

Townsville Bulletin

Lifestyle

Injection of energy

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CLARE, SOUTH OF TOWNSVILLE, WILL BE HOME TO AUSTRALIA'S BIGGEST SOLAR FARM, ONE OF SEVERAL MAJOR RENEWABLE ENERGY PROJECTS KICKING OFF IN NORTH QUEENSLAND

NORTHERN Australia is on the cusp of a renewable energy revolution and Townsville is leading the charge.

While on a residential scale more and more Townsville residents are using solar power in their homes, even bigger plans are afoot to capitalise on North Queensland's renewable energy potential.

South of Townsville the country's biggest solar farm is set to be built in Clare using about 350,000 panels.

West of Townsville, work on a \$564 million biofuel project expected to produce 344 million litres of ethanol fuel is expected to start next year.

Meanwhile in Kidston, 280km north-west of Townsville, an old gold mine is set to be transformed into a \$600 million solar and hydro project.

A second solar farm could replace a disused mango farm at The Pinnacles with a development application before Townsville City Council.

In Ingham, tenders are expected to be called later this year for North Queensland's bioenergy super sugar mill.

James Cook University Power Engineering Associate Professor Ahmad Zahedi said North Queensland was perfectly suited for solar farms.

He said traditional energy sources often had to travel hundreds of kilometres to reach the north and much of the power was lost during transmission while electricity infrastructure was vulnerable to damage from natural disasters.

"If people come here and invest in making solar farms, they can actually generate electricity and send it to the grid and make energy for North Queensland more sustainable," he said.

"Australia also has access to the latest solar technology and in North Queensland we have plenty of sun.

"In terms of sustainable energy for North Queensland there are many options and it's something developers and policymakers need to have a serious think about." Construction on the Clare Solar

farm is expected to start later this year after electricity retailer Origin Energy agreed to buy the facility's generation.

The farm is being planned by Spanish-backed developer Fotowation Renewable Ventures (FRV) on farming land next to the Clare South electricity substation. The farm will be built on a 300ha site with a 100mW capacity with the option of developing a further 35mW site.

Genex Power's \$580 million energy project near Kidston will include a 150mW solar power generation farm, 330mW pumped storage hydro-electric scheme using the former mine pits and their stored water and a 185km transmission line to carry power to the coast.

Queensland Natural Resources Minister Dr Anthony Lynham said the hydro and solar project at Kidston would be a world first providing clean, green energy.

"It's recycling the infrastructure of the former Kidston gold mine, which closed in 2001, a world first by using a disused mine site for hydroelectric power generation," he said.

"The project has the potential to meet all the peak power generation demands of North Queensland and some of Central Queensland." But it's not just big business that is taking advantage of North Queensland's natural resources to produce energy.

Small business and homeowners are also investing in solar as the price of solar panels continues to drop.

Country Solar director Steve Madson said Townsville's climate was perfectly suited to solar as peak demand in summer due to airconditioners coincided with peak sunlight areas.

"Our sun hours match our electricity usage loads so we are using our airconditioners at the same time of year when a lot of solar energy is being produced," he said.

"Homes with high daytime loads such as those with swimming pools, fish tanks or where people are home a lot during the day really suit solar.

"There has been such growth here with solar and it's not only better for the environment but it's more cost-effective than using centralised power stations." Mr Madson said the next revolution in solar power would be sparked by lithium batteries which could store solar energy. "Technology is running at such a fast pace that soon we'll see the cost of those batteries reduce and more and more people will use them to run their houses."