Hydrogen Blending in National Hydrogen Strategies: Status in UNECE countries

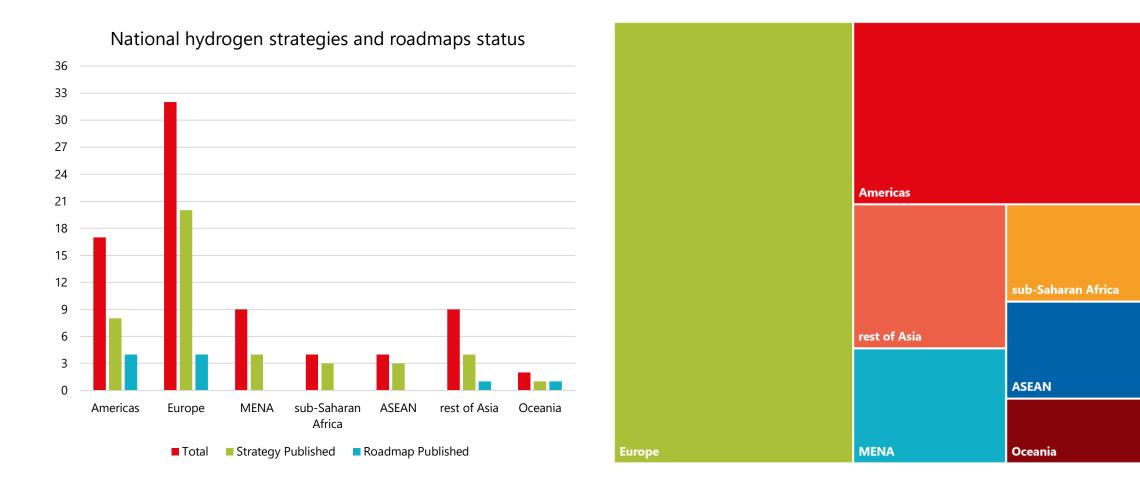
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> > April 5, 2024

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# National hydrogen strategies & roadmaps: 77 in total, 53 are published



Source: IRENA, 2024 (forthcoming)

# UNECE: 25 strategies published, 11 strategies being drafted



*Source: author's assessment based on IRENA, 2024 (forthcoming)* 

# UNECE: 16 national strategies mention H2 blending, with roughly half focusing on it

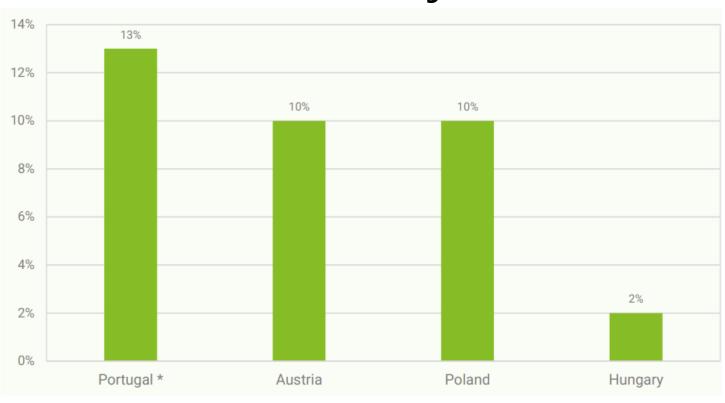


Source: author's assessment based on IRENA, 2024 (forthcoming)

# Some EU countries are setting ambitious H2 blending targets as early as 2030

2024



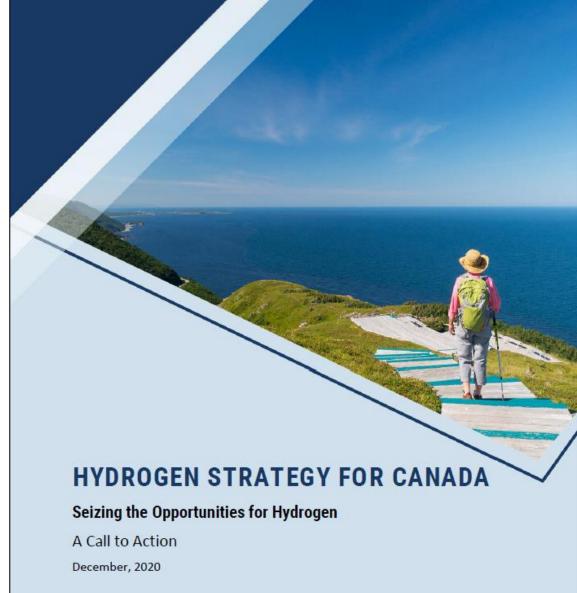


2030 target

Source: Clean Hydrogen Partnership, 2024

#### Cases: Canada

- *"Hydrogen injection and quality standards* [for pipelines] *have yet to be established in Canada and elsewhere in North America, and development of these standards is a critical step in enabling hydrogen blending in Canadian Provinces and Territories. Interprovincial coordination is required given that pipelines cross borders in some cases."*
- In the near term (2020-25) regional HUBs will be strongly influenced "by pilot results, codes, standards and regulatory approvals for blending hydrogen and natural gas to decarbonize the utility distribution system"



#### Cases: UK

- The government has decided (December 2023) to support blending up to 20% hydrogen into GB gas distribution networks under certain strategic circumstances.
- Ongoing industry trials aim to gather evidence on the safety of blending hydrogen into the networks.
- Once the safety assessment is complete, the government will decide whether to enable blending, considering feasibility and economic factors
- Enabling of blending may require changes to be made to the Uniform Network Code (UNC)

Department for Energy Security & Net Zero

#### Hydrogen Blending into GB Gas Distribution Networks: Government Response to Consultation

Summary of responses received and government response to consultation on hydrogen blending into GB gas distribution networks

### Conclusions

- 1. UNECE member countries, primarily those in the EU, have published approximately half of the world's existing hydrogen strategies.
- 2. This exerts influence on surrounding regions, including MENA, South America, ASEAN, and Central Asia.
- 3. Sixteen national strategies among UNECE countries mention hydrogen blending, with roughly half emphasizing its importance.
- 4. Ambitious plans for increasing H2 blending are evident in the strategies of EU members, Canada, and the UK.
- 5. National strategies clearly focus on international standardization in the first phase (before 2025), making it prudent to initiate collaborative efforts in UNECE with a focus on the eight leading countries.

### Questions?

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