H100 Fife – Delivering the Hydrogen Neighbourhood

1 November 2023
H100 Fife aims to deliver evidence to inform heat policy decisions by demonstrating 100% hydrogen for heat as a viable alternative to natural gas.

- Now adopted as the ‘Hydrogen Neighbourhood’ trial within the UK Government’s ‘Ten Point Plan for a Green Industrial Revolution’
- Feeds evidence into 91 of 104 Evidence Strands identified by DESNZ required to inform a policy decision
- Commenced in 2021 following 5 years of cross industry evidentiary work in preparation of trial phase
- Now in construction phase
- Go live towards end of 2024
- Trial runs until 2027
- Funded by SGN, OFGEM, Scottish Government, Cadent, NGN, WWU
- Project Partners include Baxi, Bosch
End to End System

Additional Workstreams:
- Safety Evidence
- Customer Recruitment
- Regulation and Billing
- Training and Competency

Production and Storage Site

1. Offshore Wind Power
2. Green electricity produces hydrogen
3. Safely stored
4. Pressure reduction
5. On Site H2 Demo Facility
6. Transported through network
7. Zero carbon heating for 300 homes
H100 Fife Workstreams

Upstream
1. Offshore Wind Power
2. Electrolyser
3. H2 Storage
4. Pressure Reduction
5. H2 Demo Facility

Midstream
6. Distribution

Downstream
7. In Home

- Safety Evidence
- Customer Recruitment
- Regulation and Billing
- Downstream Training and Competency
- Future of Energy Transition
- Technical & Safety Assurance
➢ AB Main Works Contractor on site since July 2023
➢ Nel Electrolyser equipment delivered to site
➢ Wefco storage tanks manufacturing and delivery schedule on track
➢ Demo facility construction nearing completion, launch early 2024
Midstream

➢ 2km of distribution pipeline laid in network area
➢ Build schedule - on track
➢ Horizontal Directional Drilling completed
➢ 11 local Sub-contractors / suppliers engaged
Downstream

- Warmworks survey programme progressing well c. 200 homes surveyed
- 6/200 homes ineligible = 97% home convertible to hydrogen
- Direct + indirect benefits of hydrogen install (customer offer + home improvements)
- Unique learning from network area e.g. timber framed, listed buildings
- Development of customer surveys
Customer & Community Engagement

• c.40% of available properties in network area registered to take part, interest continues to grow

• Home visits continuing from October - property surveys & engagement support

• Customer Newsletters sent quarterly with ongoing support for community newsletter sponsorship

• H100 Fife Project Update Open Evening - 25th October
  Opportunity to give updates on progress of project, including roadworks, surveys, production & storage site, and demo facility.

• Increasing engagement with local primary schools and high schools
  • Confirmed workshops for year 2023-24
  • Attendance at other local Career Fair Days
  • Other opportunities under review
Visit to Lochem
Thank you!

h100fife.co.uk