

Green Hydrogen Production and Storage

Paper to be presented to HAEE Energy Transition Symposium

ABSTRACT

Hydrogen is undoubtedly one of the most crucial technologies within the journey to energy transition. Global energy markets are currently focusing their efforts on H₂ electrolyzers for hydrogen production and hydrogen fuel cells for power generation, including the development of solid oxide and proton exchange membrane technologies.

Biohydrogen production, from biomass or organic waste materials through processes such as biological fermentation or thermochemical conversion. This paper discusses the feasibility and economics of transforming carbon dioxide and hydrogen from PV fed electrolysis into valuable biomethane to be injected in the existing gas grid.