

WOODSIDE'S PROPOSED H2PERTH PROJECT

Woodside Energy (Woodside) is a global energy company, founded in Australia. Our focus is to provide low-cost, lower-carbon energy the world needs.

We are proposing to develop H2Perth – a domestic and export scale hydrogen and ammonia production facility within the Rockingham Industry Zone (RIZ) (see Figure 1).

H2Perth would be a phased development, with Woodside targeting start up of Phase 1 (0.84 million tonnes per annum of ammonia, potentially up to 1 mtpa) in 2027.



H2Perth would provide a significant opportunity to establish a new strategic export industry for Western Australia.



H2Perth would support the stable transition of our local electricity grid to renewable sources.



H2Perth would supply hydrogen to local and international users, helping lower their emissions.



H2Perth would create potential opportunities for local construction, manufacturing and maintenance, including for electrolyzers.

Figure 1. Proposed H2Perth Project

Woodside acknowledges the Noongar people, the Traditional Owners of the land on which H2Perth is planned to be developed



Why is Woodside progressing H2Perth?

We provide energy the world needs to heat and cool homes, keep lights on and enable industry through our portfolio of quality oil and gas assets.

But the science of climate change is clear: if the world is to limit temperature rise, it will need to change the way that it produces and consumes energy.

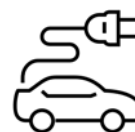
As an energy producer, Woodside is investing in the products and services that our customers need, as they too reduce their emissions.

What is hydrogen?



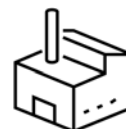
Hydrogen is the most abundant element in the universe

It can power everything petrol or gas can, and can also be stored



Hydrogen and hydrogen-based fuels do not release carbon dioxide when they are used

There are a variety of different methods to make hydrogen



How do you plan to make hydrogen at H2Perth?



Electrolysis

Hydrogen will be made using electrolysis, where electricity will be used to separate hydrogen (H_2) from water (H_2O). Depending on the source of the electricity used, this process can have close to zero emissions. For water, H2Perth proposes to use recycled wastewater to minimise the impact on residential water supply and avoid the need for seawater desalination.



Natural gas reforming

Hydrogen will be made using natural gas reforming, which converts methane (CH_4) to hydrogen to (H_2). Carbon dioxide (CO_2) is also produced as part of this process, however these emissions can be managed, and the hydrogen produced generates no emissions at the point of use.

Net zero from the start of operations

Although hydrogen does not emit carbon when it is used, H2Perth will generate emissions from the use of natural gas and electricity when making the hydrogen.

Woodside intends for H2Perth to be net zero from the start of operations, using a combination of renewable electricity, offsets, and carbon capture, utilisation and storage (CCUS) technologies.

How to find out more:

1. Read the H2Perth General and Environment Information Sheets, available on the Woodside website at: www.woodside.com/sustainability/consultation-activities
2. Contact Woodside by email to feedback@woodside.com or call toll free 1800 442 977.

www.woodside.com