

Tallawarra B Project

green hydrogen fact sheet



Tallawarra power station is on the traditional Country of the Dharawal peoples. EnergyAustralia respects and acknowledges their continued connection to Country, culture and community.

Tallawarra B will be Australia's first peaking power station to be powered by a blend of gas and green hydrogen with direct emissions offset.

With its fast-start flexible capacity, Tallawarra B will play a vital role in maintaining system security, complementing renewables coming into the

system, and providing reliable power to customers in New South Wales.

The Construction is already well underway on Tallawarra B and the project will be ready for the summer of 2023-24, around the time of the scheduled retirement of the Liddell power station.



Above: Construction is already underway at Tallawarra B power station



Gas plant with 5% green hydrogen blend from 2025



Direct* CO₂ Emissions offset over operational life

About hydrogen

Hydrogen is the simplest and lightest element. It is the most common element on earth but does not occur naturally in its pure form. Instead, it forms part of other materials such as water, fossil fuels or minerals.

When used as a fuel source, the combustion of hydrogen produces zero greenhouse gas (GHG) emissions. The pathways to produce it are diverse and the different 'colours' of hydrogen produced relate to the GHG emissions profile of the energy source or process used to extract it.

What is green hydrogen?

Hydrogen is most commonly produced by electrolysis using a device called an electrolyser, which uses electricity to split water into hydrogen and oxygen.

To be considered green, hydrogen production from electrolysis must be powered by renewable electricity, which could include any combination of on-site renewable electricity generation or the use of an equivalent number of renewable energy certificates.

The modification application will enable the delivery of green hydrogen to Tallawarra B using tube trailers.

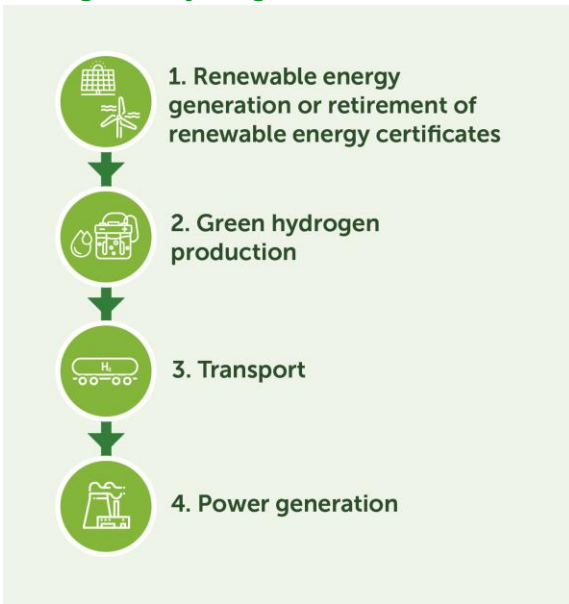
*Relates to Scope 1 emissions

Towards a cleaner energy blend

Tallawarra B will be gas-fired and designed to operate with a five per cent volume of green hydrogen from 2025. EnergyAustralia will investigate the potential to increase the percentage of green hydrogen in the fuel mix over time.

A modification application to the NSW Department of Planning and Environment is underway to seek approval for the introduction of green hydrogen into the fuel mix at Tallawarra B, and to build associated infrastructure to receive and blend the hydrogen into the turbine fuel stream.

How green hydrogen is made

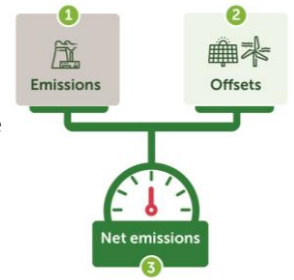


What are renewable energy certificates?

Large-scale renewable electricity certificates, known as LGCs, are produced for every megawatt hour of renewable electricity that enters the grid from an accredited renewable energy producer. The certificates can be bought by energy users wanting renewable energy, and balance out the use of electricity from the grid, which may have come from any connected source.

How carbon offsetting works

1. The production of electricity from gas releases greenhouse gases into the atmosphere.
2. To reduce the impact of these emissions, certificates can be purchased that fund projects that remove or compensate for the equivalent amount of greenhouse gases or 'offset' emissions.
3. The resulting 'net' level of those emissions is zero – which is great for the environment.



Doing, Not Just Dreaming

EnergyAustralia is Doing, Not Just Dreaming when it comes to Australia's clean energy transition.

The company has committed to be net zero (across scope one, two and three) by 2050, to be out of coal by 2040, and to reduce its direct* emissions by 60 per cent by 2028/29 relative to 2019/20.

The construction of Tallawarra B is just one of the ways EnergyAustralia is making its promises a reality. The project helps pave the way for additional cleaner fuel sources to enter the Australian energy system and helps kick start the green hydrogen industry in Australia.

About EnergyAustralia

EnergyAustralia is a leading energy retailer and generator with 2.4 million accounts across eastern Australia. We supply energy to our residential and business customers from a modern energy portfolio, underpinned by coal and gas power plants, as well as renewable energy sources and utility-scale electricity storage.

We operate Australia's largest energy sector carbon offsets program, with more than 5 million tonnes of CO₂e already fully offset and accredited by Climate Active. Under our offsets offering, more than 440,000 of our customers receive carbon neutral electricity and gas at no extra cost.

*Relates to Scope 1 emissions

Find more information on the Tallawarra B project website at: www.energyaustralia.com.au/TallawarraBproject

Contact the Community Relations Team at: Tallawarra.Community@energyaustralia.com.au



Acknowledgment: EnergyAustralia acknowledges the support of the NSW Government for the Tallawarra B Power Station Project.

Public disclaimer: The views expressed herein are not necessarily the views of the NSW Government. The NSW Government does not accept responsibility for any information or advice contained herein