

Press Release

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Green Hydrogen Demonstration Plant Was Built in Chungbuk Regulation-Free Special Zone

SEJONG -- On October 24, officials from the Ministry of SMEs and Startups (MSS), the Chuncheonbuk-do government, and the Chungju City government attended the completion ceremony of the green hydrogen demonstration plant. This facility will produce green hydrogen by utilizing ammonia. During the ceremony, attendees discussed future development directions.

Since its designation as a Regulation-free Special Zone by MSS, Chungbuk Special Zone for the Green Hydrogen Industry has been piloting the production of high-quality and low-cost hydrogen from biogas and the production of commercial hydrogen utilizing ammonia. The project has been assisting the companies in producing, storing, and utilizing green hydrogen. Until recently, the lack of relevant laws prevented those companies from entering the business of green hydrogen. The project aims to lead a net-zero economy and establish a foundation to vitalize the local economy.

Lim Jung-wook, Deputy Minister for Startups and Venture Innovation, stated, "The Chungbuk Special Zone for the Green Hydrogen Industry is a pivotal step toward the future of clean energy, which is indispensable in an era centered on climate technology. The Ministry of SMEs and Startups (MSS) will cooperate with local governments and relevant ministries to deregulate and create jobs." He emphasized, "If various hydrogen projects are commercialized through the Regulation-Free Special Zone, it will expand the foundation of the local hydrogen industry and bring us one step closer to achieving net zero."

Ammonia, which is used as the energy source for producing hydrogen, contains a high

concentration of hydrogen and is easy to liquefy at room temperature, making it suitable for bulk transportation and storage. Due to these advantages, ammonia is an ideal choice for hydrogen production at the demonstration plant located inland. Hydrogen produced at this plant can be utilized across various industries, including fuel cells and hydrogen-fueled vehicles.

Until now, there have been no safety guidelines for the process of producing hydrogen from ammonia, which has hindered companies from commercializing hydrogen. The plan is to verify the durability, productivity, and safety of this process by piloting commercial hydrogen production at modular hydrogen production plants. The results will serve as standard models for producers of hydrogen from ammonia.

About the Chungbuk Special Zone for the Green Hydrogen Industry

The demonstration plant in the Chungbuk Special Zone for the Green Hydrogen Industry is located in Chungju City and covers an area of 1,587.64 square meters. A total of KRW 24.8 billion was invested in the project, including contributions from central and local government subsidies as well as private funds. The demonstration plant was completed in October 2024, following the start of construction in November 2023. Modular hydrogen production plants were built to produce hydrogen from ammonia.