

Fact Sheet | Green hydrogen consortium

What is green hydrogen?

Hydrogen has traditionally been carbon-intensive to produce, either because of the emissions associated with Steam Methane Reforming (SMR) or from the electricity required to split the water molecule into hydrogen and oxygen through electrolysis.

Green hydrogen is produced using electrolysis powered by renewable energy, hence there are no associated operational emissions.

Are any members of the Consortium currently working on sourcing green hydrogen independently?

Some of the Consortium members are considering producing green hydrogen onsite, and others are considering sourcing it from a provider.

Why the focus on green hydrogen instead of other different forms of green energy?

The member companies of the Green Hydrogen Consortium are technology agnostic and are considering a range of options to progress decarbonisation of their operational greenhouse gas emissions. Given the range of applications for green hydrogen and the cost challenges associated with it, the Consortium was formed to work together to seek to de-risk its application and enable acceleration of cost reductions.

What are the key factors in the development of green hydrogen and the slow uptake?

At this stage, green hydrogen is costly, technically challenging and can be hazardous.

As a Consortium, the group of heavy industry participants hope to reduce costs and increase technical capabilities through scale and shared learnings. Hydrogen's many different applications make it an ideal technology to collaborate on and, through collaboration and innovation, the group hopes to accelerate cost reductions and technology readiness of green hydrogen and work through some of the current challenges to try to solve or eliminate them.

Why is green hydrogen not widely utilised already?

While governments and hydrogen industry participants have long advocated for the use of hydrogen as an alternative to conventional carbon-based fuels, there has been a lack of commercial and technical readiness for production of green hydrogen and its application in the resources and mineral processing industries.

How long is the Consortium going to be established for?

The proposed term of the Consortium is for three (3) years. The Consortium members have agreed that progress needs to be monitored every six (6) months through formal progress reporting and review meetings.

What are some of the outcomes the parties hope to achieve? By when?

As a Consortium we will be working through opportunity assessments to develop a detailed scope of work and to establish a roadmap of initiatives. The scope will be sufficiently focused to enable the desired outcomes to be achieved where it is deemed beneficial to work as a group (for example, accessing funds and stimulating interest across the entire value chain by exemplifying the potential demand and scale for hydrogen in heavy industry).

