



International Partnership
for Hydrogen and Fuel Cells
in the Economy

Republic of Korea Update

37th IPHE Steering Committee Meeting

26 – 27 April 2022

Virtual Meeting

Announcements / New Initiatives Republic of Korea

• Investments/Funding/Policies/Initiatives

1. Announced “**Basic Plan for Implementing the Hydrogen Economy of Korea** (Nov. 2021)”
 - Revision of the 'Hydrogen Economy Roadmap' announced in 2019
 - Established a comprehensive strategy for the entire life cycle of clean hydrogen production-distribution-utilization
 - Set targets of 3.9 million tons of hydrogen supply in 2030 and 27.9 million tons of hydrogen supply in 2050
2. Launched “**Hydrogen Economy Council of Energy Public Institutions**” to efficiently implement the "Basic Plan for Implementing the Hydrogen Economy of Korea.” (Jan. 2022)
3. **Hydrogen Safety Management Law** (part of the Hydrogen Law enacted in 2020) is officially enforced (Feb. 2022)
 - Started operation of permission and registration system for manufacturing hydrogen products such as hydrogen production facilities and fuel cells, and safety inspection
4. Launched “**Public-Private Joint Research Group for Hydrogen and Ammonia Power Generation Demonstration**”(Nov. 2021)
5. **Waiver of Regulation** on a demonstration project for hydrogen charging and flight test of **hydrogen aircraft mobility** (Feb. 2022)

Announcements / New Initiatives **Republic of Korea**

- **New Research & Development, Demonstration and/or Deployment Activities**

- A demonstration project for 10MW water electrolysis (Dec. 2022)
- Establishment of a hydrogen charging station using a biogas (Mar. 2022)
- A demonstration project for hydrogen forklift (60 units) (Apr. 2022)
- Clean Hydrogen Certification System to be established by 2024 (System design research in progress from Nov. 2021)

- **Key Collaborations**

- SK E&S and Plug Power established a joint venture called “HALO HYDROGEN” to enter the Asian hydrogen market (Jan. 2022)
- International Forum on **Clean Hydrogen Trade Initiative** to be held in Korea (Jun. or Jul. 2022, TBD)

- **Other**

- Opened a supporting center for product safety throughout the entire cycle of the hydrogen industry (Feb. 2022)

Republic of Korea – April 2022

Status of Deployments (as of 2021)

- ✓ Stationary FC: **767MW**
- ✓ FCEV: **19,270**
- ✓ FC Bus: **129**
- ✓ HRS: **170**

Leading Government Initiatives

Basic Plan for Implementing Hydrogen Economy
backed by
Hydrogen Economy Promotion and Hydrogen
Safety Management Law (Feb. '20)

Deployment Goals

	2030	2050
FCEV Production	0.88 million	5.26 million
HRS	310	2,000+
H ₂ Power Generation	48TWh (7.84%)	288TWh (23.8%)
H ₂ Supply	3.9MMt	27.9MMt

Goals or Focus Areas

- Clean H₂ production RD&D
- Strengthening Hydrogen ecosystem competitiveness
- Expansion of infrastructure by easing regulatory barriers
- Establishment of safety management system

Funding

- **2022 Budget : 3,04.9B KRW (2.466B USD)**

Thank you



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