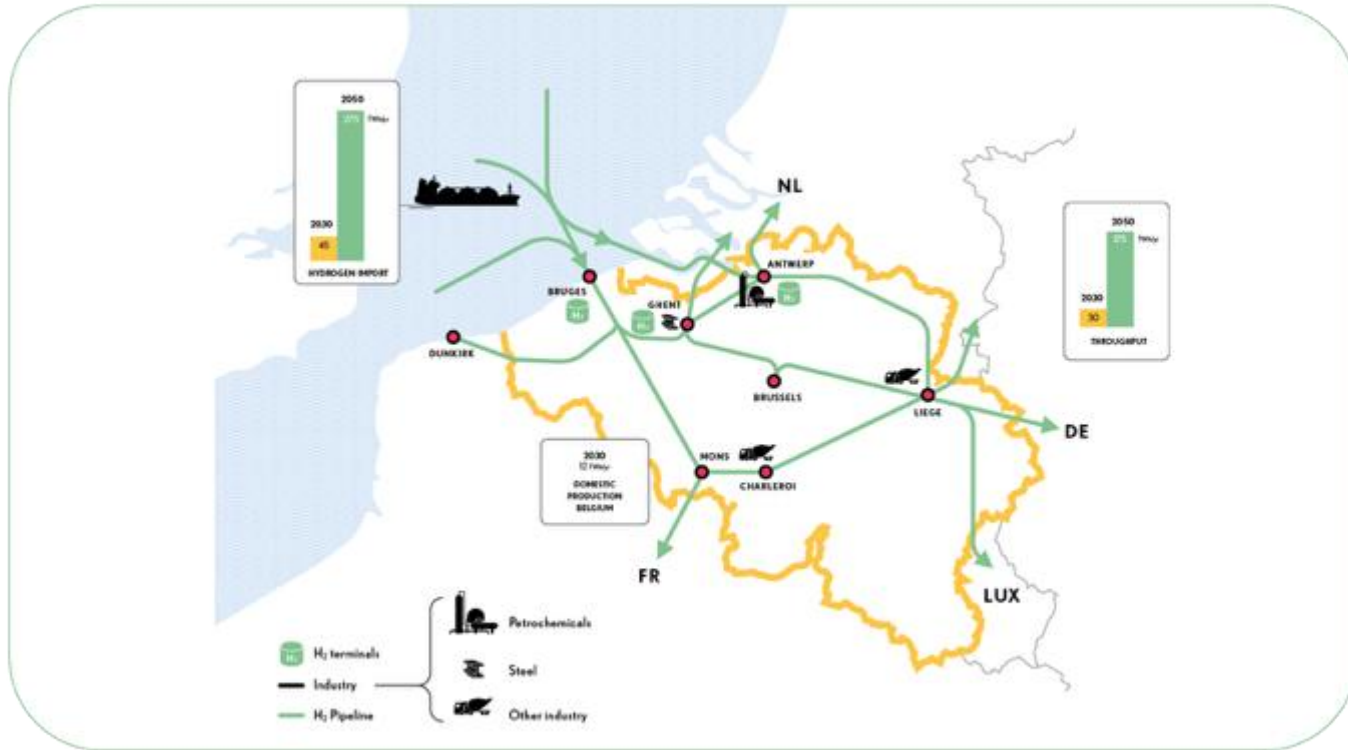


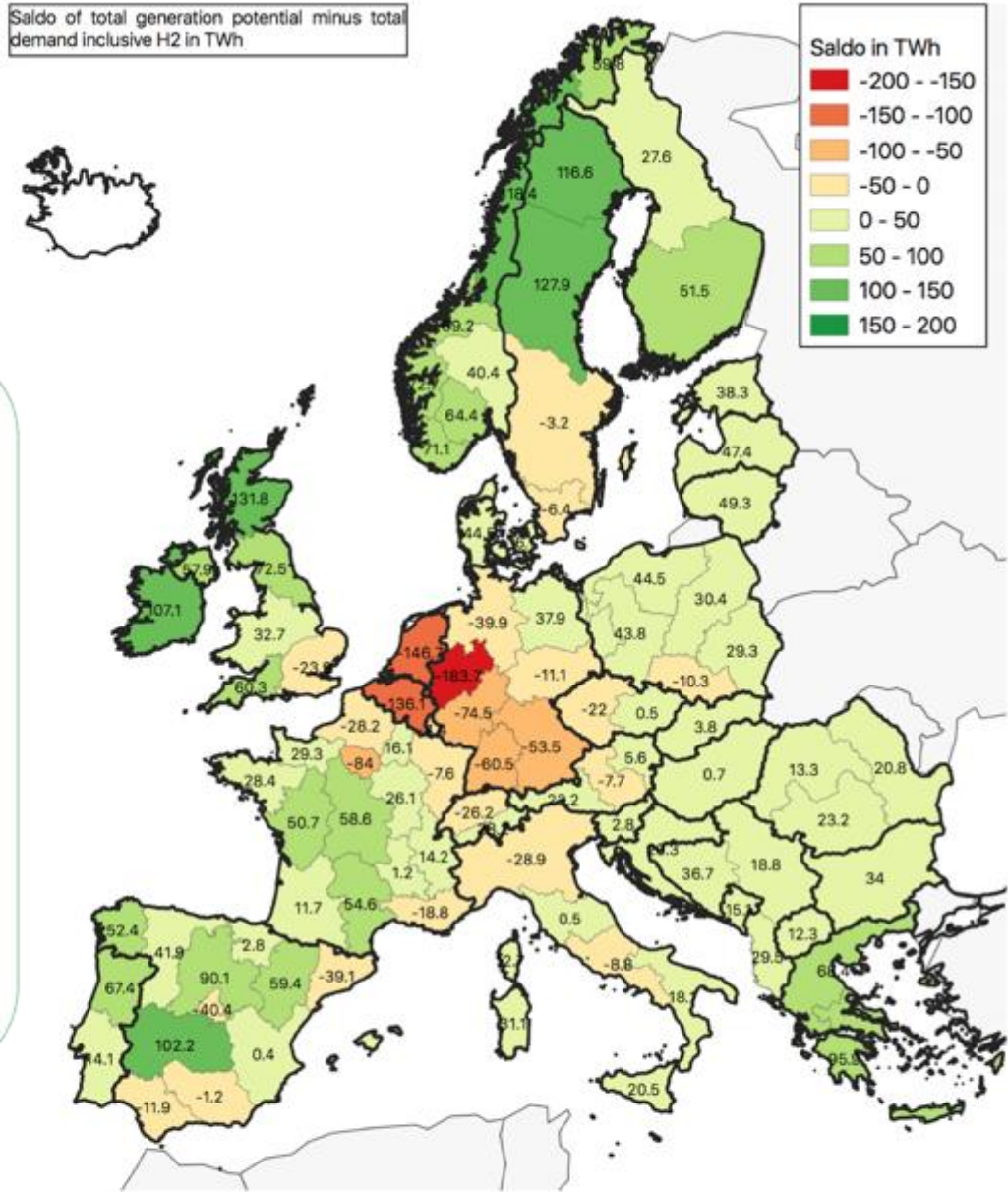
3 December 2025

# Hydrogen in Practice: Port Visions and Realisations in Flanders

# The sweet spot of H2 : BE/Flanders



Saldo of total generation potential minus total demand inclusive H2 in TWh

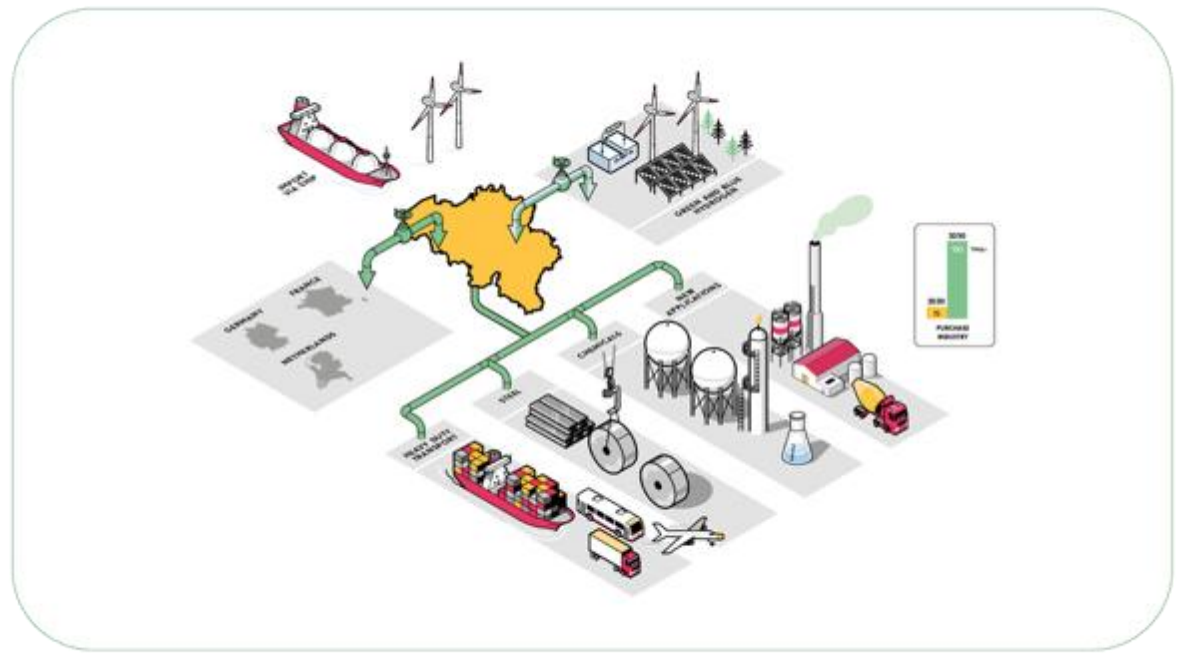


**Figure 3:** Balance of renewable generation potential and demand with electricity for hydrogen

Source: Own graph after (Material Economics 2019) and (ENTSO-E 2014a)

# H2 in Belgium/Flanders

## H2 Offtake



## Technology & application



# Today happening in Flanders



Air Liquide operates a pilot ammonia cracker in the Port of Antwerp Bruges and has announced an industrial expansion : ENHANCE project



Virya Energy, HyoffGreen and Messer are building a 25 MW green H2 plant in Zeebrugge for mobility and industrial offtake : the HyOffWind project



Fluxys is building the H2 pipeline between the Port of Ghent and the port of Antwerp Bruges

The refinery of Total Energies in Antwerp will take 15.000 T/y of green H2 along the 'refinery route'.



# FLHYPORTS Hydrogen Valley in Flanders



## Legend

- Future open access hydrogen network
- Existing private hydrogen network
- Main motorways
- Waterways
- Projects realized
- Projects in the pipeline
- FIHyPorts TESTBED locations

## PROJECTS REALIZED

- 1 By-product hydrogen "INEOS" 13000 t/y
- 2 HRS "CMB Antwerp"
- 3 HRS "DATS24 Antwerp"
- 4 HRS "Dats24 Erpe-Mere"
- 5 HRS "Dats24 Halle"
- 6 HRS "Airliquide, Zaventem"
- 7 HRS "DATS24, Leuven"
- 8 HRS "Parkwind, Oostende"
- 9 5 Buses "High V.LO-City"
- 10 2 Refuse trucks "Revive"
- 11 Tugboat
- 12 Ammonia cracker "Air Liquide Antwerp"
- 13 Hydroville

## PROJECTS IN THE PIPELINE

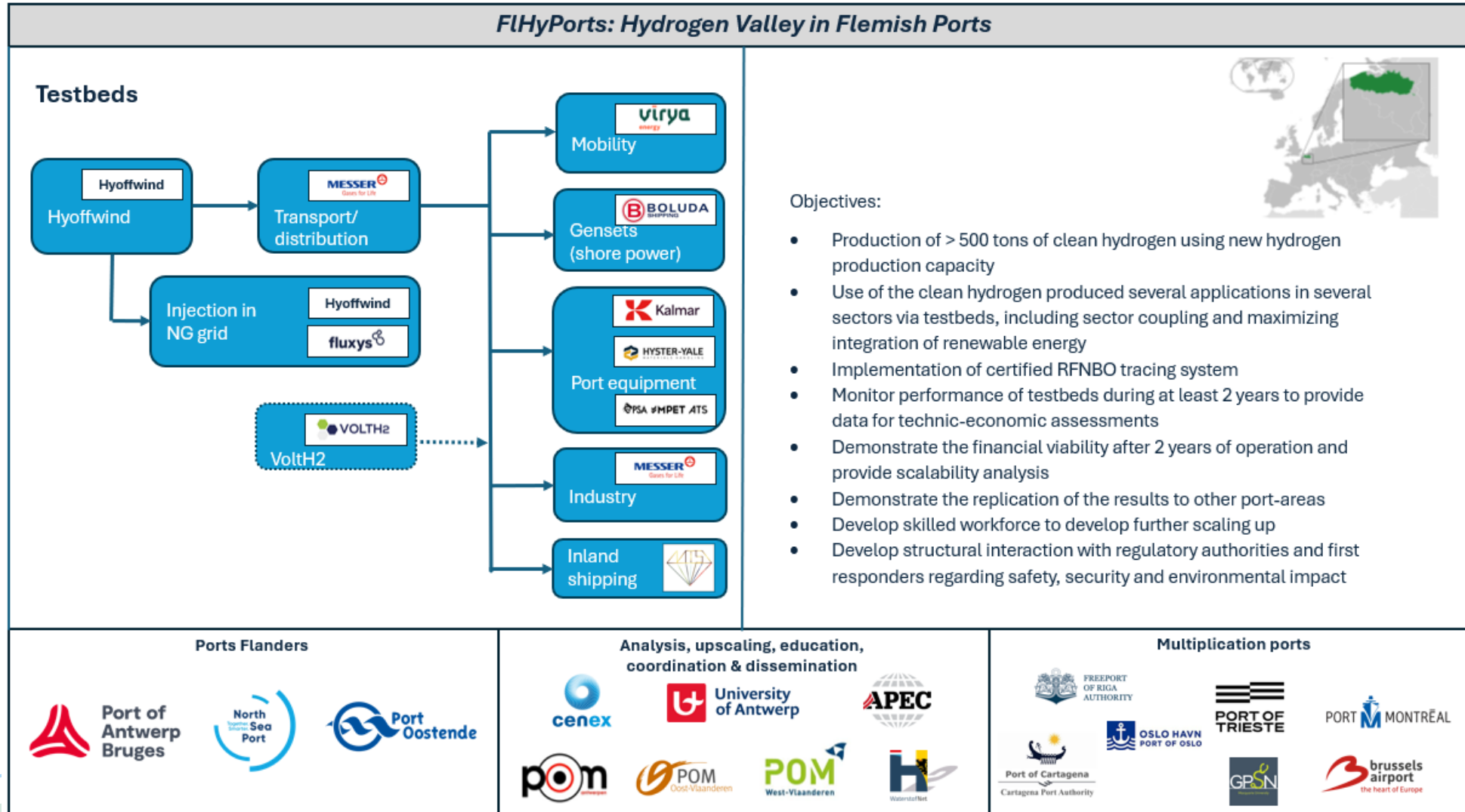
- 1 Electrolyser "North-C-Hydrogen" 67 MW
- 2 Electrolyser "PlugPower" 100MW
- 3 Industrial heat for chemical industry "Ineos" 10MW
- 4 DRI steel
- 5 HRS "Air Products"
- 6 HRS "Air Products"
- 7 Low carbon "Kairos Antwerp"
- 8 Low carbon "H2BE Ghent"
- 9 Ammonia terminal "VTTI / ATPC Antwerp"
- 10 Ammonia terminal "Vesta"
- 11 Ammonia terminal "LBC Vlissingen"
- 12 5 Heavy-duty H2-ICE trucks "DFDS"

## FIHyPorts TESTBED locations

- 1 Electrolyser "HyOffwind" 25 MW; filling point; mixin
- 2 Electrolyser "VoltH2" 25 MW; filling point 2027
- 3 Port equipment, straddle carriers, empty container l
- 4 Genset "Boluda"
- 5 Inland shipping
- 6 Industry



# FLHyPorts : the Flemish Hydrogen Valley

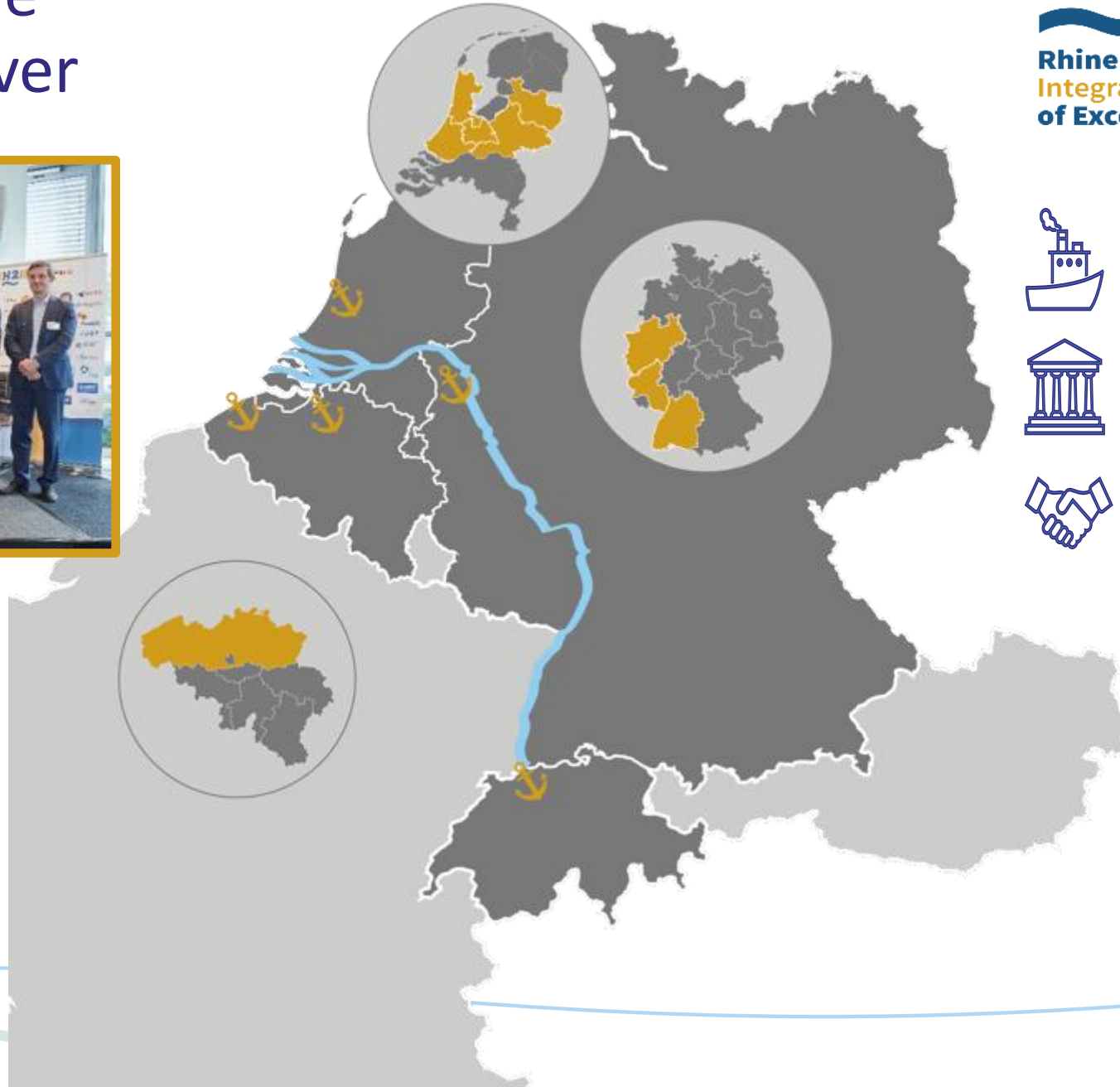


# in the meantime on the Rhine river



## WN as program office:

- Standardisation
- Market development
- Port infrastructure
- Tanktainer pool company
- Subsidies
- Policy



4 ports



9 governments



50 + Lol partners



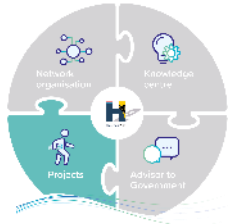
# Kickstart the 4 H2 ready barges in a 'Living Lab'



# WaterstofNet : 16 years of H2 experience

- Knowledge and collaboration platform on hydrogen
- Focus on Flanders / Belgium / Netherlands / Benelux
- Non profit / 12 employees
- Offices in Turnhout (BE) and Helmond (NL)





# Projects

Identifying and facilitating 'next step' projects



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 WaterstofNet

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[WaterstofNet.eu](http://WaterstofNet.eu)

Bedankt voor uw aandacht!  
Thank you for your attention!



WaterstofNet