

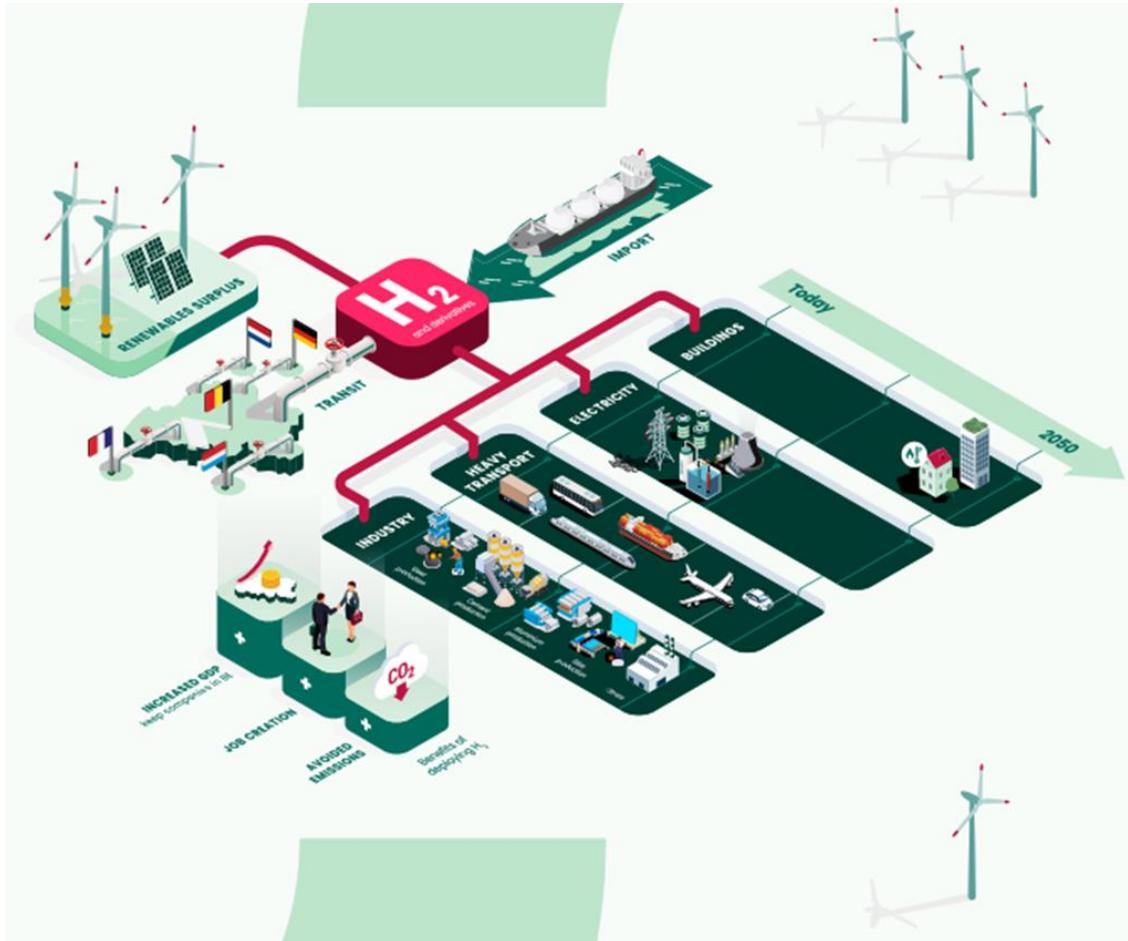
# Insights on H2 Production in Belgium INN2POWER 2023 - Ostend

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# A Belgian Strategy on Hydrogen



- The ambition is the decarbonization
- Hydrogen is one of the vectors of the decarbonisation



# The ways of producing Hydrogen

Be 570 kt  
Europe 11.5 Mt

- SMR and other chemical processes
- SMR + CCS
- By-products
- Electrolysis
  - From the grid
  - From low carbon electricity
  - From renewable electricity
- Pyrolysis
- Photosynthesis
- ...

0.5%

0.1%



Source: Clean Hydrogen Monitor 2022, year 2020



# The Names of Hydrogen

- Colors: Black, grey, blue, green, turquoise, pink, white,
- From the Delegated Acts (published by EC):
  - Renewable
  - Low-carbon
  - Other
- The only GHG considered is CO<sub>2</sub>



# BELGIUM characteristics

- Small country 31,000 km<sup>2</sup>
- Very dense population 375 inhab./km<sup>2</sup>
- Short coast 73 km
- Highly industrialised



# Hydrogen Imports and Backbone

- MOUs for green hydrogen import

Namibia

Oman

Chile

...

- Form of H<sub>2</sub>

Gaseous

Liquid

Ammonia

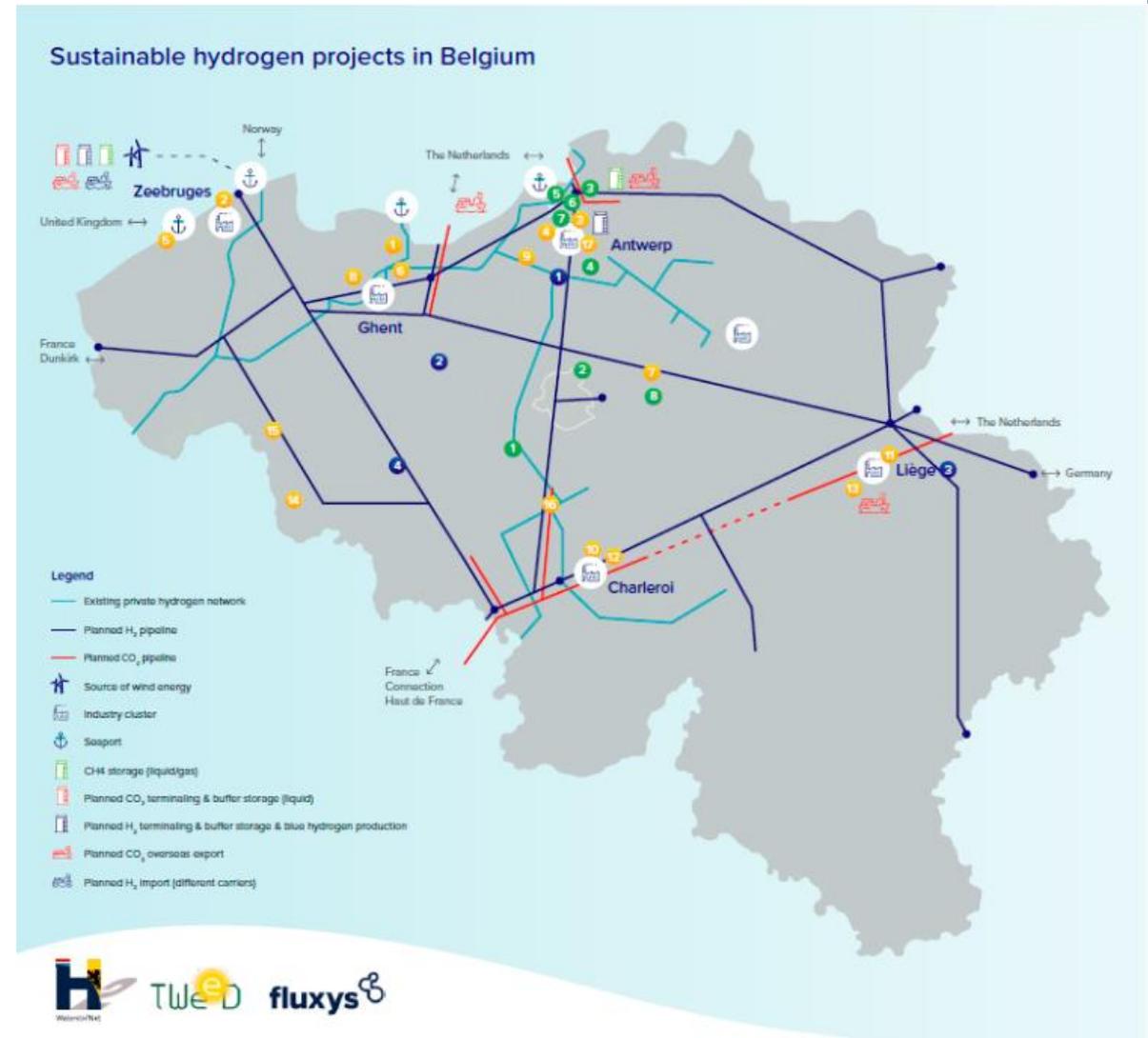
Methanol

...

- Network

Transport

Distribution



# Conditions of local Hydrogen Production

- Offshore production by electrolysis
- Electrolysis on sea coast
- On-site production on very industrial user (electricity sourcing)
- Centralised or semi-centralised production by electrolysis in remote areas before availability of piping distribution (electricity sourcing)
- Development of high pressure tube trailers



# Thank you

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