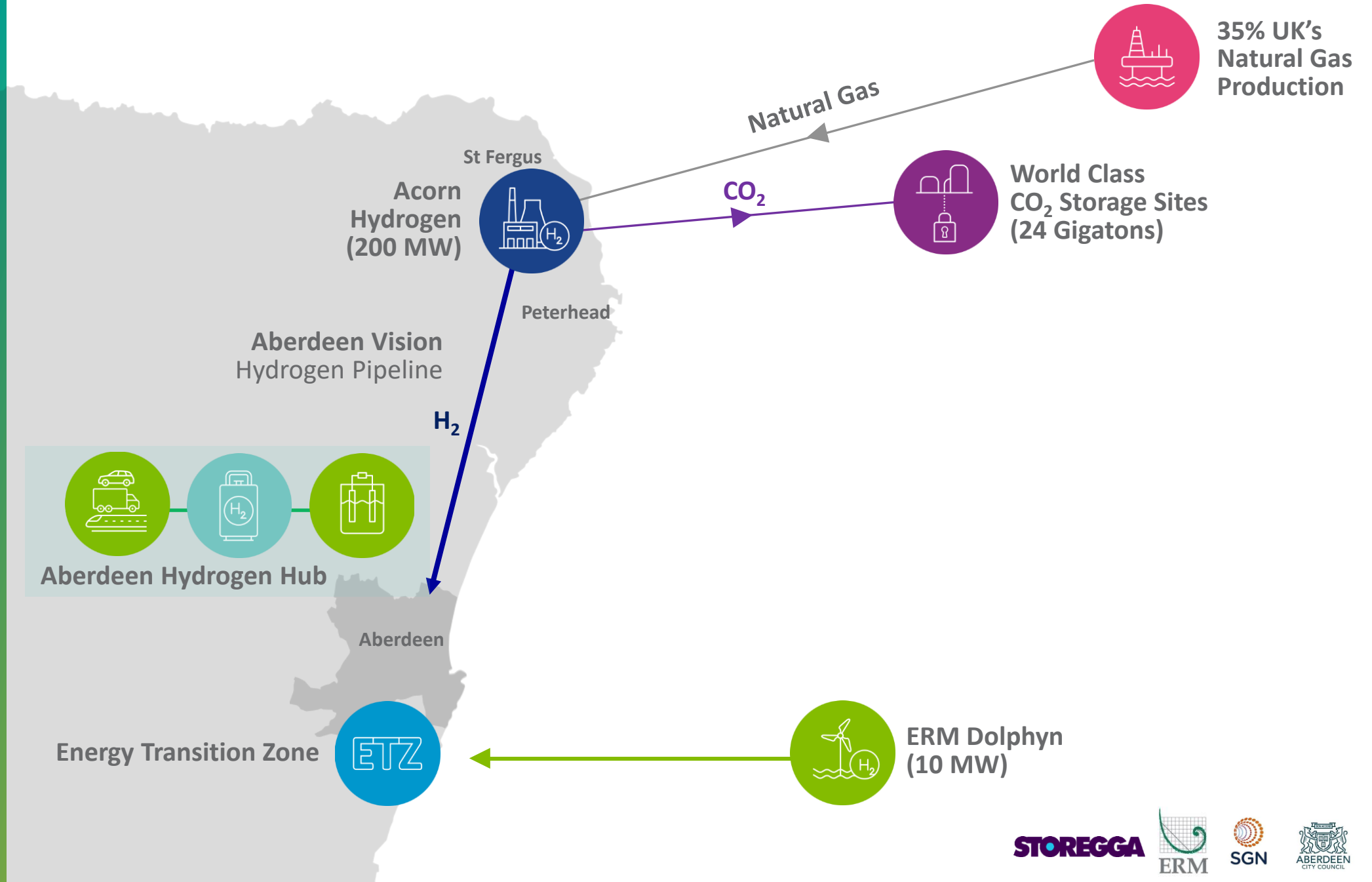


ERM Dolphyn
Project (2024)
2000kg H₂ / day initially

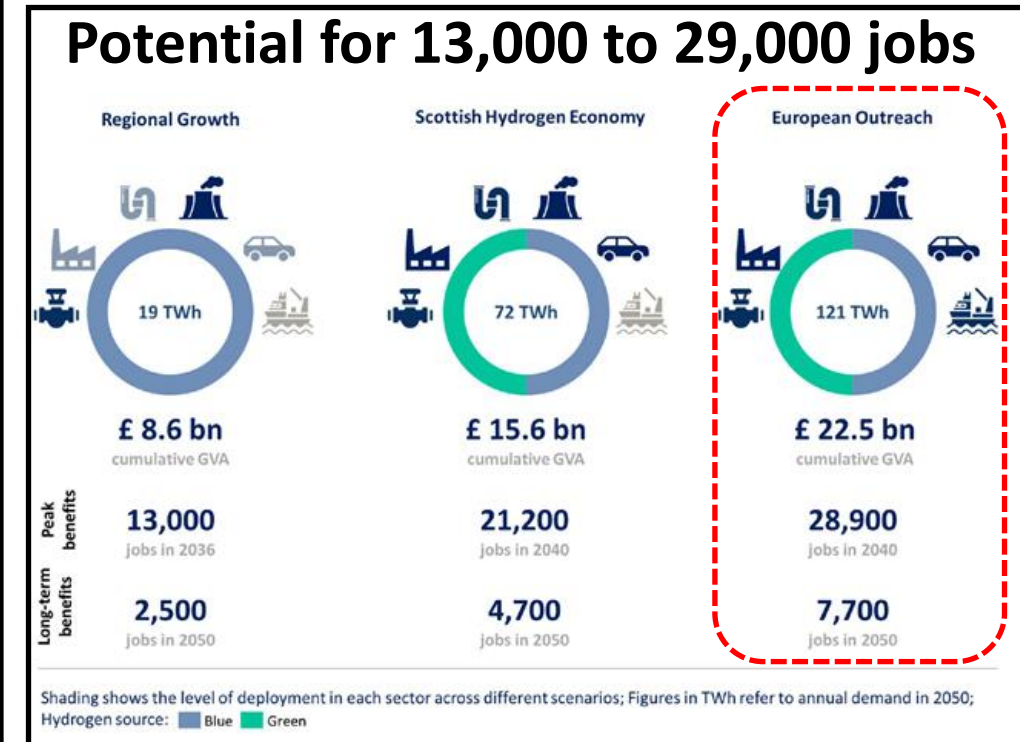
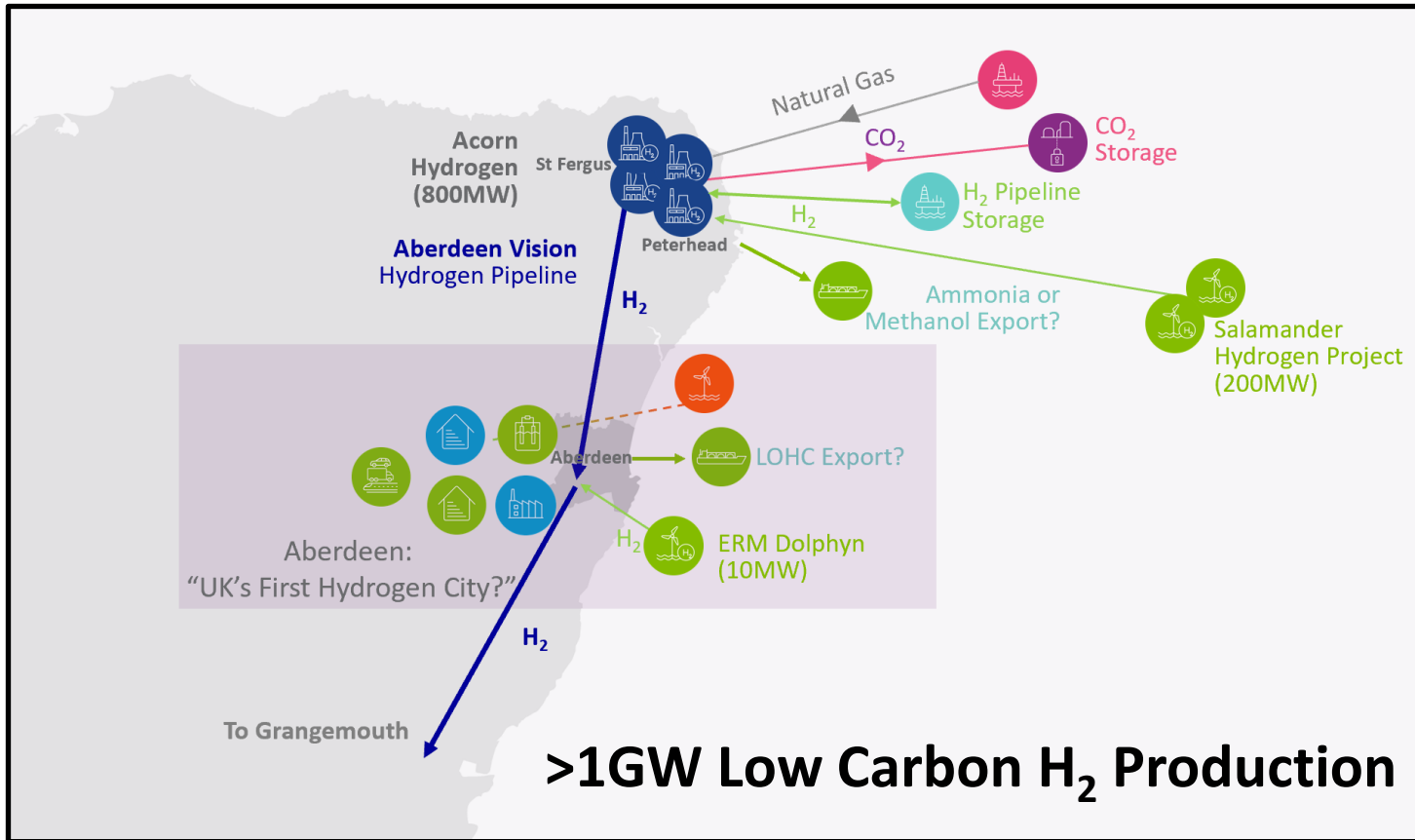


ETZ

North East Scotland: Hydrogen Projects Operational by 2025-27



NE Scotland's Hydrogen Economy by 2032: Regional, National & International Impact

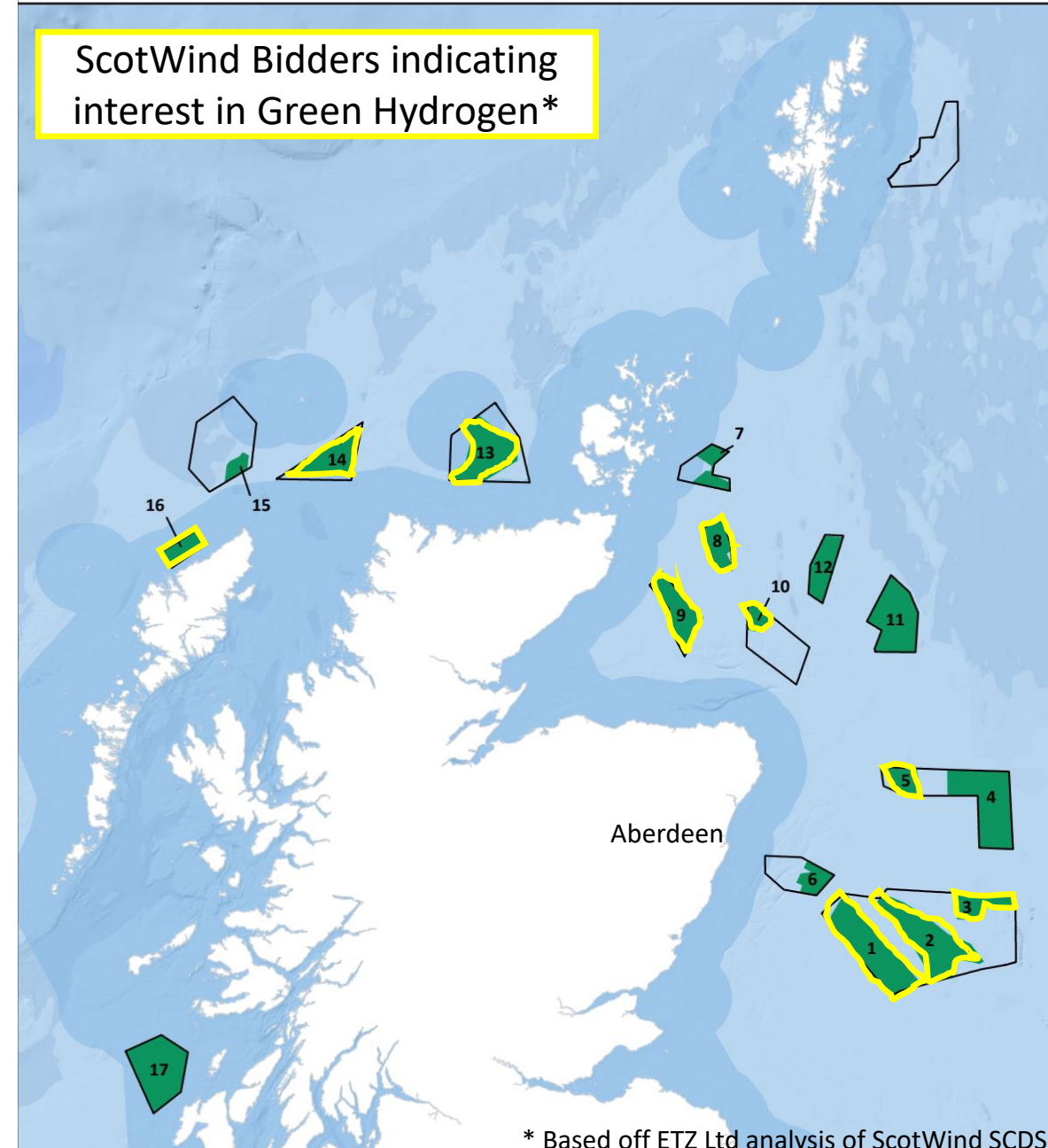


*"North East Scotland is well placed to deliver a substantial proportion of the UK's future low carbon hydrogen requirements as a result of a number of current and near future hydrogen projects, which combined are expected to generate in excess of **200MW by 2025-27**. These projects can be scaled up quickly to contribute **over 1GW (20%) of Scotland's low carbon hydrogen production target of 5GW by 2030-32**".*

- Ten of seventeen successful ScotWind leasing round bidders make reference to potential for green hydrogen, e.g.:
 - BP / EnBW: 400MW;
 - Offshore Wind Power consortium (including TotalEnergies).
- Some may select to progress Power-to-X options as part of their development plans to offset CfD funding and grid access timing challenges.

ScotWind Awarded Sites

ScotWind Bidders indicating interest in Green Hydrogen*



Energy Transition Zone & Aberdeen South Harbour

Port of Aberdeen's South Harbour



£400m investment

- Largest marine infrastructure project underway in the UK providing added capacity to existing North Harbour (UK's oldest business, established in 1136)
- Deep Water, non-tidal providing 24/7 access
- Extensive laydown (125,000m²) & quayside space (1,400m)
- Gearing up to benefit from proximity to ScotWind licensing areas
- Operational in 2022



Introducing the Energy Transition Zone (ETZ)



What is ETZ?

- Adjacent to the new **£400m Aberdeen South Harbour** and is a mix of greenfield sites and the brownfield industrial areas of East Tullos and Altens.
- ~70 ha (gross) of net zero space acting as the **commercial gateway for large scale offshore renewables and high value manufacturing.**
- An **exemplar low carbon development** and home to leading-edge innovation, including innovation centres **for floating offshore wind & hydrogen.**
- Supporting **green recovery** post COVID-19 & aligned to **Scotland's net zero targets.**
- Working with the community through its development, provides an opportunity to **advance equality of opportunities, deliver community benefits and support inclusive growth & just transition.**



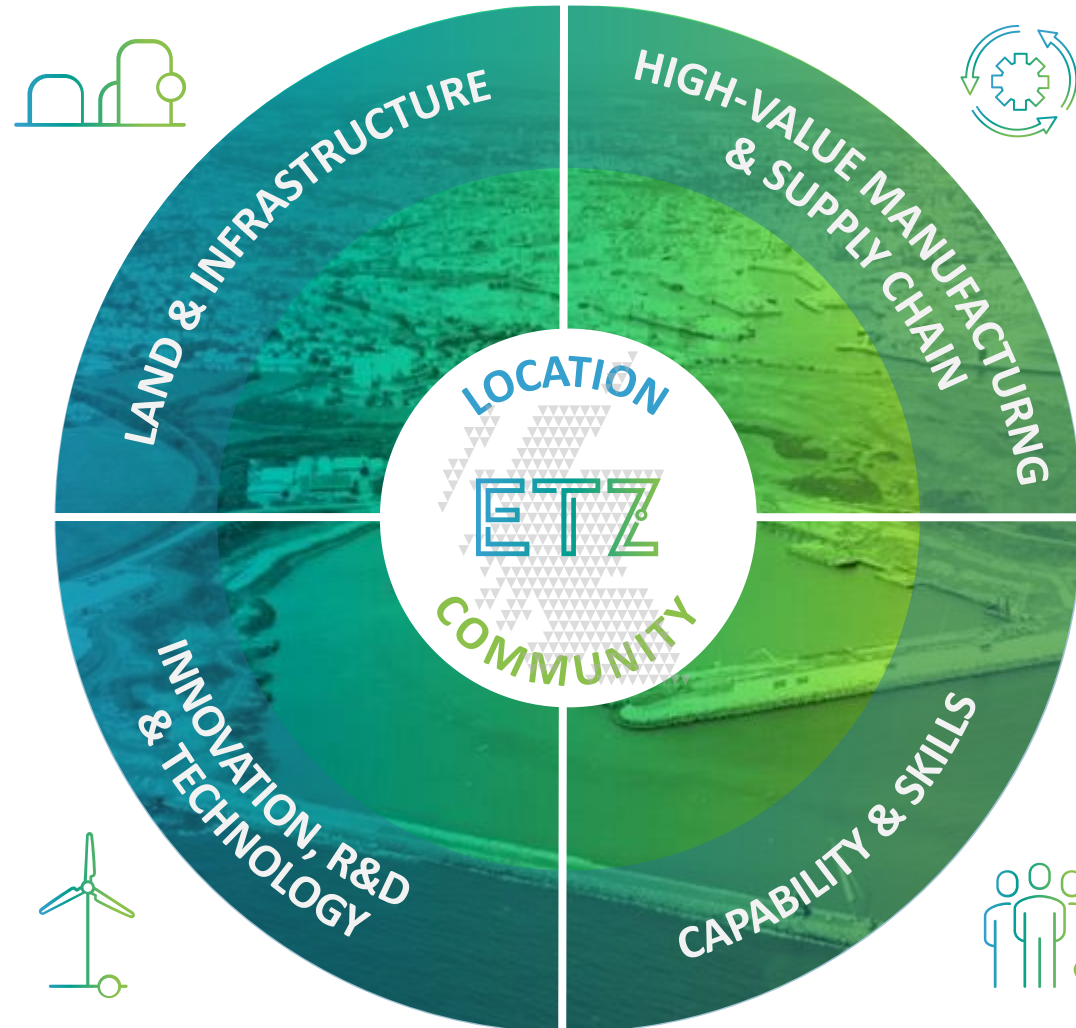
Who is ETZ Ltd?

- ETZ Ltd was created in April 2021 with an established governance structure & experienced leadership team to help deliver the region's ambition to be a **globally recognised integrated low carbon energy cluster.**
- ETZ Ltd is a **not for profit, private sector led** company operating on the basis of no commercial gain.
- Founding members are Opportunity North East (ONE), Port of Aberdeen (POA) & Scottish Enterprise (SE).
- ETZ has **secured £53m in public funding from Scottish & UK Governments and £5.7 million funding from ONE.**
- ETZ will support **2,500 direct jobs**, with a further 10,000 energy transition-related jobs across the region and will create **£400 million of added value.**

ETZ Focus areas: Hydrogen & Skills



- Leverage the £400M Aberdeen South Harbour (ASH) Investment
 - Enable offshore wind and **hydrogen high value manufacturing**
 - Deliver green space enhancements and community facilities
 - Facilitate gaining Green Freeport status
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- Home of National Floating Offshore Wind Innovation Centre
 - **Site of proposed Green Hydrogen Test and Demonstration Facilities**
 - Energy Incubator & Scale-up Hub to support green start-ups and scale-ups
 - Applied R&D linked to advanced manufacturing
 - A centre for data and digital innovation



- Attract inward investment for high value manufacturing
 - **Supporting infrastructure for emerging hydrogen production, storage and distribution business**
 - Provide scale-up and mentoring support to capitalise on new energy transition opportunities
 - Internationalisation & export of offshore engineering, manufactured products
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- **Build on existing energy skills and experience in the region**
 - Work with the local community to deliver inclusive job opportunities
 - **Establish the National Energy Skills Accelerator (NESA)**
 - **Develop Energy Transition Pathway for supply chain & deliver other NEERSF re-skilling programmes**



East Tullos

Altens

Skills Campus
NESCOL

Innovation Campus
Energy Incubator &
Scale-up Hub

Offshore Wind Campus
FLOWIC

Road / Rail / Marine
H₂ Refuelling

Hydrogen Campus
GHTDF
ERM Dolphyn

High Value Manufacturing

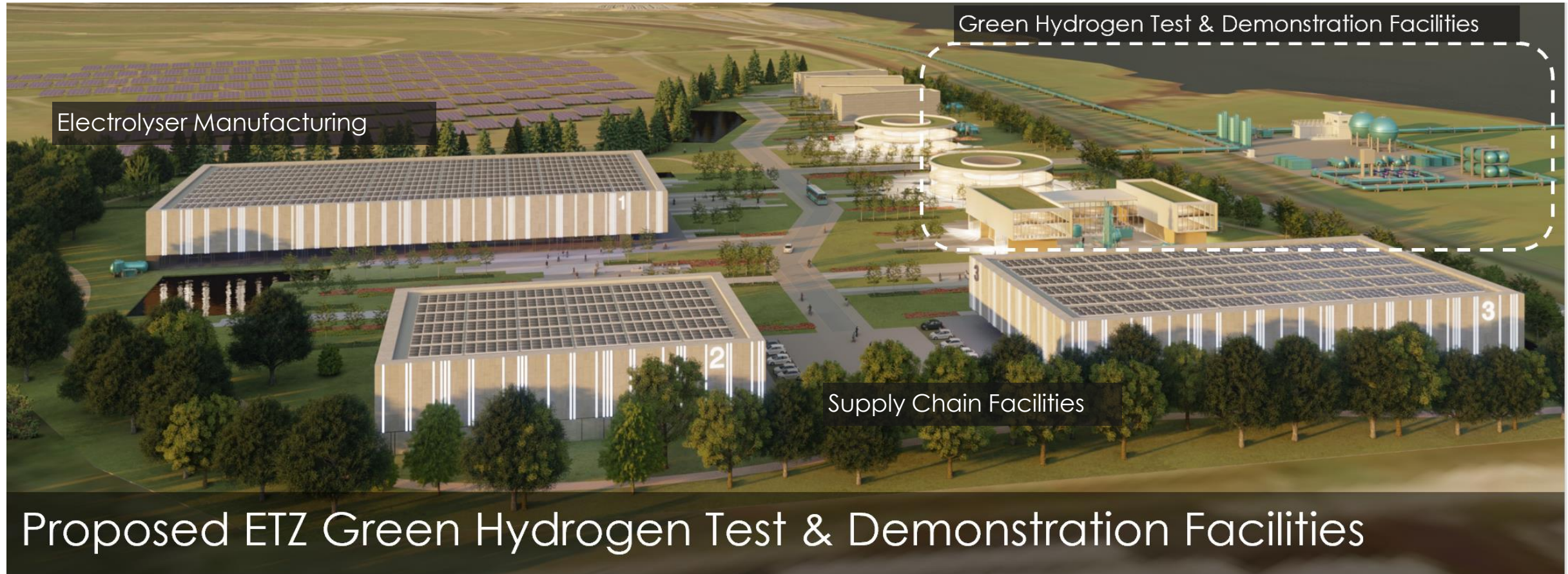
Torry

Marine Gateway
Aberdeen South Harbour

Energy Transition Zone

Indicative Conceptual Model
Subject to Planning Consent

Proposed ETZ Hydrogen Campus





NETZ ZERO

ENERGY TRANSITION ZONE

For further information / feedback on the proposed Energy Transition Zone, contact:

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