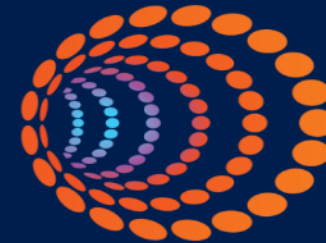


H100 Fife – Introduction

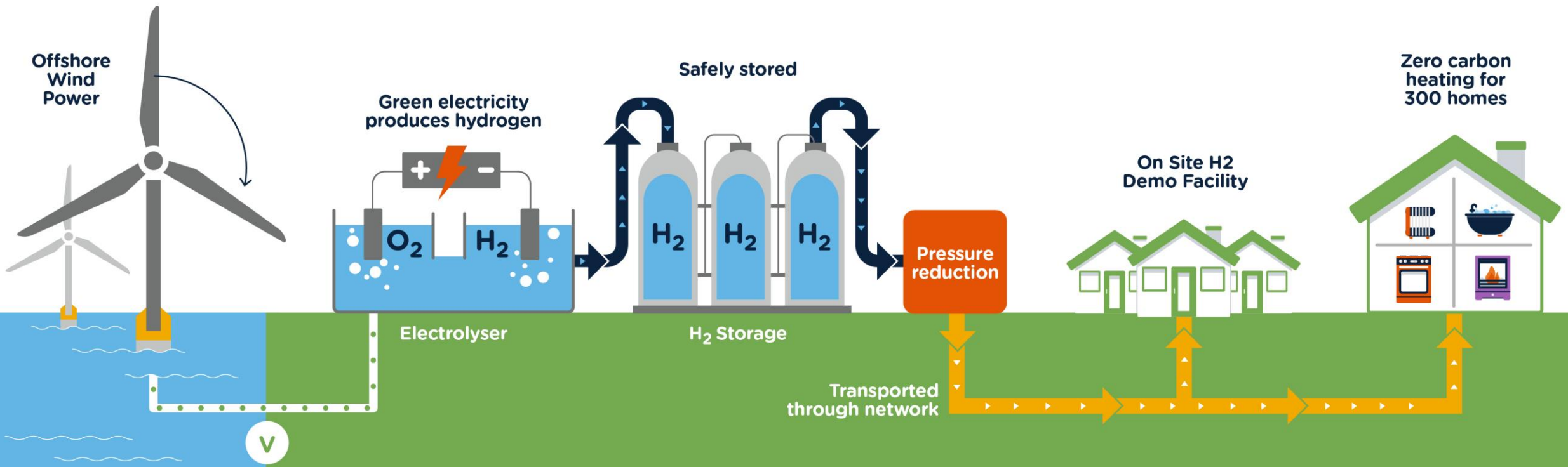
February 2021



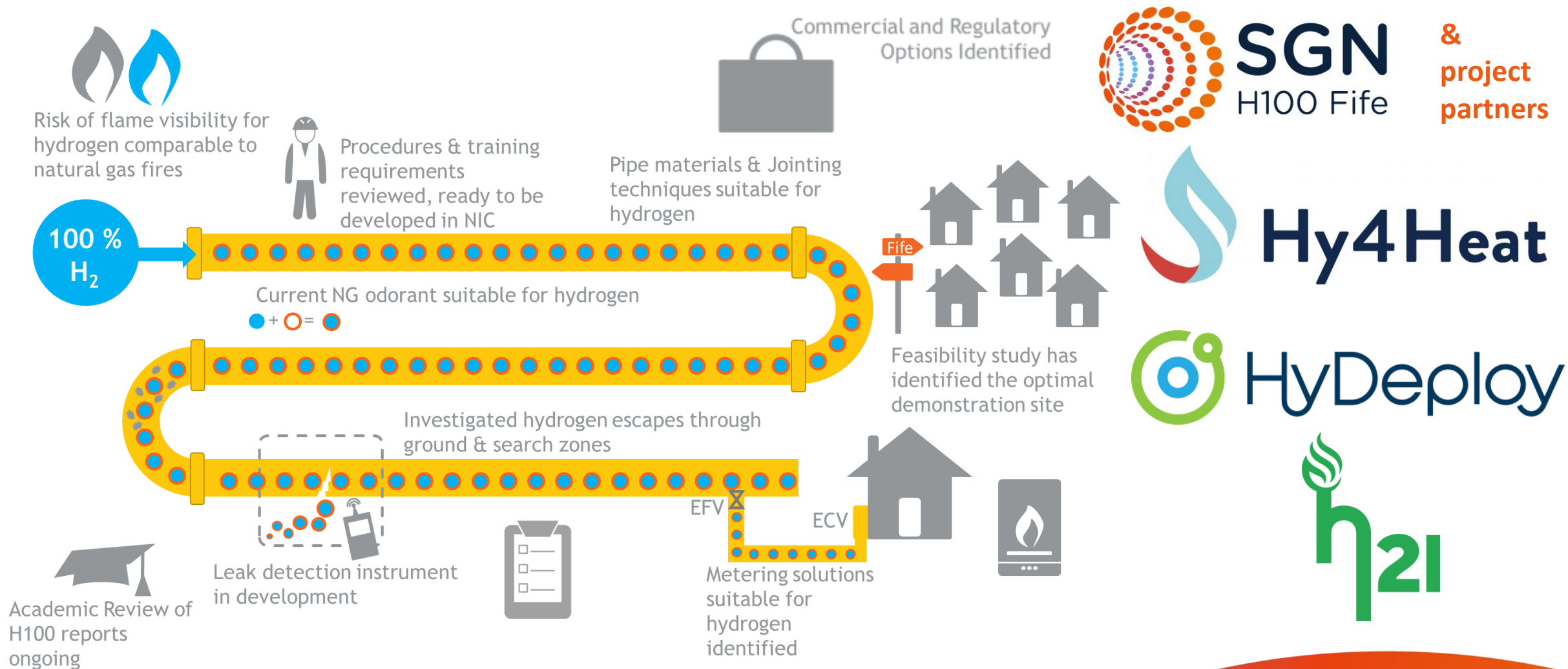
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End to end 100% hydrogen system



Evidence Base



Location – Levenmouth, Fife (Scotland)



Customer Principles



Hydrogen Demonstration Facility

Participation 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
- Customers can remain with existing suppliers or retain flexibility to switch
- Reflecting existing arrangements as closely as possible
- Cost neutral to participate



Retail Principles



- Commodity balancing and customer billing



- Project sells hydrogen to shipper at natural gas price index
- Cost differential between hydrogen production and natural gas index borne by the project



- Increased cost of hydrogen production remains with the project upstream protecting retail supply chain



- Customers energy unit cost of natural gas for hydrogen supply, this is reflected in customer bill

- Metering and billing solution in development



- Security of supply storage solution



- Provision of hydrogen appliances and meters at no cost to customer, including maintenance



- Option to return to natural gas



Outcomes

Critical H100 Fife Outcome Examples

- Prioritised learning to inform hydrogen system transformation
- Validation of 80% of 280000km network materials, components, construction and operation on a live network.
- Quantifying and qualifying customer and social acceptance of hydrogen for heat in real-world trial
- End to end system interfaces management and learning across the whole system
- Statistically significant and scalable
- Future demand forecasting through heat profile data
- Informs heat policy decisions and future regulation
- Shared learning & knowledge transfer to facilitate hydrogen projects & roll out
- Market creation



Key Dates & Next Steps

Ofgem deadline 17th March 2021 – H100 Fife Regulatory Framework Plan

- Plan for developing and executing project regulatory model
- Scoped metering and billing solution for hydrogen customers
- Understanding of potential changes required – Xoserve systems, industry code modifications, licences
- Mapping of industry impacts
- Engagement with industry
- Timeline and next steps for implementing regulatory model

Industry Ask:

1. Provide initial views on participation attractiveness.
2. Flag any barriers to participation and indicate how they should be addressed.

Ofgem deadline April 2022 – H100 Fife Regulatory Model Agreed

- Continue engagement with industry to validate regulatory solution and ability to participate
- Implement regulatory model before project operations end of 2022/start 2023



Thank you

H100 Fife video link -

<https://www.sgn.co.uk/H100Fife>



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