



SPREEE

Angus McIntosh, Project Director, SGN

January 2018



SGN

Your gas. Our network.

Copyright © SGN

SGN

- £5.3bn value of assets
- Two distribution networks in GB: 74,000km
- Building a third in NI
- 5.9m customers - 14 million people
- 3,800 staff 2,000 contractors
- 33 biomethane plants



Our work – each year

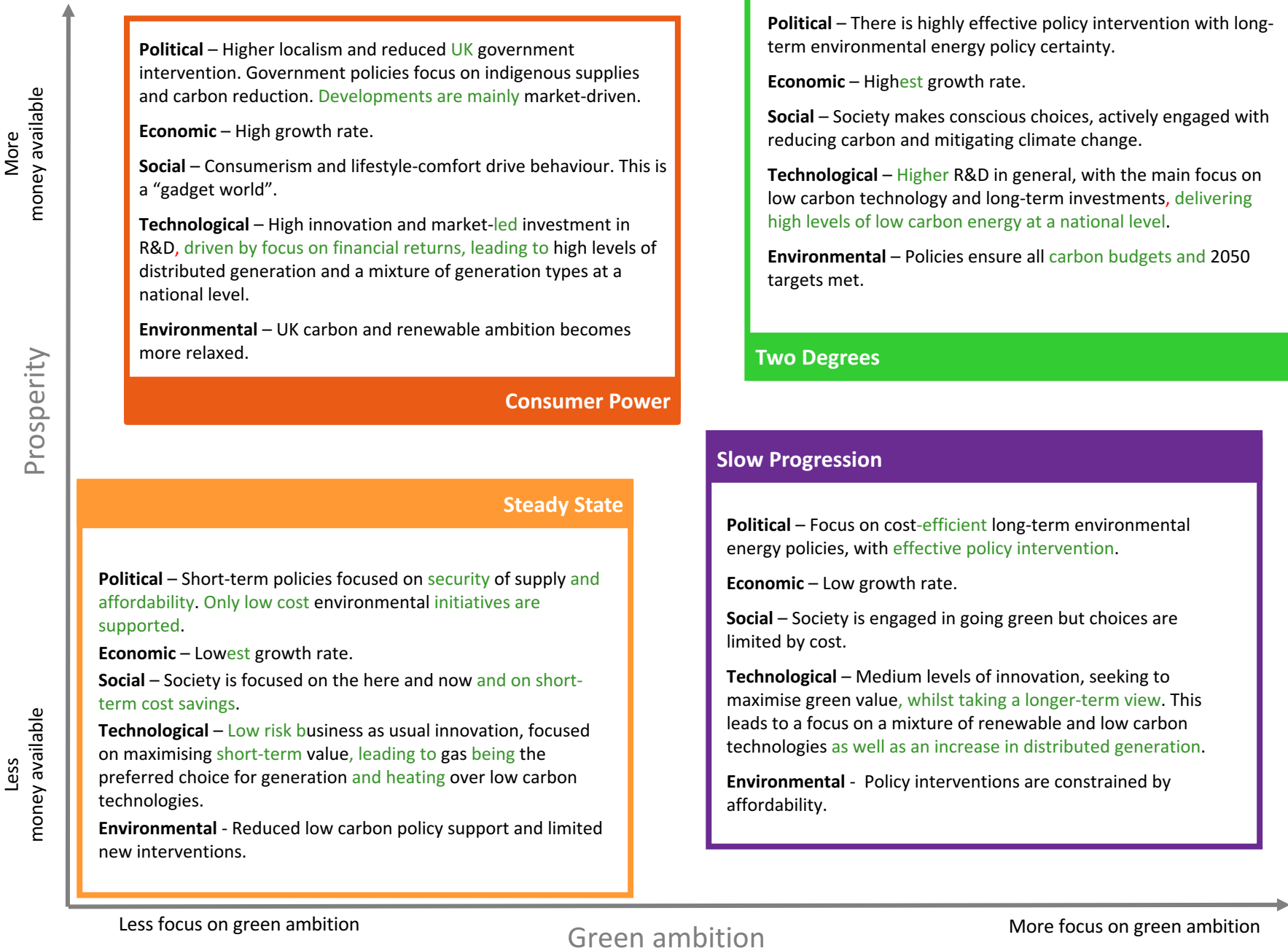
- Emergency - 50,000 repairs and 230,000 calls
- Replacement – 1,000km mains replaced
- Connections – 20,000 (4,000 fuel poor)
- Delivery of Infrastructure
- £11m invested in R & D 2016/17
- >£40m invested in the rollout of innovation



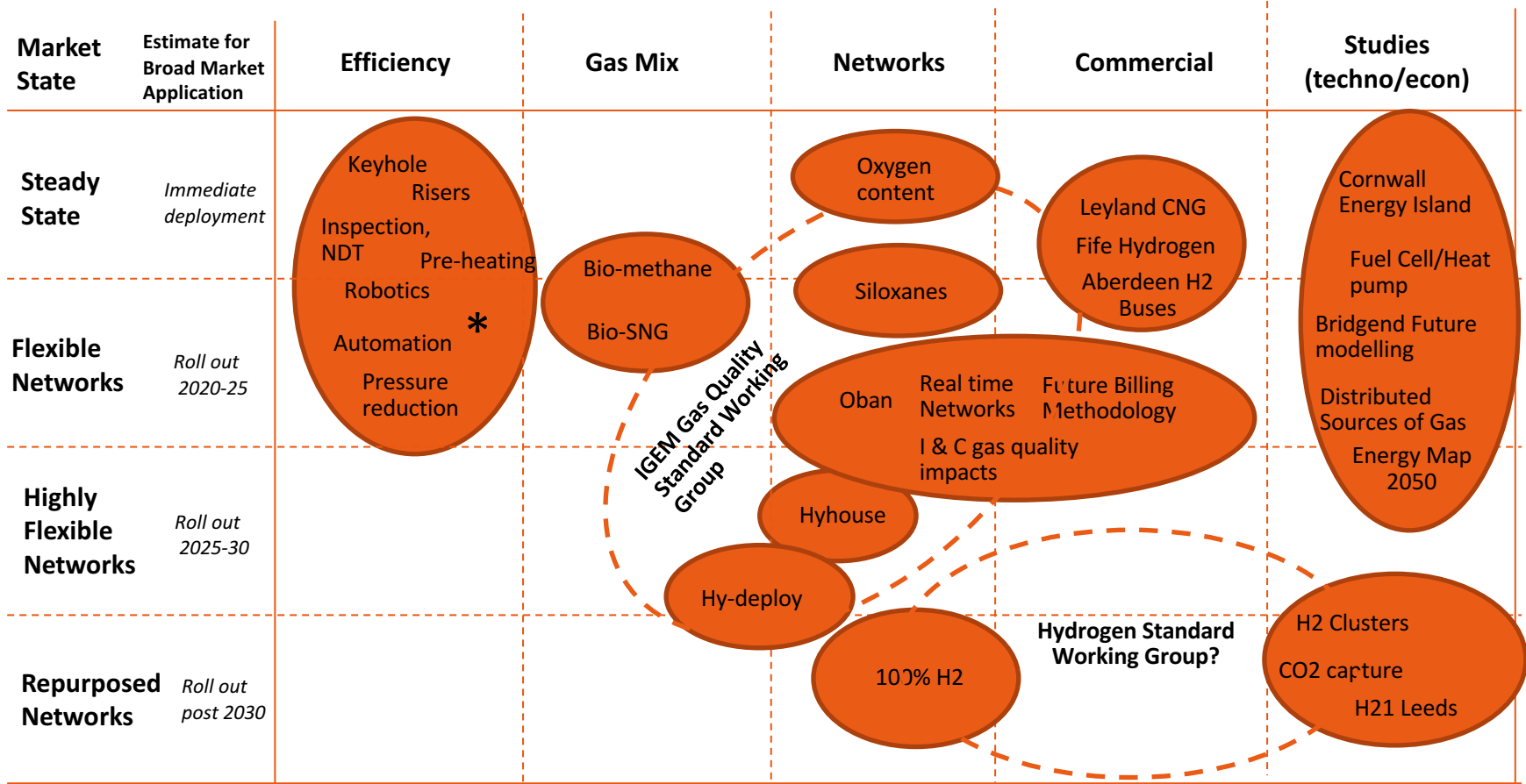
FES 2017 scenario matrix

Source: Cadent Ltd

Words in green showing changes from FES 2016



Future Energy Scenarios - Gas

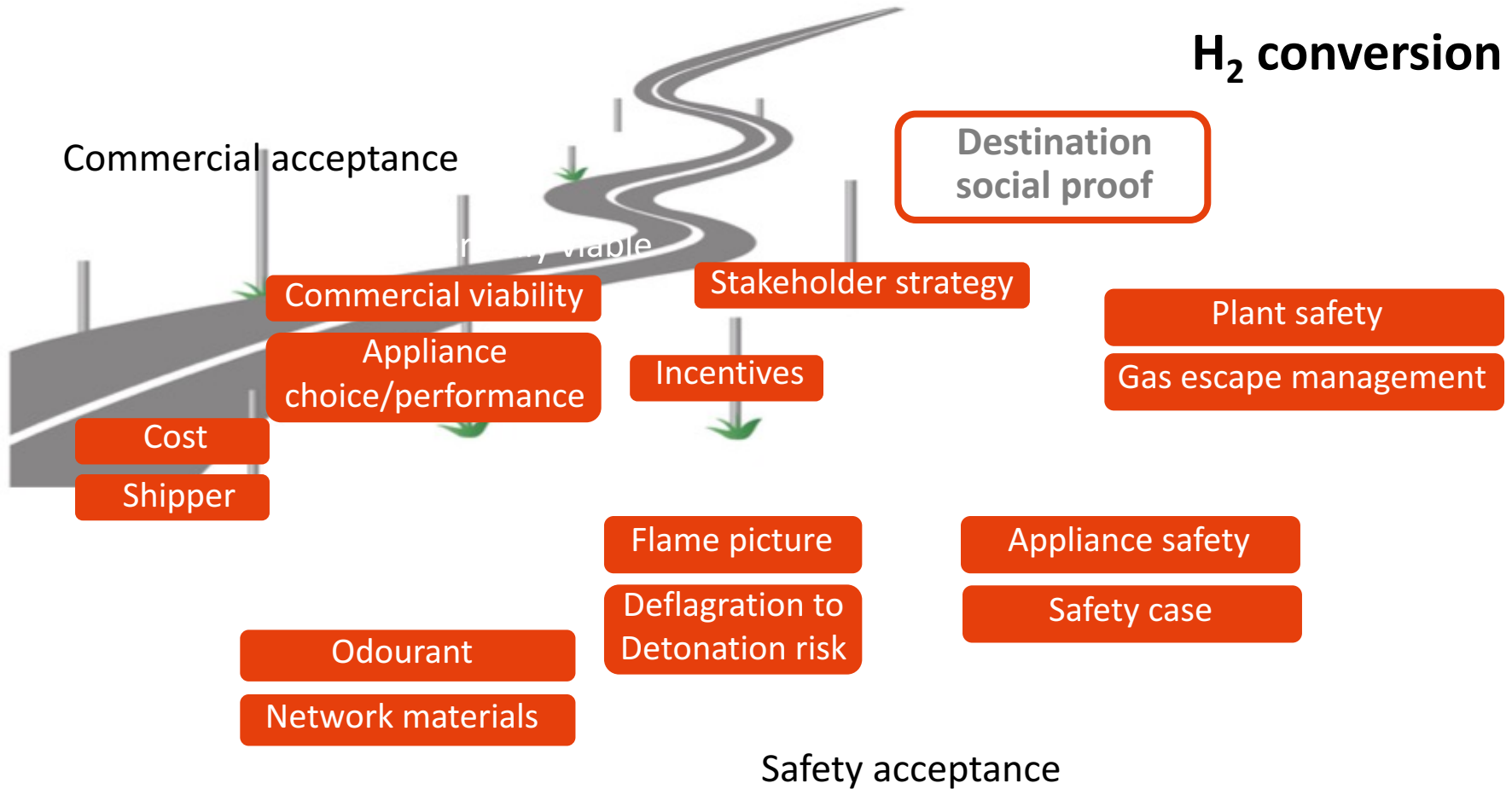


*Not exhaustive

H₂ Road to social proof



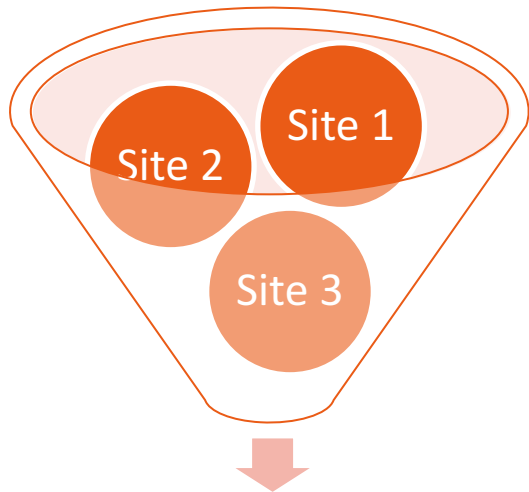
H₂ conversion



H₂ Projects

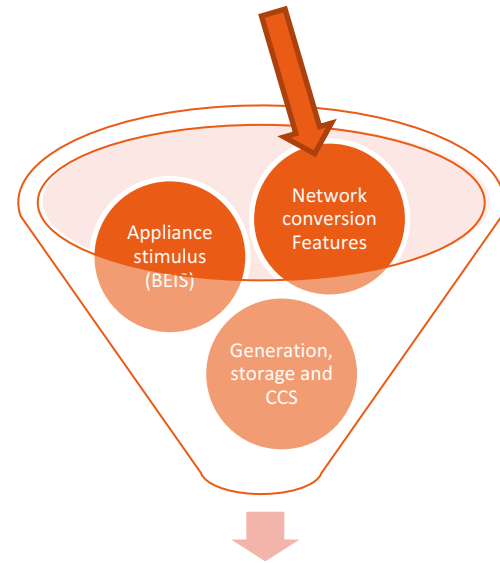
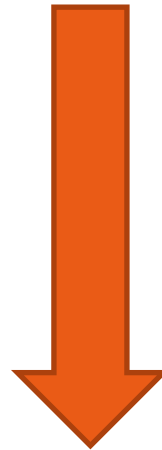


HYDR_HGEN



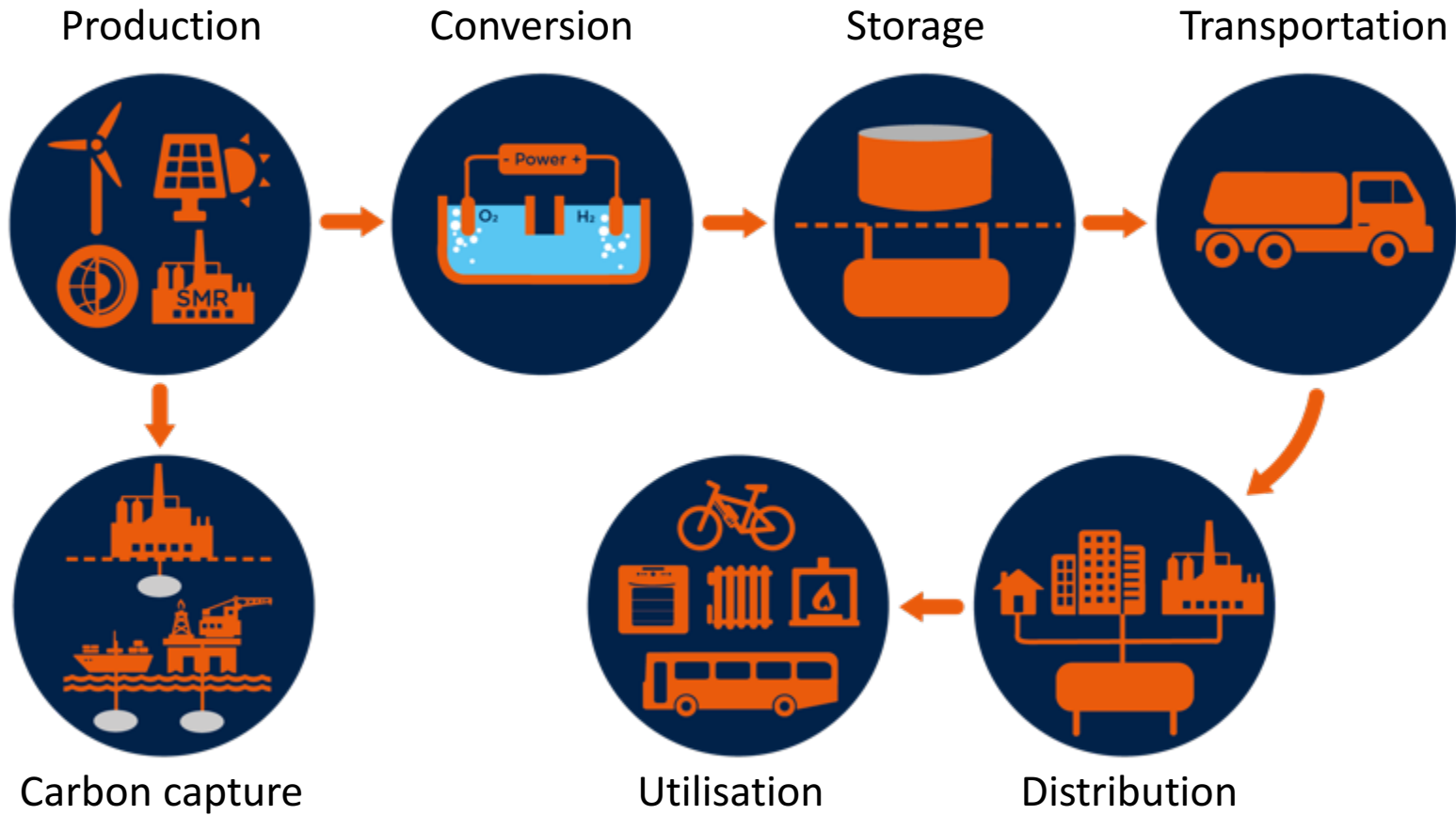
Construction Demonstration

100% H₂






Collaborative Parallel evidence
toward conversion

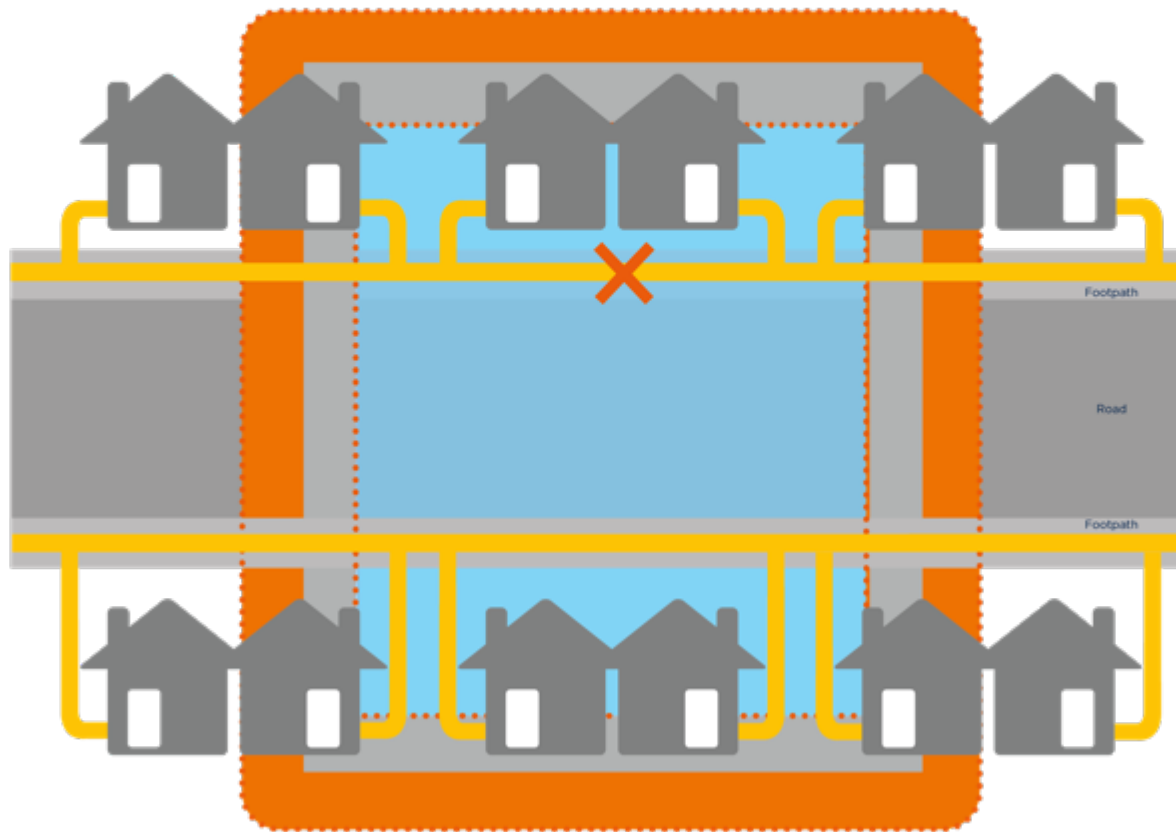
Hydrogen network



Search zone for gas escape




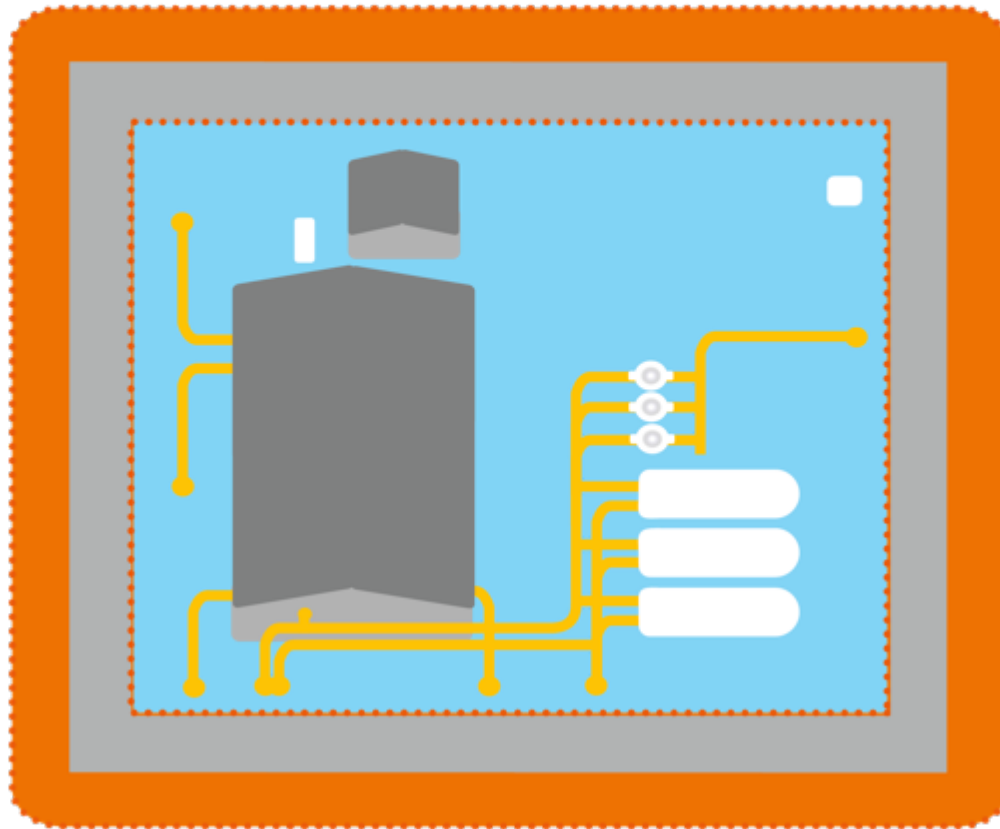
 H₂ search zone?  Natural gas search zone  Gas escape location



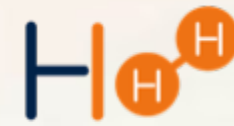


PRS Hazardous Area

 H₂ Hazardous Area?  Natural Gas Hazardous Area



Detonation/
Deflagration
transition



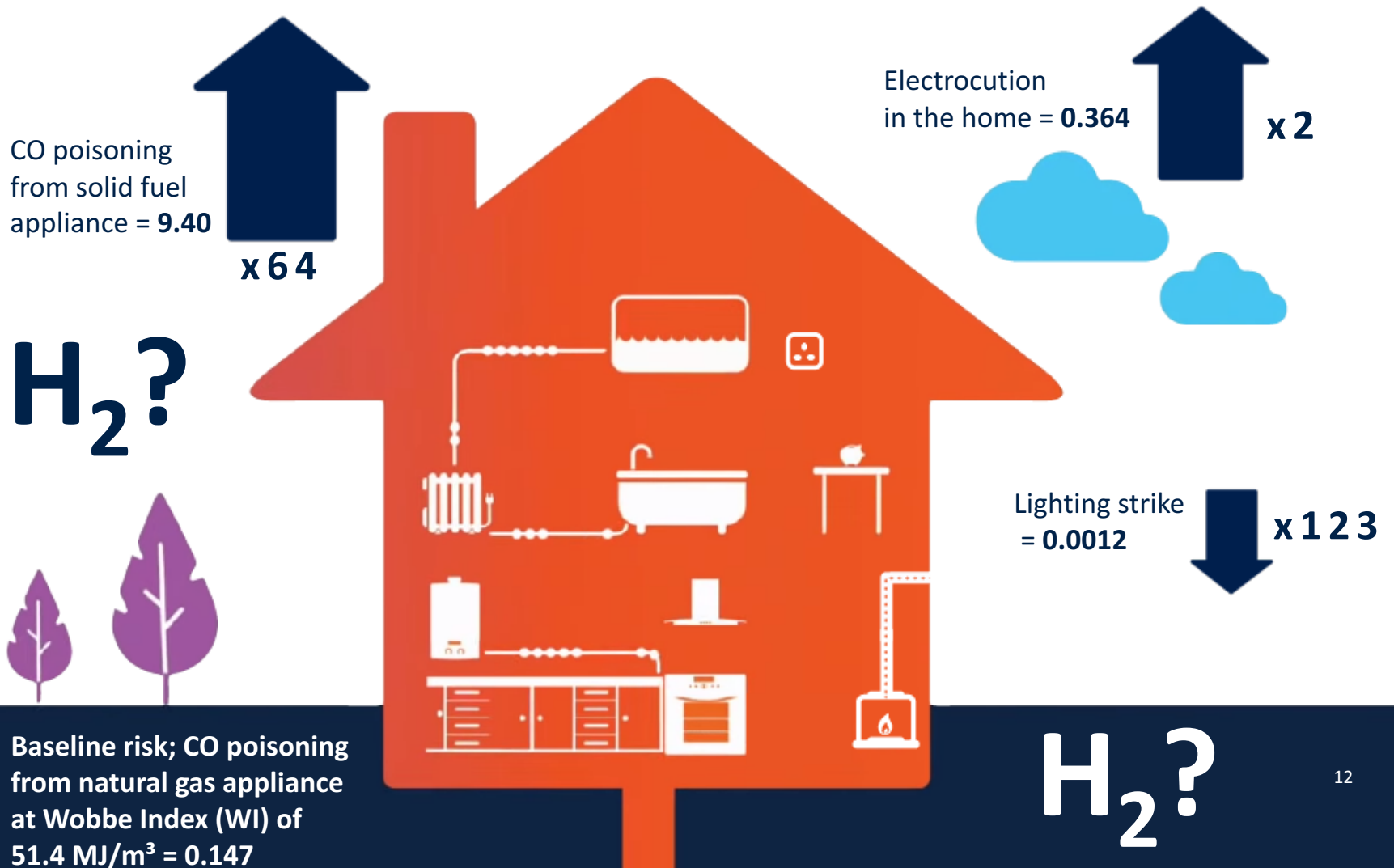
H₂ Applications



Relative risks to the home



Risk = number of fatalities per million people per year



Thanks

Angus.mcintosh@sgn.co.uk



SGN

Your gas. Our network.