

Emerson Electric Company

Utilising IT to Enhance Share of Hydrogen for Green Energy | SOLUTION

Description:

Emerson has partnered with the Korea Hydrogen Green Energy Network (KOHYGEN) to help ensure the safety and reliability of its pioneering hydrogen infrastructure initiative which involves setting up the world's largest hydrogen refuelling station for commercial vehicles.

The project is an important step towards the reduction of emissions, drive investments in hydrogen and accelerate transition to a net-zero global economy.

Emerson will help KOHYGEN build smart and safe hydrogen refuelling infrastructure by leveraging IT based integrated operations, using large capacity, high-efficiency charging systems and most importantly, strengthening design safety standards.

The Jeonju Pyeonghwa Hydrogen Refueling Station is the first of 35 high-capacity gas and liquid hydrogen refuelling stations KOHYGEN plans to construct across the Republic of Korea by 2025. The Station has a charging capacity of 300 kilograms per hour, which can fuel up to 15 buses and trucks per hour, or over 100 per day—12 times more than an average capacity hydrogen station.

Additionally, Emerson and KOHYGEN are collaborating on creating technical standards for future high-capacity commercial refuelling stations and similar projects.

In line with Emerson's 'Greening of, Greening by, and Greening with' sustainability strategy, the company is working on a range of hydrogen projects globally, applying their expertise and innovative technologies to scale hydrogen consumption and make renewable energy a reality. Partnering with KOHYGEN is a critical step forward in diversifying the global energy mix.

In addition to deep domain experience across the hydrogen value chain, Emerson is providing core technologies, including temperature transmitters, flowmeters, pressure transmitters, programmable logic controllers (PLC) and valves, to deliver the high level of performance necessary for developing a commercially viable hydrogen charging model that can expand Korea's domestic hydrogen market and serve as a template in other countries.