

SGN's H100 Fife project: green hydrogen to homes

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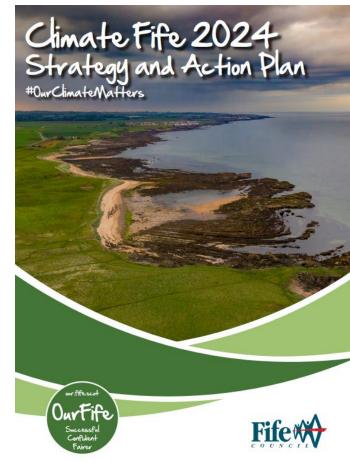
APSE Scotland Building and Housing seminar 2024 22nd February 2024

Climate Fife



Fife Council's interest in H100 Fife

- Option to further research decarbonisation of heat
 - Climate Fife Strategy
 - Local Heat & Energy Efficiency Strategy
 - Local Housing Strategy, warm low carbon homes
- Local climate and energy knowledge
- Community engagement
- Area regeneration

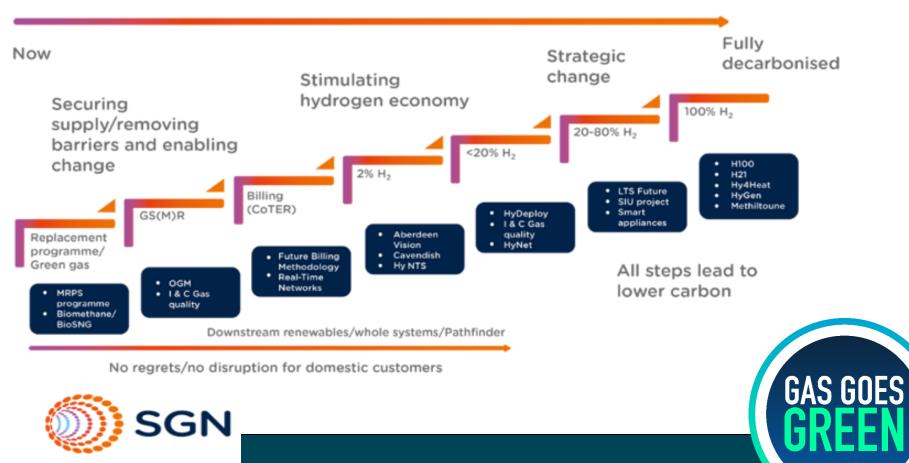




Hydrogen Context

• H100 Fife is a key demonstration project with national significance in evidencing the role of hydrogen to decarbonise the gas networks.

The gas quality decarbonisation pathway

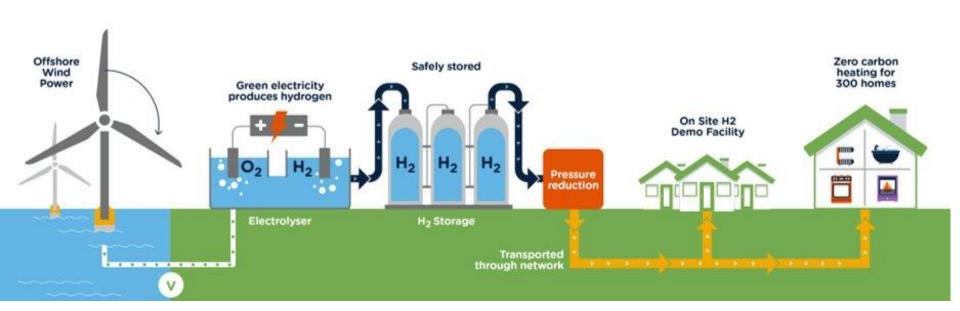


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H100 Fife – End to End Demonstration



- Up to 300 customers in Fife will make history in this world-first project.
- Participating homes will be connected to 100% green hydrogen gas produced from renewable energy.





H100 Fife – Levenmouth Site





ORE Catapult 7MW Turbine Energy Park Fife



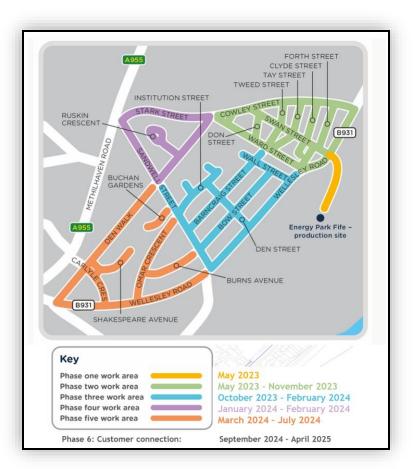
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Hydrogen Network & Distribution Construction

- 4.0km of distribution pipeline laid in network area (50% complete)
- 12 local Sub-contractors / suppliers engaged
- Network construction will take place in phases to minimise disruption across the network area





H100 Fife is a first-of-a-kind demonstration project that's leading the way in decarbonising home heating.



- Key Principles:
- Building customer confidence
- Providing interactive customer experience with hydrogen
- Maintaining customer choice model throughout project
- Customers can opt-in for a hydrogen supply or remain with existing natural gas supply
- Cost neutral to participate

The new Hydrogen Demohomes will be open in Spring for customers to come and see how similar hydrogen is to natural gas.



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Community voice at the centre of H100 Fife

- H100 Fife Community
 Liaison Group
- Educating about hydrogen in primary schools
- Training Engineers with skills for the future at Fife College
- Community projects and charities
- Supporting vulnerable customers





Fife Council perspective - opportunities & challenges

- Inform future decarbonisation options
- Community engagement in climate and energy
- Local learning Levenmouth concentration, but Fife-wide schools & education
- Householder offer & ability to switch, so cost-neutral
- Investment in EnergyPark Fife and local job creation

- No reduction in fuel poverty
- Abeyance of EESSH in line with boiler replacement timetable
- Uncertain impact of hydrogen on EPCs
- Data share agreement
- Balancing expectations
 and SGN timetable

Our Big Energy Move

Here we will begin to transform the energy system in Fife to low carbon.

Energy is critical to everything we all do and one of the most significant costs to Fife homes and business. We need to transform Fife's energy system to one where we have power when we need it and in a way that financially benefits the people of Fife.





Next steps

- Demonstration centre open from spring
- Ongoing community and participant engagement
- Home installations from late 2024
- Network construction completed by summer 2024



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