EU’s energy sector integration and hydrogen strategies

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SNETP Forum

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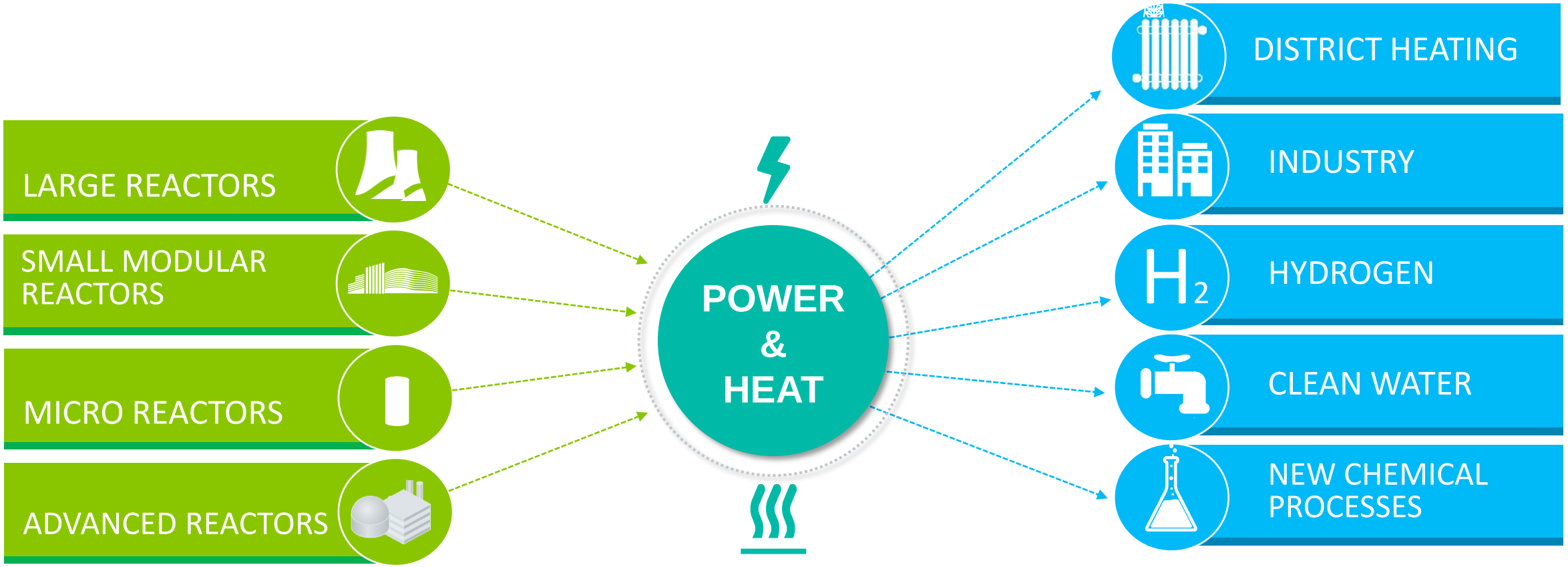
Nuclear and energy sector integration



FORATOM responded to the 2020 consultation promoting capabilities of nuclear reactors to provide:

- low-carbon electricity for hydrogen production,
- heat for industrial processes and
- district heating

Clean, affordable and secure energy: EU hydrogen strategy

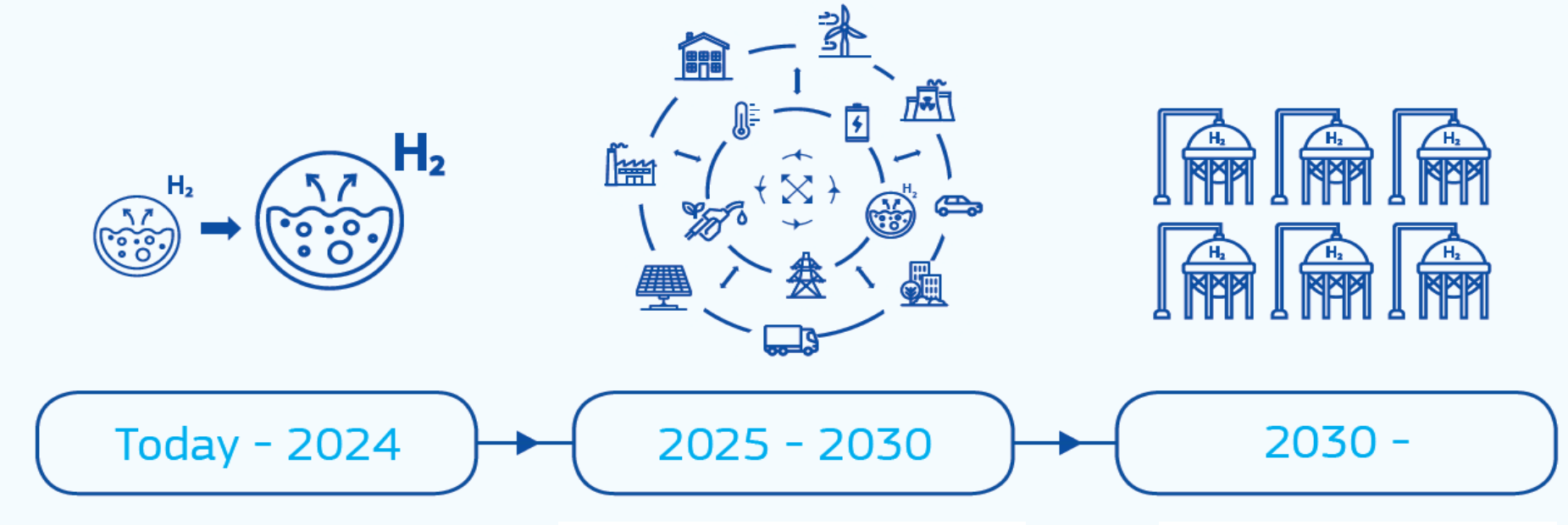
FORATOM's main points of the response to the consultations:

- The classification of hydrogen should be done based on a detailed life-cycle assessment of the carbon intensity of the source used to produce it.

- Instead of referring to renewable hydrogen (or green hydrogen), we believe the most accurate term should be low-carbon or decarbonised hydrogen, which would include all low-carbon sources such as nuclear.

- With nuclear complementing variable renewables (wind and solar) in supplying power for low-carbon hydrogen production, this will ensure a quasi-baseload electrolyser which will trigger decreasing production costs

A hydrogen strategy for a climate-neutral Europe

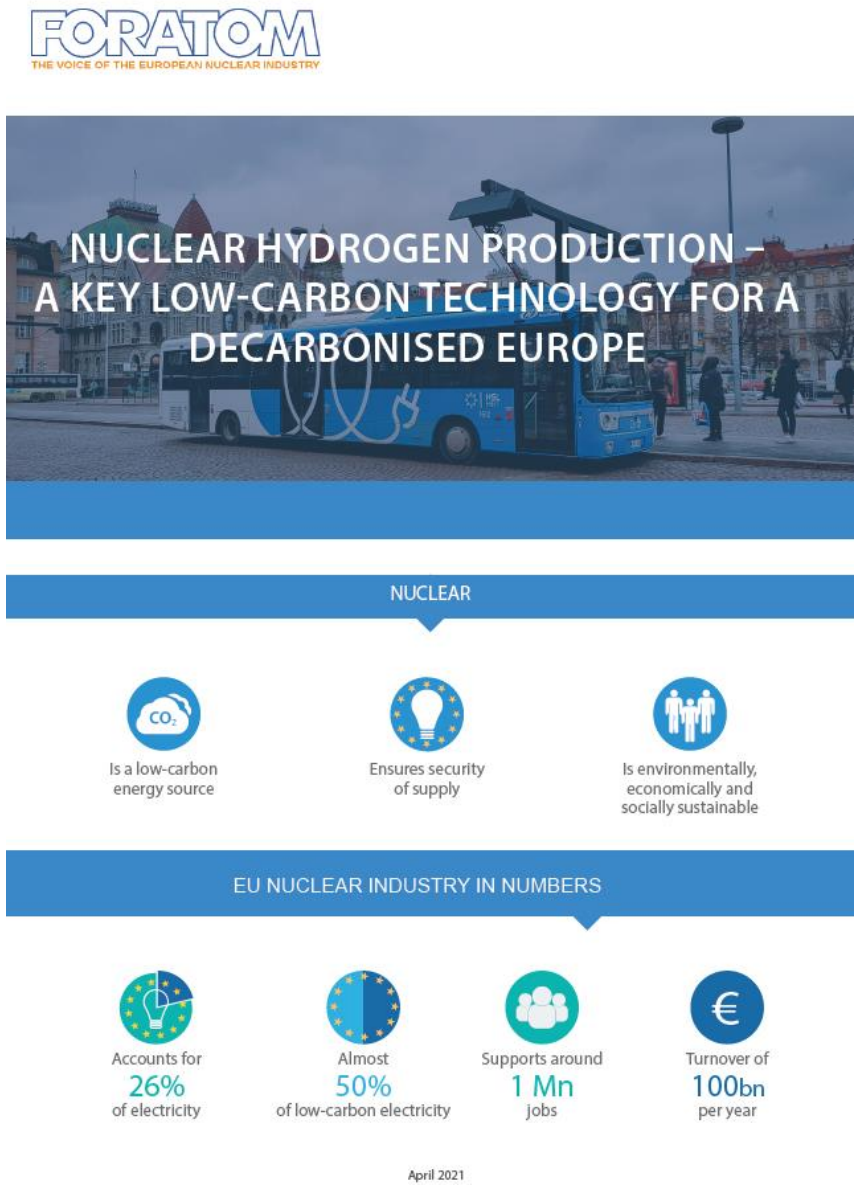


From now to 2024, we will support the **installation of at least 6GW of renewable hydrogen electrolysers in the EU**, and the production of **up to 1 million tonnes** of renewable hydrogen.

From 2025 to 2030, hydrogen needs to **become an intrinsic part of our integrated energy system**, with at least 40GW of renewable hydrogen electrolysers and the production of **up to 10 million tonnes** of renewable hydrogen in the EU.

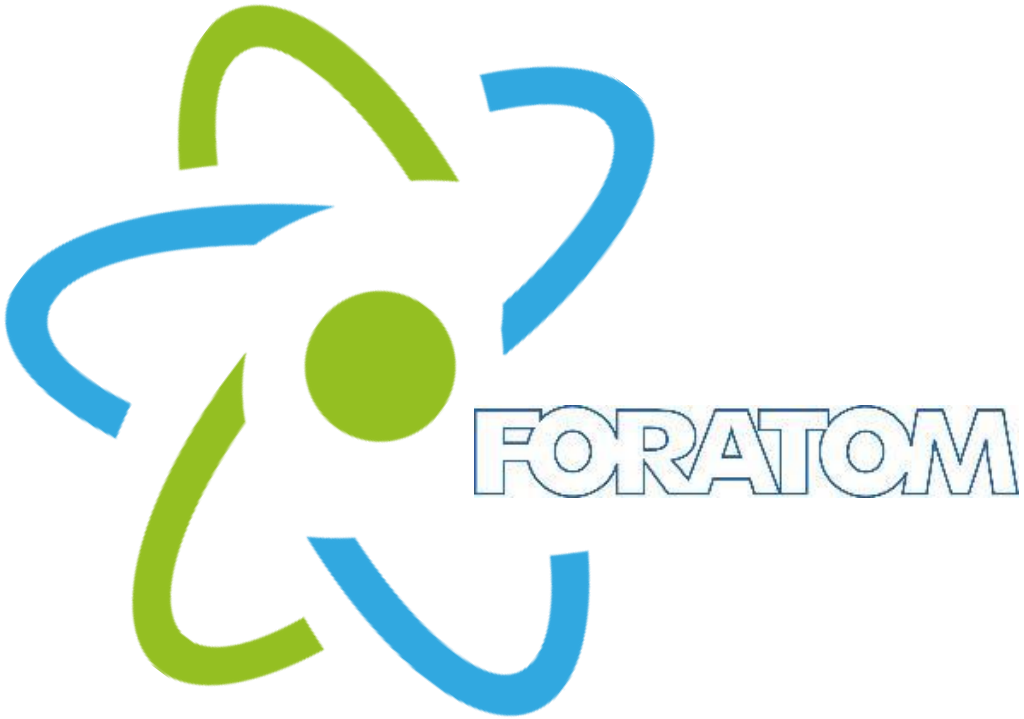
From 2030 onwards, **renewable hydrogen will be deployed at a large scale** across all hard-to-decarbonise sectors.

FORATOM's position paper on hydrogen



- **The main points of the paper are:**
  - Context
  - Key technologies for the hydrogen economy and the role of nuclear energy
  - Economic and operational features of hydrogen production
  - Hydrogen Certification System
  - Policy recommendations
- Position paper and background paper released on 4 May 2021 with an article in #NuclearEurope
- Main point – of FORATOM's opinion: A sustainable and economic hydrogen economy cannot succeed without significant reliance on low-carbon category (electrolysis using nuclear power)

Thank you for your attention



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