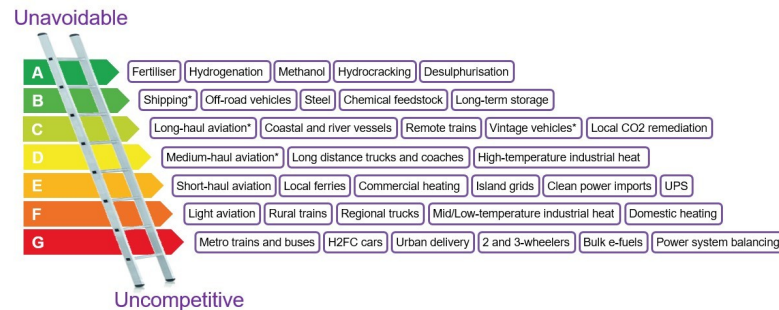
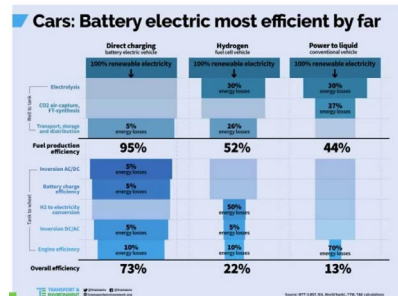
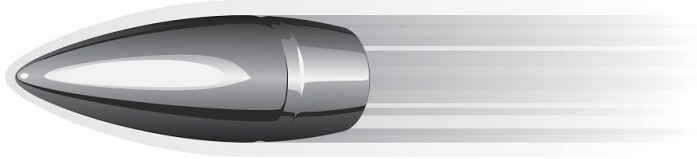


Doncaster Hydrogen Refuelling Hub: National and Regional Activity

June 2022



Why Hydrogen?

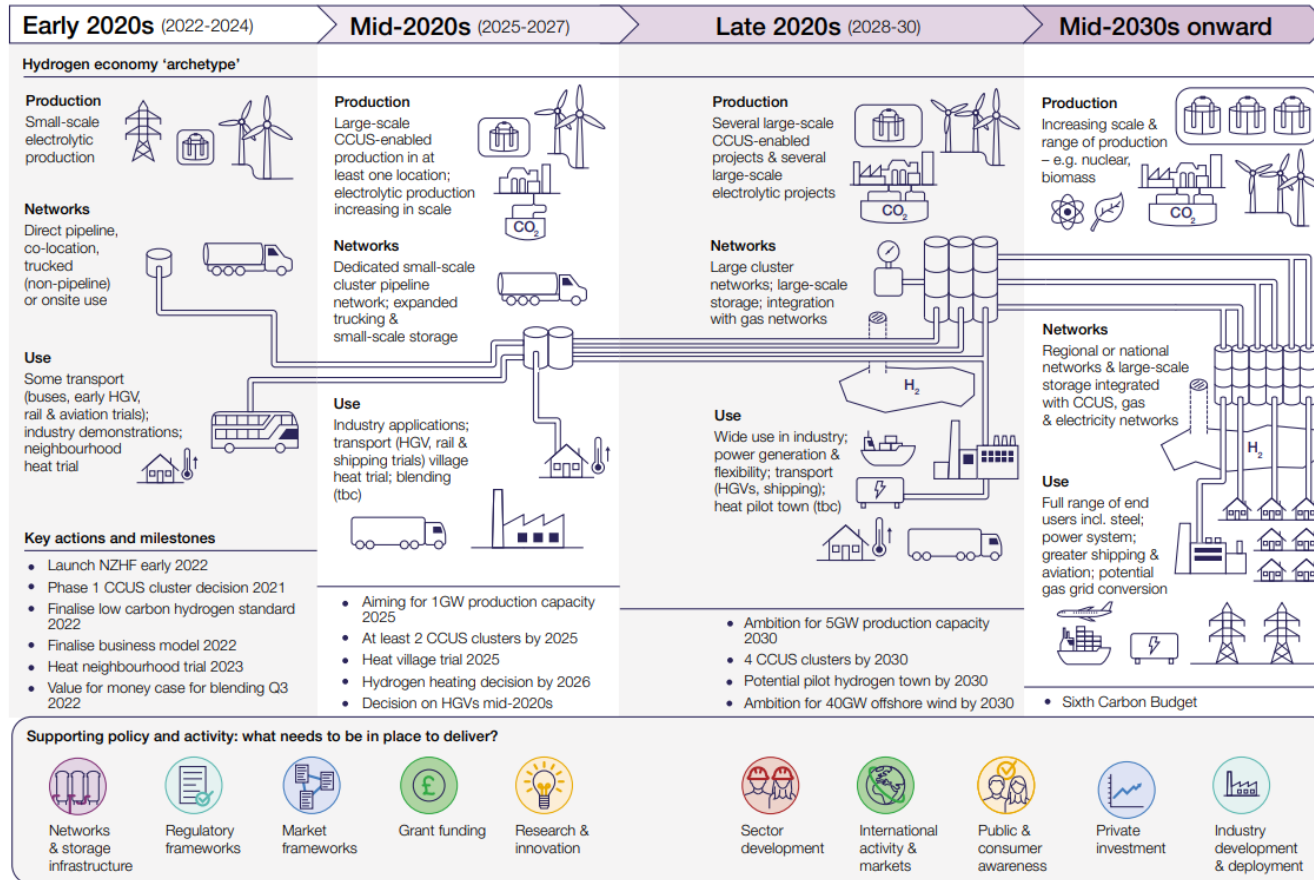


* Via ammonia or e-fuel rather than H2 gas or liquid

Source: Liebreich Associates (concept credit: Adrian Hiel/Energy Cities)

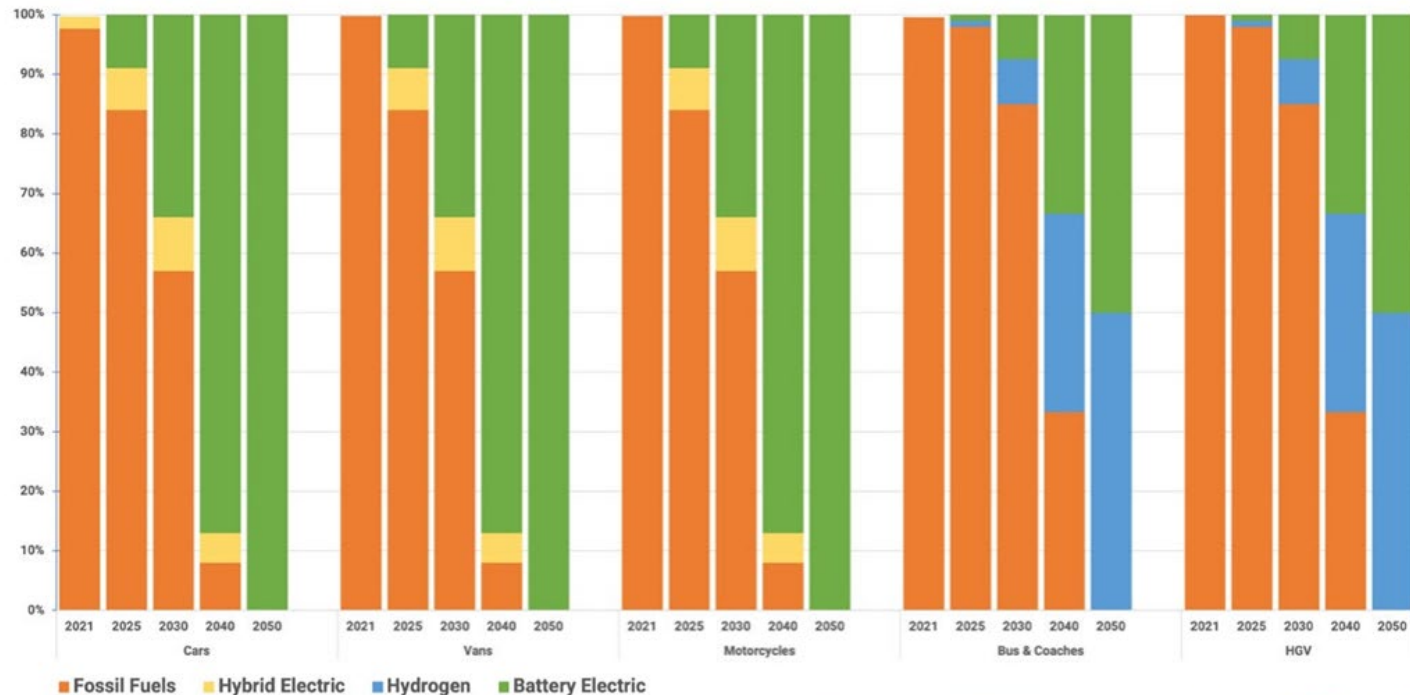
- Hydrogen, the Silver Bullet (advantages)
- Hard, costly and inefficient (disadvantages)
- Essential part of the decarbonisation toolkit (the reality)

National Perspective



- UK Government policy support hydrogen as key enabler to net-zero emissions
- 10 GW by 2030
- Green growth agenda
- Ban of non ZE vehicle sales (cars 2030, HGV<26t 2035, all HGVs 2040)
- Focus on hard to electrify areas
- Pre-commercial phase

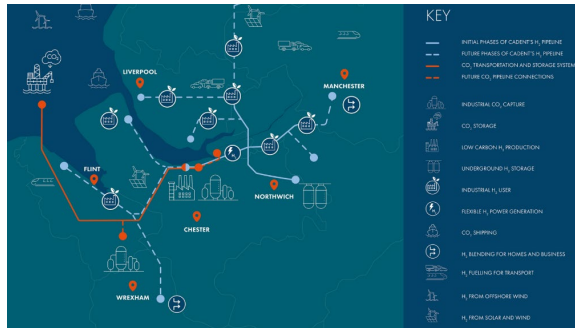
National Demonstration Funding



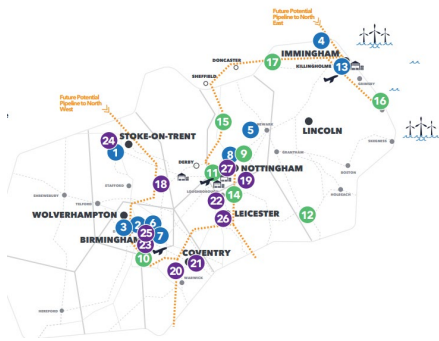
- Innovate UK's Transport Vision forecasts a 100% penetration of ZE HGVs by 2050 and estimates a split of 50% hydrogen and 50% battery electric trucks.
- ZERFT Initiative provided nearly £20m funding for feasibility and EV truck demonstration
- Next step large scale demonstration trials of solutions for ZE HGVs (incl. H2)
- Feed in to UK strategy exp. 2025

Regional Projects

North West HyNET

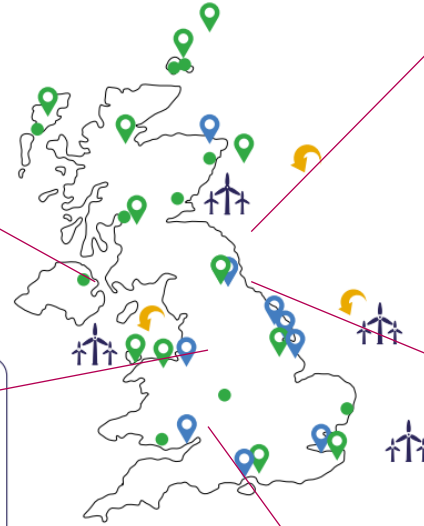


Midlands Engine Hydrogen Technology Valley



- Key**
- Electrolytic production project (under 5MW)
 - Electrolytic production project (over 5MW)
 - CCUS enabled production project (100 MW+)
 - 🔄 CO₂ storage potential
 - 🌬️ Offshore wind

Note: Includes plans and proposals for known projects that are in the public domain. Many more projects are under development in all parts of the UK. BEIS are continuing to gather intelligence on new projects as they emerge.

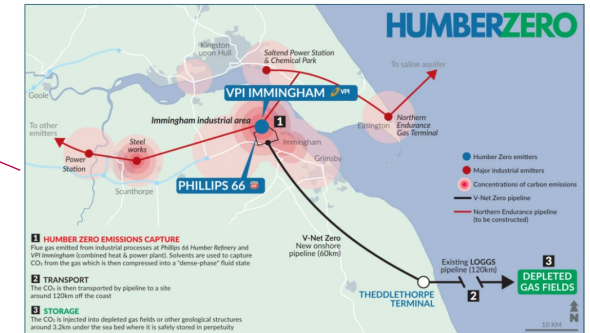


Hydrogen South West Consortium

Tees Valley Multi-Modal Hydrogen Transport Hub



Project Overviews



Regional Opportunity



- Central position of Doncaster can offer opportunities for distribution of hydrogen and hydrogen refuelling
- Potential for a hub and spoke generation and supply model
- Hydrogen pipeline being developed through the East Cost Hydrogen project could provide supply spurs to the region for the local SRN
- Opportunity to engage with the regional clusters to help develop a vision for it's place in the supply chain
- Opportunity for a wider South Yorkshire / Yorkshire H2 strategy