

March 2025

# Aberdeen Hydrogen Hub

Building the opportunity



An integrated energy partnership



# Aberdeen Hydrogen Hub – a scalable green hydrogen production, storage, and distribution hub - operating from 2026



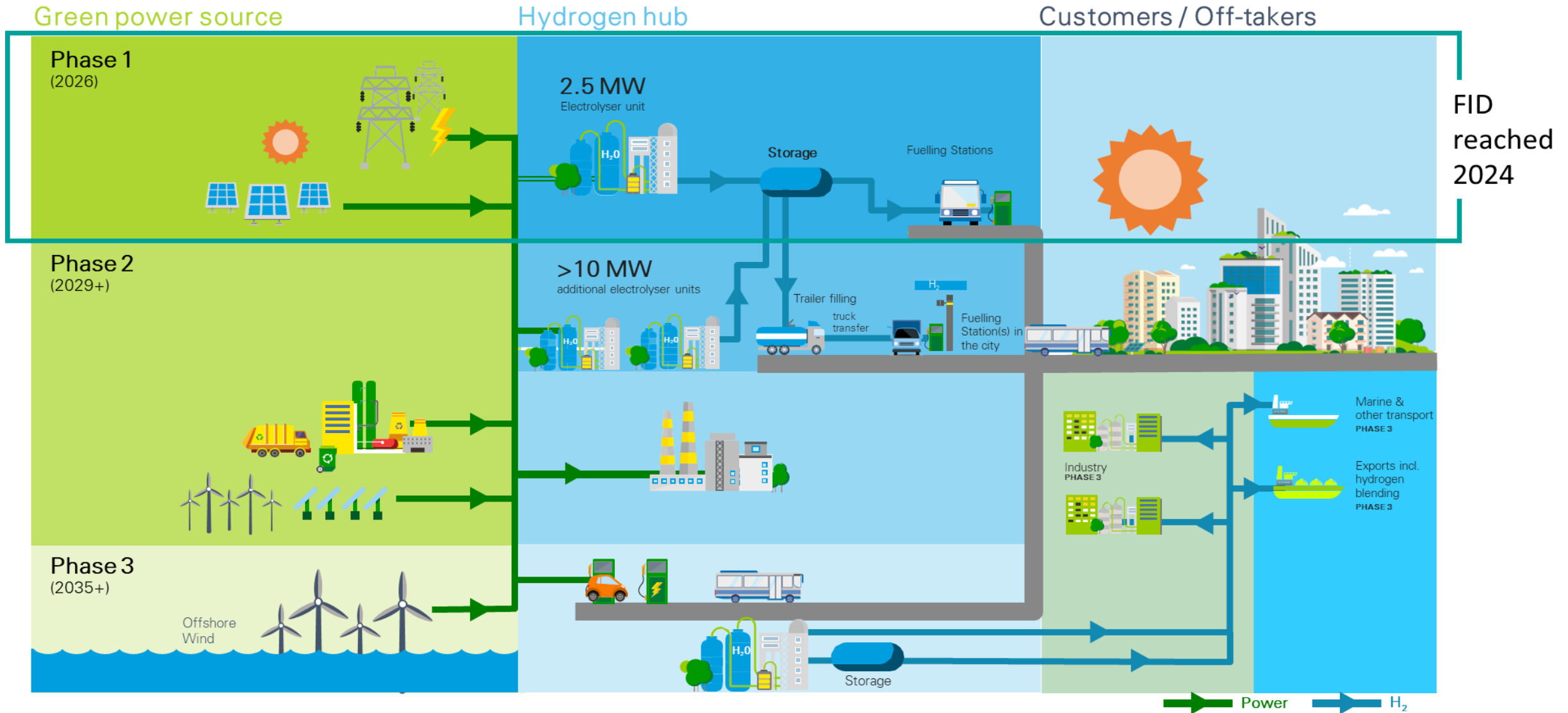
An integrated energy partnership



- Public-private partnership
- Innovative and fully integrated energy system project
- 2.5MWe of electrolytic hydrogen production

- Supports transport decarbonisation and stimulates hydrogen economy in Aberdeen
- Commitment to economic and community benefits, contributing to a long-term hydrogen economy

# A phased green hydrogen hub development, scaling in line with market growth of renewables and hydrogen demand





# Contracts awarded, supporting local content with each based in Aberdeen or with significant Scottish operations

## Electrolyser Package



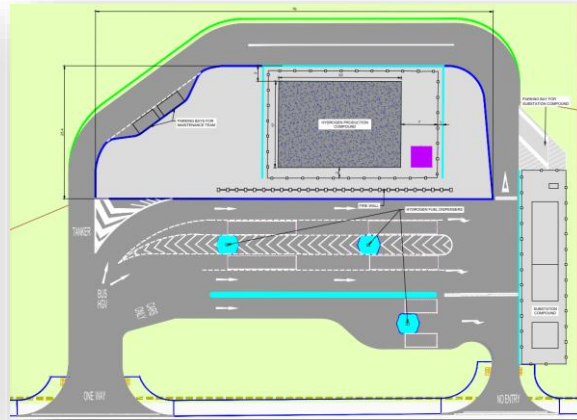
**Description:** Design, specification, procurement, installation and commissioning of full H2 electrolyser package on site

**Public or Private Tendering:**

Public



## Civils Package

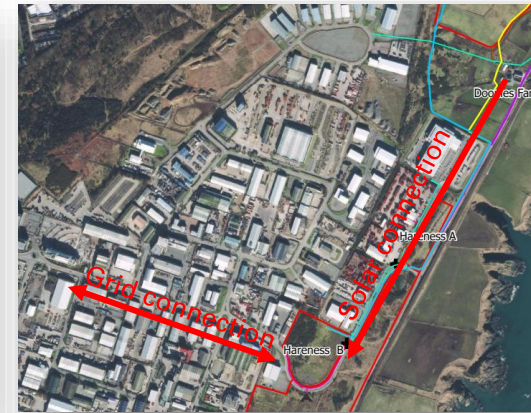


Design and all site works; excavation, concrete plinth, roads, fencing, drainage, utility connections etc. on site

Private

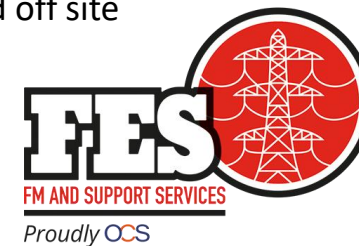


## Electrical & System Integration



Design and installation of the grid connection to site and the solar connection to site. Scope also includes integration of all equipment on and off site

Private



## Solar Package



Turnkey solution for design, site prep, installation, commissioning (+2yr O&M) of solar facility, up to but not including grid connection

# Transitioning skills & building the supply chain

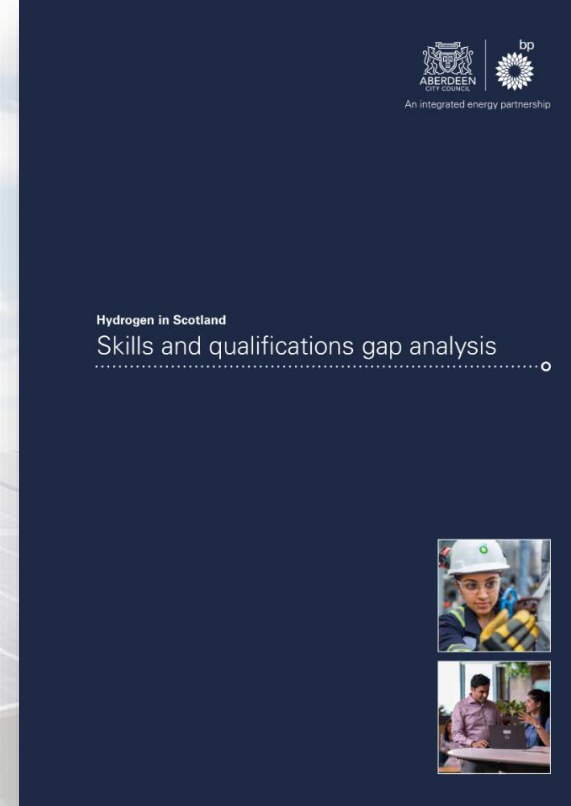


## Building the supply chain

- Identifies the gaps in supply chain capability
- Identifies barriers facing suppliers in the hydrogen sector
- Suggests that a range of stakeholders can help address these gaps



Scan the QR code to download the document



## Skills and qualifications gap analysis

- Defines what skills are needed
- Assesses the current skills landscape
- Makes recommendations around suitable future skills provision



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# Hydrasun



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# Our Hydrogen Journey >40 H<sub>2</sub> Projects



Established in 1976, Hydrasun has been delivering high pressure gas system solutions for safety critical applications

1976

2016

Over the past decade, Hydrasun has expanded to offer hydrogen-specific integrated products and services, successfully completing 40 key projects



550 Employees Globally

£ 120M Turnover



Transport



Industry



Power

Our project experience includes the design, supply, integration, installation, and commissioning of piping systems, panels, and Hydrogen Refuelling Stations (HRS) across the Transport, Industrial, and Power sectors. Key areas include:

- Hydrogen Refuelling Systems (HRS): design, installation, commissioning, operation and maintenance
- Fuel switching in industrial gas systems
- Hydrogen offtaker solutions



## Specialist Turnkey HRS Solution Provider and H<sub>2</sub> System Integrator

# Hydrasun Scope of Work

Aberdeen Hydrogen Hub (Phase 1)



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## Project Description

Hydrasun will provide and integrate the hydrogen refuelling station, and associated infrastructure, to supply green hydrogen to local off-takers. The 2.5MW Hydrogen Refuelling Station (HRS), powered by a solar farm, producing 800-1000kg hydrogen per day to fuel 25 buses and a similar no. of fleet vehicles (HGV and cars).

## Scope of Supply

Full turnkey design, supply and installation of the Hydrogen production package

- Major equipment items:
  - 2.5MW<sub>e</sub> Electrolyser
  - 2 x Compressors
  - 2000kg Compressed Storage
  - 2 x Chillers
  - 2 x Dispensers
  - PLC and safety control systems
  - Local Equipment Room



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# Project Timeline

Aberdeen Hydrogen Hub (Phase 1)

  
ROBERTSON



Detailed Design and  
Safety Assessments

Aug 24 – Aug 25



Procurement  
Activities

Nov 24 – Sep 25



Siteworks

May 25 – Nov 25



H2 Tech Package  
Construction

Jan 26 – Apr 26



Pre-Commissioning,  
Commissioning and  
Handover

May 26 – Aug 26

  
Supply Chain Engagement  
November 2024 – September 2025

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# Aberdeen Hydrogen Hub (Phase 1)

## Supply Chain Solutions

### Major Equipment Items

- **2.5MW PEM Electrolyser**
- **Compressors**
- Dispensers
- T20 Chillers
- **Hydrogen Storage**
- Local Equipment Room

### Engineering Support

- Safety Study Chairs (HAZID/HAZOP)
- Consequence Modelling

### Control System

- Process Control System (PCS and SCADA)
- Fire & Gas Detection System/ Fire Suppression System
- Safety Shutdown System (SIS)

### Construction & Commissioning

- Cranage
- Analysis Services (Water, Hydrogen Purity)
- Scaffolding Contractors (Platforms)
- Waste Management Services (Skips)

### Balance of Plant (BoP)

- Break Water Tank
- Water Pumps
- Water Pipeline Filters
- Hydrogen Filters
- Small Bore Tubing
- Actuated Ball Valves
- Pressure Regulation
- Bulk Materials (Cladding, Glands, Transits and cable containments etc.)
- Instrumentation (Analysers, Pressure Transmitters, Flow Meters)
- Metering
- Safety/ Pressure Relief Valves
- Control Valves
- Junction Boxes
- Safety Signage
- Supports/ Framing / Steelwork



# Key Contacts

**Jamie Ross**

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**Dr Stuart Mitchell**  
Hydrogen Director



**Ed Harper**  
Project Director



**Stuart Gardiner**  
Operations Director



**Stuart Duncanson**  
Head of BD



**Hannah Beveridge**  
Sales & Marketing Manager



**Jemma Reynolds**  
Sales & Marketing Analyst

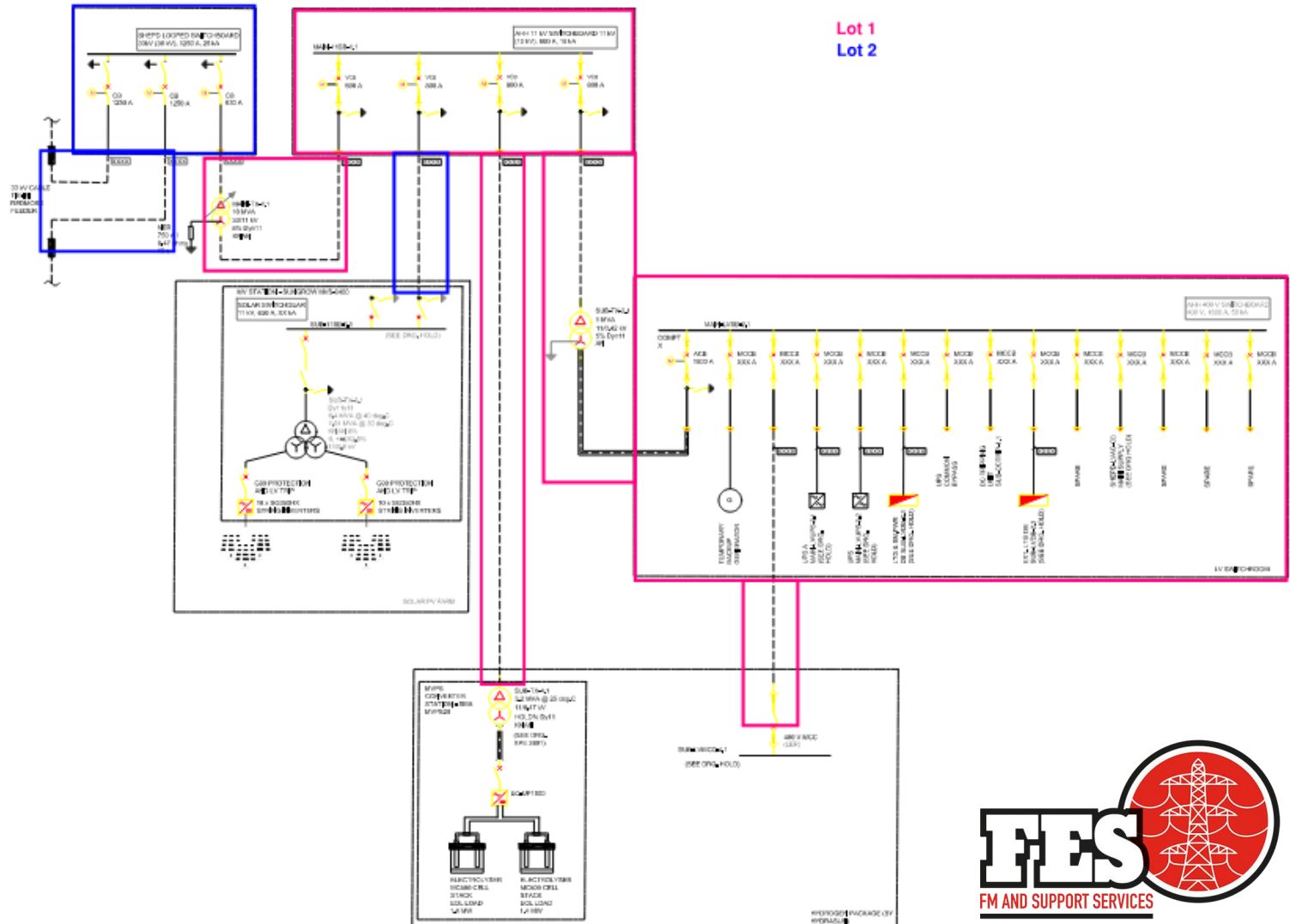
# FES – Scope Of Works

## Lot 1

- Clients 33kV & 11kV HV Network and associated infrastructure
- ECS/PMS/SCADA
- Energy Management System (EMS)
- Communication & fibre network infrastructure
- CCTV
- Fire Alarms
- Lightning Protection & earthing
- External Lighting

## Lot 2

- ICP SSE 33kV substation and incoming supply
- 11kV HV Private Wire to solar farm & associated civil excavation & reinstatement
- Fibre network infrastructure



Lot 1  
Lot 2



# FES – Supply Chain Packages



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## FES potential supply chain opportunities

Lot 1 – Balance of Plant	Lot 2 – ICP & Private Wire
11kV Switchgear	Cable Ducting
11kV transformer	Cable draw pits / chambers
Fire Alarm	Fibre cabling
Lighting; Internal & External	11kV cable
CCTV	33kV SSE spec cable



An aerial rendering of an industrial site. The foreground shows several large, light-colored industrial buildings and a paved area. A red line outlines a specific area, possibly a solar farm or a new development, which includes a large field of blue solar panels. The site is situated on a coastal area with a cliffside overlooking the sea. In the background, a city is visible, and a harbor with several ships is on the right. The text "Visit us at Stand 2" is overlaid in the center.

Visit us at Stand 2



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