

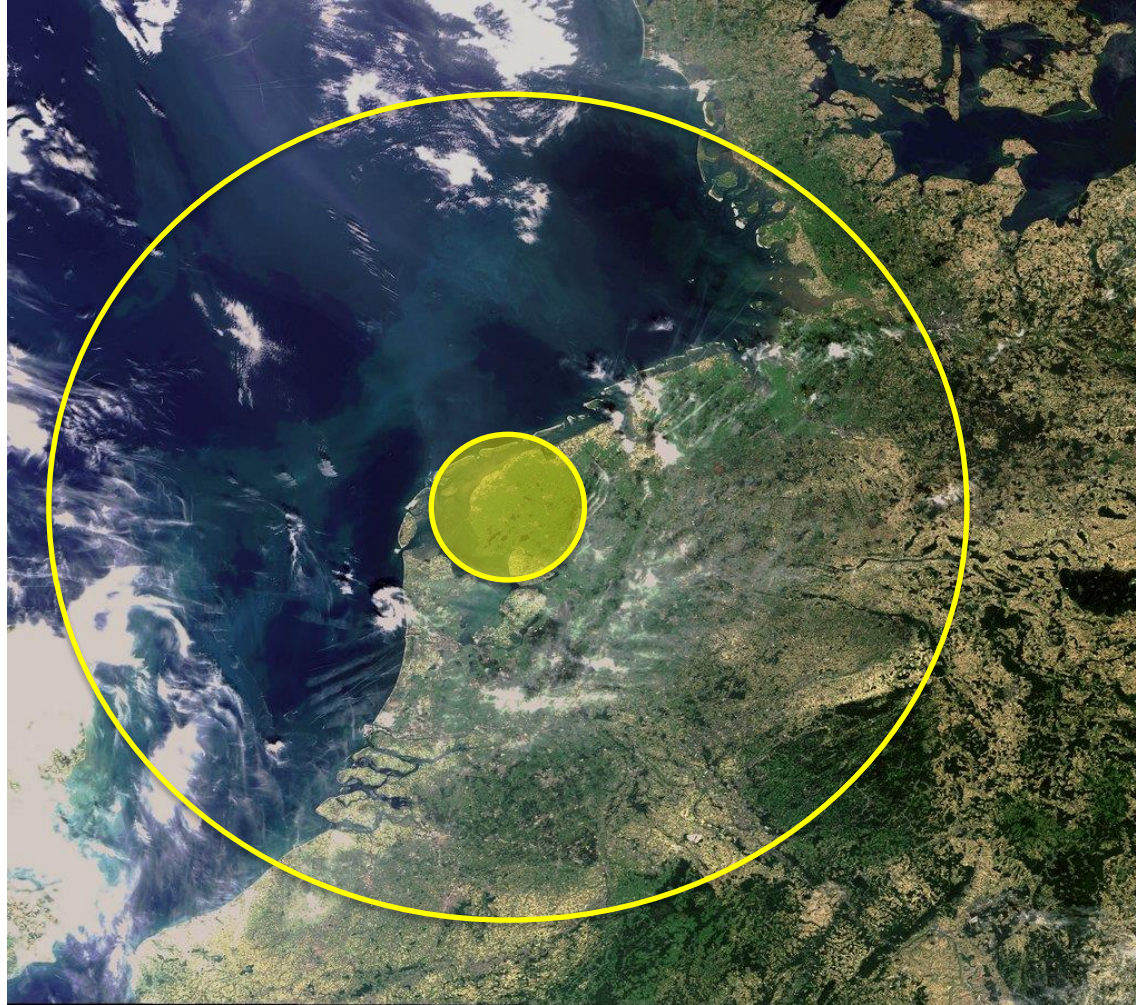
Hydrogen Valley's and HEAVENN

Power to the molecules

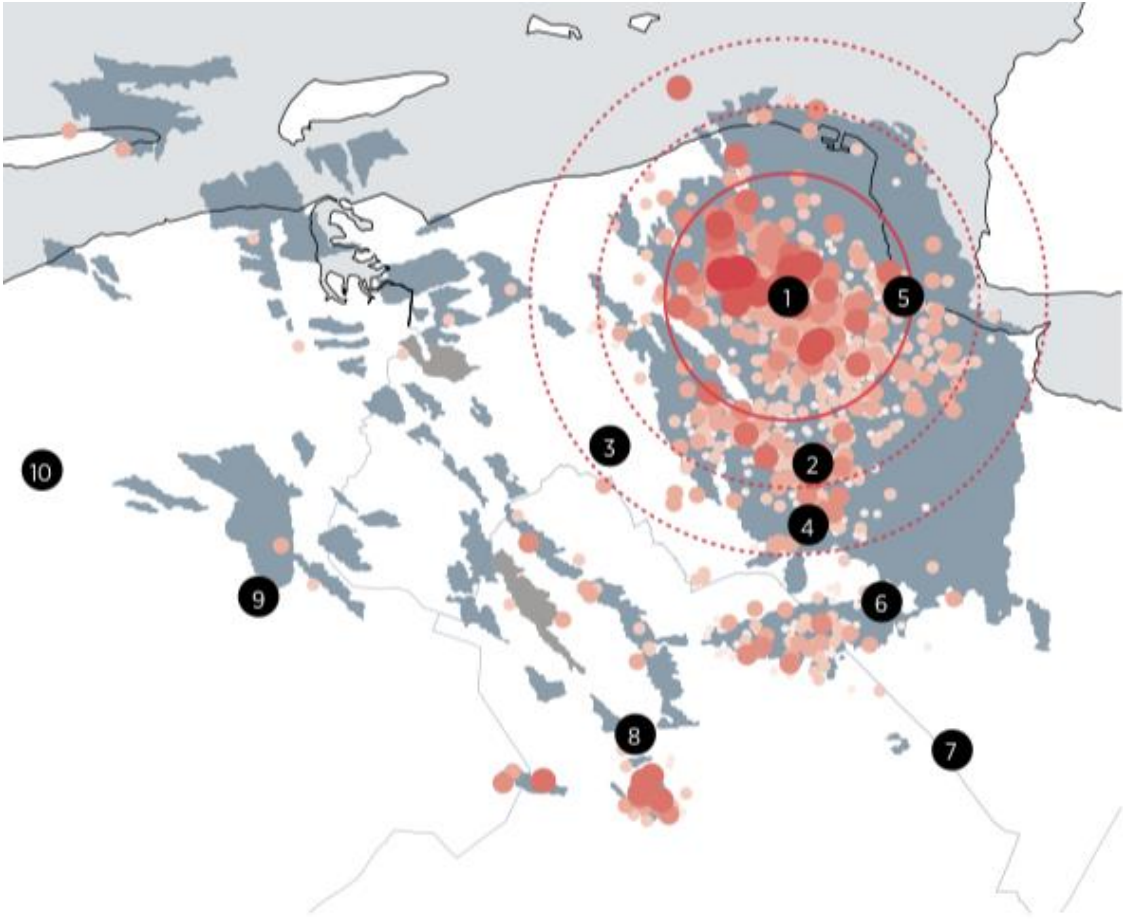
Patrick Cnubben

New Energy Coalition

Where are we located?



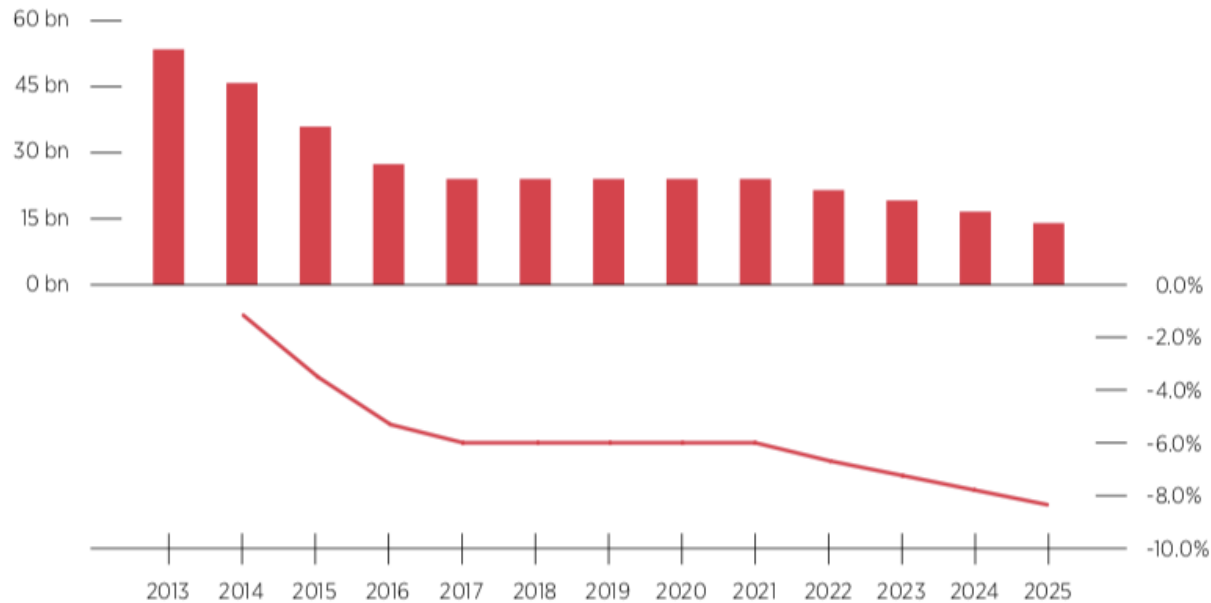
Situation in the Northern Netherlands



Situation in the Northern Netherlands



Gas production and cumulative economic impact - **baseline**

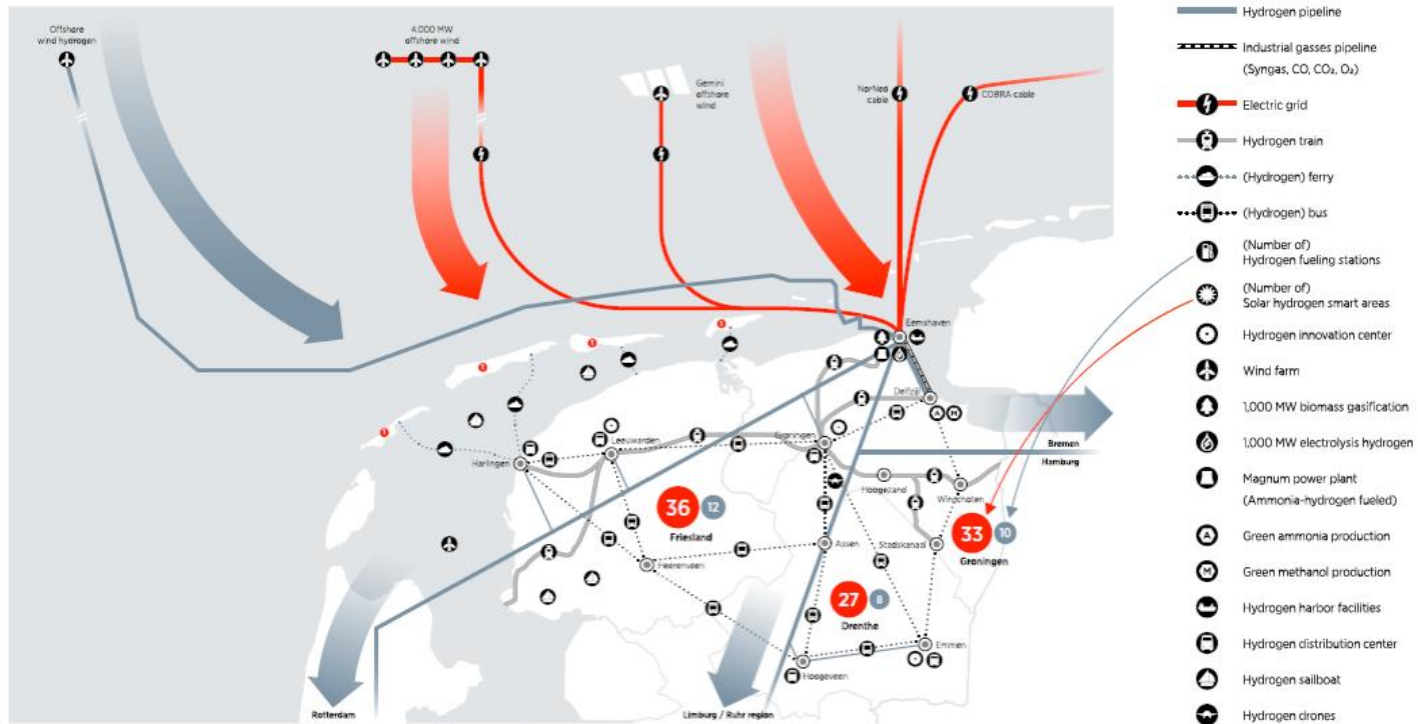


■ Historic gas production + base scenario (in bn m³, left)

— Cumulative impact on economic growth in Northern Netherlands (in %, right)

A region needs a business H2 fits as a glove!

Green Hydrogen Economy in the Northern Netherlands

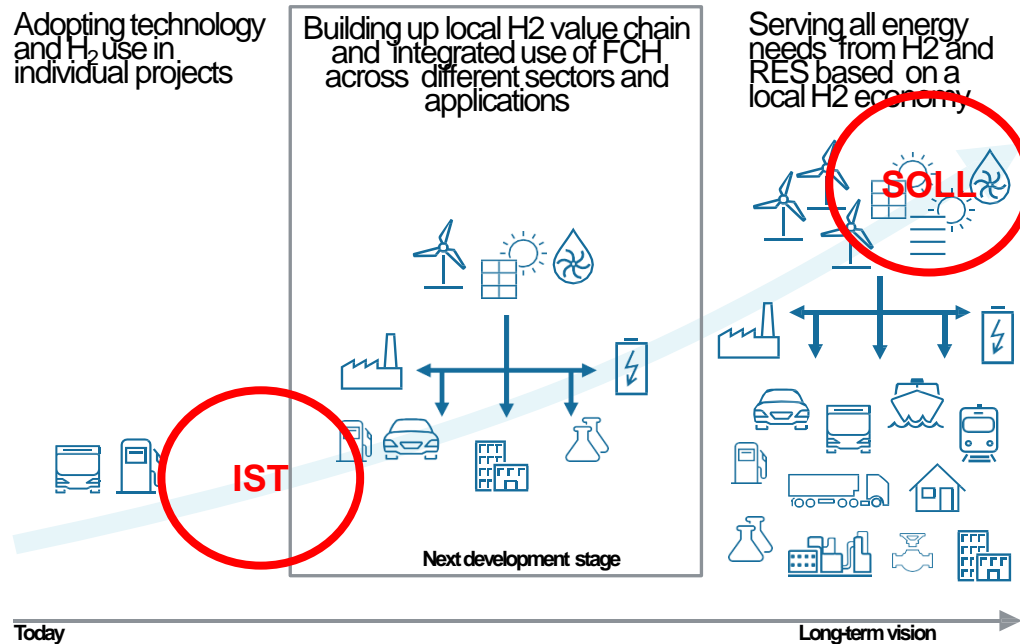


Green Hydrogen Economy In the Northern Netherlands

We have a plan

**Green Hydrogen
Economy in the
Northern Netherlands**

Becoming a Integrated Hydrogen Economy



- By linking individual projects and developing local H₂ infrastructure, establishing H₂ Valleys represents the next development stage towards a local H₂ economy in the long term
- H₂ Valleys should establish local H₂ nuclei or from which further roll-out and uptake of local H₂ use can be started
- Implementing H₂ Valleys should be part of a clear local strategy to start a long-term green energy transition and be backed up by respective political commitment

HEAVENN

The consortium

- Stichting Energy Valley, part of New Energy Coalition
- 29 entities from 7 EU countries (NL, D, DK, B, UK, ES and E)
- Parties from business: large, mid-sized and SME, associations, knowledge institutions, expert advisories, regional development institutions

Broad national and international support

- Over 60 parties from over 12 countries have given their support to the project via the means of a Letter of Support
- The project also can rely on broad political support covering the whole political spectrum – nationally and EU level

HEAVENN

New Energy Coalition



Nouryon

gasunie



H2Tec BV

EWE

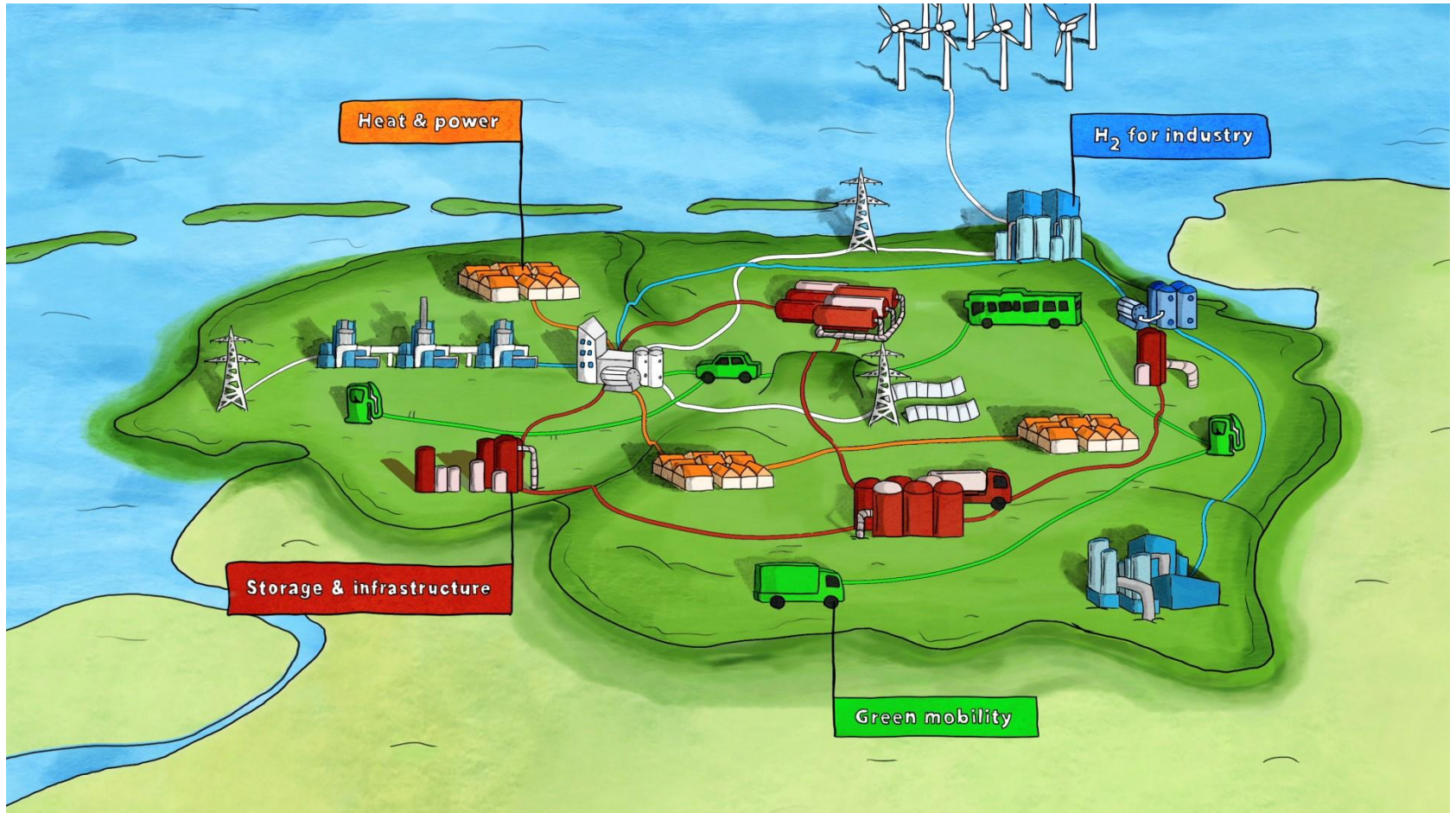
HYDROGEN VALLEY®



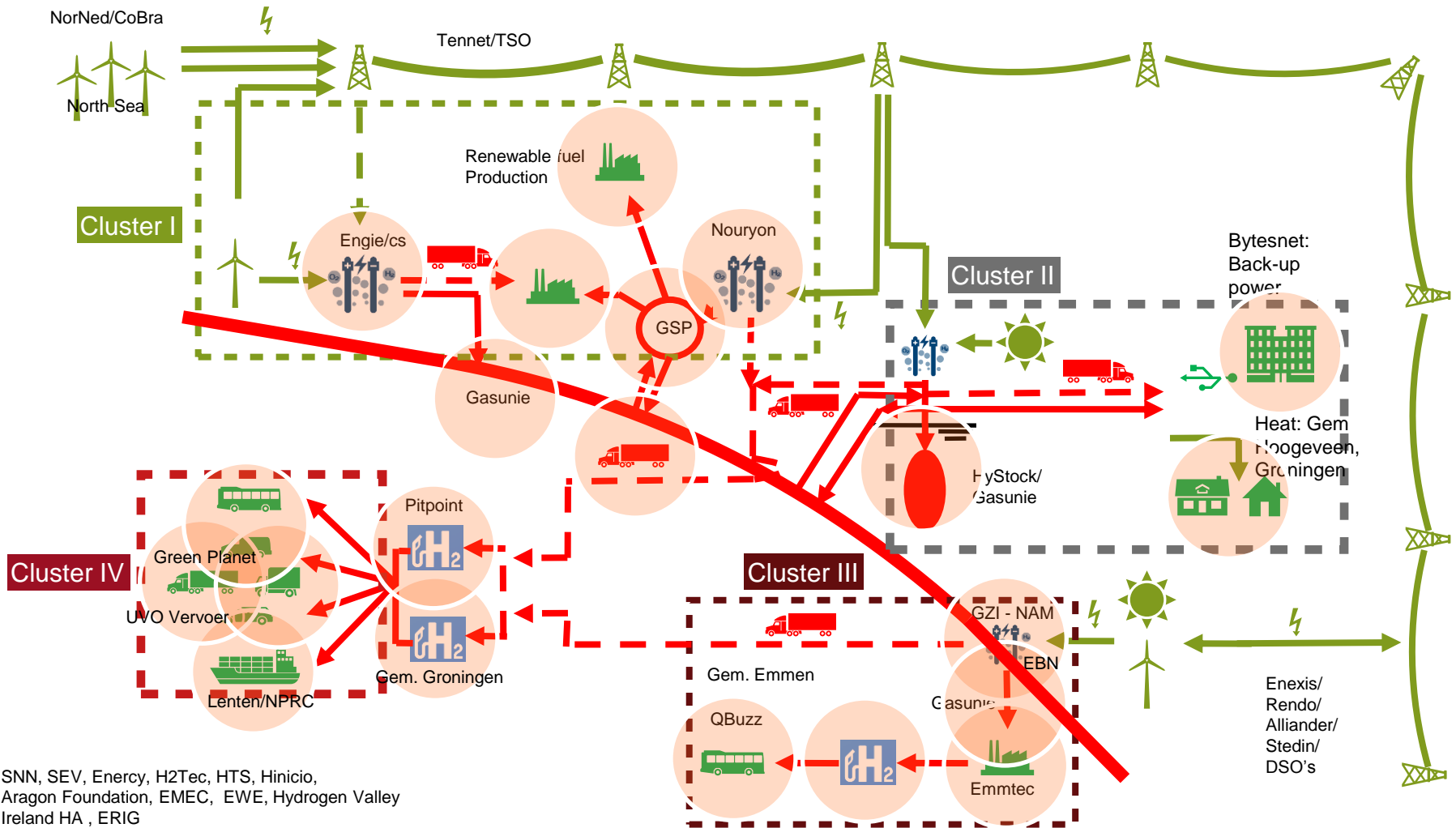
Qbuzz

Supported by:

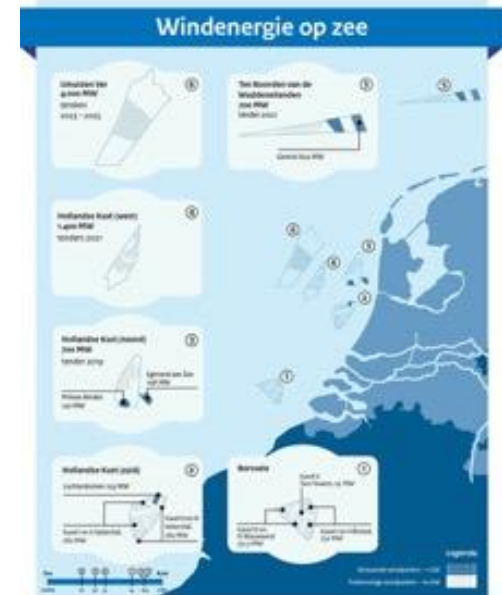




HEAVENN



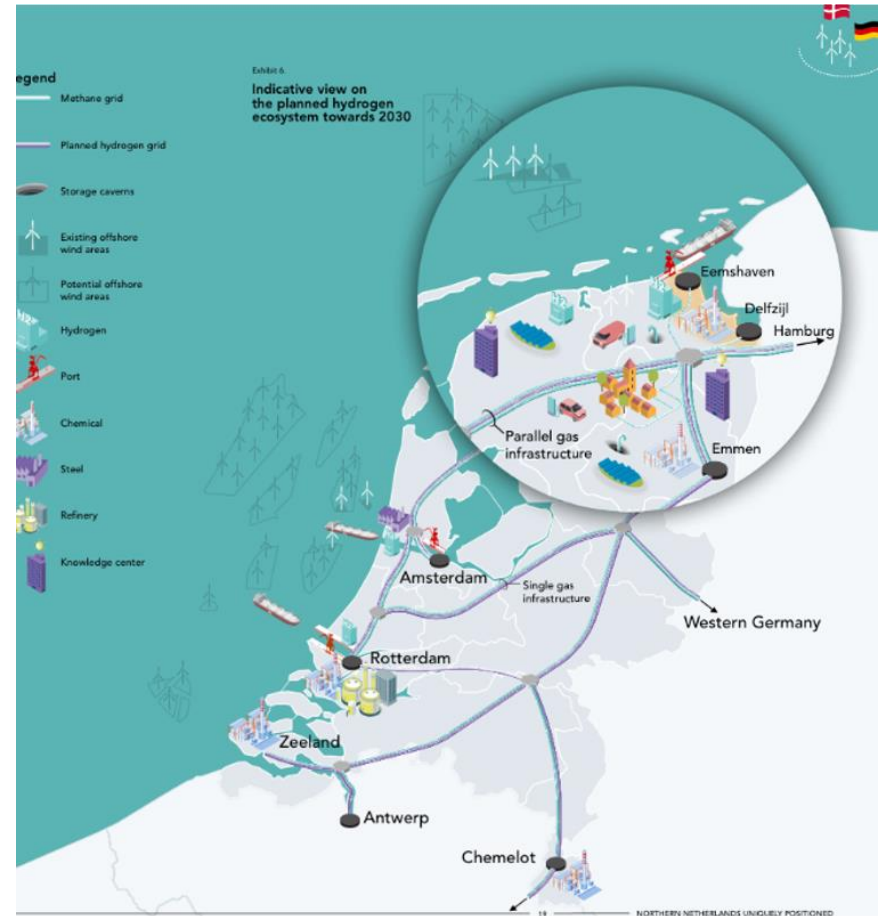
Drivers for Clean Hydrogen



Grey Hydrogen: 175 PJ per year (based on natural gas conversion)

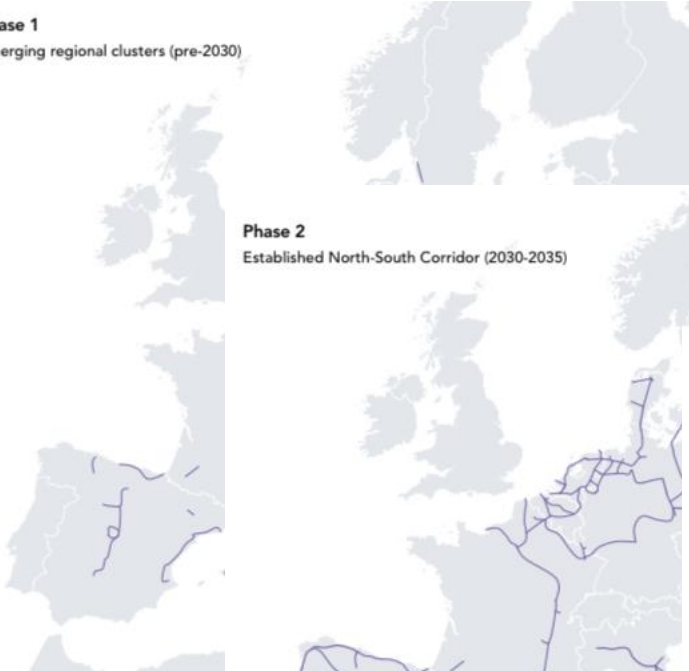
Offshore wind:
Huge potential, 11.5 GW in 2030
even more than 40 GW possible

Hydrogen Investment Plan 2.0



EU backbone development

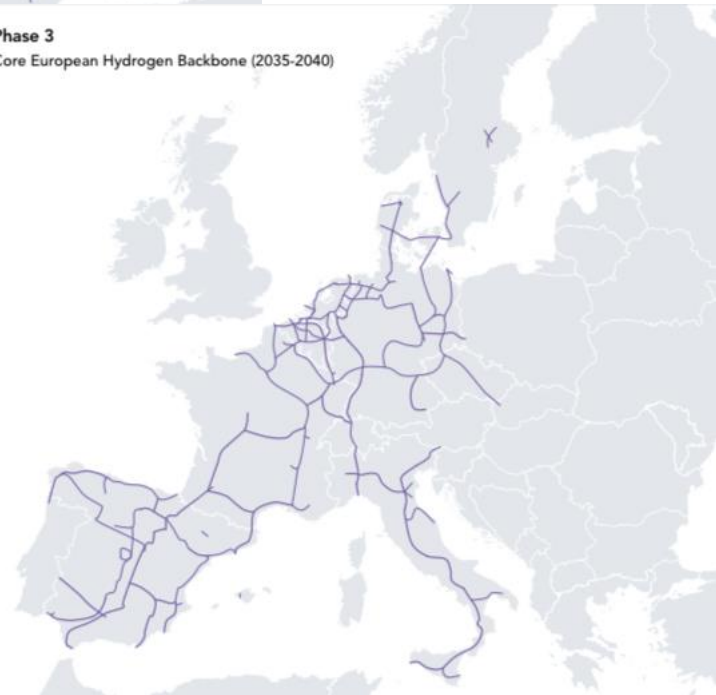
Phase 1
Emerging regional clusters (pre-2030)



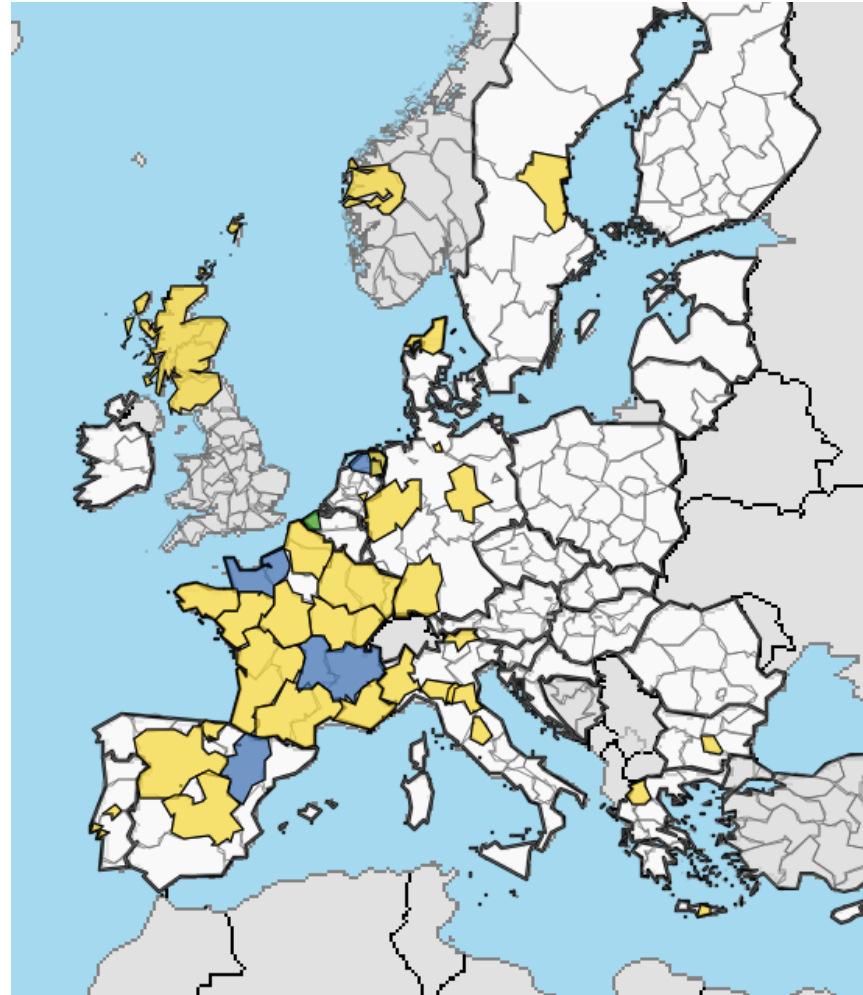
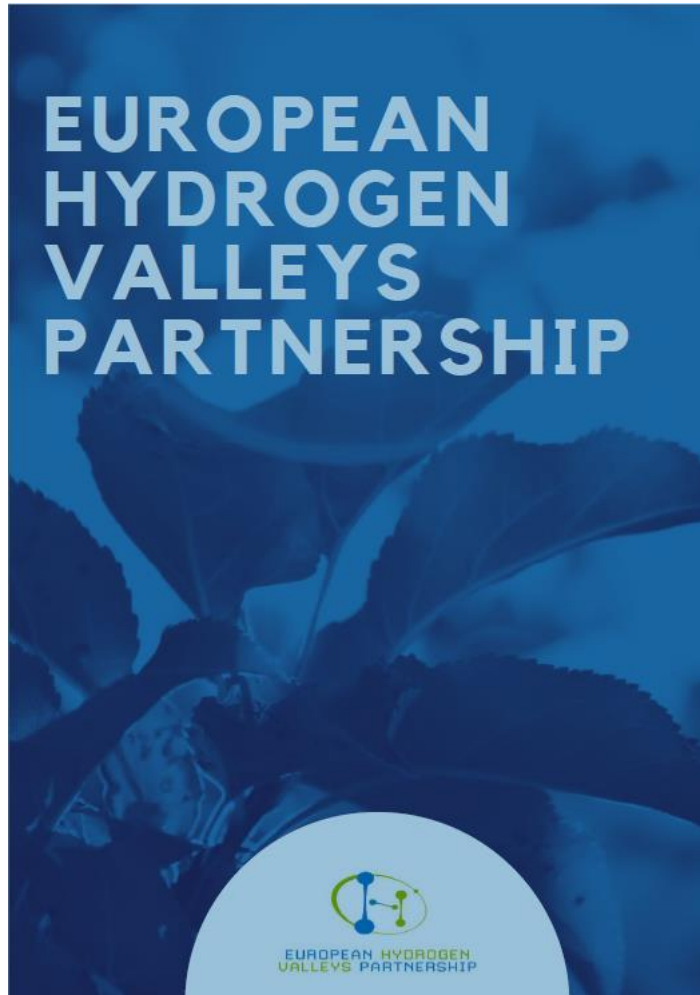
Phase 2
Established North-South Corridor (2030-2035)



Phase 3
Core European Hydrogen Backbone (2035-2040)



European Hydrogen Valley's Platform

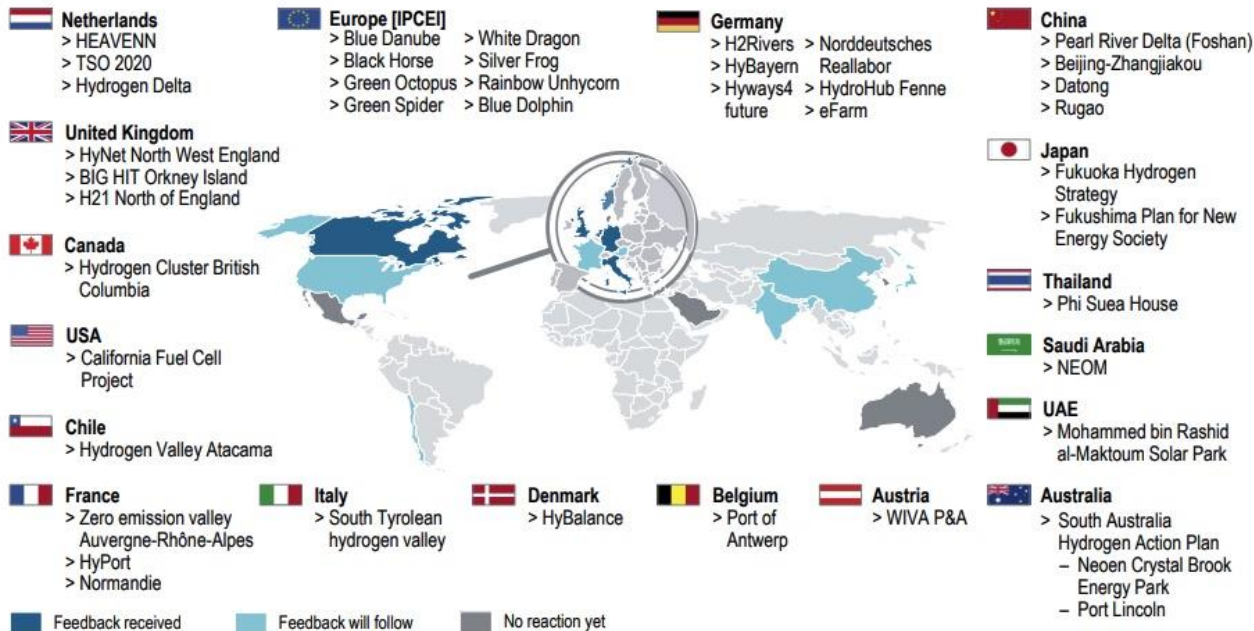


Mission Innovation Hydrogen Valley Platform

We have gathered the first comprehensive overview of H2Vs globally and identified 40 relevant projects together with IC8 members

Global Hydrogen Valley projects and status of IC8 feedback

Current status – Pre-final



Source: Roland Berger

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FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING



MISSION
INNOVATION

accelerating the clean energy revolution

Connect Hydrogen Valley's

BIGHIT

H₂
HY WAYS FOR FUTURE

GREEN HYDROGEN HUB DENMARK



The Hague...

GREEN FLAMINGO

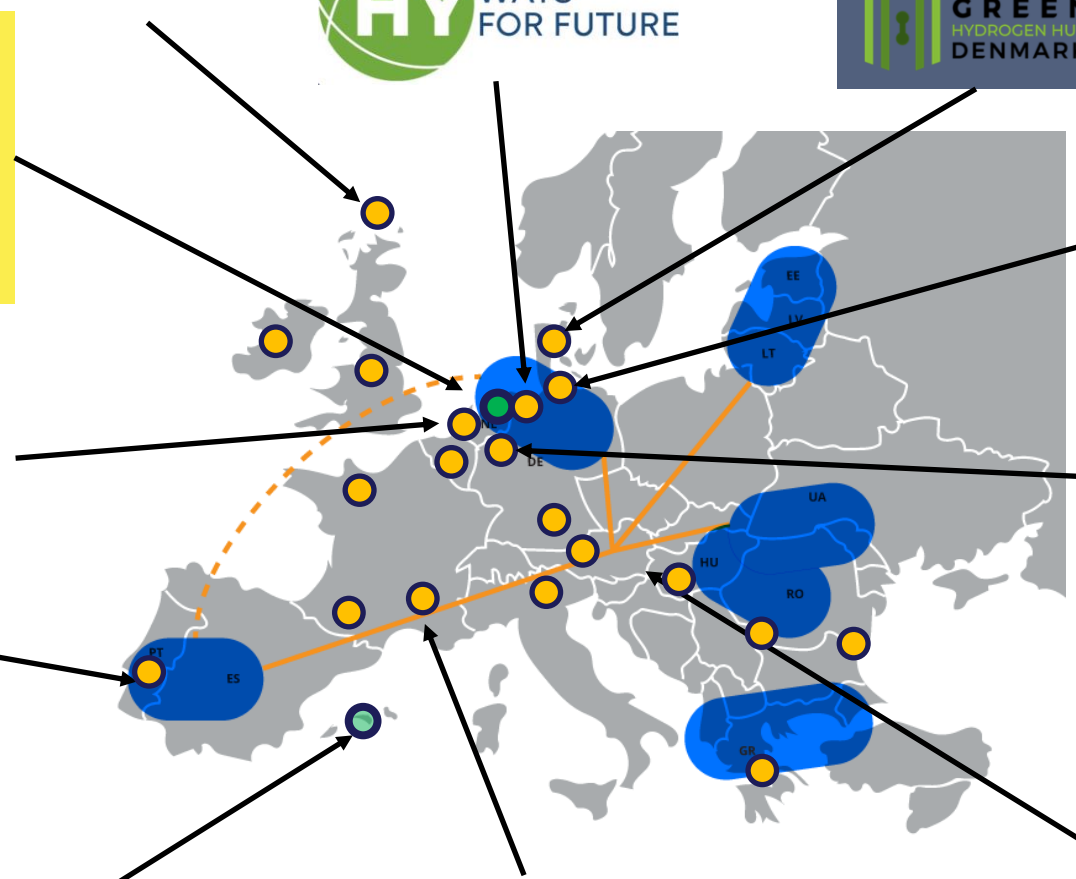
Green Hyslands

Zero Emission Valley

HY-5

HY3

Blue Danube



Join us in Heavenn and Hydrogen Valley's with NEC!



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