

# RENEWABLE PROJECTS QUARTERLY REPORT

Q1 2023

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We respectfully acknowledge Aboriginal and Torres Strait Islander people as the Traditional Custodians of the lands and waters on which we work and live. We commit to collaborate with First Nations communities, to promote sustainable practice, protect ancient sites and culture with equitable access to the benefits of clean energy. Sovereignty has never been ceded. We acknowledge Elders, past and present, and their continuing culture and connection to Country.



#### **HIGHLIGHTS**

The first quarter of 2023 saw over \$1.3 billion worth of projects begin construction, nearly double compared to Q4 2022. Despite this being the first uptick seen since Q2 2022, the rolling 12-month quarterly average dipped slightly to \$1.8 billion. The largest among the seven generation projects that began construction was the Wollar Solar Farm, with a total capacity of 290 MW. The Blyth Battery (300 MW / 800 MWh) was the only storage project to commence construction over the same period. The total capacity for the eight generation and storage projects combined was 1,014 MW.

Quarterly investment in financially committed generation and storage projects reached \$400 million, the second lowest quarterly result since data collection began in Q1 2017. This was a far cry from the \$4.3 billion seen in Q4 2022, and as a result, the rolling 12-month quarterly average investment of financially committed projects dipped to \$1.6 billion (-8.0%). The one project to reach financial commitment was the Rangebank Battery Energy Storage System (BESS) in Cranbourne West, Victoria, holding a size of 200 MW / 400 MWh.

In terms of new installed capacity added, this was 2,023 MW less (-91.0%) compared to Q4 2022, and 1,379 MW less (-87.3%) compared to the same quarter 12 months ago. In terms of storage, this quarter's 400 MWh was half of what was seen in Q4 2022, and 2,490 MWh less (-86.2%) compared to the same quarter 12 months ago. For the first time since we began recording data in 2017, zero generation projects reached the critical stage of financial commitment.

Western Australia boasted the most projects to begin construction in Q1 with three, reaching a total of 286 MW, and \$822 million worth of investment. Victoria and New South Wales followed with two apiece, while South Australia had one.

Two projects were commissioned in Q1: the New England Solar Farm (Stage 1) in NSW with an installed capacity of 400 MW, and the Pilbara Generation Project BESS located in WA, with a storage capability of 13 MWh.

There are currently 108 generation and storage projects that have either reached financial commitment or begun construction. This equates to 16.7 GW of installed capacity, as well as 13.9 GWh of storage. In total, this equates to nearly \$23.6 billion worth of investment in these two development stages. 193 generation and storage projects have been commissioned since 2017, contributing 15.5 GW of installed capacity, 1.7 GWh of storage, and over \$27 billion worth of investment.

#### **Clean Energy Council definitions**

**Financial commitment:** publicly available information stating that a project financially closed or achieved debt financing.

**Under construction:** publicly available information that a project started construction work.

**Commissioned:** publicly available information that a project is fully completed and commissioned (a project that is currently operational and not commissioned falls **under the category under construction).** 

Note: Some minor adjustments and reclassifications have been made to the project data since the Q2 2022 Renewable Projects Quarterly Report due to new information becoming available.



#### **Q1 2023 PROJECT TRACKER**

Table 1. Projects Commencing Construction in Q1

Name	Owner	Туре	State	MW (MWh)
Blyth Battery	Neoen	Storage	SA	300 (800)
Cunderdin Solar Farm	Naturgy	Solar	WA	128
Girgarre Solar Project	Enel Green Power	Solar	VIC	93
Moora Microgrid	Moora Energy	Hybrid	WA	8
Pilbara Generation Project	Fortescue Metals Group	Solar	WA	150
Raywood Solar Farm	AceEnergy	Solar	VIC	5
Riverina Solar Farm	Suntech	Solar	NSW	40
Wollar Solar Farm	Beijing Energy International	Solar	NSW	290

Table 2. Projects Reaching Commission in Q1

Name	Owner	Туре	State	MW (MWh)
New England Solar Farm (Stage 1)	UPC/ACEN Renewables	Solar	NSW	400
Pilbara Generation Project BESS	Fortescue Metals Group	Storage	WA	42 (13)





#### **GENERATION PROJECTS**

The first quarter of 2023 didn't see any generation projects reach financial close; however, seven projects commenced construction, which represented 714 MW of installed capacity. The rolling 12-month quarterly average of under construction generation projects fell only slightly to 1,016 MW (-0.8%). Because no projects reached financial close this quarter, the rolling 12-month average for installed capacity fell to 767 MW, a drop of 160 MW (-17.3%).

One generation project was commissioned, stage 1 of the New England Solar Farm, adding another 400 MW into the network.



#### **Quarterly generation project figures**

0

financially committed

7

started Construction 1

commissioned

#### **Generation project tally in Australia since 2017**

257

financially committed

220

under Construction 179

commissioned

#### **Quarterly Capacity by Development Stage**

O MW

capacity of newly financially committed projects

**714** MW

capacity of newly under construction projects

400 MW

capacity of newly commissioned projects

#### **Annual capacity by development stage\***

**1194** MW

capacity from financially committed projects

3745 MW

capacity from under construction projects

2042 MW

capacity from completed (commissioned) projects



<sup>\*</sup>Projects that reached multiple stages over the last 12 months are only included in their most recent stage

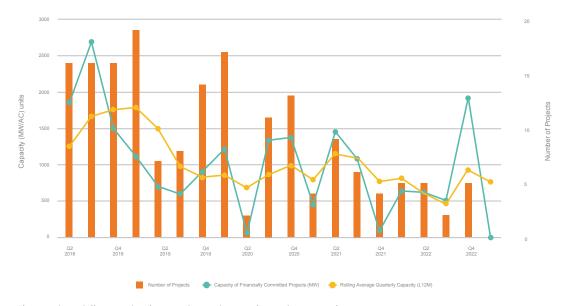


Chart 1. Financially committed generation projects and capacity, quarterly.

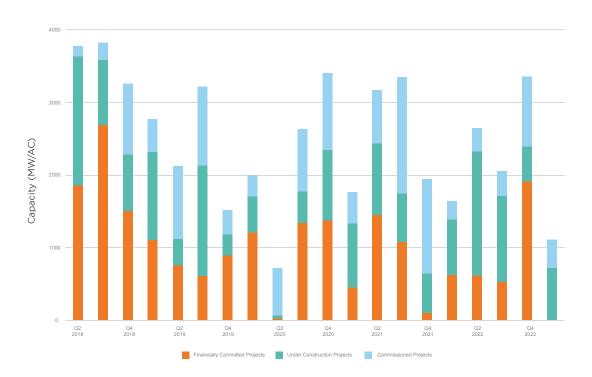


Chart 2. Total capacity of generation projects by development status, quarterly



#### **INVESTMENT**

Investment in projects which commenced construction in Q1 2023 totalled \$1.3 billion. The rolling 12-month quarterly average investment fell slightly to \$1.7 billion (-5.6%) for new capacity projects that commenced construction compared to the previous quarter. More encouragingly, when compared to the same rolling average 12 months ago, this has increased by 30.8%.

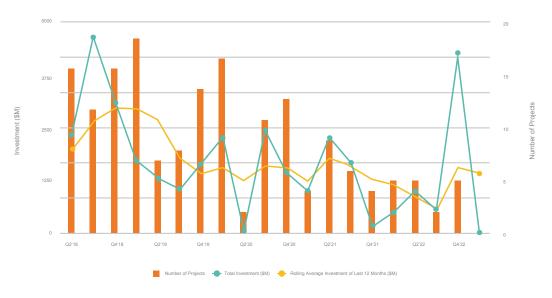


Chart 3. Financially committed generation projects and investment, quarterly.

# **Quarterly investment figures by development stage**

\$0

investment in financially committed projects

\$1.3B

investment in under construction projects

\$768m

investment in commissioned projects

# Annual investment figures by development stage\*

\$2.2B

investment in financially committed projects

\$6.2B

investment in under construction projects

\$3.7B

investment in commissioned projects



<sup>\*</sup> Projects that reached multiple stages over the last 12 months are only included in their most recent stage

# **PROJECTS BY STATE**

Only one project reached financial close across Australia in Q1 2023.

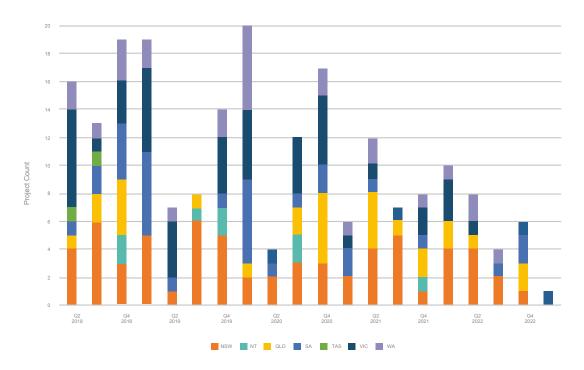


Chart 4. Total financially committed renewable projects by state, quarterly

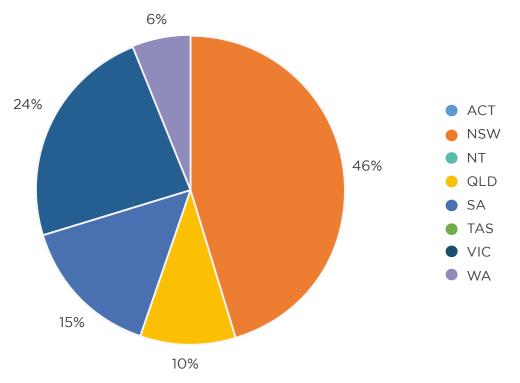


Chart 5. Share of total financially committed capacity by state, last 12 months



Table 3. Projects commencing construction in Q1 2023

State	Project count	Capacity (MW)	Capital cost (\$M)
QLD	0	0.0	0.0
NSW	2	330.0	490.0
VIC	2	98.0	12.0
SA	1	300.0	0.0
WA	3	286.0	821.8
TAS	0	0.0	0.0
NT	0	0.0	0.0
ACT	0	0.0	0.0
TOTAL	8	1014.0	1323.8

Table 4. Projects commissioned in Q1 2023

State	Project count	Capacity (MW)	Capital cost (\$M)
QLD	0	0.0	0.0
NSW	1	400.0	768.0
VIC	0	0.0	0.0
SA	0	0.0	0.0
WA	1	42.0	250.0
TAS	0	0.0	0.0
NT	0	0.0	0.0
ACT	0	0.0	0.0
TOTAL	2	442.0	1018.0

<u>View our project tracker for further details on all projects.</u>



#### STORAGE PROJECTS

The Rangebank BESS in Victoria was the only storage project and indeed the only renewable energy project to reach financial close in Q1 2023, adding 400 MWh of storage. This was half of what was seen in Q4 2022, and nearly 2,500 MWh less than what was seen 12 months ago in Q2 2022. As a result, the rolling 12-month quarterly average has fallen heavily for the second quarter in a row to 1,221 MWh.

Additionally, one storage project, the Blyth Battery (300 MW / 800MWh), began construction during the quarter, while one project, the Pilbara Generation Project BESS (42MW / 13 MWh) was commissioned.

# **Quarterly energy storage project figures**

1

financially committed

1

started Construction 1

commissioned

# **Quarterly generation of energy storage projects**

400 MWh

generation from financially committed energy storage projects 800 MWh

generation from under construction energy storage projects **13** MWh

generation from completed (commissioned) energy storage projects





# **Total energy storage projects in Australia since 2015\***

54

reached financial commitment

41

began construction

20

reached commission

**7.7** GWh

Generation from current financially committed energy storage projects

4.3 GWh

Generation from current under construction energy storage projects

**1.4** GWh

Generation from current commissioned energy storage projects

\*Includes projects that have a storage component (i.e. hybrid wind and solar projects)





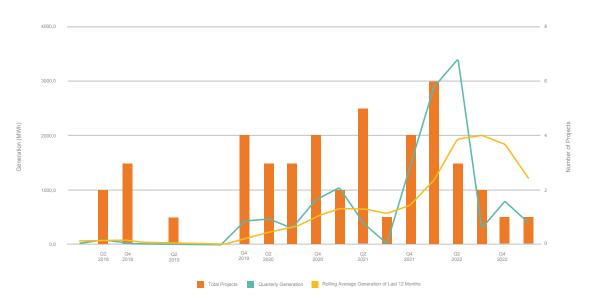


Chart 6. Financially committed storage projects by energy, quarterly

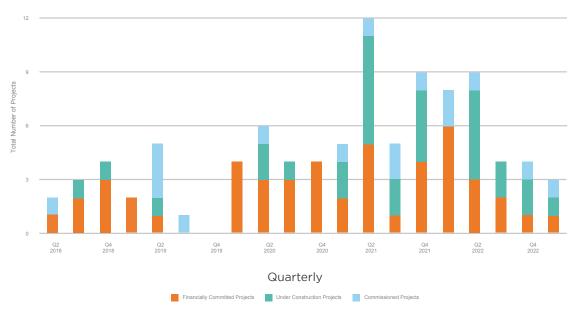


Chart 7. Total project count of energy storage projects by development stage, quarterly





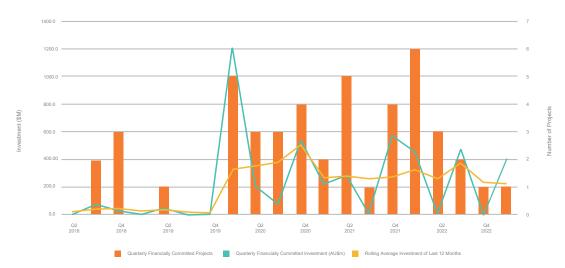
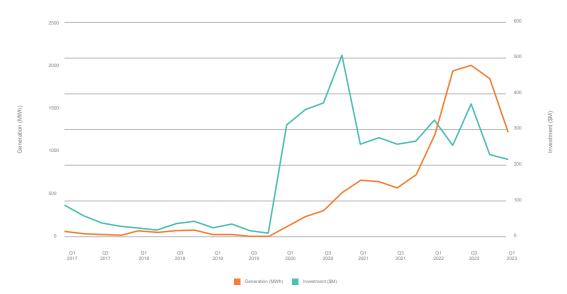


Chart 8. Financially committed storage projects by investment, quarterly



 ${\it Chart\,9.\,Financially\,committed\,storage\,energy\,and\,investment,\,quarterly\,average\,L12M}$ 





Table 5. Financially committed and under construction energy storage projects by state

State	Project count	Capacity (MW)	Energy (MWh)	Total investment (\$M)
ACT	1	100.0	200.0	0.0
NSW	12	2276.0	6486.0	1062.8
NT	2	41.0w	38.5	38.3
QLD	2	150.0	300.0	185.0
SA	7	1187.0	2864.0	1006.2
TAS	0	0.0	0.0	0.0
VIC	5	798.0	1852.0	663.0
WA	5	242.0	247.0	283.8
Total	34	4794.0	11987.5	3239.2

Table 6. Commissioned energy storage projects

	2017	2018	2019	2020	2021	2022	2023
Number of projects	1	3	4	2	5	4	1
Investment (\$M)	90.0	128.9	71.6	131.6	373.8	86.9	250.0
Capacity (MW)	100.0	90.0	155.0	163.0	431.7	69.0	42.0
Energy (MWh)	129.0	115.0	185.0	198.0	693.0	101.0	13.0







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