

Transportation Hydrogen Supply Reviewed as Resource Security Alert Escalates

- Transportation hydrogen supply and demand review meeting held... Domestic transportation hydrogen supply operating normally

The Ministry of Climate, Energy, and Environment (MCEE, Minister Kim Sunghwan) announced that it will hold a meeting to review the supply and demand status of transportation hydrogen related to the Middle East war on the afternoon of April 7 at a conference room in the Centerpoint Gwanghwamun Building (located in Jongno-gu, Seoul).

This inspection meeting was arranged to proactively review the supply and demand status of transportation hydrogen used in hydrogen vehicles, such as hydrogen buses, following the escalation of the crude oil resource security alert from “Caution” to “Alert” and the natural gas alert from “Attention” to “Caution” starting April 2.

The meeting, chaired by Second Vice Minister Lee Hohyeon of the MCEE, will be attended by around 20 companies and hydrogen-related organizations, including relevant ministries such as the Ministry of Land, Infrastructure and Transport, △petrochemical companies (SK Incheon Petrochem, Lotte Chemical, LG Chem), by-product hydrogen suppliers (SKI E&S, Approtium, Deokyang Energen, etc.), reformed hydrogen suppliers (Korea Gas Corporation, Korea Gas Technology Corporation, Hyosung, Linde, Capro, etc.), hydrogen refueling station operators (HyNet, Kohygen), hydrogen vehicle manufacturer (Hyundai Motor Company), and the dedicated hydrogen distribution agency (Korea Petroleum Quality & Distribution Authority).

While outlining the current domestic hydrogen supply and demand status, the

Korea Petroleum Quality & Distribution Authority, the dedicated hydrogen distribution agency, stated that some companies have reduced the supply of by-product hydrogen derived from naphtha feedstock due to decreased naphtha imports caused by the Middle East war. However, transportation hydrogen in Korea is currently being supplied normally through alternative volumes such as natural gas-based reformed hydrogen.*

* Daily supply of transportation hydrogen: approximately 63 tons (as of March 18–April 6)

In addition, a review of the additional production capacity by hydrogen suppliers found that facilities are in place to produce up to an additional 80% of the current average daily supply, indicating that even if the supply of by-product hydrogen from naphtha feedstock is reduced, it can be replaced with alternatives such as natural gas-based reformed hydrogen and by-product hydrogen from non-naphtha feedstocks.

In addition, participating companies will share supply and demand trends, such as feedstock sourcing conditions related to the Middle East war, current production volumes, and additional production capacity, and plan to actively cooperate to stabilize the supply of transportation hydrogen by securing alternative volumes and expediting the operation of newly built hydrogen production facilities in the event of supply disruptions.

Second Vice Minister Lee Hohyeon of the MCEE stated, “To prevent any disruption to the operation of hydrogen vehicles, such as hydrogen buses, due to the impact on by-product hydrogen supply caused by the Middle East war and reduced naphtha imports, feedstock suppliers, including petrochemical companies, and hydrogen suppliers should actively secure hydrogen feedstocks and alternative volumes and make every effort to ensure a stable supply of transportation hydrogen.” He added, “Hydrogen refueling station operators should also strive to inspect their facilities and stabilize hydrogen prices to avoid any inconvenience in hydrogen vehicle refueling.”