Energy sources for fossil-free hydrogen production

Dedicated on- and offshore hydrogen facilities

Hydrogen production

Storage

Industry sector

Fossil-free hydrogen is used both as an input and as a facilitator in industrial processes, enabling the replacement of fossil fuels (e.g. gas) and materials (e.g. coal).

- Steel: Fossil-free steel
- Chemical: Synthetic products like carbon fibre, plastics and textiles
- Refinery: For example biodiesel, synthetic aviation fuel and replacing fossil-based hydrogen in conventional fuel production
- Agriculture: Fertilizers made of fossil-free hydrogen-based ammonia

Transport sector

For example fuel cells in heavy duty vehicles powered by hydrogen and fossil-free ammonia used as fuel for shipping

Heat sector

Hydrogen replaces natural gas in combined heat and power plants