

Hydrogen & P2X

Hydrogen Europe

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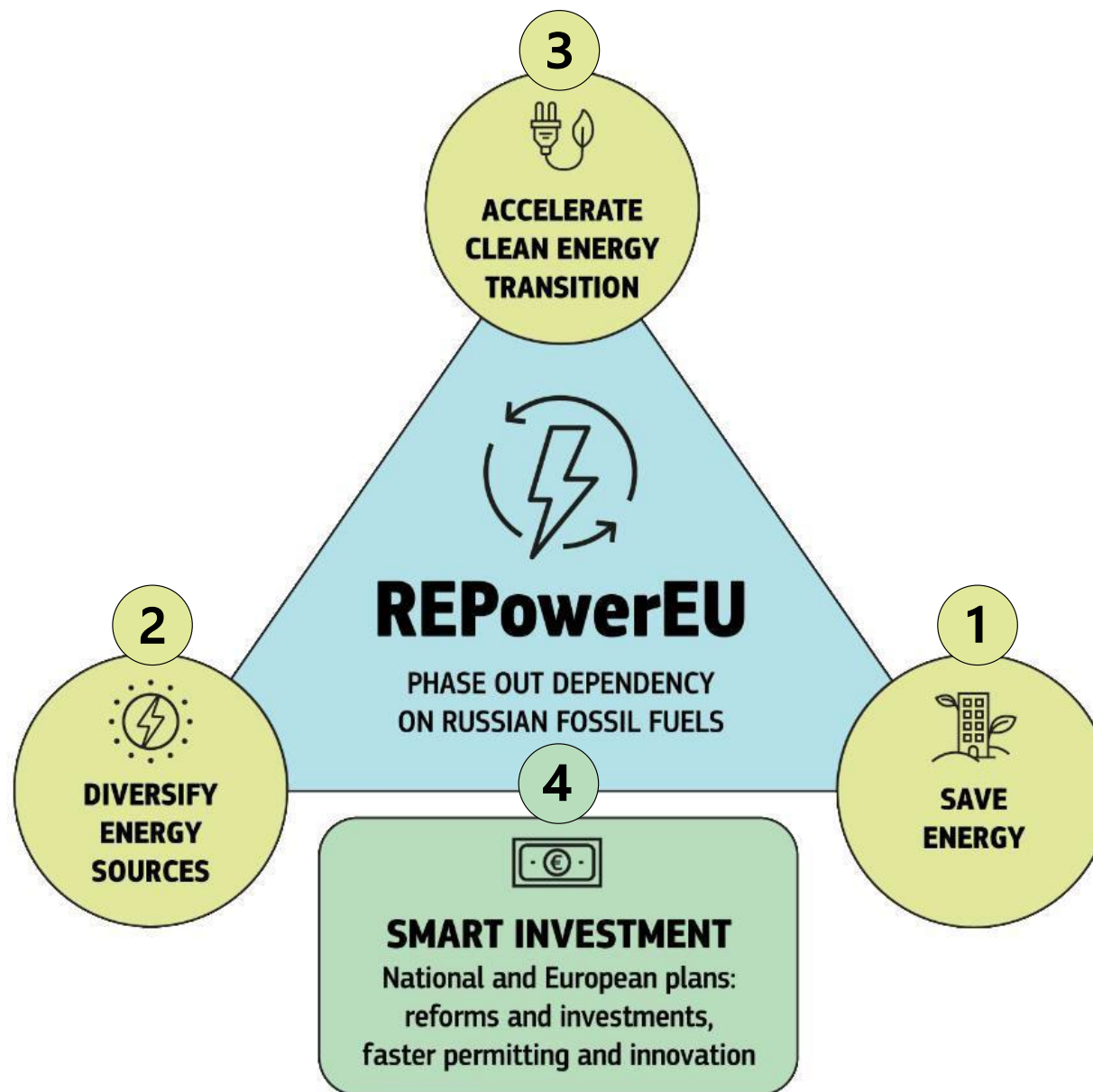
Who are we / what do we do?

We represent:

- 350+ Industry Members,
 - 29 National Associations,
 - 90+ Research organisations (through our Hydrogen Europe Research)
 - 25+ European Regions
- We represent the views and aspirations of the hydrogen and fuel cells industry in Europe.
- We promote hydrogen and fuel cells as clean and efficient technologies.
- We develop, in coordination with our members, the necessary materials, documents and position papers to achieve our mission.
- We help our members to develop their business activities in Europe.



REPowerEU: 4 Main Pillars



Pillar 3- Substituting Fossil Fuels and accelerating the clean energy transition



Boosting renewable energy (EU solar strategy, permitting)

- 45% RES target
- Solar obligations in buildings
- RES a public interest (RED changes)
- Permitting guidance
- Double up heat pumps sales in 5 years



Accelerating Hydrogen

- RED targets (from 5.6 to 9mt by 2030)
- Two Delegated Acts
- IPCEIs acceleration
- Hydrogen demand report as 2025
- 200m€ in hydrogen valleys (Clean H2 partnership) +200m€ from industry.



Biomethane and R&I

- Production target of 35bcm by 2030
- Biogas & Biomethane industrial partnership
- € 13.1bn for R&I in other partnerships (aviation, steel, rail waterborne...)



Developing a European Hydrogen grid

- TEN-E: by March 2023, a preliminary H2 infra needs
- PCI and PMI list by end of 2023 with access to CEF by 2024

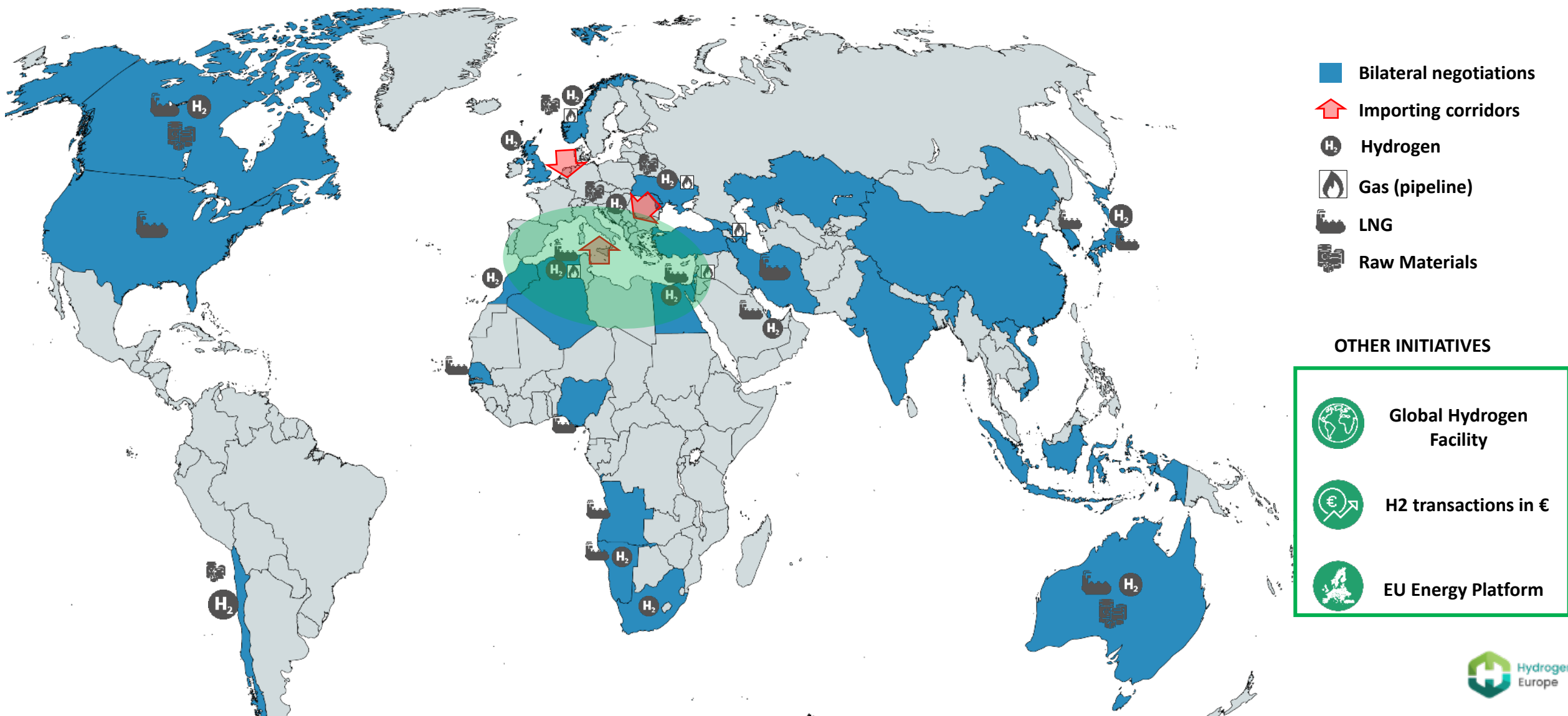


Reducing fossil consumption in hard to abate sectors

- CCFDs
- Innovation fund calls up to € 3bn:
 - Clean tech manufacturing
 - H2 in industry

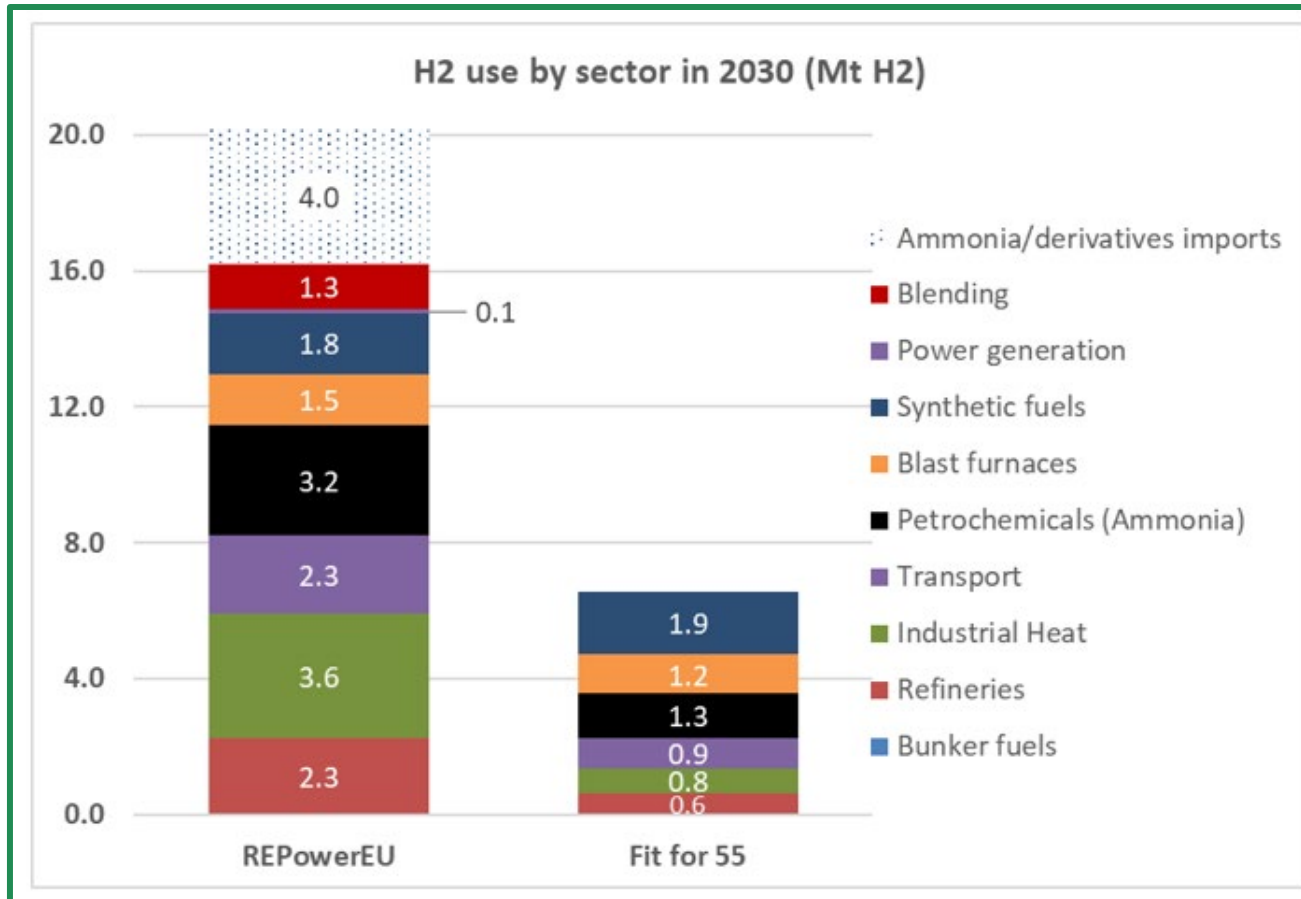
Pillar 2- Diversifying energy imports

The EU's external energy engagement on H2 after REPowerEU



Increase H2 Demand: Industry & Mobility

EC calls upon Council and EP to align the sub-targets for renewable fuels of RFNBOs in RED II



Source: Modelling using PRIMES

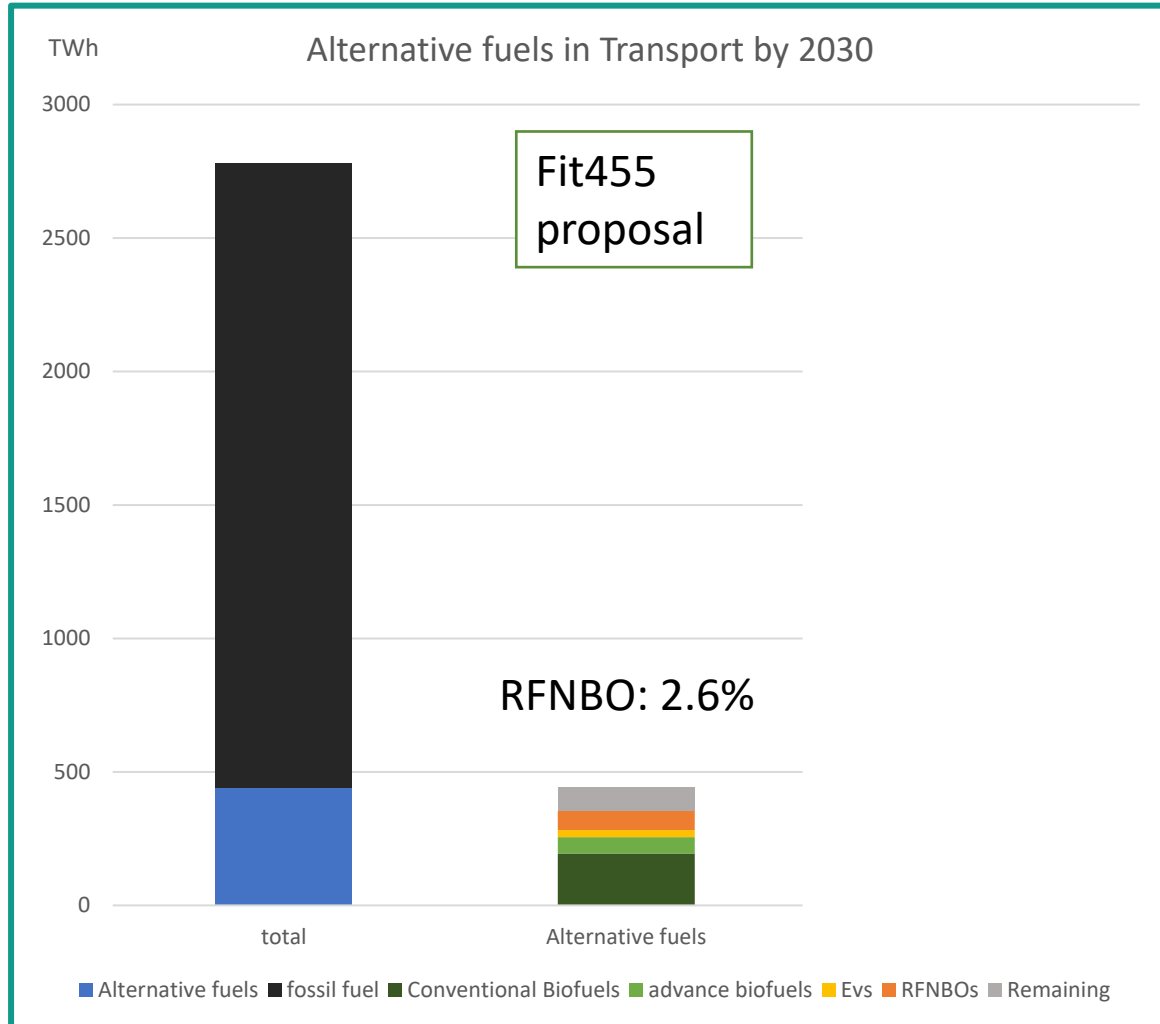
75 % for industry (an increase from 50%)

- Estimated demand by 2030: 8.4 mt (excluding refineries)
- 3.6 mt for industrial heat (x4)
- 3.2 mt in chemicals (x2.5)
- 1.5 mt in steelmaking (switch 30% steel production to hydrogen-based DRI-EAF)

5% for transport (an increase from 2.6%)

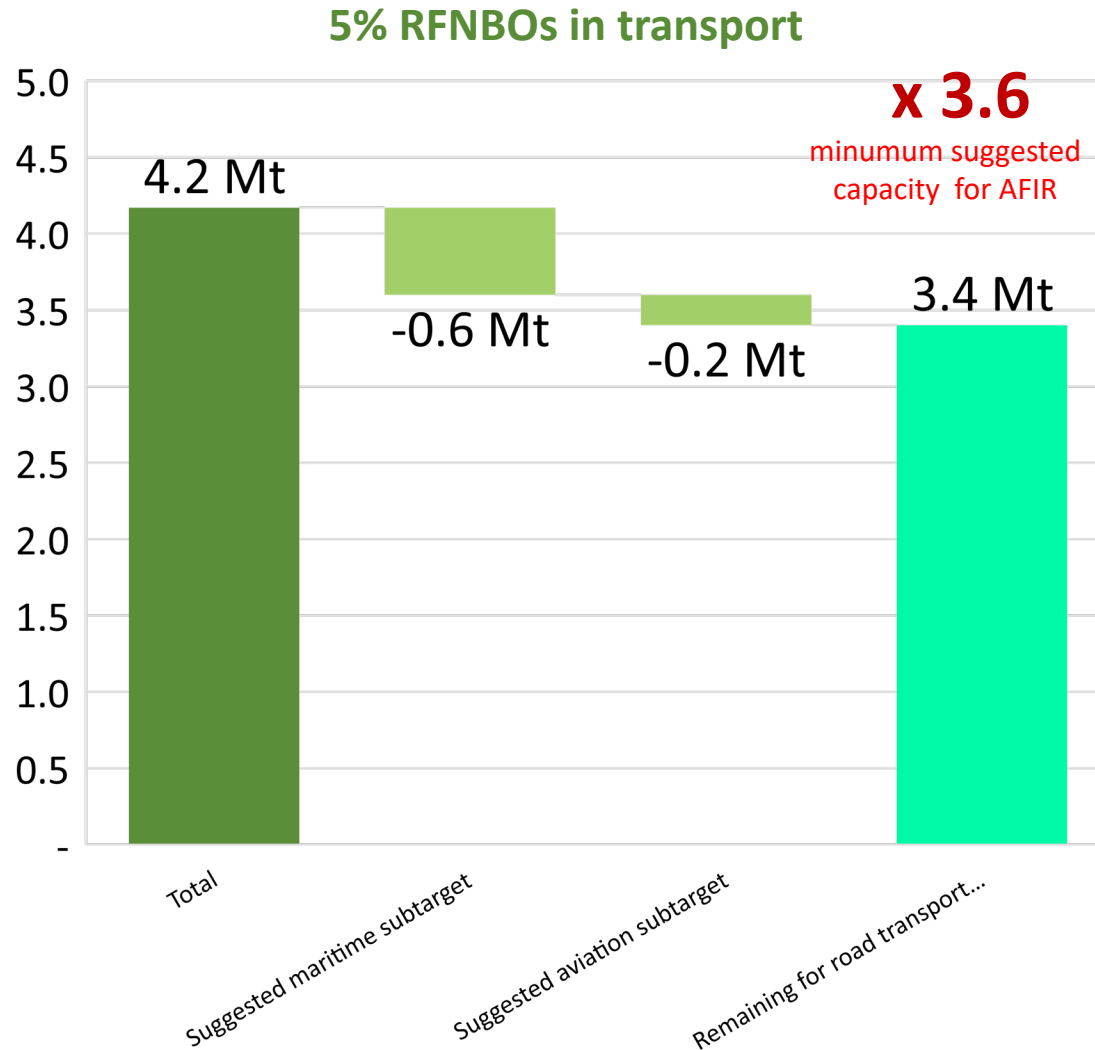
- Estimated demand by 2030: 6.4 mt (including in refineries) (x3)
- Increase the share of zero-emission vehicles
- Adopt proposals on Alternative fuels
- Adopt a legislative package on greening freight transport by 2023

H2 demand in transport



- Target: 13% GHG emission reduction.
- Plus 3 sub-targets on energy content:
 - RFNBO: 2.6% (1.2x in maritime and aviation)
 - Advance biofuels: 2.2% (1.2x in maritime and aviation)
 - Conventional biofuels: ~7%
 - EV: no target (volumes based on impact assessment)
- Mechanism allowing fuel suppliers to exchange credits for supplying renewable energy to the transport sector.
- RFNBO: 2.6% ~ 72TWh (2.2 Mton H2)
- RFNBO: 5% ~139TWh (4.2 Mton H2)

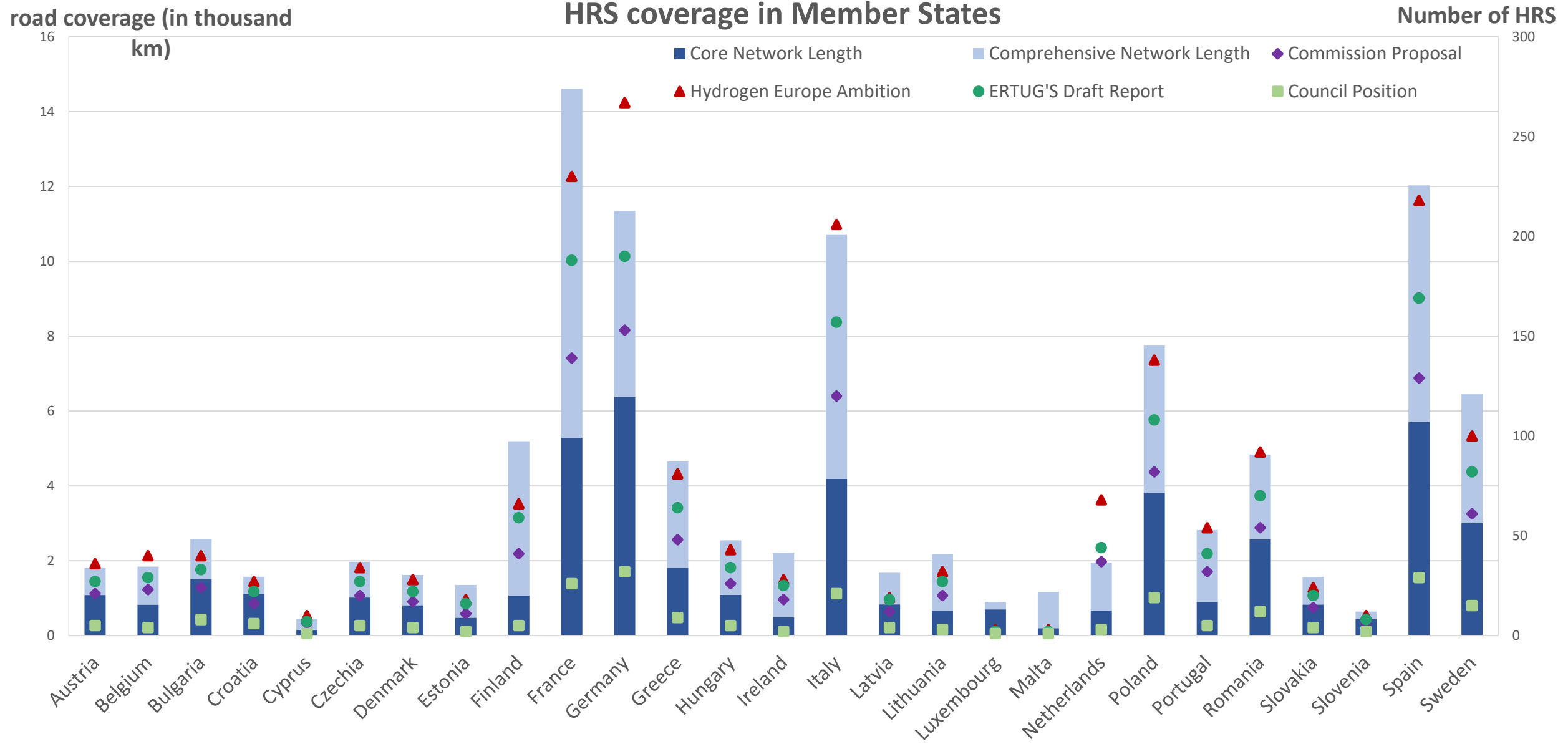
Suggested RED transport subtarget in RePowerEU



Current sub-sector targets on RFNBOs within FuelEU Maritime And REfuelEU Aviation do not match the increased ambition and strategy regarding RFNBOs in road transport

- FuelEU Maritime- proposed 6% e-fuels target
- RefuelEU aviation- 0.7% e-fuels by 2030

HRS in the EU: very different levels of ambition





Thank you for your support!



*Propelling global carbon neutrality by
accelerating the European hydrogen industry.*