

Circular Economy (CE)



Carbon Direct Avoidance (CDA)

H₂-based metallurgy



Electricity-based metallurgy



Smart Carbon Usage (SCU)

Proces Integration



Carbon Valorisation/CCU



Carbon Capture and Storage CCS²

(not included in SCU, CDA or CE)



- H₂ pipelines by conversion of existing natural gas pipelines (repurposed)
- UK 2030 pipelines depends on pending selection of hydrogen clusters
- Newly constructed H₂ pipelines
- Export/Import H₂ pipelines (repurposed)
- Subsea H₂ pipelines (repurposed or new)

- ▲ Potential H₂ storage: Salt cavern
- ▲ Potential H₂ storage: Aquifer
- ◆ Potential H₂ storage: Depleted field
- Energy island for offshore H₂ production
- ★ City, for orientation purposes

SOURCES:

EUROFER for steel low-CO₂ projects
European Hydrogen backbone, Guidehouse report 2021

