Quarterly investment report: Large-scale renewable generation and storage

Q4 2025

CLEAN ENERGY COUNCIL

About this report

The Clean Energy Council's quarterly investment report tracks utility-scale projects from the financial investment commitment stage through to the completion and operation of the plant.

The financial investment commitment stage – in which projects receive agreement for access to debt and equity, based on the necessary project development and connection approvals and contracting arrangements being in place – is a crucial lead indicator for new capacity build.

The Clean Energy Council is aware that variations exist in development stage definitions across the industry, and as such the Clean Energy Council's data may differ from other datasets for the same period.

The Clean Energy Council's project data is retrospective, and so is subject to change depending on updated public information.

Investment figures for specific projects and charts showing trends over time are expressed in nominal terms (not adjusted for inflation). When a chart references investment trends beyond 12 months, it is expressed in real terms to adjust for inflation. The base month used with a **CPI value of 100 is September 2017**, and is drawn from the Australian Bureau of Statistic's Monthly Consumer Price Index Indicator.

Acknowledgement of Country

We respect and acknowledge the diversity of communities, identities, and clan groups for all First Nations peoples throughout Australia and recognise the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures; and to Elders past and present.

As a collective of diverse businesses operating on a national scale, we understand that the success of our endeavours is intrinsically linked to the wellbeing and prosperity of the communities we operate within. We acknowledge that Aboriginal and Torres Strait Islander communities are rich and diverse, reflecting a tapestry of cultures and backgrounds. This diversity underscores the importance of embracing a range of holistic solutions to address the unique challenges and opportunities that lie ahead.

We recognise the impact of human activity on the cultural landscape of Australia. We understand that these practices have not always been in harmony with the profound attachment and cultural custodianship that First Nations peoples have with the land.

We are committed to forging strong relationships with First Nations communities and stakeholders, recognising their unique perspectives and aspirations. We strive to engage in genuine, meaningful partnerships that honour their rights, culture, and self-determination.

← Cover image:
Coopers Gap Wind Farm
Western Downs, QLD
Western Wakka Wakka, Wulli Wulli #2
and Barunggam Country
(Tilt Renewables)

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Executive summary

The Clean Energy Council's Q4 2025 Quarterly Investment Report demonstrates a rebound in large-scale renewable energy and storage investment across Australia. The quarter delivered record commissioning outcomes across generation and batteries, strong financial close activity, and continued expansion of the national project pipeline.

Five renewable generation projects (1.2 GW) and five storage projects (1.1 GW) reached financial close during Q4 2025, with total capital investment exceeding $4 billion across generation, storage and hybrid assets.

Q4 has outperformed all other quarters on record for newly commissioned renewable and storage projects. Nine generation projects were completed totalling 2.1 GW of new capacity and representing 63% of 2025's total operating capacity. A record four storage projects (1.9 GW / 4.9 GWh) became operational, beating records broken in Q3 2025, reinforcing Australia's accelerating energy transition.

The forward pipeline remains robust. There are currently 81 generation projects (nearly 13 GW) and 75 storage projects (13 GW / 34.7 GWh) either financially committed or under construction.

Q4 2025 signals renewed momentum in Australia's clean energy buildout system transformation. However, much work remains to be done to continue to stimulate investment including streamlining planning and approvals processes and ensuring critical transmission infrastructure is built to get projects connected on time.

CEC definitions

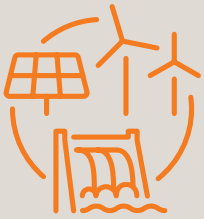
Financial close: publicly available information stating that a project's financing agreements have been signed, and the owner can begin drawing on the financing to commence work on the project. Typically this aligns with execution of a connection agreement and generator performance standards with the relevant network service provider and AEMO.

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

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

Highlights

9 generation projects were commissioned this quarter with a total operating capacity of 2.1 GW. This total is a quarterly record and more than the previous six quarters combined.



5 renewable generation projects (1.2 GW) worth $3.5 billion reached financial close - an uplift from more subdued investment in the prior three quarters

4 storage projects were also commissioned, combining for a total of 1 GW / 2.3 GWh of capacity / energy output.

5 renewable storage projects worth 1.1 GW (capacity) / 2.8 GWh (energy generation) reached financial close.

Q4 2025

Project pipeline

There are currently 80 renewable electricity generation projects that have either reached financial commitment or are under construction, representing nearly 12.2 GW of capacity. There are another 75 storage projects (either standalone or hybrid projects) in the pipeline, equivalent to 13 GW / 34.7 GWh in capacity / energy output.

Since 2017, 260 generation and storage projects have been commissioned, representing over 20 GW of installed electricity generation capacity and 4.1 GW / 8.7 GWh of energy storage.

A breakdown of all projects currently in financial commitment or under construction stages across the states and territories is shown below.

Current generation and storage projects either in financial commitment or under construction, by state

State	Project count	Total project capital investment ($M)	Generation project capacity (MW)	Storage project capacity (MW)	Storage project energy output (MWh)
ACT	1	400	0	250	500
NSW	39	8,692	3,153	4,307	11,528
NT	5	102	45	41	39
QLD	25	8,952	3,790	2,970	7,602
SA	19	3,400	945	2,299	5,638
TAS	1	50	21	-	-
VIC	29	9,619	3,137	2,029	5,859
WA	24	6,897	1,090	1,137	3,567
TOTAL	**143**	**38,111**	**12,180**	**13,033**	**34,733**

Current onshore wind projects either in financial commitment or under construction

State	Project count	Total project capital investment ($M)	Generation project capacity (MW)
ACT	0	-	-
NSW	1	820	414
NT	0	-	-
QLD	7	5071	2432
SA	2	1,500	544
TAS	1	50	21
VIC	3	4650	1538
WA	4	1,313	449
TOTAL	**18**	**13,404**	**5398**

Current solar projects either in financial commitment or under construction

State	Project count	Total project capital investment ($M)	Generation project capacity (MW)
ACT	0	-	-
NSW	16	3531	2654
NT	3	49	45
QLD	5	480	933
SA	6	534	401
TAS	0	-	-
VIC	14	2235	1594
WA	3	712	374
TOTAL	**47**	**7540**	**6000**

Q4 2025

Generation projects

Financial close

Quarter 4 is the strongest quarter in 2025 for new generation financing.

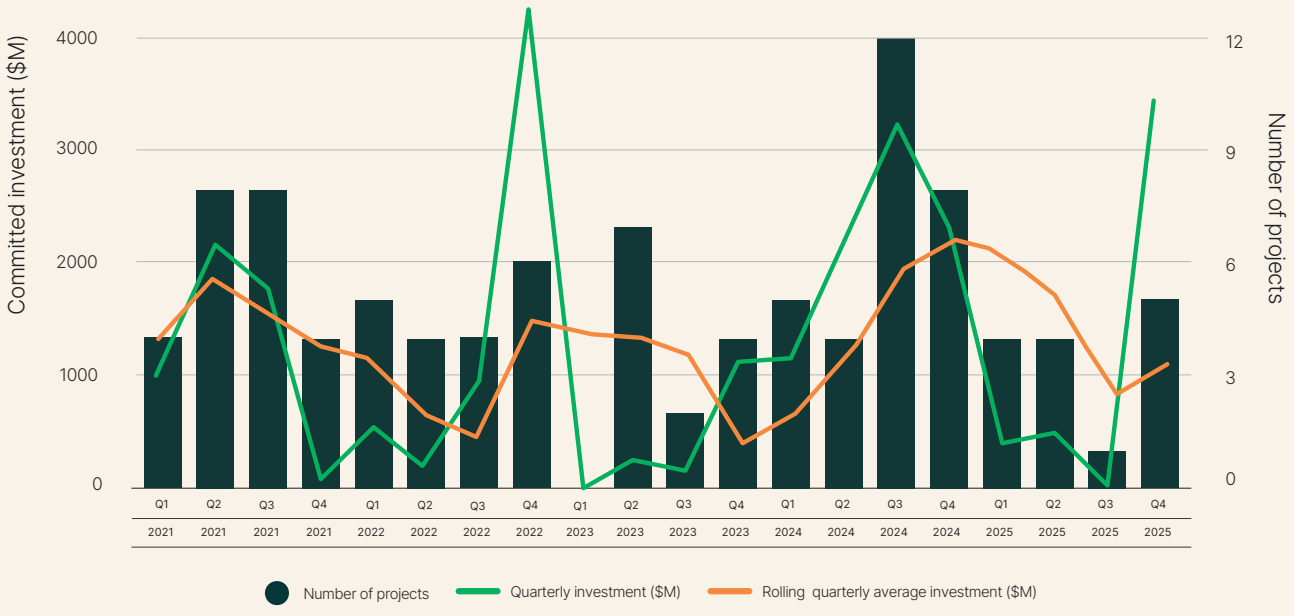
Quarter 4 2025 saw a late surge of large-scale renewable generation projects progress along the development pipeline. In one of the best performing quarters over the last three years, **five projects worth 1.2 GW of capacity reached financial close,** more than the previous three quarters combined. The largest of these new renewable projects was New South Wales' Blind Creek Solar Farm, with a size of 300 MW. Remarkably there were four onshore wind farms that reached financial close in the final weeks of December, in a year that had so far seen no wind farms reach this stage across the country. These onshore wind projects combined for a total of 857 MW. All generation projects reaching financial close combined for **$3.5 billion worth of investment.**

The projects to reach financial close were:

- Blind Creek Solar Farm (NSW) - 300 MW
- Carmody Hill Wind Project (SA) - 256 MW
- Delburn Wind Farm (VIC) - 205 MW
- Palmer Wind Farm (SA) - 288 MW
- Waddi Wind Farm (WA) - 108 MW

This solid end to the year saw 2025's total capacity of financially closed generation projects reach 2.3 GW, down on the 4.4 GW previously seen in 2024. Industry still faces an array of key challenges, such as transmission rollout, grid connection and project planning approvals. More work is required in order to ensure the acceleration of financial investment decision and to restore investor confidence.

Financially committed generation projects quarterly investment, nominal $AUD (million)



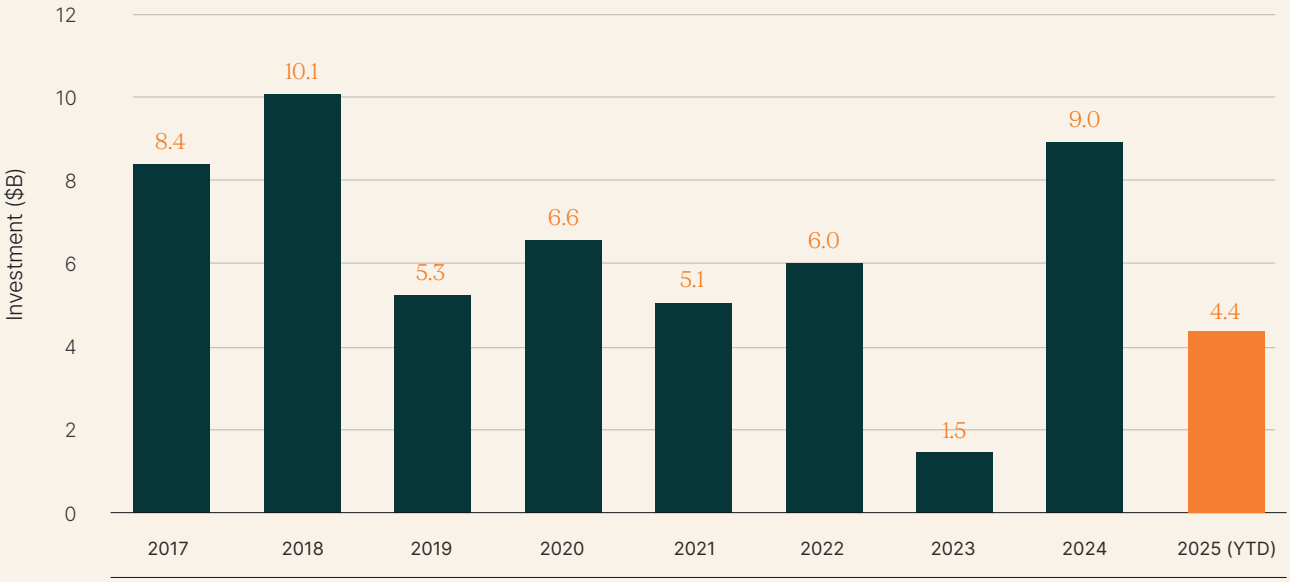
Project investment

A flurry of onshore wind investment in Q4 saw it achieve the second highest levels of investment in a single quarter for new generation projects, with $3.5 billion. This showcases the strong demand for global industry to invest in Australia with the correct settings in place. The total CAPEX for generation projects reaching financial close in 2025 reached $4.4 billion.

By comparison, the running total in 2024 was $9 billion, signaling that more is needed in order to ensure the investment continues to flow into the country.

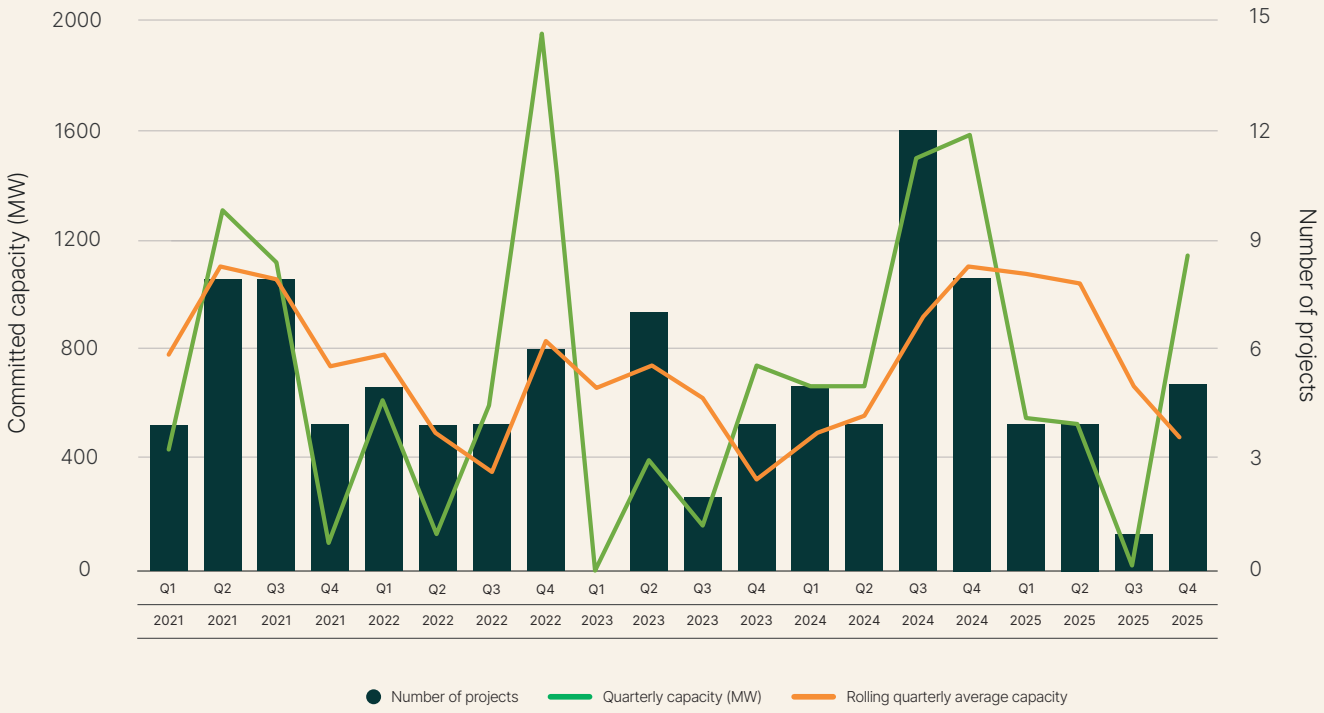
The investment charts presented here are expressed in nominal terms.

Total nominal investment of financially committed generation projects, annual $AUD (billion)

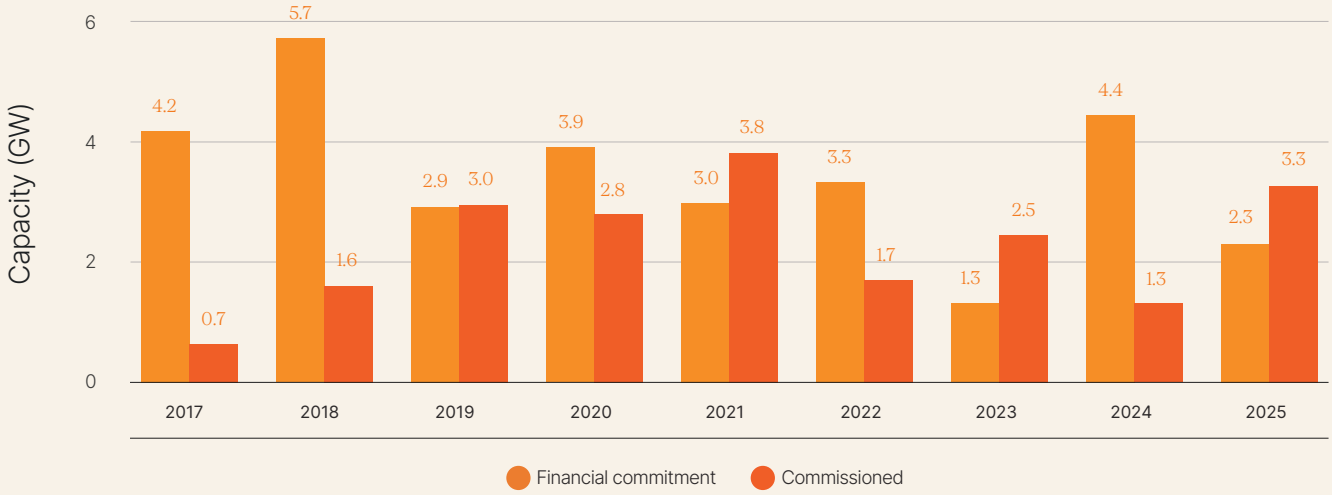


Note: Projects that reach multiple stages have been included in each stage.

Financially committed generation projects and capacity, quarterly MW



Total capacity of generation projects by development stage, annual GW



Generation projects overview by development stage reached

		Financially committed	Under construction	Commissioned
Q4 results	Projects	5	2	9
	Total capacity	1157 MW	405 MW	2099 MW

Commissioned generation projects

Records broken for commissioned generation projects, providing much needed energy supply to the grid.

In encouraging signs for renewable energy investors, Q4 2025 broke the record for the single largest quarter for newly commissioned generation projects, with nine projects reaching this stage with a total capacity of 2.1 GW, 57 per cent more than the previous record of 1.3 GW set in Q3 2021. The largest of these projects was Queensland's Clarke Creek Wind Farm – Stage 1, with a maximum capacity of 450 MW. Once the second stage is completed, this wind farm will be the second largest onshore wind project in the country.

Queensland also led the way with the most projects to become operational (four), while New South Wales had three, and Victoria and South Australia each had one. This late surge of generation projects becoming commissioned meant 2025 had 3.3 GW of generation capacity coming online, a vital annual total that is second only to the 3.8 GW seen in 2021. These nine commissioned projects represent a CAPEX value of over $3.3 billion invested, showcasing the strong demand for these renewable energy projects.

Commissioned generation projects by year

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Number of projects	11	28	42	34	41	18	15	13	23
Investment (A$m)	1,590	3,361	5,775	4,627	6,233	3,140	3,793	2,659	4,600
MW	654	1,614	2,970	2,812	3,834	1,705	2,463	1,321	3,279
Average project size (MW)	59.5	57.6	70.7	82.7	93.5	94.7	164.2	101.6	142.6

Project completion time by state

On average across Australia, it takes solar projects 21 months to progress from a financial investment decision to becoming fully operational. Onshore Wind projects, meanwhile, take an average of 30 months to progress across these stages, whilst storage projects take an average of 23 months.

South Australia leads all states when it comes to average time from financial commitment to commissioning for generation technology types, while it shares the title with Victoria shortest time for storage projects to progress between these stages at 20 months. Western Australia is the only state with a sufficient sample size for hybrid projects (projects with three or more technologies) to be included in the data, where it takes 17 months to progress from financial commitment to commissioning.

Project completion time – from financial commitment to commissioning

Time from financial commitment to commissioning by state & technology (months)**

State	Solar	Onshore wind	Battery	Hybrid
VIC	22	28	20	N/A
NSW	22	31	N/A	N/A
QLD	23	37	28	N/A
SA	19	23	20	N/A
WA	21	N/A	26	17
Total average by tech:	**21**	**30**	**23**	**17**

Notes - Average based on solar, onshore wind and battery projects that have reached commission since 2017.

The stated timeframe excludes the project development phases (e.g. Project design, planning & environmental assessments etc.) prior to Financial Commitment.

Each technology type needs to have at least five commissioned projects in a state for the average to be included.

Q4 2025

Energy storage projects

Financial close

Utility storage continues to be a reliable avenue of renewable investment

The final quarter of 2025 was another strong quarter for new utility-scale storage, with five projects totalling 1.1 GW / 2.8 GWh of capacity / energy output reaching financial commitment. Overall in 2025, there were 20 projects worth 4.2 GW / 13.4 GWh reached financial close, with the latter figure being a new annual record. With a duration of four hours, Victoria's Elaine BESS was the largest storage project to reach an investment decision in Q4, with a size of 311 MW / 1,244 MWh. Victoria and South Australia each had two storage projects reach financial close, while New South Wales had one.

Commissioned storage projects

Commissioned storage projects break records, again.

Further along the utility-scale storage pipeline saw more newly established records broken. **Four projects worth 1 GW / 2.3 GWh were commissioned**, with both measures beating the records broken in Q3 2025. The largest battery to come online was Victoria's Melbourne Renewable Energy Hub with a size of 600 MW / 1,600 MWh and a duration of 2.7 hours. For the first time ever, the rolling 12-month quarterly average for commissioned storage projects surpassed 1 GWh, and is now sitting at 1.2 GWh. This has nearly tripled compared to the same time 12 months ago.

Overall in 2025, there were eleven storage projects worth 1.9 GW / 4.9 GWh that reached the final commissioning stage. **The annual total of 4.9 GWh is greater than the previous eight years combined.**

Battery energy storage system projects by development stage reached, Q4 2025

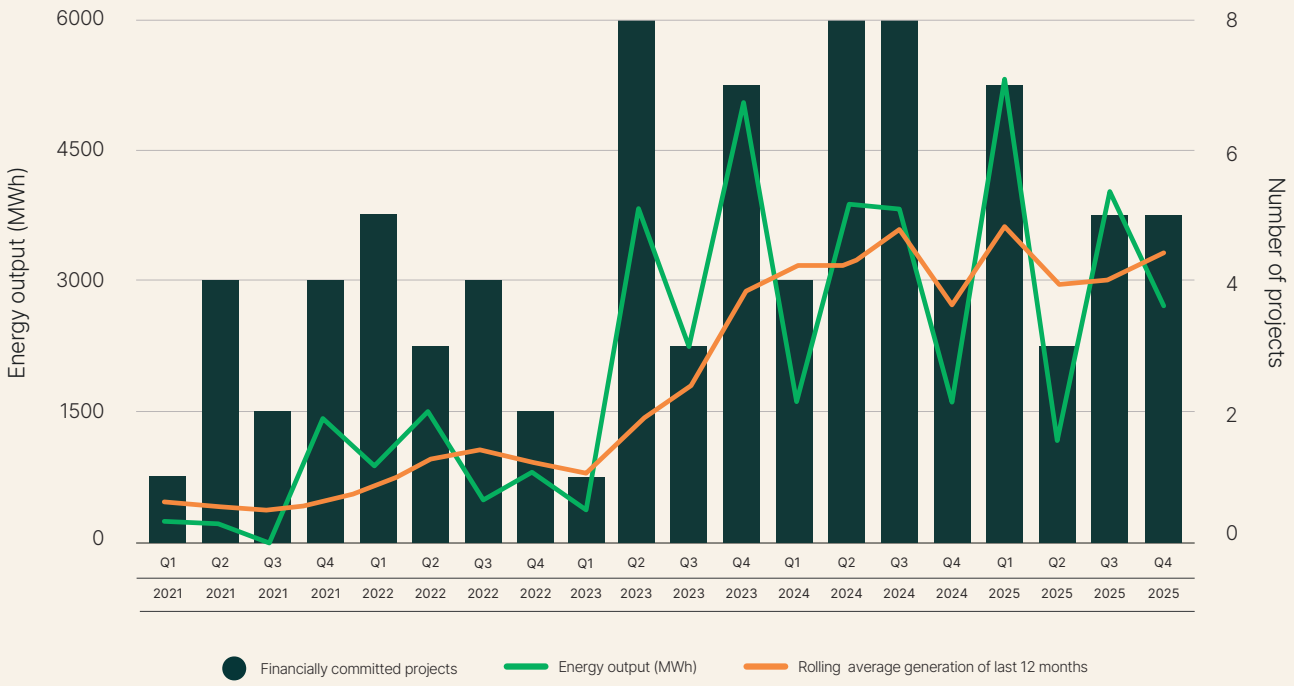
Battery Storage		Financially committed	Under construction	Commissioned
Q4 results	Project count	5	4	4
	Project capacity	1,058 MW	958 MW	950 MW
	Project energy output	2,761 MWh	2,538 MWh	2,300 MWh

Notes: Includes hybrid projects with a storage component

Projects that reach multiple stages have been included in each stage.

Project investment is underrepresented as not all projects have publicly available information.

Financially committed storage projects by energy output, quarterly MWh



Commissioned energy storage projects by year

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Number of projects	1	3	3	1	4	4	8	5	11
Investment (A$m)	90	129	72	42	353	87	960	1,325	2,001
MW	150	90	130	13	426	69	724	619	1,872
MWh	194	115	135	4	647	101	947	1,677	4,924
Average MW	150	30	43	13	107	17	91	124	170
Average MWh	194	38	45	4	162	25	118	335	448
Average duration (MWh/MW)	1.3	1.3	1.0	0.3	1.5	1.5	1.3	2.7	2.6

Pumped Hydro Energy Storage (PHES)

While no pumped hydro projects reached financial close in Q4, there are currently two projects across Australia under construction. In November, the Kidston Pumped Hydro Project began a significant commissioning process, the first of its kind to join the NEM in 40 years.

Pumped hydro energy storage (PHES) projects currently under construction

Project name	State	Owner	Capacity (MW)	Energy generation (MWh)	Duration
Kidston Pumped Hydro Project	Queensland	Genex Power	250	2,000	8
Snowy 2.0	New South Wales	Snowy Hydro	2,000	350,000	175

Q4 2025

Hybrid projects

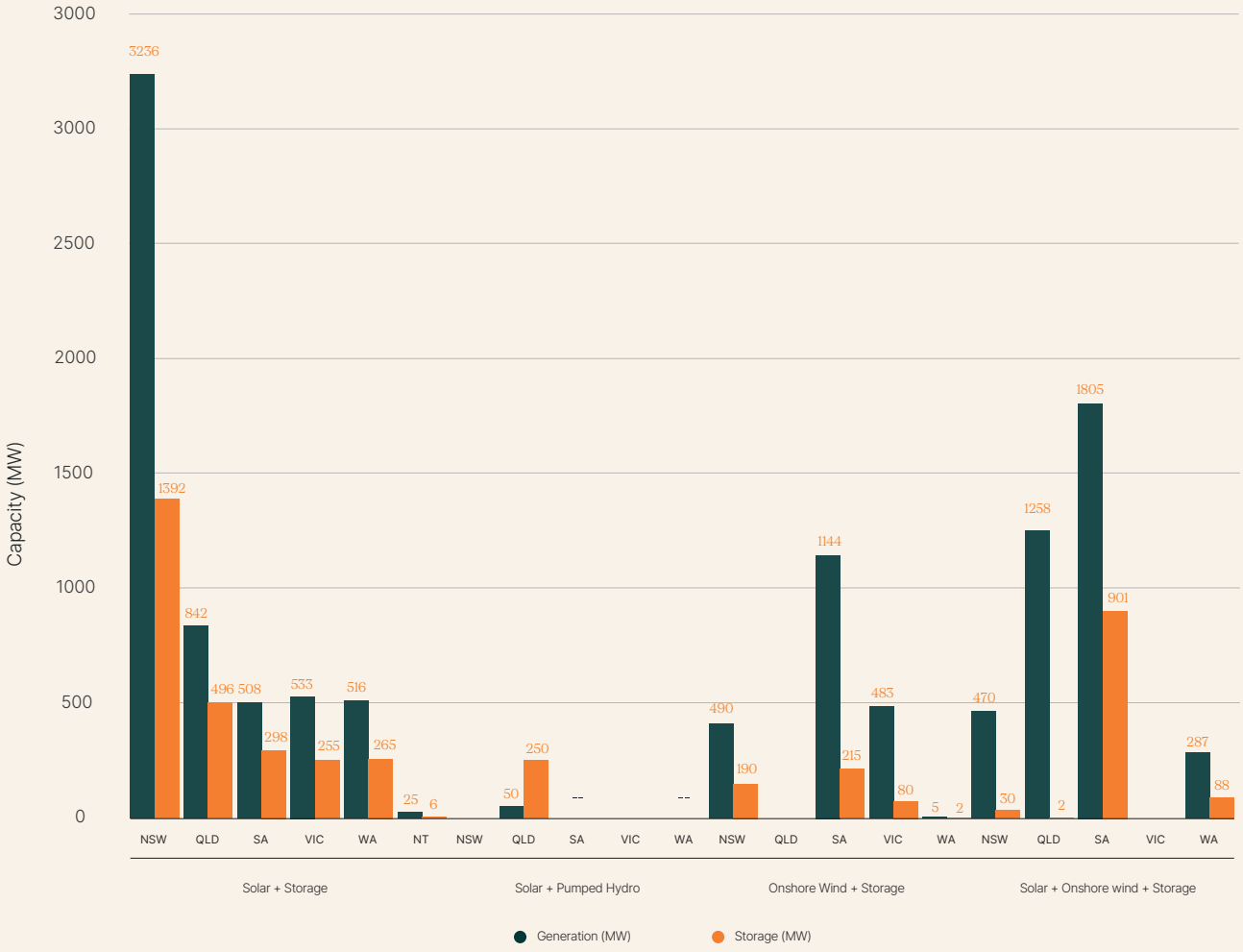
Hybrid projects are becoming more prevalent, with systems consisting of solar and storage, wind and storage, solar and PHES, or a combination of these. Across the nation, there are 64 hybrid projects at various stages of development. Close to two thirds of these projects are solar and storage systems.

These projects are not in addition to those already captured earlier in the report but show the increasing tendency to co-locate projects.

Project breakdown of hybrid projects

		Solar + storage	Solar + PHES	Wind + storage	Wind + solar + storage
Generation component	Solar capacity (MW)	5,660	50	-	1,315
	Wind capacity (MW)	-	-	2,046	2,509
	PHES (MW)	-	250	-	-
Storage component	Capacity (MW)	2,711	250	447	1,021
	Energy (MWh)	5,982	2000	720	3,935
Average duration (hrs)		2.2	2.2	8.0	1.6
Total number of projects		41	42	1	8
Total build cost ($AUD billion)		$8.7	$0.9	$2.3	$2.5

Hybrid project capacity breakdown by state and type



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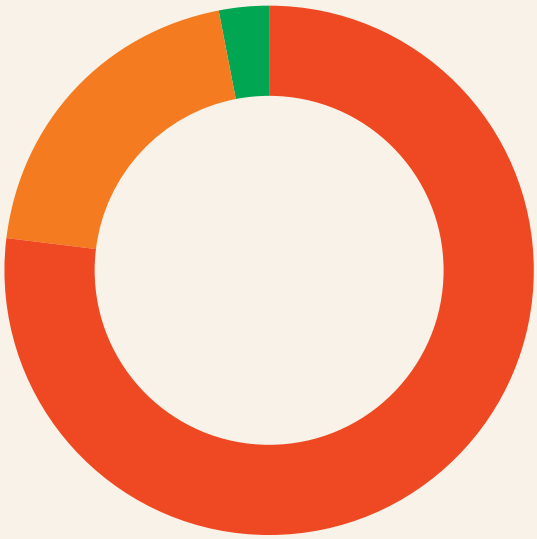
Capacity Investment Scheme and NSW Long-Term Energy Services Agreements tracker

The Capacity Investment Scheme (CIS) is an Australian Government revenue underwriting scheme to accelerate investment in renewable energy generation and storage. The CIS aims to support 40 GW of new capacity nationally. To date, six tenders have been closed and another four are currently in progress to support projects in the National Energy Market (NEM) and the WA Wholesale Electricity Market (WEM). As at end of Q4 2025, 66 projects had been awarded a CIS Agreement and nearly a quarter of these projects have progressed beyond financial close. Their status by lifecycle stage is summarised below.

Total project count and percentage share of all closed CIS Agreements by lifecycle stage, Q4 2025



Pre-FID	51
FID / Under construction	13
Commissioned	2

Capacity Investment Scheme and NSW Long-Term Energy Services Agreements tracker

Long-Term Energy Services Agreements (LTESAs) support the New South Wales Government's Electricity Infrastructure Roadmap by offering generation, storage and firming projects the right to access minimum cash flows for periods within a long contract term. This reduces price uncertainty for investors, bringing forward investment in new sources of renewable energy projects.

To date, five tenders have been closed and announced to support projects in NSW, while a further two round will be announced in 2026. To date, 17 projects have been awarded an LTESA, and nearly two thirds have progressed beyond financial close. Their status by lifecycle stage is summarised below.

Total project count and percentage share of all closed LTESA Agreements by lifecycle stage, Q4 2025

Pre-FID	6
FID / Under construction	8
Commissioned	3

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