



Hydrogen – European strategy and progress

- 8 July 2020: The EU Hydrogen Strategy
- 11 December 2020: Council Conclusions:
 - 'Towards a hydrogen market for Europe'
- 25 January 2021: Council Conclusions:
 - Delivering on the external dimension of the European Green Deal' (Climate and Energy Diplomacy)
- 8 March 2022: The REPowerEU
- 8 May 2022: REPowerEU Plan
 - Hydrogen Accelerator
 - EU External Energy Strategy
- 16 March 2023: European Hydrogen Bank
 - Communication



EU Hydrogen Strategy

A roadmap to 2050

2024

- 6 **GW** of renewable hydrogen electrolyzers
- Replace **existing hydrogen production**
- Regulation for liquid hydrogen markets
- Start planning of hydrogen infrastructure
- Production of 1 mio tonnes

2030

- **40 GW** of renewable hydrogen electrolyzers
- New applications in **steel and transport**
- Hydrogen for electricity balancing purposes
- Creation of "Hydrogen Valleys"
- Cross-border logistical infrastructure

2050

- Scale-up to **all hard-to-decarbonise sectors**
- Expansion of hydrogen-derived **synthetic fuels**
- EU-wide infrastructure network
- An open international market with € as benchmark

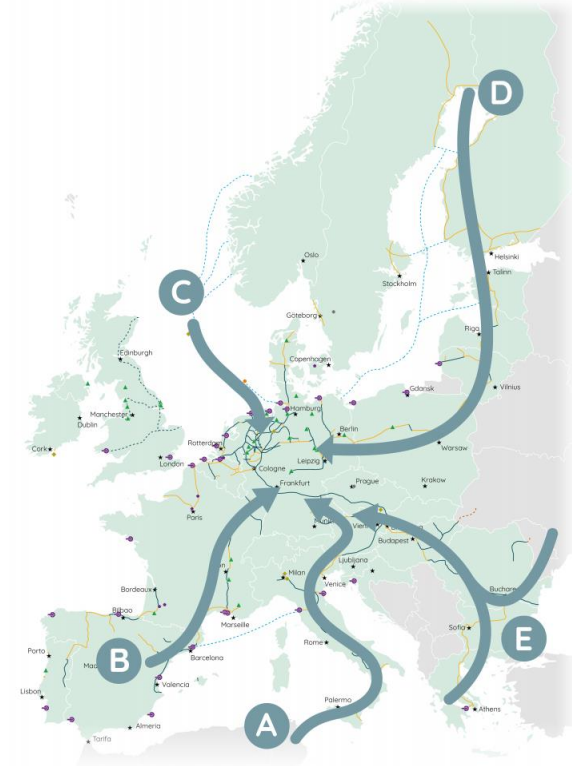
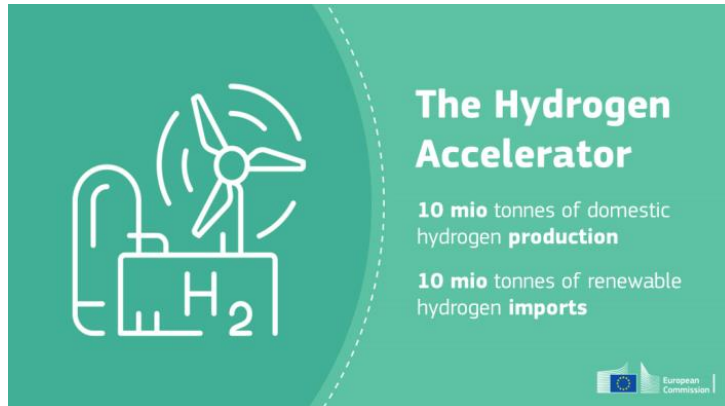
Installed electrolyser capacity in EU

- End of 2022: appr. 236 MW
- End of 2023: appr. 2 GW (exp.)

Hydrogen import corridors

To enable the import of 10 Mt of renewable hydrogen by 2030

- By 2030, five pan-European hydrogen supply and import corridors could emerge
- connecting industrial clusters, ports, and hydrogen valleys to regions of abundant hydrogen supply



- **Strategic natural gas suppliers/decarbonisation partners:**
 - Morocco MoU on Green Partnership, signed on 18 October 2022
 - Egypt MoU on Renewable Hydrogen, signed on 16 November 2022
- **Raw material suppliers: MoUs on Raw Materials and Renewable Hydrogen:**
 - Kazakhstan signed on 7 November 2022
 - Namibia signed on 8 November 2022
- **Hydrogen importer, technology partner:**
 - Japan MoU on Hydrogen cooperation signed on 2 December 2022

Southern H2 Corridor as PCI candidate

Italy, Germany and Austria support the project

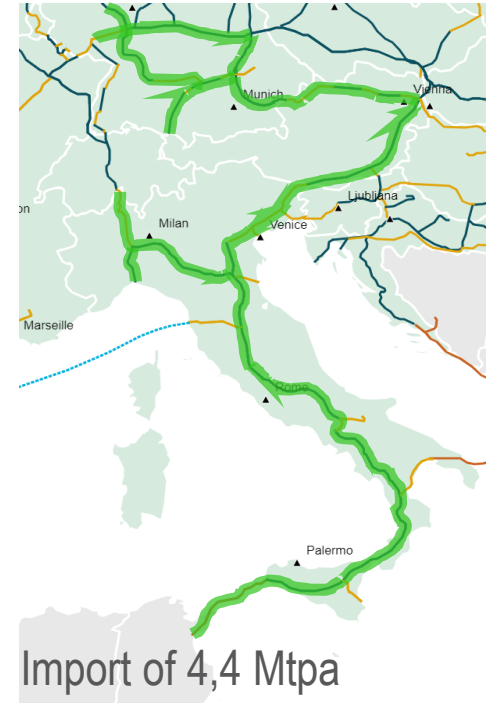
- > Energy ministries of AT, DE and IT signed a joint letter of support for the development of a "Southern H2 Corridor" in early May 2023

PCI candidates – Southern H2 Corridor

Investment Project Main Information

PRJ Code	PRJ Name	Code	Project Name	Country	Promoter
PRJ-G-227	Hydrogen Interconnection Italy Austria	HYD-N-1205	Italian H2 Backbone	Italy	Snam Rete Gas S.p.A.
PRJ-G-227	Hydrogen Interconnection Italy Austria	HYD-N-986	H2 Readiness of the TAG pipeline system	Austria	Trans Austria Gasleitung GmbH (TAG GmbH)
PRJ-G-240	Hydrogen Interconnection Austria-Germany	HYD-N-642	HyPipe Bavaria – The Hydrogen Hub	Germany	bayernets GmbH
PRJ-G-240	Hydrogen Interconnection Austria-Germany	HYD-N-757	H2 Backbone WAG – Penta West	Austria	GAS CONNECT AUSTRIA GmbH

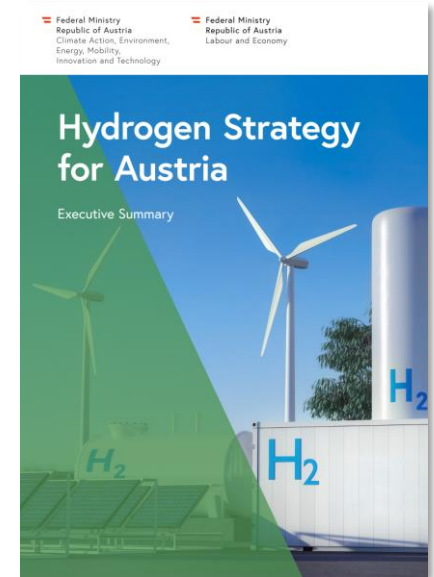
Source: [ENTSOG](#)



Hydrogen Strategy for Austria

Development of a hydrogen infrastructure

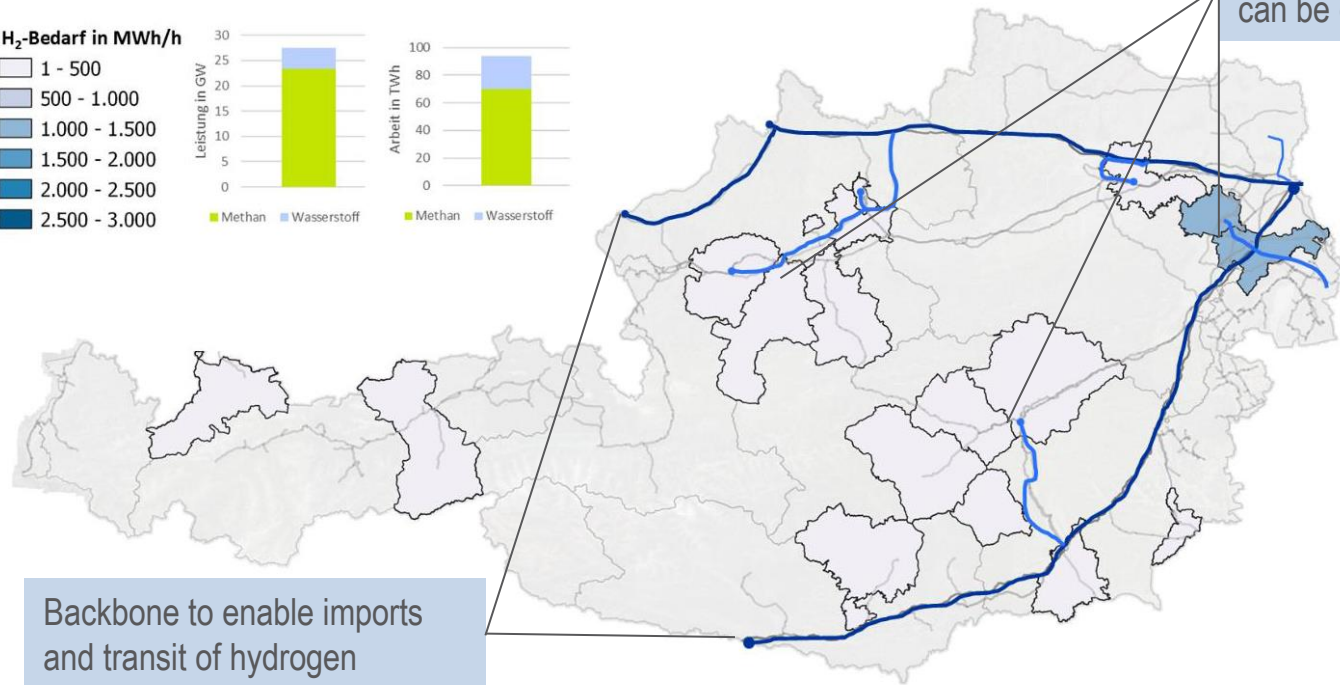
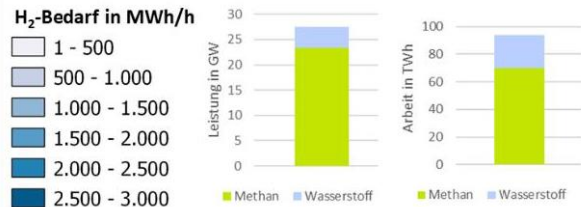
- **Target of the strategy**
 - Gradual conversion of the gas infrastructure into a hydrogen infrastructure
 - “Gas infrastructure 2040” study ongoing
- **Network operators developed a hydrogen roadmap**
 - Part of the work on the gas network development plans
 - Robust demand assessment: bottom-up demand survey
 - Various supply scenarios
 - Hydraulic simulation -> Determination of required new-built and repurposed pipelines



Austrian Hydrogen Backbone – 2030

TAG and WAG are central elements for a hydrogen backbone in Austria

Abbildung 2: H₂ Roadmap 2030



Industrial clusters in Austria can be connected to backbone

Backbone to enable imports and transit of hydrogen

Legal framework needed...

... to lay down the framework for the European hydrogen market

- 6th PCI list will include a number of hydrogen infrastructure projects
 - CEF funding for these projects will be key
- Delegated Acts outlining detailed rules on the EU definition of renewable hydrogen published on 20 June 2023
 - Defines under which conditions hydrogen, hydrogen-based fuels or other energy carriers can be considered as renewable fuels of non-biological origin (RFNBOs)
 - Methodology for calculating life-cycle greenhouse gas emissions for RFNBOs
- Agreement on RED III to introduce quota for industry
 - 42% of the hydrogen used in industry should come from renewable fuels of non-biological origin (RFNBOs) by 2030 and 60% by 2035
- Decarbonisation Package expected until the end of 2023



