



International Partnership
for Hydrogen and Fuel Cells
in the Economy

Republic of Korea Update

41st IPHE Steering Committee Meeting

19 - 20 March 2024

New Delhi, India

Announcements / New Initiatives *Republic of Korea*

• Investments/Funding/Policies/Initiatives

1. Clean Hydrogen Certification Mechanism launched (January 2024)

- Proposed threshold: $\leq 4\text{kgCO}_2\text{eq/kgH}_2$ (well-to-gate)
 - Emissions from transportation (international shipping), ammonia processing, etc.: not counted
- 4 classes of clean hydrogen ($\text{kgCO}_2\text{eq/kgH}_2$): **0~0.1 / 0.1~1 / 1~2 / 2~4**
- Eligible pathways: those that contribute to meeting the national GHG reduction target
- Preliminary review consulting & exemplary certification (this year), issuing of certificates (2027)

2. Second year of Clean Hydrogen Portfolio Standard (2H 2024)

- Launch of **Clean hydrogen section (3.5 TWh)** and third round of General hydrogen section (1.3 TWh)
- Eligibility for the clean section: generators with clean hydrogen supply contracts
 - Including contracts with results from preliminary review consulting

Announcements / New Initiatives *Republic of Korea*

• New Research & Development, Demonstration and/or Deployment Activities

1. Deployment of **Commercial FCEVs** (December 2023)

- Targets: 21,200 FC busses, 280 liquid hydrogen refueling pumps by 2030
- Support for purchase (forklifts, garbage trucks), FC replacement, etc.

2. Hydrogen **Storage/Transport Industry Cluster** in Gangwon State (December 2023)

- Government funding of 240 million USD in total (5 years starting from 2024)
- Establishing infrastructure for testing labs, demonstration projects, etc. of storage and transport

3. First **Hydrogen Liquefaction Plant** (January 2024)

- 5ton/day capacity to supply nearby research labs, companies and HRS
- Joint investment (72 million USD) by Doosan Enerbility, Province of Kyoungnam, City of Changwon

Republic of Korea – Profile December 2023

Status of Deployments (Dec. 2023)

- ✓ Stationary FC: **1,057MW**
- ✓ FCEV: **34,258**
- ✓ FC Bus: **651**
- ✓ HRS: **286**

Leading Government Initiatives

3-Up* policy package

* Scale-up, Build-up, Level-up

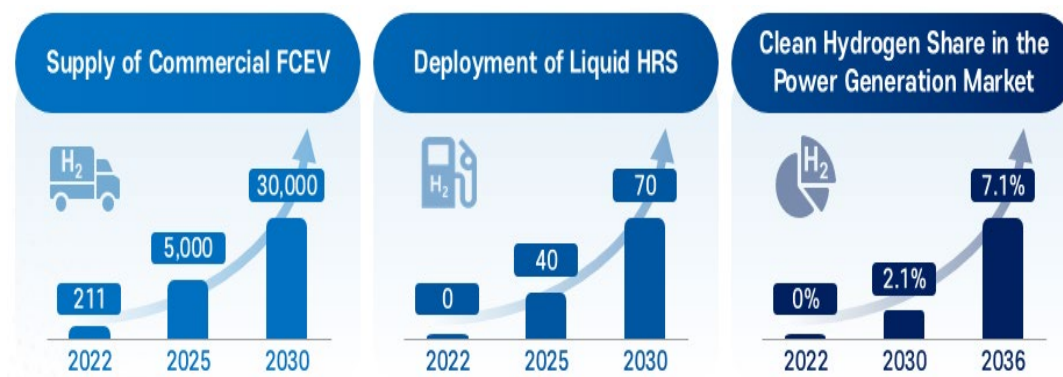
backed by

Hydrogen Economy Promotion and Hydrogen Safety Management Law (Feb. '20)

Goals or Focus Areas

- Huge demand creation
- Demand-based **distribution infrastructure**
- Clean hydrogen **supply chain** establishment
- Institutional foundation for **hydrogen market**

Deployment Goals



Funding

- **Mobility subsidy budget:** 620.9B KRW (473M USD)
- **Hydrogen, FC R&D budget:** 120.1B KRW (91M USD)

Thank you



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