



BENELUX HYDROGEN STUDY

CONTEXT

The European Union is accelerating its transition to a green and inclusive hydrogen economy. In its REPowerEU strategy, the European Commission has set itself the objective of producing 10 million tons of renewable hydrogen in Europe and importing 10 million tons of renewable hydrogen by 2030.

Within the European Union, the Benelux countries and neighboring regions play a key role in the development of hydrogen. To achieve these goals, it is necessary to be able to estimate the market for hydrogen demand, production, infrastructure needs, storage facilities and imports. Furthermore, political measures must be taken quickly, and regional cooperation must be strengthened.

MAIN RESULTS OF THE STUDY

The hydrogen study shows that **by 2030, within the European Union, the Benelux and the six neighboring regions will represent the following:**

- **Import:** 67% of hydrogen imports
- **Production:** 15% of hydrogen production
- **Infrastructure:** 24% of pipeline length
- **Storage:** 31% of storage needs and 26% of storage potential
- **Industry:** 41% of hydrogen demand for chemicals and 35% of hydrogen demand for steel

The study highlights that the Benelux countries and neighboring regions are dominant in 3 key sectors: steel production, chemical production and (heavy) transport.

RECOMMENDATIONS OF THE STUDY

- Strengthened, **collective voice** towards influencing EU legislation and promoting the region
- Promoting **collaboration** along the hydrogen value chain
- Streamlined and **fast-track procedures** by speeding up the permitting process
- Paving the transition path by accelerating deployment of a **cross-border hydrogen backbone**
- Kick-start the development of an **integrated hydrogen market** by harmonizing system requirements, safety protocols, standards and hydrogen quality for H2 transport and consumption
- Uniform approach for establishing **hydrogen refueling infrastructure** by harmonizing payment systems, HRS interoperability, homologation requirements and permitting rules
- Advance the development of an **integrated hydrogen market** by providing the means for barrier-free flow of hydrogen from production point to the end-user location through the use of the Benelux legal instruments
- Economic activities & education by promoting new economic activities related to hydrogen development; and by implementing diplomas and certificates that are accepted and recognized across the Benelux region

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Benelux
SECRETARIAAT-GENERAAL
SECRETARIAT GÉNÉRAL

STUDY

CROSS-BORDER HYDROGEN VALUE CHAIN IN THE BENELUX AND ITS NEIGHBOURING REGIONS
IDENTIFYING AND CONNECTING RENEWABLE HYDROGEN DEMAND AND SUPPLY VIA THE CROSS-BORDER HYDROGEN BACKBONE

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