



Thailand to Establish Standards for EV Charging and Hydrogen Infrastructure

Thailand's Department of Energy Business (DOEB) is developing national standards for electric vehicle (EV) charging stations and hydrogen fuel infrastructure to support the country's transition toward clean energy. The initiative aims to create unified safety protocols and clear regulatory guidelines for investors in the downstream energy sector. Authorities believe standardized systems will help ensure safety, improve service accessibility for drivers, and encourage further investment in alternative energy infrastructure.

Officials emphasized the importance of preventing technological fragmentation in EV charging systems. Drawing lessons from the early mobile phone industry, where incompatible charging connectors caused inconvenience for users, regulators aim to establish a single standard to ensure compatibility across charging networks. In January, the DOEB announced new installation standards for EV charging stations at petrol stations, which will take effect in April. These guidelines include requirements on station design, installation procedures, emergency power cut-off systems, and clearer approval processes across relevant government agencies.

The development of EV infrastructure aligns with Thailand's national EV policy known as "30@30," which aims for electric vehicles to account for 30% of total automotive production by 2030. Under this policy, Thailand targets the production of approximately 725,000 zero-emission cars, 675,000 electric motorcycles, and 34,000 electric buses and trucks. Recent figures also show rapid growth in EV adoption, with newly registered battery electric vehicles increasing significantly year-on-year, reflecting the country's accelerating shift toward electric mobility.

In addition to EV charging infrastructure, the government is also preparing regulations for hydrogen fuel as part of its long-term energy strategy. Hydrogen development is currently in a sandbox phase led by private investors, and authorities plan to incorporate hydrogen-related activities into the Fuel Control Act. Draft legislation expected between 2026 and 2027 will establish legal frameworks governing hydrogen storage, pipelines, and service stations. Despite challenges such as high production costs and infrastructure requirements, hydrogen is viewed as an important component of Thailand's broader plan to achieve net-zero greenhouse gas emissions by 2050.