

ENERGY UPDATE

Cleaner energy for Queenslanders

March 2022 – Issue 5



Queensland Energy Transformation

Queensland's renewable energy investment took another major step forward on 17 March with \$192.5 million allocated to Wambo Wind Farm near Dalby from the \$2 billion Renewable Energy and Hydrogen Jobs Fund.

Through publicly-owned energy company Stanwell, Queenslanders will own 50 per cent of the 252 megawatt (MW) wind farm located in the Southern Queensland Renewable Energy Zone (QREZ).

Looking ahead, the Queensland Energy Plan will deliver long-term energy transformation for Queenslanders and set our pathway to provide cleaner energy to power more jobs and industries.

The plan will identify initiatives to reach our 50% renewable energy target by 2030. It will also leverage our public ownership and create certainty, allowing Queensland householders and businesses to benefit from a reliable energy network built on clean power made in Queensland by Queenslanders

Consultation on the energy plan has commenced with industry and members of the Ministerial Energy Council, with their views sought on the critical elements of a successful plan.



Hydrogen in Queensland

2022 is shaping up to be another big year in hydrogen for Queensland with a large pipeline of projects planned, focussed on both domestic production and exports.

On 22 March we committed \$28.9 million from the Renewable Energy and Hydrogen Jobs Fund to the construction of CS Energy's Kogan renewable hydrogen demonstration project.

The project includes co-location of a solar farm, battery, hydrogen electrolyser, hydrogen fuel cell, hydrogen storage, and out loading facility as well as hydrogen refuelling facilities to be located nearby in Chinchilla and Charlton.

It will use behind-the-meter solar energy to produce 50 000 kg of renewable hydrogen when operational in 2023 – making it one of the few truly green hydrogen projects in Australia.

CS Energy's project brings to five the number of hydrogen refuelling projects in development around the state, signalling the start of a Queensland Hydrogen Super Highway.

Queensland's super highway will also link with New South Wales and Victoria under a landmark tri-state agreement to collaborate on a hydrogen refuelling network for heavy transport and logistics along the eastern seaboard.

On 25 March, Energy Ministers signed a Memorandum of Understanding for the refuelling corridors starting with the Pacific Highway, Hume Highway and Newell Highway.



Image: Artist's impression of Kogan renewable hydrogen demonstration project. Image credit CS Energy.



Queensland Renewable Energy Zones (QREZ)

The Southern QREZ kicked off development on 17 March with the announcement of a \$170 million connection agreement between publicly owned Powerlink and the 1 gigawatt MacIntyre Wind Precinct.

The MacIntyre Wind Precinct consists of two wind farms, with the 102 MW Karara Wind Farm to be built, owned, and operated by publicly owned renewable energy generator, CleanCo. CleanCo has a power offtake agreement with Acciona for the neighbouring 923 MW MacIntyre Wind Farm.

The Northern QREZ kicked off development in May 2021. We announced \$40 million would be invested to upgrade transmission lines between Cairns and Townsville, unlocking up to 500 MW of renewable capacity. The first new project connecting to the REZ is Neoen Australia's \$370 million 157 MW Kaban Green Power Hub wind farm.

Consultation is underway to deliver the first stages of QREZ investment. Following on from initial community input, a Technical Discussion Paper on QREZ design and access was released for industry feedback in November 2021.

More than 60 responses were received from a wide range of stakeholders including renewable energy developers and generators, community interest groups, environmental groups, local governments, and market bodies. Results of the engagement will be used to inform the continuing development of the QREZ framework throughout 2022.



Queensland
Government



Borumba Dam pumped hydro

We are investing \$22 million for a detailed design and cost analysis to determine Borumba Dam's suitability for a pumped hydro energy storage facility. Powerlink has been selected to carry out detailed studies with analysis to consider environmental, social and economic impacts.

On-site ground testing commenced in February 2022, with geotechnical investigations primarily focused on the proposed location of the new dam wall, the upper reservoir and the underground power station.

Community and stakeholder engagement is a key priority for the project to help deliver not only the best outcomes for Queensland, but also the local community. More than 150 residents attended a series of community drop-in sessions in Imbil and Gympie in December 2021 to learn about the proposed project. The next community drop-in sessions will be held on 20 and 21 April 2022 in Imbil and Gympie.



Future fuels

Queensland's sustainable bio-ethanol and biodiesel mandates are increasing the uptake and availability of ethanol fuels and kick-starting the supply chain for biodiesel.

Since 2017, the 4% ethanol mandate has stimulated growth, with E10 sales and investment by service stations more than doubling since 2016.

Our 0.5% biodiesel mandate has also stimulated investment by major ferry terminals with new infrastructure in South East Queensland kickstarting the supply chain.

Nevertheless, petrol costs have been steadily rising. It now costs anywhere from about 10 to 15c/km to fuel a standard car. Comparatively, it costs around 2c/km to run a car on electricity.

That is why more Queenslanders are purchasing electric vehicles (EVs), with registrations more than doubling to over 8,000 in 2021.

We have well established goals to give Queenslanders access to high quality EVs and the

necessary supporting infrastructure. This will in turn decarbonise transport, reduce emissions and enhance transport networks.

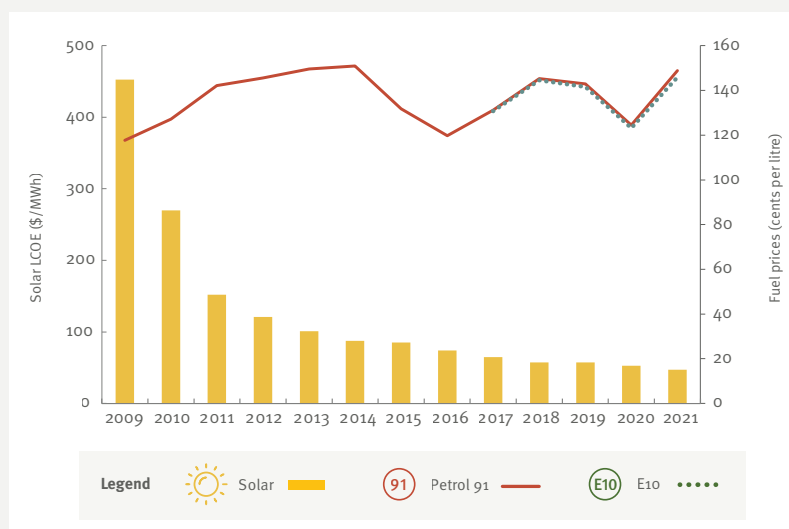


Image: Fuel price comparison.



Achieving our renewable energy targets

We are delivering affordable, reliable and sustainable energy solutions for Queenslanders. In 2015, we started a renewable energy boom in Queensland to reduce emissions, create new jobs and diversify the state's economy by establishing a 50% renewable energy target by 2030.

Large-scale renewable energy in Queensland



50 projects



\$10.7 billion
invested



7,900
construction jobs



5,774 MW

Renewable energy in Queensland



7,261 MW
renewable capacity



20.9%
from renewable sources

*Figures current as at 28 March 2022.



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Energy – Queensland