



Dutch H2 and REDIII strategy

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Ministry of Climate Affairs and Green Growth

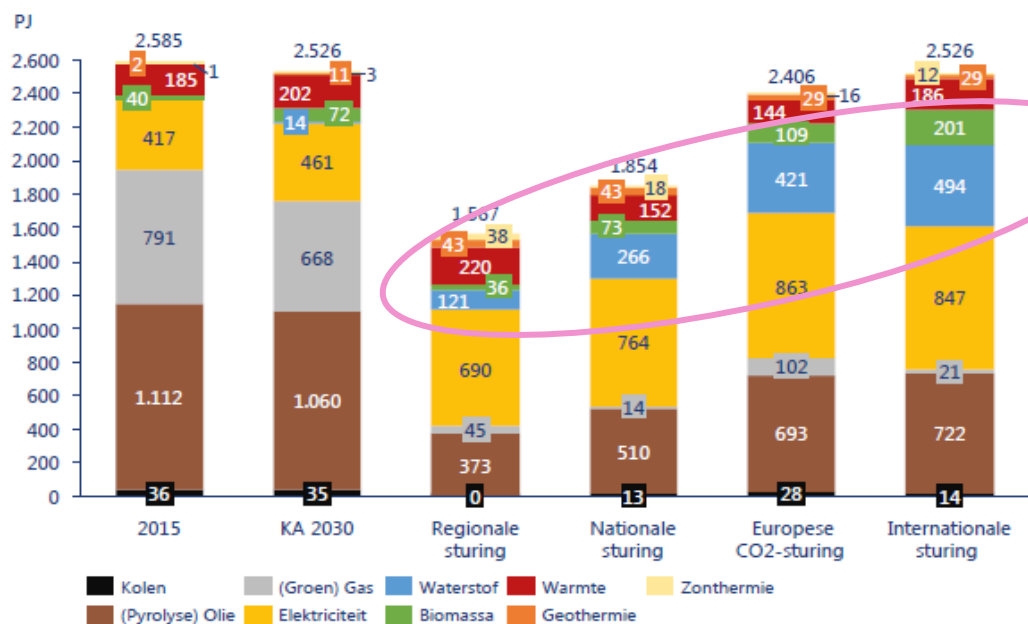
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Intern gebruik



Netherlands: Outlook and policy goals

RENEWABLE HYDROGEN KEY IN 2050



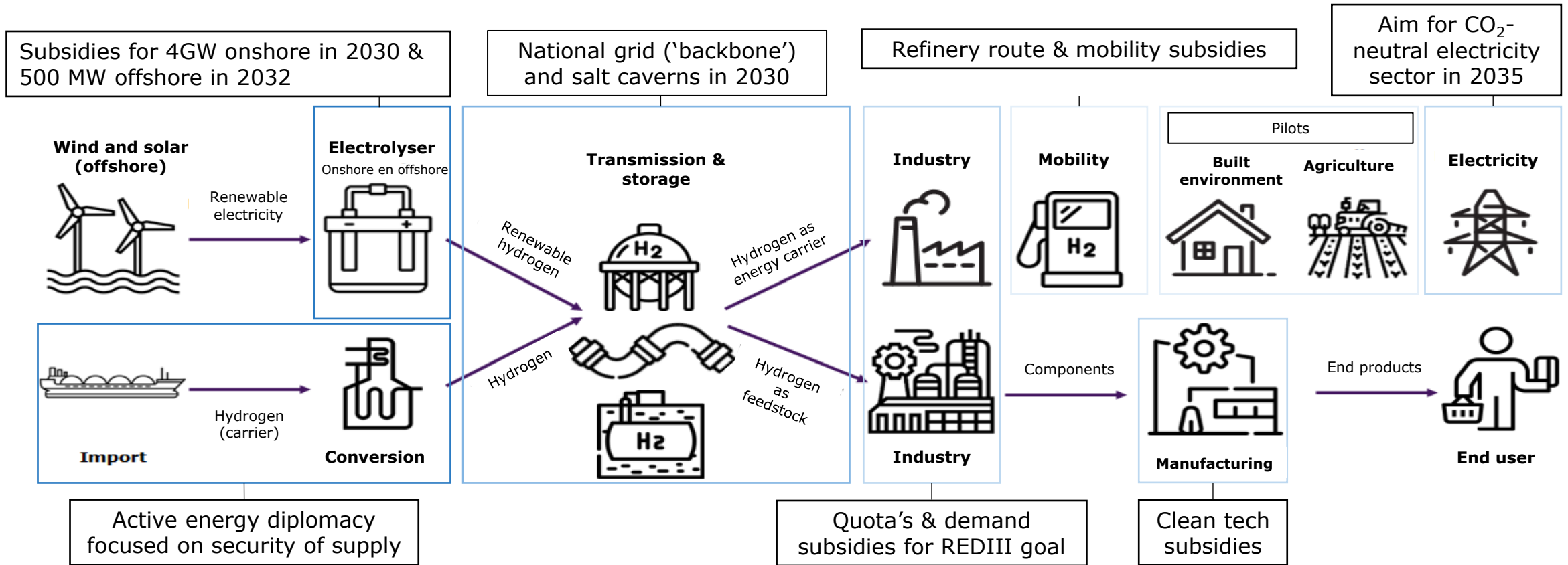
Bron: Berenschot/Kalavasta

MULTIPLE TARGETS FOR 2030

- > 60% CO₂-reduction in NL
 - Replacing grey H₂ use
 - Switching new users to H₂
- > REDIII RFNBO targets 2030
 - 35 PJ (10TWh) in industry
 - 5 PJ (1,5TWh) in mobility
- > Ambition of 4 GW electrolysis
 - Supports 30-40 PJ (8-11TWh) production



The Dutch state is developing policy along the entire hydrogen value chain





NL has experience via 'OWE-scheme' - thus no 'AaaS'

Design OWE 2 - (€1bn in 2024)

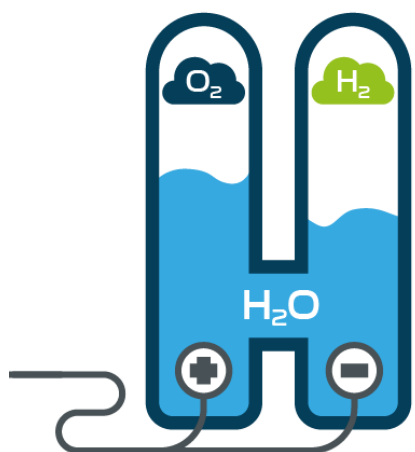
- › Projects of 0.5MW > & max 50% of budget for one project
- › CAPEX support up to 80% of costs. Total of CAPEX and OPEX: €9/kgH₂
- › Ranking on €/MW of electrolysis (incl. previously subsidy)

Changes after experience with OWE-1 - (250mln. in 2025)

- › Realization period from 4 to 5 years
- › Pending environmental permit is sufficient
- › Offer for electricity supply is required
- › Extra evidence on potential customer(s) and selling price



An integrated approach on industrial demand creation



Foundation: supply side

Production subsidies

- 2022 - IPCEI - €875 mln.
- 2023 - OWE1 - €250mln.
- 2024 - OWE2 - €1bn.
- € 2,5bn for further subsidies



H2 demand creation

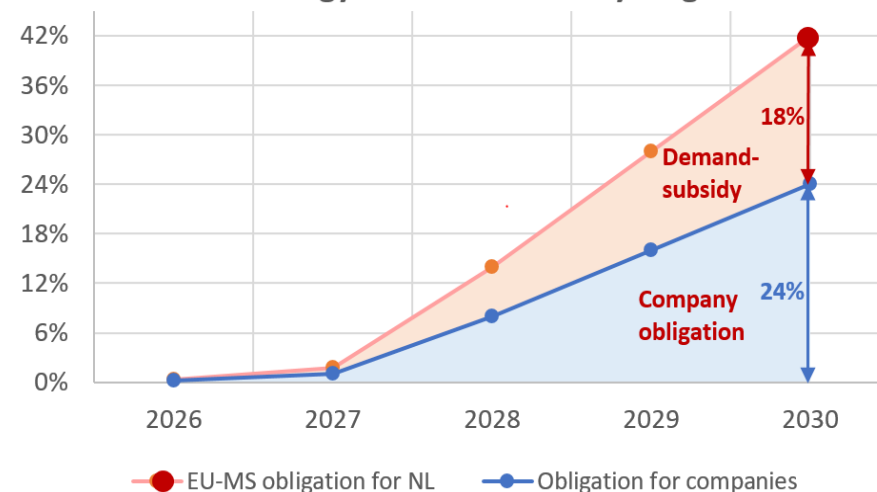
Industry Quota

- As % of H2 use
- Tradable certificates
- % in 2030 TBD
- Consultation this autumn

Demand-subsidies

- Incentives users
- Rest of REDIII 22a.
- Planned for end 2025

Strategy for REDIII industry-target NL





Examples of hydrogen projects in NL

Recent projects (2023/24)

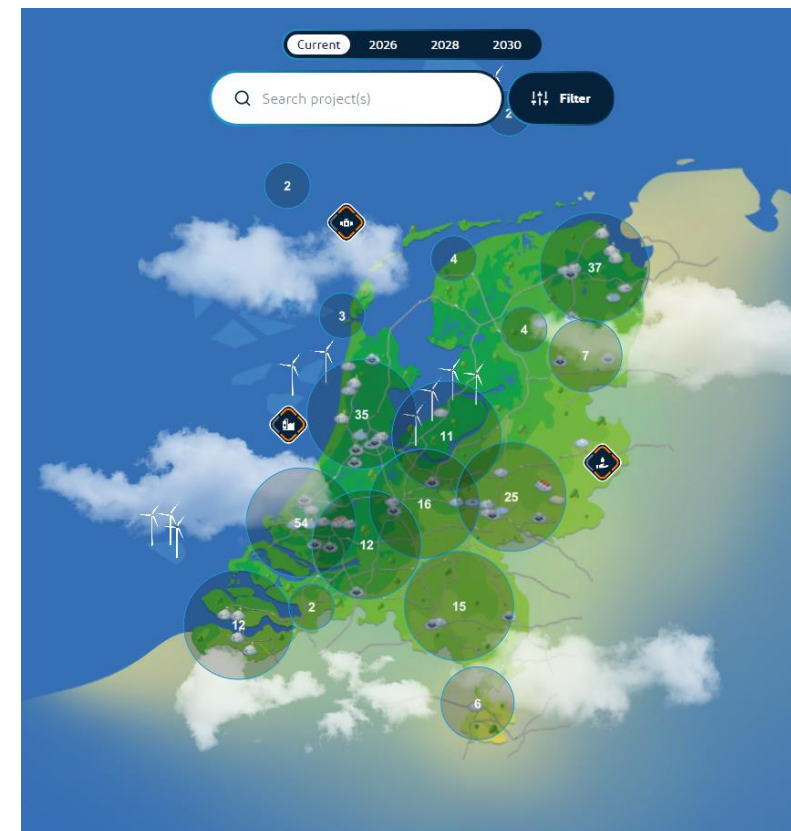


Shell Holland Hydrogen I
200 MW Electrolyser on
the Maasvlakte
Port of Rotterdam has
taken FID



PosHYdon started with
onshore pre-tests before
going live offshore (1 MW
electrolyser to be put on
an offshore platform in
2024)

Interactive map with overview of over 300 hydrogen projects in NL and their status!



[Missie H2 & TKI Waterstofkaart](#)



Main observations and obstacles

- › Catch 22/chicken-and-egg problem:
 - Even with supply-subsidy: producers want long-term offtake contracts before FID
 - No demand-pull: industrial offtakers want flexibility facing uncertain developments
- › There is no silver bullet:
 - Uncertain demand from industrial quota due to potential derivative-imports
 - 'Transition failure': unclear future market size hampers 'first mover' incentive
 - Fully subsidizing all producer income streams reduces total capacity state can support
- › So, a mix of instruments is necessary
- › Question is: Is covering funding gap sufficient to stimulate long-term contracts?



Ministerie van Economische Zaken
en Klimaat



Thank you!

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