

# The Path of Hydrogen (H<sub>2</sub>) Production through the Steam Methane Reforming (SMR) Process

Explores the key steps involved in producing hydrogen from natural gas. The process includes feed gas pre-treatment, pre-reforming, steam methane reforming (SMR), the water-gas shift reaction, and hydrogen purification via pressure swing adsorption (PSA). The PSA tail gas is recycled as fuel for the SMR furnace, improving energy efficiency. This pathway is widely used for industrial hydrogen production, supporting applications in refining, ammonia synthesis, and clean energy technologies.

