

# Central Queensland Renewable Energy Industry Profile

July 2018



## Rooftop solar

Over 2017 we estimate rooftop solar installations supported 51 full time jobs across the Central Queensland region. The total installed base of solar systems across the region indicates that around 24% of all residential dwellings have a solar system installed.

**Table 9-1 Uptake of rooftop solar PV in Central Queensland Region**

Number of installations	Proportion of dwellings with solar	Capacity (MWs)	Estimated Generation (MWh)	CO2 Savings (tonnes)
23,107	24%	91	126,383	99,842

Sources: Number of installations, capacity and generation derived by data published by the Clean Energy Regulator as at March 2018. Number of dwellings taken from the 2016 Census.

## Utility-scale projects

Central Queensland has just one operational renewable energy project, powered by landfill gas which is expected 6,132 MWh per year on average, equivalent to the electricity consumption of 1,170 average Queensland homes.

**Table 9-2 Operational large-scale power projects in Central Queensland Region**

Fuel type	No. plants	MW	Annual generation (MWh)	Avoided CO2 (tonnes)	Households powered
Bioenergy	1	1.0	6,132	4,844	1,170
<b>TOTAL</b>	<b>1</b>	<b>1.0</b>	<b>6,132</b>	<b>4,844</b>	<b>1,170</b>

Sources: Number of projects, their capacity and generation from Green Energy Markets Power Plant Register. Avoided CO2 based on generation displacing the average grid emissions intensity of Queensland electricity according to the Australian Government's National Greenhouse Accounts Factors – July 2017. Households powered derived on the average Queensland household's annual electricity consumption according to the Australian Energy Market Commission's 2017 Residential Electricity Price Trends publication.

Table 9-3 details that there are another 12 solar projects either in construction or under development in the region. These projects' 2,021 megawatts of capacity are capable of producing 4.8m megawatt-hours per annum. This is equal to 9.1% of Queensland's entire annual electricity consumption and equivalent to the annual average electricity consumption of 916,707 Queensland households.

**Table 9-3 Projects under construction and development in Central Queensland region**

	Solar	
	No. plants	MW
Under construction	2	168
Development - planning approved	5	976
Development - yet to be approved	5	877
<b>TOTAL</b>	<b>12</b>	<b>2,021</b>
Annual generation (MWh)	4,803,546	

Source: Green Energy Markets Power Plant Register for project capacity and generation.

Table 9-4 provides estimates of the employment, investment and emissions abatement these projects could be expected to provide if they were all to proceed. The \$3 billion of investment in these projects could be expected to support 4,446 job years of employment building these projects plus 202 ongoing full-time jobs.

**Table 9-4 Employment, investment and emissions abatement flowing from projects under construction and development in Central Queensland region<sup>1</sup>**

	Solar
Construction employment (job-years)	4,446
Operations employment (FTE)	202
Investment (\$m)	\$3,032
Equivalent households powered	916,707
CO2 avoided (tonnes)	3,794,801

*Note: job estimates indicated above are not taken from specific estimates for each project cited by developers due to inconsistent methods for estimating a single job between companies. See section 3.4 for information on how employment is estimated.*

Note: The Central Queensland Region includes the Local Government Areas of Gladstone (R); Rockhampton (R); Livingstone (S); Banana (S); Woorabinda (S); Central Highlands (R).



**SolarCitizens**

This is an extract from the report '**Renewable Energy Across Queensland's Regions**' by industry analyst Tristan Edis of Green Energy Markets, details current at June 2018.

The report was commissioned by community organisation Solar Citizens and can be downloaded at [www.solarcitizens.org.au/qld\\_regions](http://www.solarcitizens.org.au/qld_regions)

*For full project list – see next page.*

<sup>1</sup> Sources: See section 3.4 for information on how employment is estimated. Avoided CO2 based on generation displacing the average grid emissions intensity of Queensland electricity according to the Australian Government's National Greenhouse Accounts Factors – July 2017. Households powered derived on the average Queensland household's annual electricity consumption according to the Australian Energy Market Commission's 2017 Residential Electricity Price Trends publication.

## Large-scale renewable energy projects in Central Queensland

Current at May 2018, includes projects >2MW<sup>2</sup>

### Projects under construction

Fuel type	Project Name	Company	Capacity (MW)	Locality
Solar	Emerald Solar Farm	RES	68	Emerald
Solar	Lilyvale Solar Farm	Fotowatio Renewable Ventures	100	Tieri

### Projects in development<sup>3</sup>

Fuel type	Project Name	Company	Capacity (MW)	Locality
Solar	Baralaba Solar Farm	Fotowatio Renewable Ventures	100	BARALABA
Solar	Bluff Solar Farm	Infigen Energy	100	BLUFF
Solar	Crinum Creek	Adani Renewables	100	TIERI
Solar	Bouldercombe Solar Farm	Eco Energy World	280	BOULDERCOMBE
Solar	Tieri Solar Farm	Fotowatio Renewable Ventures	96	TIERI
Solar	Comet Solar Farm	Hadstone Energy	235	COMET
Solar	Raglan Solar Farm	Eco Energy World	350	RAGLAN
Solar	Rodds Bay Solar Farm	Renew Estate	300	BOROREN
Solar	Yarwun Solar Farm	Renew Estate	27	YARWUN
Solar	Aldoga	Acciona Energy	265	ALDOGA

<sup>2</sup> Appendix B - 'Renewable Energy Across Queensland's Regions' Green Energy Markets, 2018

<sup>3</sup> Projects 'in-development' have either: a site identified and landholder consent; submitted a development application to local Council; or have a development approval.