

ENERGY UPDATE

Cleaner energy for Queenslanders

July 2022 – Issue 7



Queensland to host Australia's first service station with a hydrogen pump

Construction has kicked off on Australia's first co-located hydrogen refuelling station, with the newly constructed refueller set to open later this year at one of Brisbane's busiest service stations, the BP Truckstop at the Port of Brisbane in Lytton.

This is the first hydrogen refueller to be built alongside an existing petrol station and will be a critical link on the east coast hydrogen superhighway.

The Queensland Government's current fleet of five hydrogen-powered Hyundai NEXOs will be the first to use the new refueller.

The project will demonstrate how hydrogen refuelling stations can be safely integrated into the existing service station network, paving the way for more jobs in more industries and more infrastructure to facilitate hydrogen trucks and buses.

The hydrogen refuelling station will have capacity to refill a hydrogen car in three to five minutes and will be accessible to anyone with a hydrogen car.



Artist's impression of the hydrogen refueller



Electricity rebate increased for vulnerable Queenslanders

Some of Queensland's most vulnerable people will see lower electricity costs this year thanks to a boost in the Electricity Rebate to \$372.20 per year. The rebate is provided to eligible Queensland households, pensioners, seniors, war veterans, low income households and asylum seekers.

This rebate is on top of the \$175 Cost of Living Rebate for all Queenslanders that was announced in May 2022. The Cost of Living Rebate will appear on residential customers' bills from September 2022.

This is all part of the Queensland Government's plan to deliver cost of living relief for Queenslanders.



Over 10,000 EVs registered in Queensland

Queensland's electric vehicle (EV) registrations have increased from 500 just five years ago to over 10,000 today, supercharging sustainable travel in our state.

We're committed to making sure access to clean and efficient fuels is readily available to charge the increasing number of EVs in Queensland.

EVs will be able to charge up along our very own, publicly-owned Queensland electric superhighway. Queensland has over 7.7 gigawatts of renewable generation and has plans to triple this. This means that when Queenslanders charge up at one of the publicly-owned stations, they will be charging up with Queensland sunshine, wind and water.

The Queensland Government is also providing Queenslanders with a \$3,000 rebate on eligible EV purchases, as part of the Queensland Government's plan to increase zero emission vehicles across our state.

Affordable, cleaner, Queensland-made energy will make us a leader in renewable energy for transport, while creating thousands of jobs.



Work starts on MacIntyre Wind Farm

Work has officially commenced at the MacIntyre Wind Farm precinct, a 620-worker, \$2 billion project that will include Queensland's first publicly-owned and operated wind farm, and establish Queensland's Southern Renewable Energy Zone (REZ).

The precinct will be one of the largest wind farms in the southern hemisphere, with the MacIntyre Wind Farm boasting 162 turbines and the Karara Wind Farm hosting a further 18 turbines.

The project is expected to create 400 project jobs during construction and support a further 220 transmission jobs.

With the capacity to supply the equivalent of nearly 700,000 homes, the project will substantially boost renewable energy supply in Queensland helping our industries, businesses and communities to achieve their sustainability goals.



MacIntyre Wind Farm sod turning ceremony



Queensland
Government



Green data storage set for Moreton Bay

One of Australia's largest proposed 'green data' storage facilities has been announced for the Moreton Bay region in a step forward for Queensland's renewable and digital economies.

The supernode is an innovative new project planning to bring large-scale storage facilities for both data and battery energy to the one site. The project has the potential to be a \$2.5 billion-plus investment, developed in stages on a 30-hectare site.

It also offers ample scope for powering our large-scale batteries with locally produced solar, wind and hydro sourced renewables, which will also power the data centre campus as it grows.

Large-scale data storage will support new jobs and allow the region to continue to boom in the lead-up to the Brisbane 2032 Olympic and Paralympic Games.



Artist's impression of the supernode



Queenslanders harnessing the power of the sun

The uptake of solar and battery systems in Queensland is expected to soar in coming months in response to cost of living pressures, as Queenslanders harness the power of the sun to keep their power bills low.

Rooftop solar is the state's largest power generator, with capacity more than twice that of Gladstone Power Station. From January to May 2022, 19,000 solar systems totalling 193 megawatts (MW) were connected. In total more than 708,000 Queensland homes have solar, which is around one in three homes.

As of May 2022, Queensland has:

- more than 4100 MW of small-scale solar capacity connected
- more than 739,000 solar systems, including over 708,000 residential systems
- more than 10,400 batteries totalling over 136 megawatt hours of capacity.



Large-scale batteries unlocking Queensland's renewable energy future

In June 2022, the Queensland Government announced 13 large-scale batteries to be rolled out across the state. As part of the battery blitz, Queensland's largest utility-scale battery will be built at Greenbank in an innovative partnership between Powerlink and CS Energy to deliver more reliable, affordable energy for Queenslanders.

The 200 MW / 400 megawatt-hour (MWh) Greenbank battery will be a game-changer in the way we operate the electricity grid. It will be critical for soaking up our sunshine and wind to feed into the system when Queenslanders need it.

After successfully installing five network-connected batteries between Townsville and Toowoomba, Energy Queensland will deliver a further 12 batteries across the state, each up to 4 MW.

Construction has also begun in Maryborough on Australia's first, large-scale iron flow battery manufacturing facility, creating hundreds of jobs across the region. The \$70 million, state-of-the-art big battery manufacturing centre is being developed by Energy Storage Industries – Asia Pacific (ESI).

The facility will help boost energy supply, support local jobs and drive down power prices. When fully operational in 2026, ESI aims to have up to 500 highly skilled employees and contractors working throughout regional Queensland.



Large-scale battery at Bargarra Substation



Queensland energy snapshot



2,205 MW
large-scale solar



4,100 MW
rooftop solar



690 MW
wind



492 MW
bioenergy



745 MW
hydro and
pumped hydro



8,119 MW
coal



3,172 MW
gas



449 MW
other (including diesel)

Large-scale renewable energy in Queensland (operational and committed since 2015)



50
projects



\$10+ billion
invested



7,900
construction jobs



5,700+ MW
capacity

Renewable energy in Queensland



7,000+ MW
renewable capacity
(large-scale and small-scale
currently operational)



21.4%
from renewable
sources

*All figures except 'renewable sources' current as at 30 June 2022. 'Renewable sources' figure current July 2021 to June 2022. Construction jobs figure is an estimate.



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