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Biomass and Waste Gasification for Carbon-Free Hydrogen Production

Daniel Roberts
Research Program Director, CSIRO Energy
Brisbane, Australia

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Abstract

Gasification is a well-established pathway for the conversion of carbonaceous feedstocks to a range of valuable products. It is deployed at scale around the globe for the industrial production of liquid fuels, chemicals, and fertilisers, and has been used at small scale for the generation of power in off-grid applications using waste biomass as a feedstock. There is increasing interest in the use of gasification as a pathway to support the large-scale production of renewable and low-carbon hydrogen, using a range of biomass and waste feedstocks, but there remain challenges with economics, scale, and feedstock-specific aspects of gas processing and separation.

This presentation will give an overview of emerging pathways for low-carbon hydrogen via gasification, and consider the research and technical challenges that must be overcome to support projects at scale.

Note: This document will be opened to the participants on IERE website before the Workshop and opened to the public afterward.