



INTERNATIONAL PARTNERSHIP FOR HYDROGEN AND FUEL CELLS IN THE ECONOMY

IPHE Country Update June 2020: Republic of Korea

Name	LEE, Ho-Mu
Contact Information	hmlee@keei.re.kr , +82-52-714-2279
Covered Period	February – June, 2020

1. New Initiatives, Programs, and Policies on Hydrogen and Fuel Cells

Ministry of Trade, Industry and Energy (MOTIE) released the 5th Community Energy Supply Basic Plan. It includes policy measures to encourage community energy suppliers to use fuel cells such as applying fast track approval procedures to fuel cell installation in existing community energy facilities or sites.

Three ministries, including MOTIE, sealed a “Memorandum of Understanding on Demonstration of Hydrogen Fuel Cell Trucks Deployment” with Hyundai Motors and major domestic logistics businesses. The demonstration project will be ready by the end of 2020 and implemented for the following 2 years.

2. Hydrogen and Fuel Cell R&D Update

The government plans to demonstrate MW-scale renewable energy-fed water electrolysis technology starting 2020.

KEPCO embarked on a “P2G technology development for storing and transforming renewable energy” project, aiming at demonstration of 2MW PEM-alkaline hybrid electrolysis system.

3. Demonstration, Deployments, and Workforce Developments Update

The government implements the following “Hydrogen Industry Promotion Projects”:

- “Hydrogen Model City Project” is to build hydrogen model cities in Ulsan, Ansan and Wanju-Jeonju area by 2022. In the city of Ulsan, a model city with an area of 5.87km² is to be developed on a total budget of 39.1 billion KRW (USD32.6M). Various hydrogen technologies (residential, transportation, industrial, etc.) will be introduced in the model city.
- “Hydrogen Green Mobility Regulation-free Special Zone Project” is expected to allow for demonstration of hydrogen-based mobility technologies.
- “Hydrogen Integrated Mobility Cluster Establishment Project” is to establish a hydrogen-based mobility cluster in selected regions, integrating local major industries such as automobile, ship-building and chemistry (conditional on preliminary feasibility study to be completed by the first half of 2021).

4. Events and Solicitations

MOTIE, in cooperation with Korea Energy Economics Institute (KEEI) and Korea Energy Agency (KEA), is due to host “2020 Korea Energy Transition Week” in Seoul from October 21 to 23. There will be a hydrogen session with the theme of “Role of Green Hydrogen in Completing Energy Transition”. The “2020 Energy Transition International Conference” and related exhibitions will take place in parallel.



INTERNATIONAL PARTNERSHIP FOR HYDROGEN AND FUEL CELLS IN THE ECONOMY

5. Investments: Government and Collaborative Hydrogen and Fuel Cell Funding

With an intent to gain a new growth momentum, MOTIE intends to invest additional 6.9Billion KRW (USD57.5M), as a part of the national green new deal package in the remaining half of 2020. Green hydrogen production and storage R&D support program and hydrogen safety enhancement project are included in MOTIE's proposal.

6. Regulations, Codes & Standards, and Safety Update

Recent deregulation cases: rationalization of hydrogen refuelling station (HRS) safety criteria, permission of multi-story HRS, relaxation of HRS building restriction in development restriction zones, permission of HRS in industrial complexes.



Summary Country Update June 2020: Republic of Korea

Transportation	Target Number	Current Status (May 2020)
Fuel Cell Vehicles ¹	2,900,000 (excl. export) by 2040	7,314
FC Bus	40,000 (excl. export) by 2040	15
Fuel Cell Trucks ²	30,000 (excl. export) by 2040	1 (May 2020)
H ₂ Refueling Stations	Target Number	Current Status
H2 Station	1,200 by 2040	39

¹ Includes Fuel Cell Electric Vehicles with Range Extenders

² As above