

Role for molecules in the decarbonization of the industry and focus on the role of Hydrogen and CO2 infrastructure



Cedric Van Hoonacker

Key account manager H2 and CO2

17 November 2022



Who are we?

We are a midstream energy infrastructure company, not involved in energy production or supply

We are a neutral operator with regulated activities in Belgium

Terminalling



380 TWh/y of
LNG regasification capacity with
terminals in Belgium, France,
Greece & Chile

Transmission



12 000 km
gas pipelines in operation

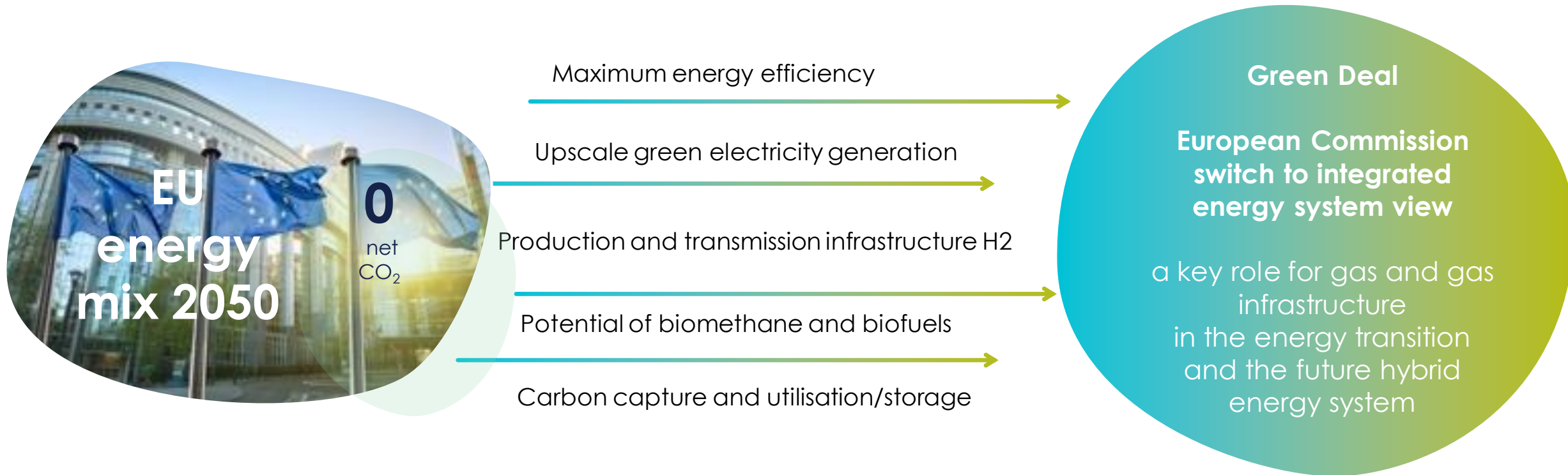
Storage



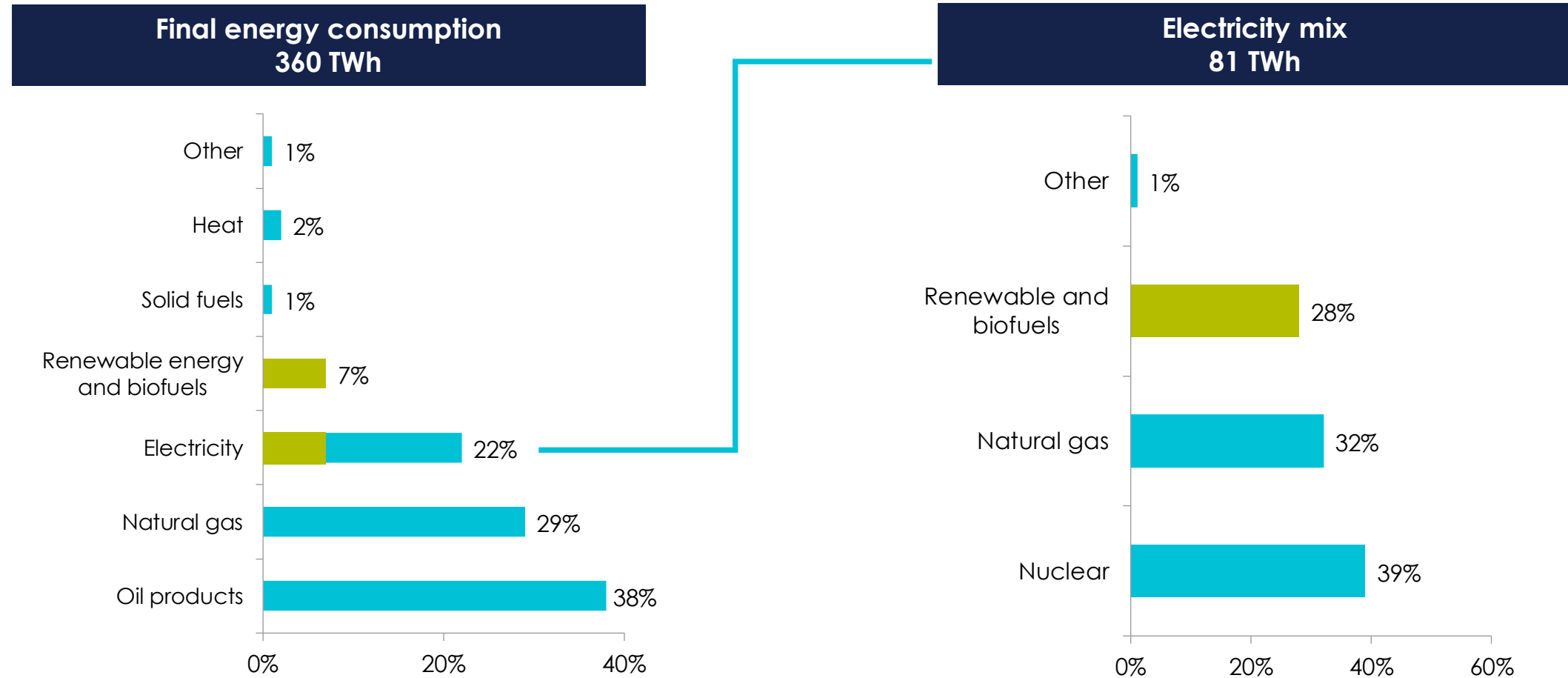
7610 GWh
underground
gas storage
in Belgium



Fluxys fully support Europe's plan and roadmap to become the first carbon-neutral continent by 2050 and making the Green Deal a reality



Belgian energy consumption

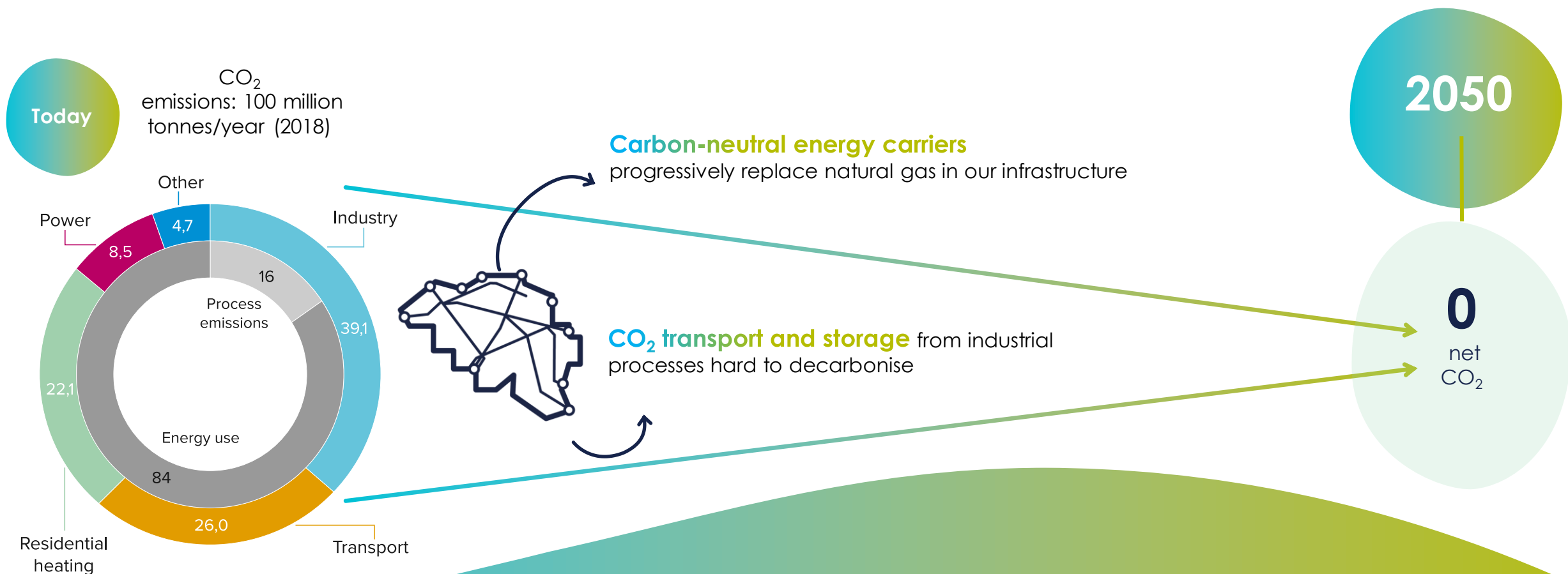


[EC DG Energy update april 2022 – jaar 2020]

[EC DG Energy update april 2022 – jaar 2020]

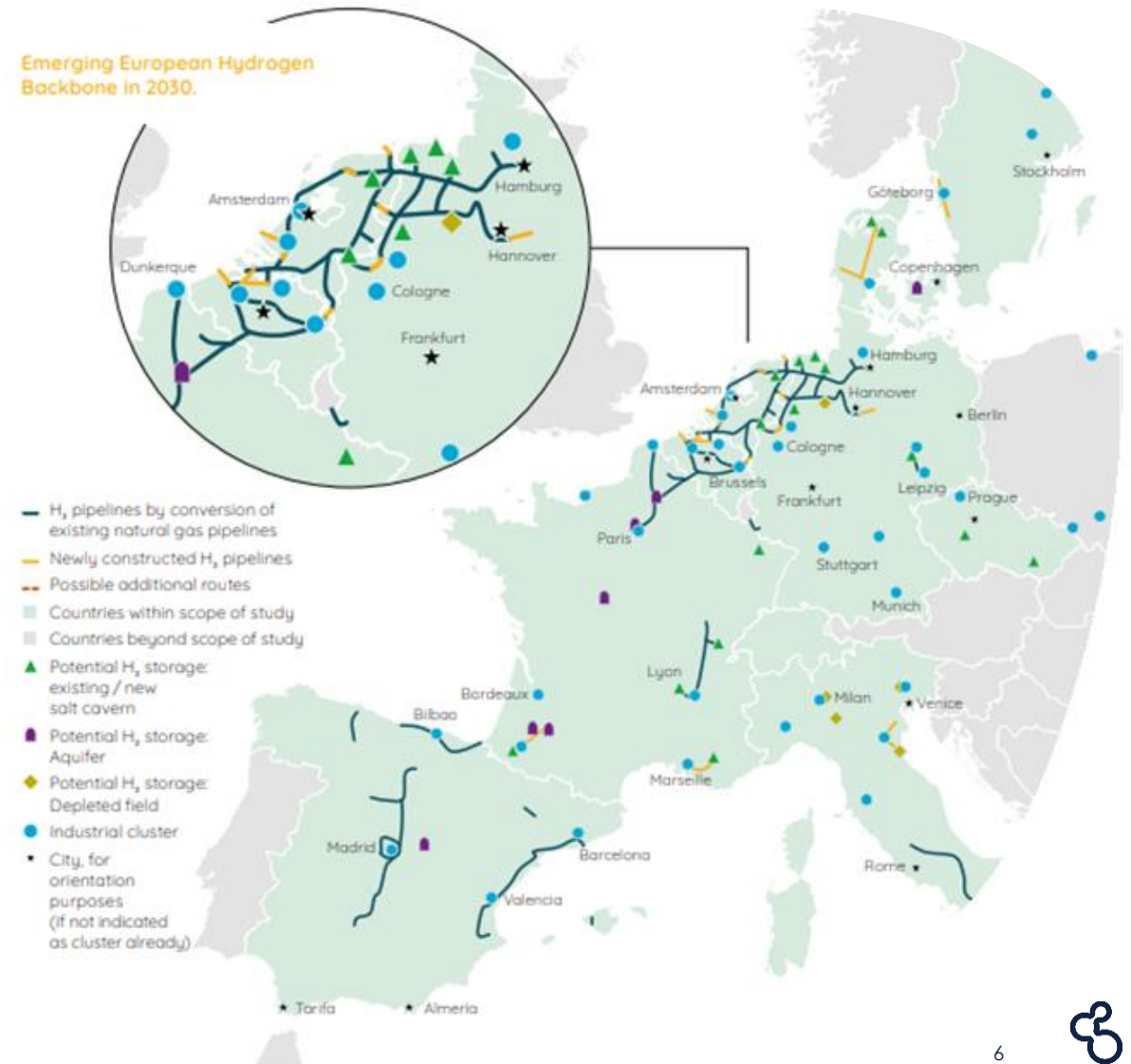


With our infrastructure we can contribute to the decarbonisation



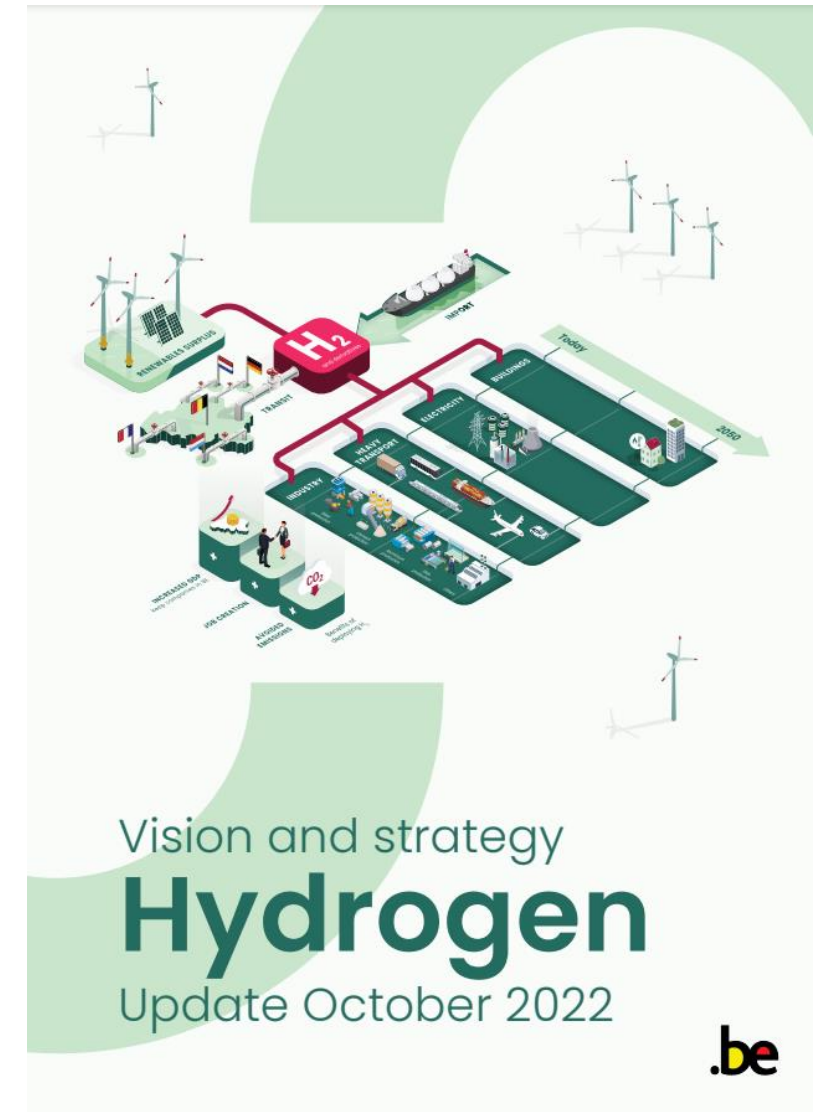
EU hydrogen strategy: European Hydrogen Backbone

- **Vision 2030-2040** developed by 31 TSOs in 28 countries in line with the EU hydrogen strategy
- **REPowerEU** wants to establish a **North Sea Corridor** for the import and transit of green hydrogen in north-west Europe
- **Belgium at the very heart of this nascent European backbone**



Belgian Federal Hydrogen Vision and Strategy

- **Vision – Strategy based on 4 Pillars:**
 - ❑ Belgium an import and transit hub for renewable molecules in Europe
 - ❑ Expanding Belgian leadership in hydrogen technologies
 - ❑ Establishing a robust hydrogen market
 - ❑ Investing in cooperation as a key success factor



And we are convinced that Fluxys, as energy infrastructure company has several assets to help shift to a net-zero energy system with a robust energy mix

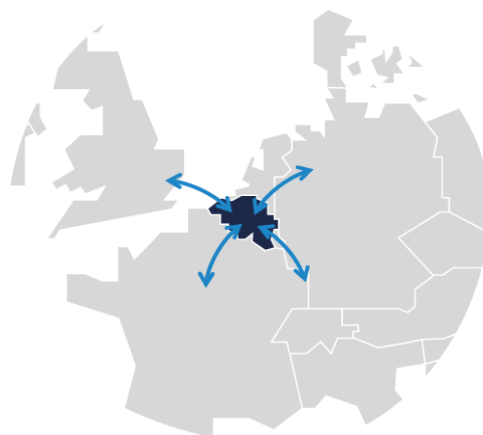
1

highly **interconnected** infrastructure with 1/4 of the European consumption landing in Zeebrugge



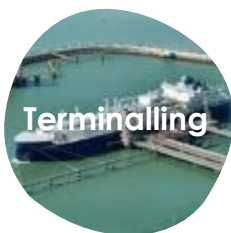
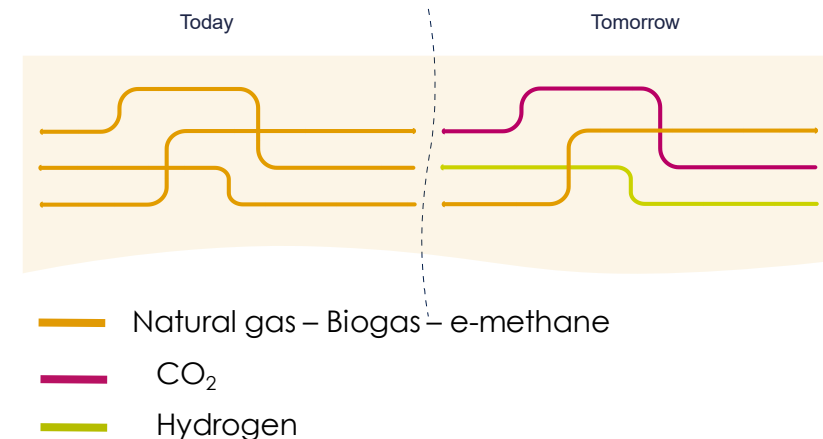
2

Belgium = **heart** European crossroad with 4 pipelines arriving in Zeebrugge as potential future connectors for importing energy

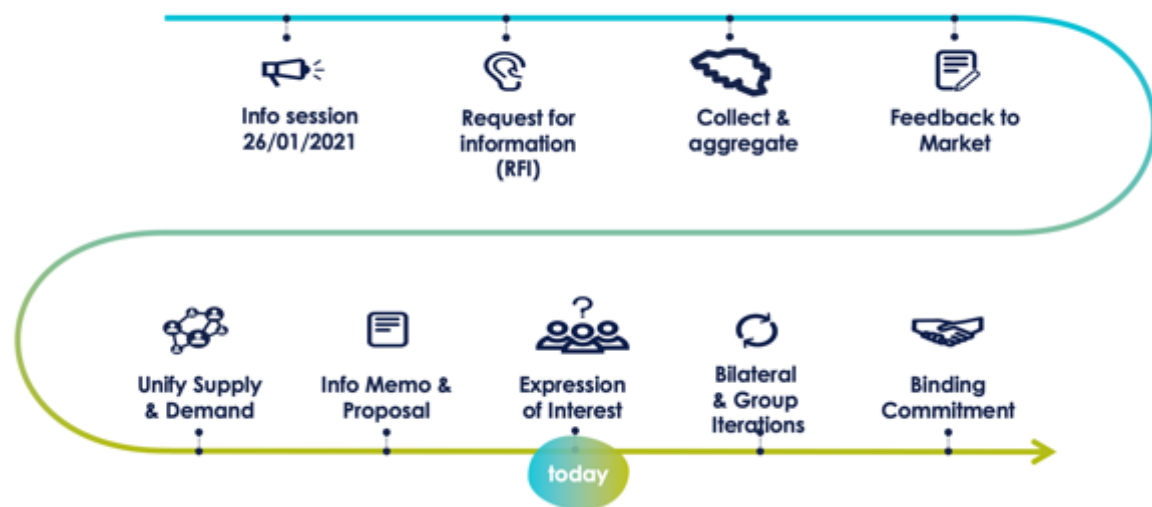


3

versatile infrastructure with high repurposing potential

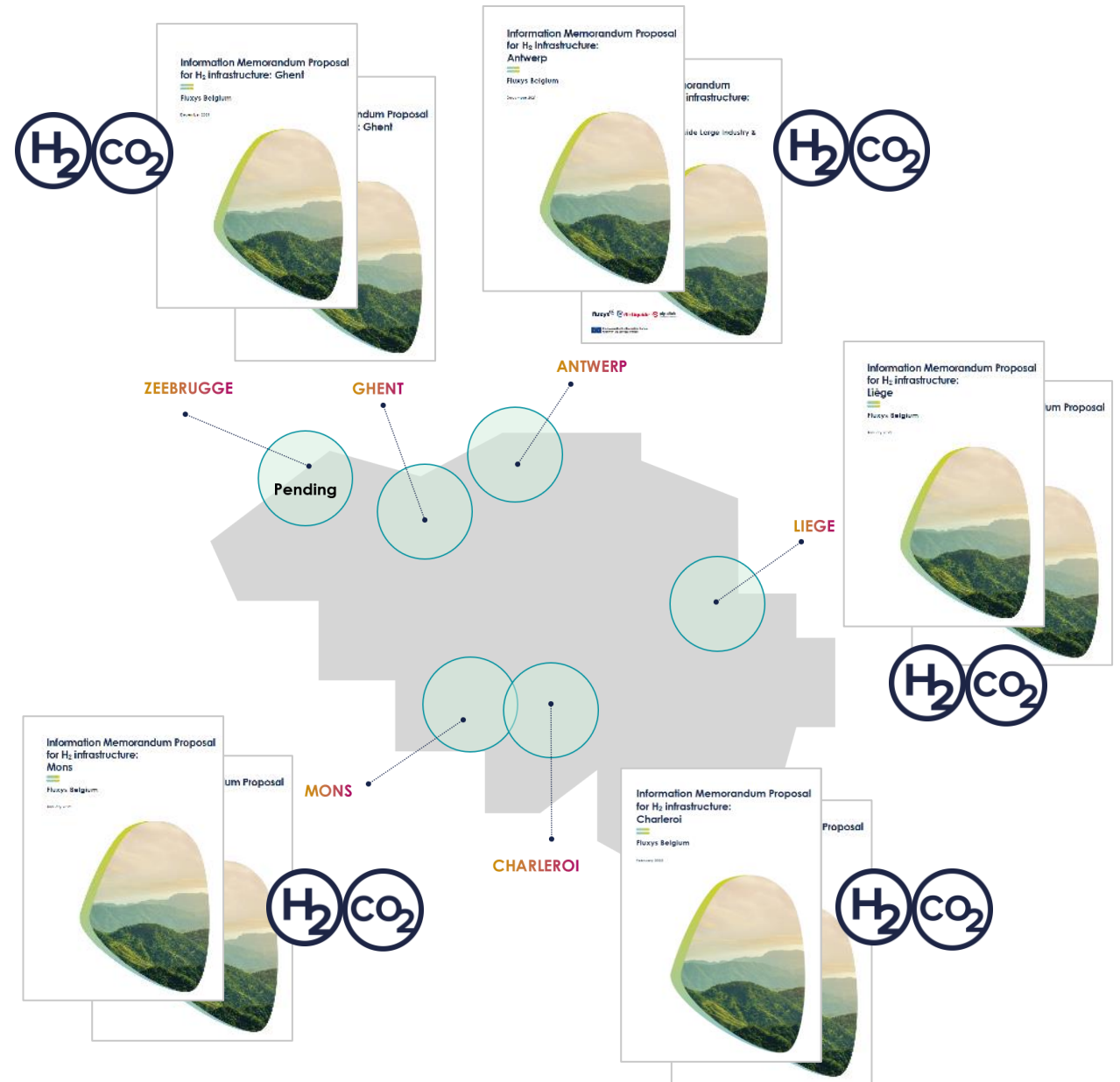


Fluxys in dialogue with industrial partners to understand their needs



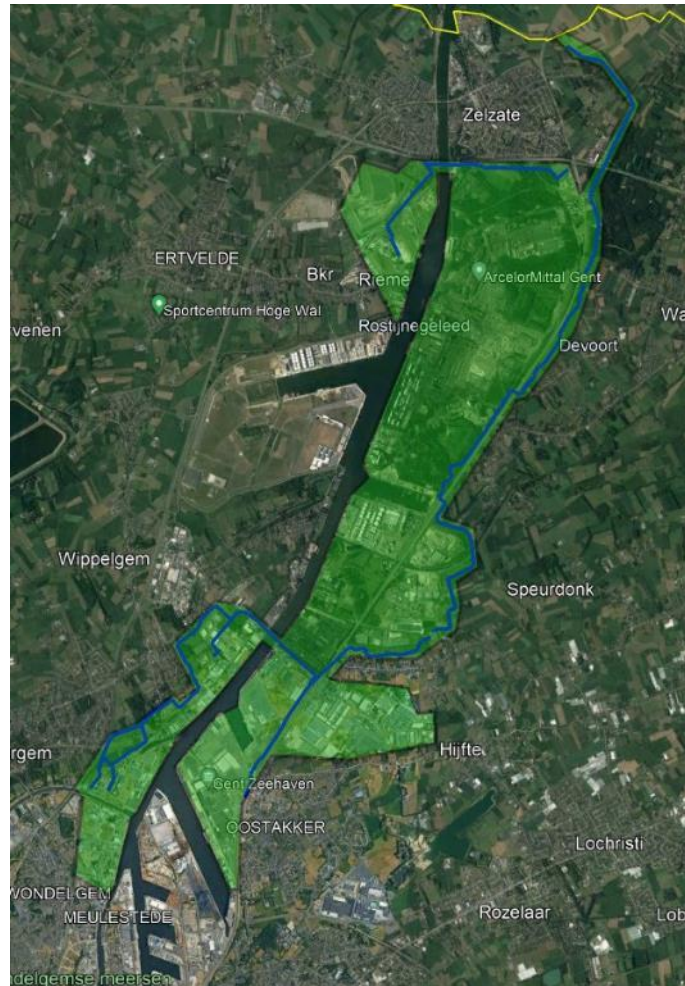
Our ambition: first infrastructure up and running in 2026

- **Ready to implement** open access H₂ and CO₂ infrastructure proposed in 5 industrial clusters: market now to express interest
- **Cross-border interconnections:** memoranda of understanding signed with all neighbouring countries



Specific Info memorandum proposal: Ghent Cluster

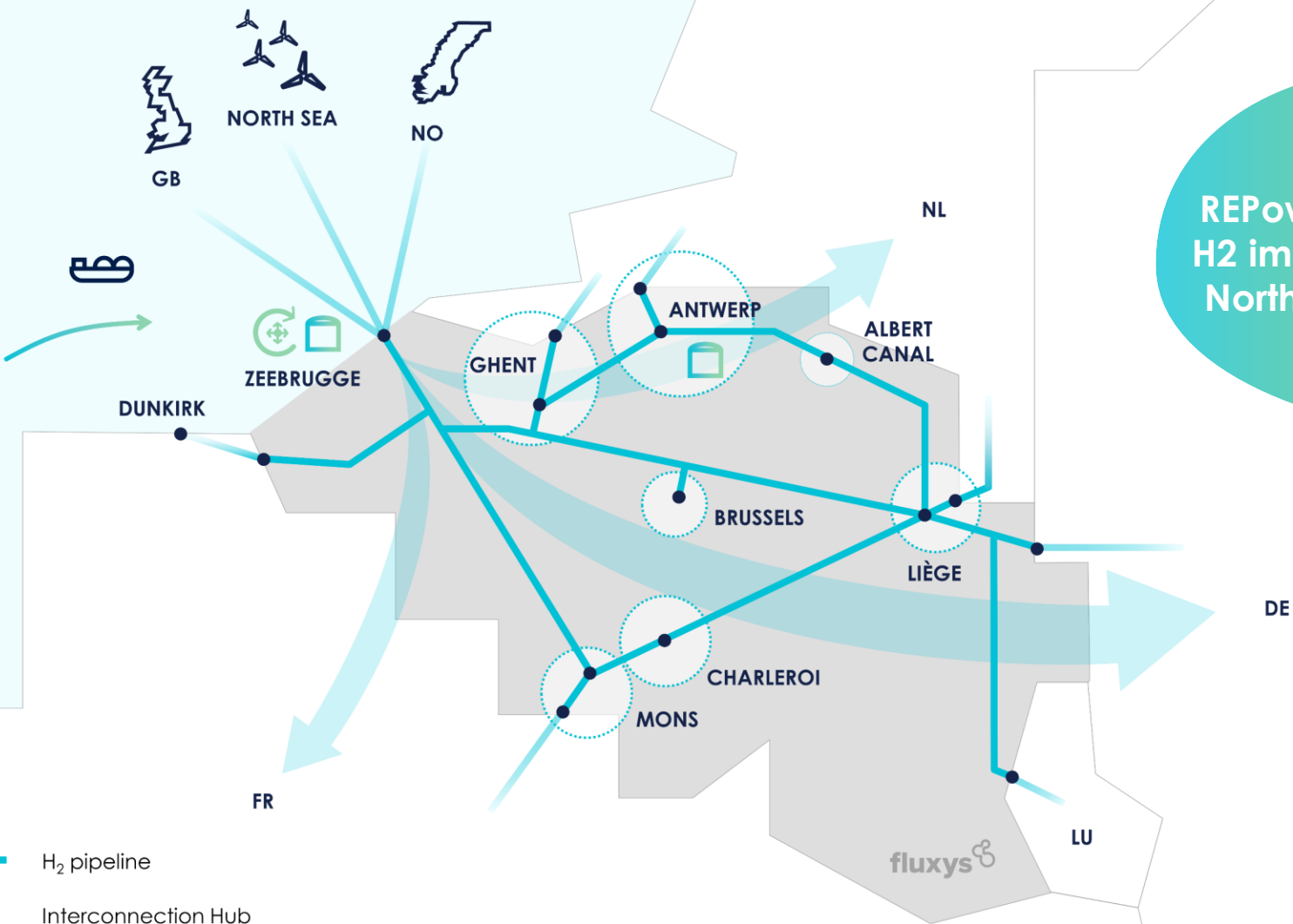
H₂






CO₂



Fluxys Hydrogen network

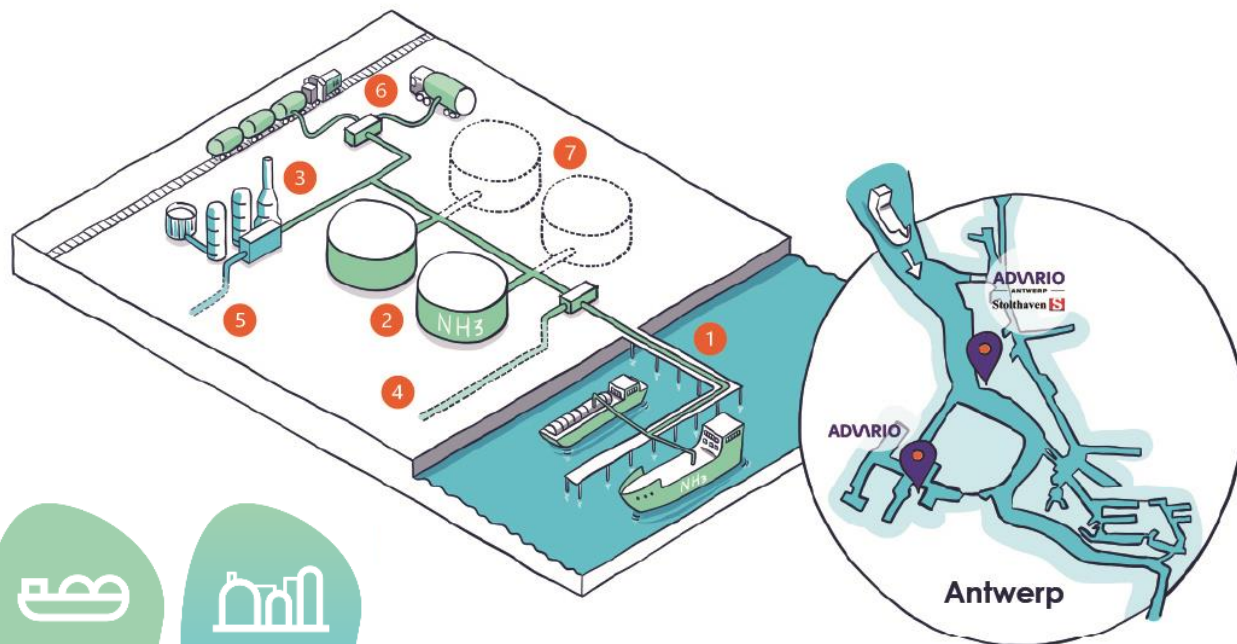


REPowerEU: 10 million tons
H2 imports by 2030 via a.o.
North Sea Import Corridor

-  H₂ pipeline
-  Interconnection Hub
-  Import terminal (different carriers)



NH₃ import terminal Antwerp



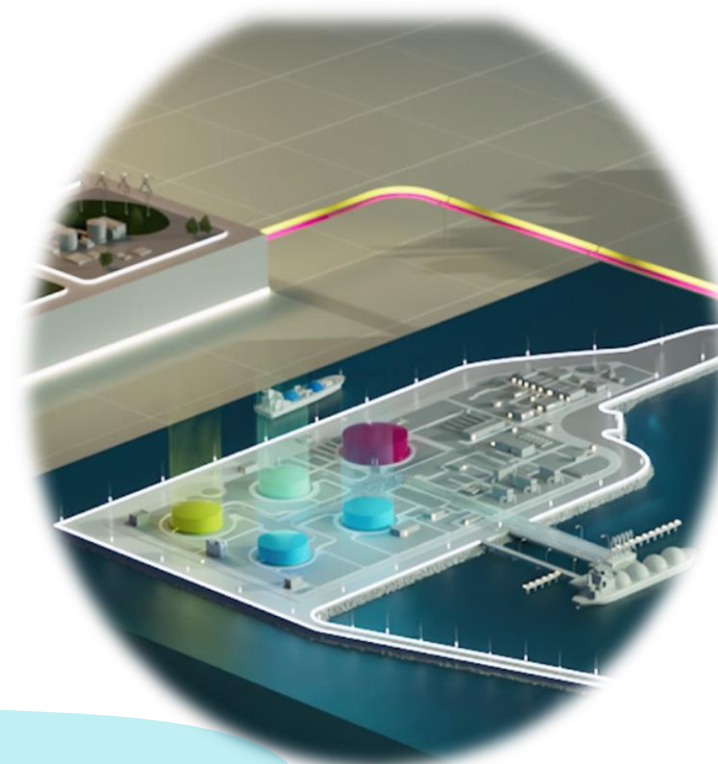
NH₃ import terminal



NH₃ to H₂ reversion

initiate NH₃/H₂ import in Belgium

Future-proofing Zeebrugge as future energy hub

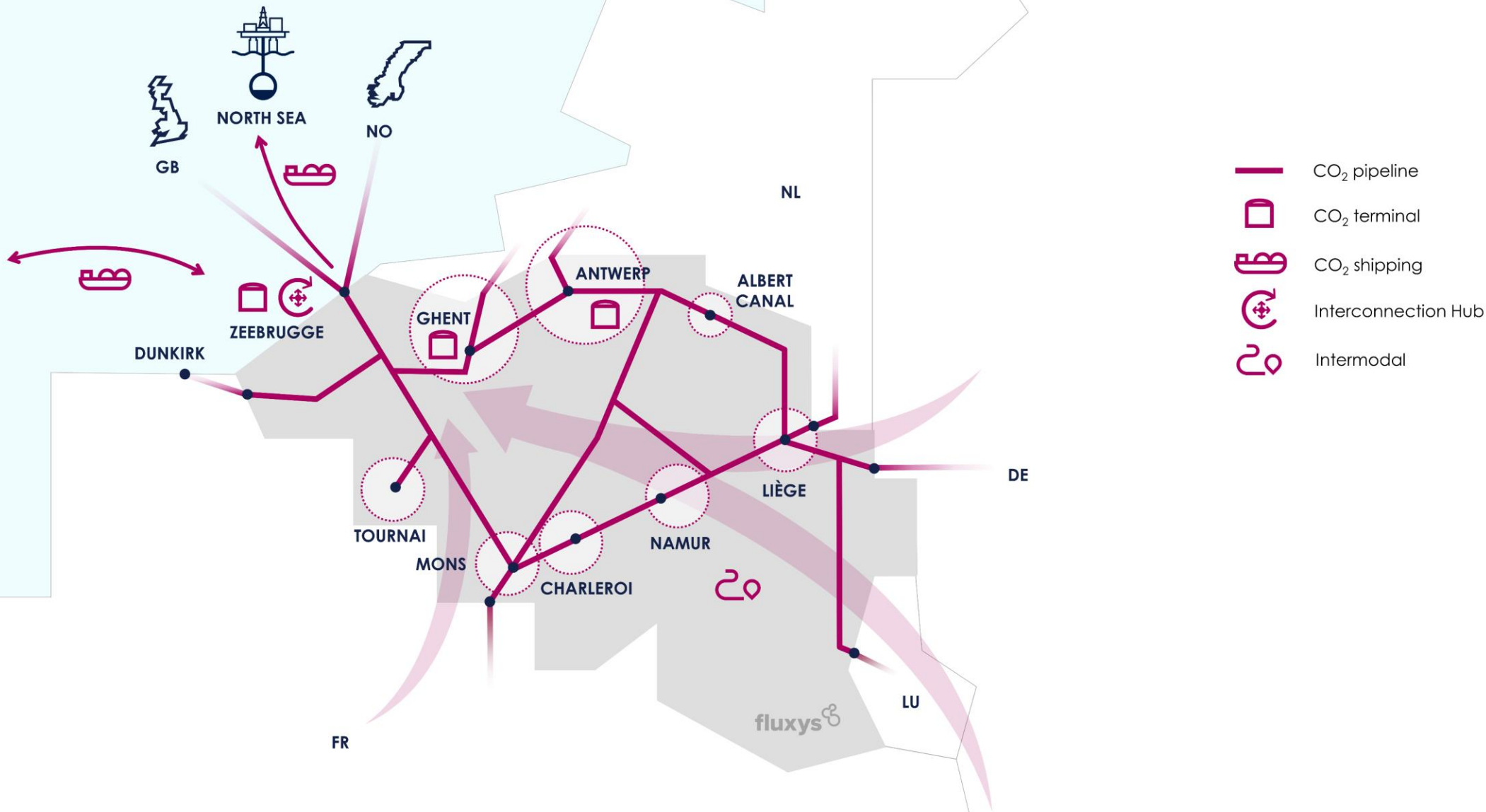


Develop LNG terminal into multi-molecule hub

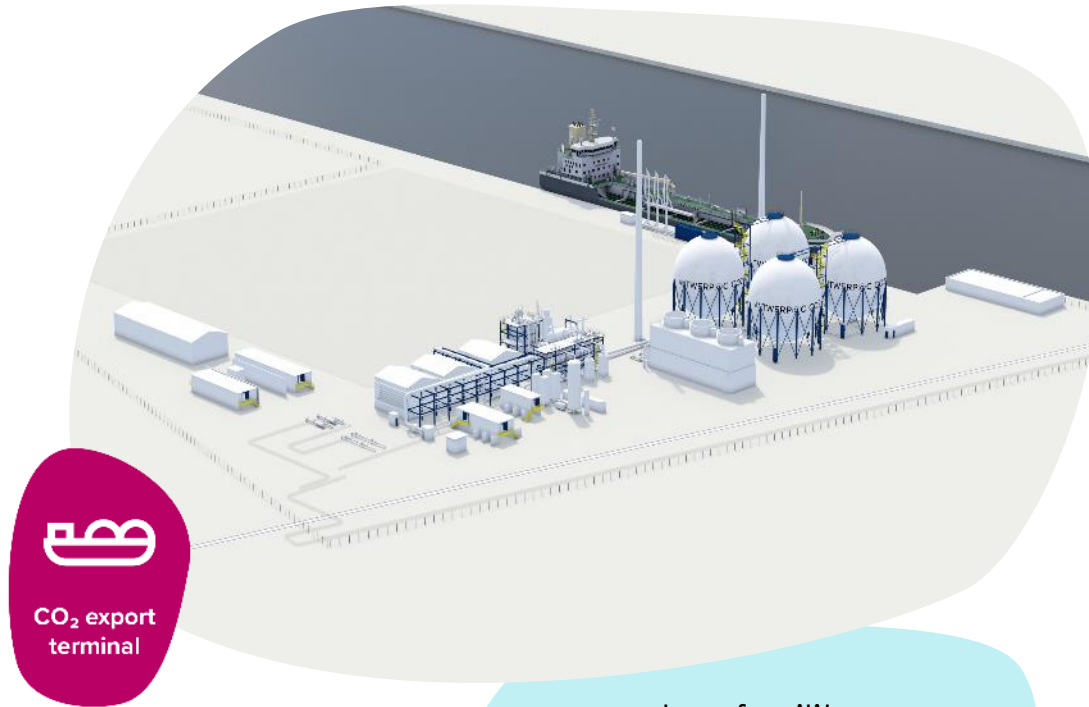
- NH₃ import terminal
- Export CO₂ terminal



Fluxys CO₂ network



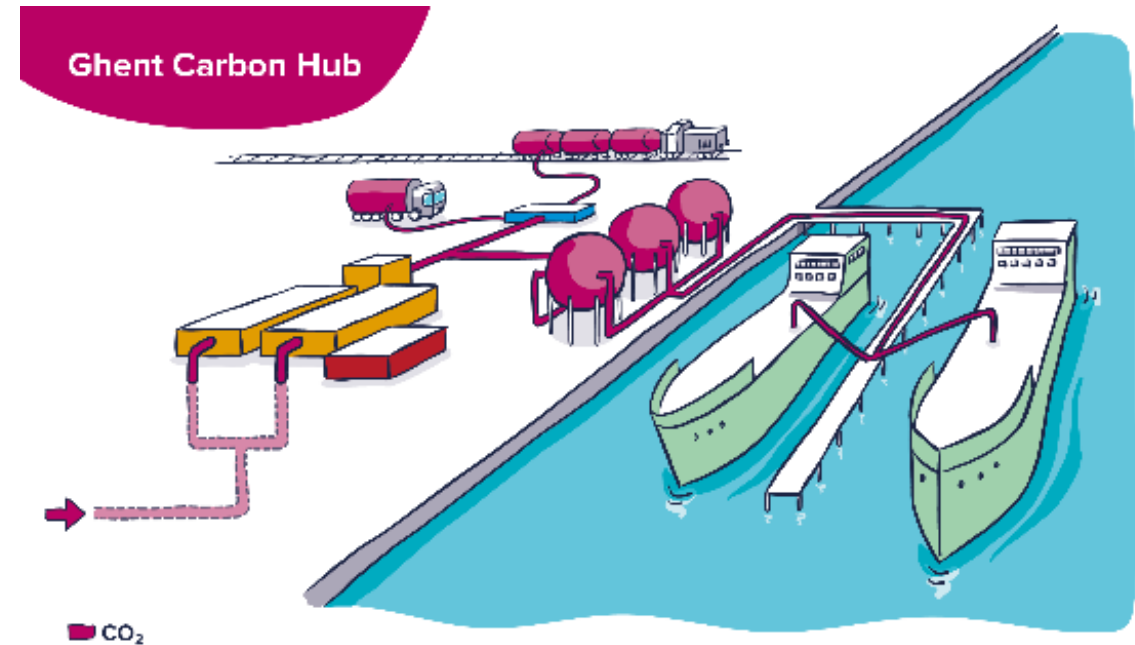
Antwerp@C CO₂ liquefaction terminal Antwerp




CO₂ export
terminal

key facility
for emission reduction
in port area

Ghent Carbon Hub CO₂ liquefaction terminal Ghent




CO₂ export
terminal

key facility
for emission reduction
in port area



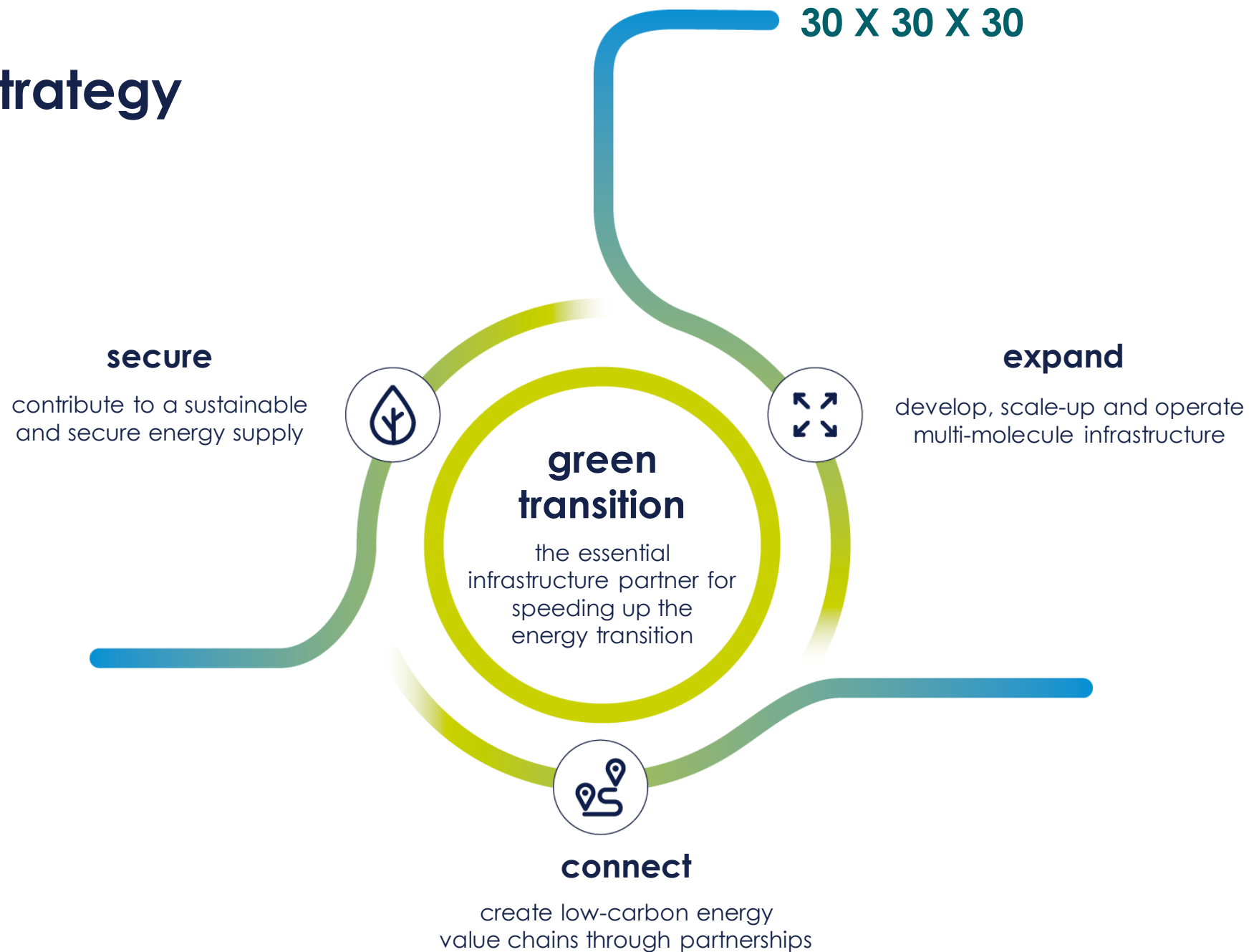
CO₂ offshore pipeline from Zeebrugge to Norwegian fields



Intermodal CO₂ transport solution: barge



Fluxys' strategy



#wemakethemove



fluxys 