



Policy Resolution 06.2020

Adopted Unanimously on September 29, 2020

Accelerating the Hydrogen Economy with Future Research and Development

Sponsor

Representative Mark McBride, Oklahoma

WHEREAS, scientists have been interested in hydrogen (H₂) as an energy source since the 1800s, and it currently is an essential feedstock and fuel in many industries; and

WHEREAS, H₂ is the simplest and most abundant element in the universe and, like electricity, is an energy carrier (fuel) that can be used to store, move, and deliver energy produced from other sources; and

WHEREAS, H₂ has the highest energy content of any common fuel per unit of weight, but it is less dense than other fuels, which hinders its wide-scale deployment; and

WHEREAS, H₂ primarily is used as a chemical in ammonia production, as a chemical feedstock and catalyst, as a hydrogenating agent for food and drug production, and in petrochemical and refinery processing; and

WHEREAS, H₂ is emerging as a low-carbon fuel option for transportation, electricity generation, and manufacturing applications, and it could decarbonize three large sectors of the economy; and

WHEREAS, H₂ can be produced without a carbon footprint from a variety of sources, including natural gas, coal, nuclear energy, biomass, waste materials, or splitting water molecules; and

WHEREAS, H₂ from natural gas is commercially viable today and could be a bridge technology with carbon capture, utilization, and storage (CCUS) to enable future energy scenarios where H₂ is sustainably produced using the Nation's diverse domestic resources; and

WHEREAS, gasification of fossil fuels with biomass and plastics is expected to be the lowest-cost route to providing carbon negative H₂ when using CCUS technologies; and

WHEREAS, several states have passed laws to encourage development of stationary H₂ applications; and

WHEREAS, U.S. Department of Energy (DOE) is well-positioned to accelerate the transition to a low-carbon economy with H₂; and

WHEREAS, DOE develops technologies to diversify and increase domestic energy supplies and make energy more affordable, improve domestic energy production and use, and enhance the security, reliability, and resilience of energy infrastructure.

THEREFORE, BE IT RESOLVED, the Southern States Energy Board encourages its member jurisdictions to consider laws that support the development of stationary H₂ applications to enable the transition to a hydrogen economy; and

BE IT FURTHER RESOLVED, the Southern States Energy Board commends DOE's Hydrogen Program Plan that actively pursues H₂ research and development efforts within the Office of Fossil Energy, Office of Energy Efficiency and Renewable Energy, and the Office of Nuclear Energy; and

BE IT FURTHER RESOLVED, the Southern States Energy Board encourages DOE to continue its emphasis on H₂ production, transport, delivery, and storage and to implement programs in the southern region that will advance the directive; and

BE IT FURTHER RESOLVED, the Southern States Energy Board urges DOE to address novel safety considerations, revised regulations, and design standards that are specific to H₂ storage; and

BE IT FURTHER RESOLVED, the Southern States Energy Board recommends the DOE Office of Fossil Energy leverage the experience of the *Regional Initiative to Accelerate CCUS Deployment* program recipients in its efforts to advance technologies to produce H₂ from coal and natural gas and bridge the technology with CCUS.

