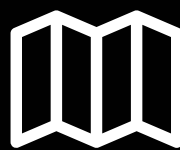


Powered by hydrogen

A new WAY to decarbonise the world's industrial, transport and energy sectors

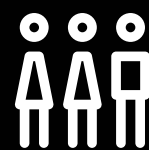
The vision

WA is a significant exporter of hydrogen, a renewable energy source – supporting the decarbonisation of the world's industrial, transport and energy sectors.



National Hydrogen Roadmap

WA has the opportunity to be a first-mover and capture thousands of new energy jobs



WA Renewable Hydrogen Council

established by the State Government to develop recommendations in early 2019 for supporting a hydrogen fuel sector in WA

The time is now

Globally:

Recent technological developments and changes to policy settings have positioned Hydrogen as an increasingly important component of the global energy system

Locally:

WA's large endowments of natural gas and vast potential to harness renewable power position the state as a potential low carbon producer

Japan has a target to put **800,000 hydrogen fuel cell vehicles**

on the road by 2030 – up from just 3,000 today

By 2040, China wants to end production and sale of **internal combustion engine vehicles**

WA has an estimated conventional gas resource of **130 trillion cubic feet** natural gas is currently the major source of commercial hydrogen fuel

Abundant solar energy potential 

Large volumes of solar electricity are required to commercially produce hydrogen through electrolysis of water

Toyota is targeting a **27% cost reduction** in hydrogen fuel stacks by 2020

Australia is forecast to miss **Paris climate targets** unless we increase our usage of renewable fuels

WA has a supportive policy environment relative to other states and territories, and historic capability in the extraction of natural gas and chemicals handling

Existing trade relationships with energy-importing economies who are likely to demand hydrogen fuel in the future: Japan imports 93% of its energy requirements. South Korea imports more than 81%

\$3.3m 

ATCO project to build a green hydrogen innovation hub at Jandakot, using solar electrolysis to convert water into hydrogen fuel

\$2.9m 

research project at UWA, co-funded by ARENA, into the viable storage and transport of hydrogen fuel in liquid methanol form