

*Improving economic policy*

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# Narratives on Hydrogen

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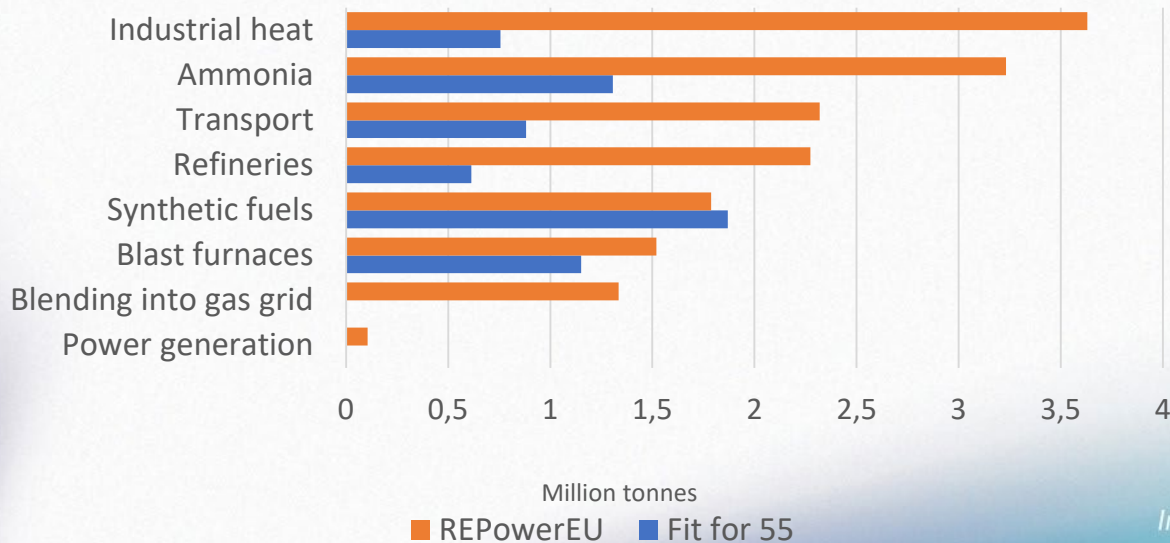
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Oslo, 12 February 2024

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# 1. What is the EU's political ambition?

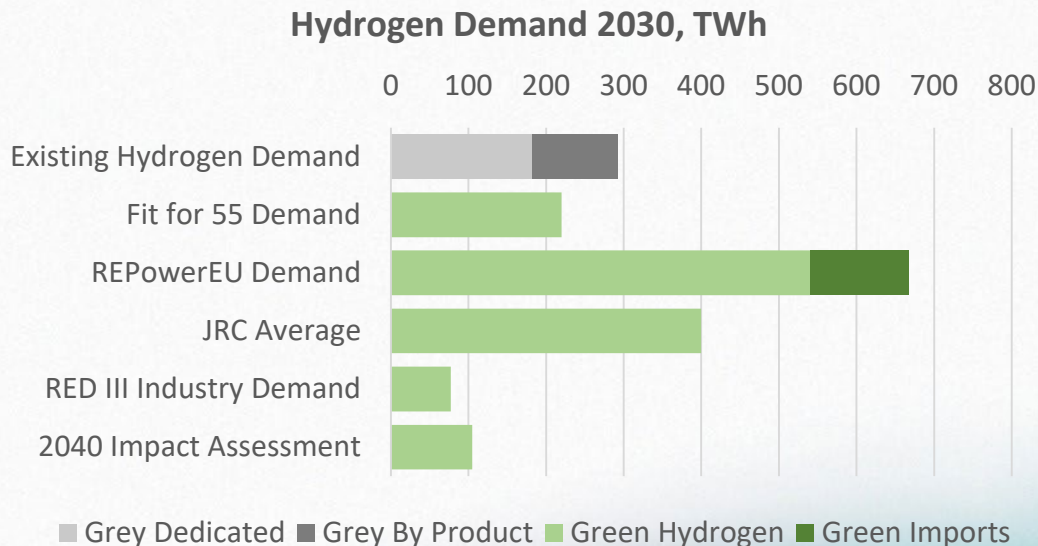


2030 Targets: energy crisis shifted discourse on hydrogen from **niche complement to electricity** to **replacing natural gas**



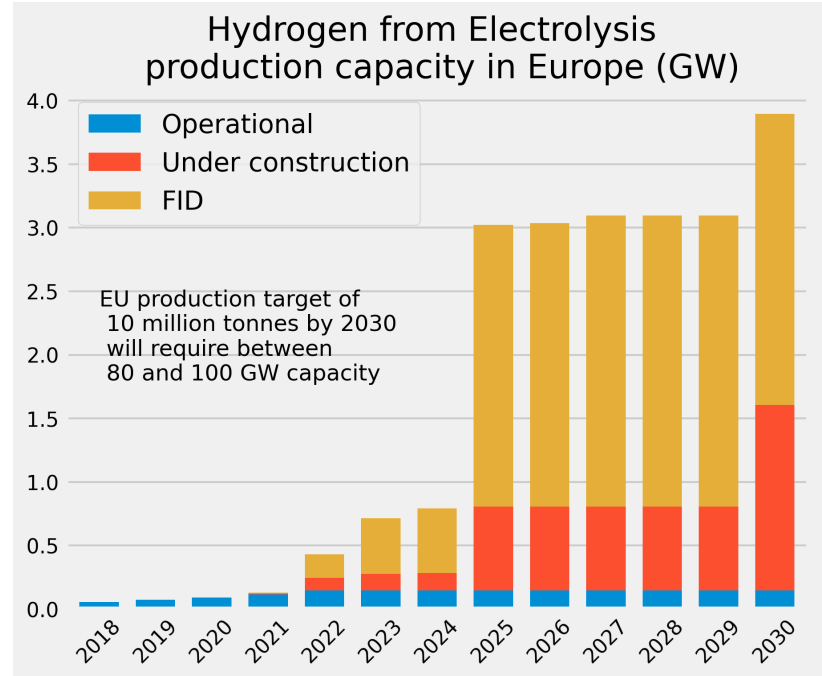
# 1. What is the EU's political ambition?

- Independent estimates are **substantially lower** than REPowerEU
- So is an estimate based on RED III industrial demand



## 2. Why do projects not take FID?

- IEA identifies 796 projects based on electrolysis hydrogen in the EU
  - 15% are operational, 5% under construction
  - 8% have taken a final investment decision
  - The remainder are *announced*, ie undertaking feasibility studies or running demos



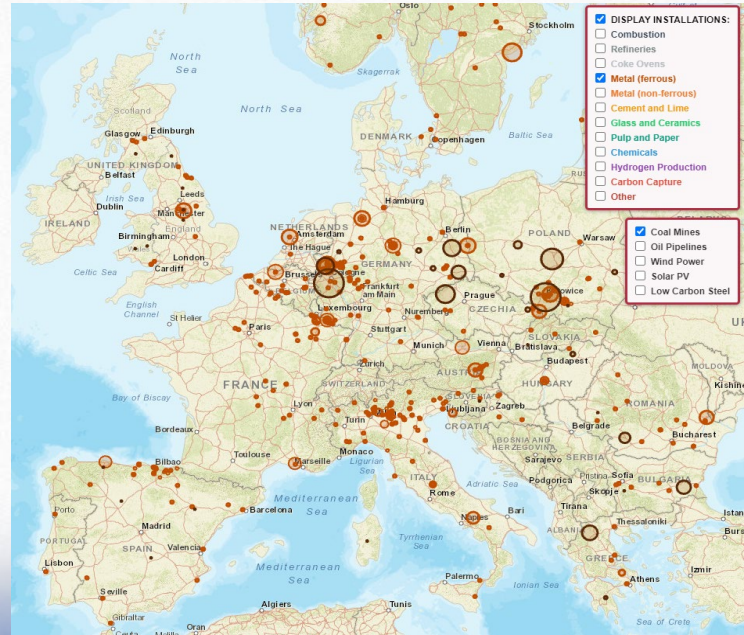
Source: Bruegel on IEA

# 3. The future geography of hydrogen



- Pure hydrogen (**pipeline**) vs derivative hydrogen (**ship**)
- Imported derivatives (eg Ammonia) **will be consumed as derivatives** (eg to make fertiliser):
  - **Ship trade is accelerating more quickly** than pipelines (Hydrogen Bank, H2Global)
- Will EU import ammonia, reduced iron, and synthetic kerosene?
- Similar question arises for trade across the EU – pure hydrogen by pipeline, or final derivatives?

Ferrous metal industry located around coal mines





# *Thank you!*

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