# Rooftop solar and storage report

January—June 2025

CLEAN ENERGY COUNCIL

# About this report

This is the fourth edition of the Clean Energy Council's half-yearly report monitoring the progress of the deployment of rooftop solar and behind-the-meter energy storage systems in Australia. The rooftop solar and battery installation data featured in this report is sourced from our data partner for these Rooftop Solar and Storage reports, SunWiz, with supplementary data from Green Energy Markets referenced in some instances. The report's section on installer, product and Approved Seller accreditation draws on Clean Energy Council data.

## 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.

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# Highlights

There were 115,584 rooftop solar installations on Australian homes and businesses in the first half of 2025.

These installations represent more than 1.1 GW of new installed capacity into the grid.

Rooftop solar contributed 12.8 per cent, or 15,463 GWh, of Australia's total energy generation for the first half of 2025.[1]

Queensland surpassed New South Wales for the first time as the leading state for total capacity installed, with 326 MW.

A record breaking 85,000 battery units were sold in the first half of 2025, with a spike in the second quarter in the lead up to the Federal and WA residential home battery programs going live.


At end of June 2025, there were 5,157 approved rooftop solar and inverter products and household batteries available to installers across Australia.

[1] Open Electricity - Open Electricity: All Regions

# Installations and capacity trends

## Rooftop solar installations

In the first half of 2025 there were **115,584** rooftop solar units installed across Australia. This was 18 per cent lower when compared to the same period 12 months prior. Despite this, rooftop solar continues to be a key and growing contributor to the nation's energy mix, with a generation share of **12.8 per cent** in the first six months 2025 (up from 11.5 per cent in the same period 12 months prior and 6.0 per cent in 2020).

The total installed capacity of rooftop solar so far in 2025 is **1.1 GW**. This complements the 1 GW worth of commissioned large-scale generation projects over the same period. There are now a total of **4.2 million** rooftop solar installations across Australian homes and businesses, representing **26.8 GW** of generation capacity.

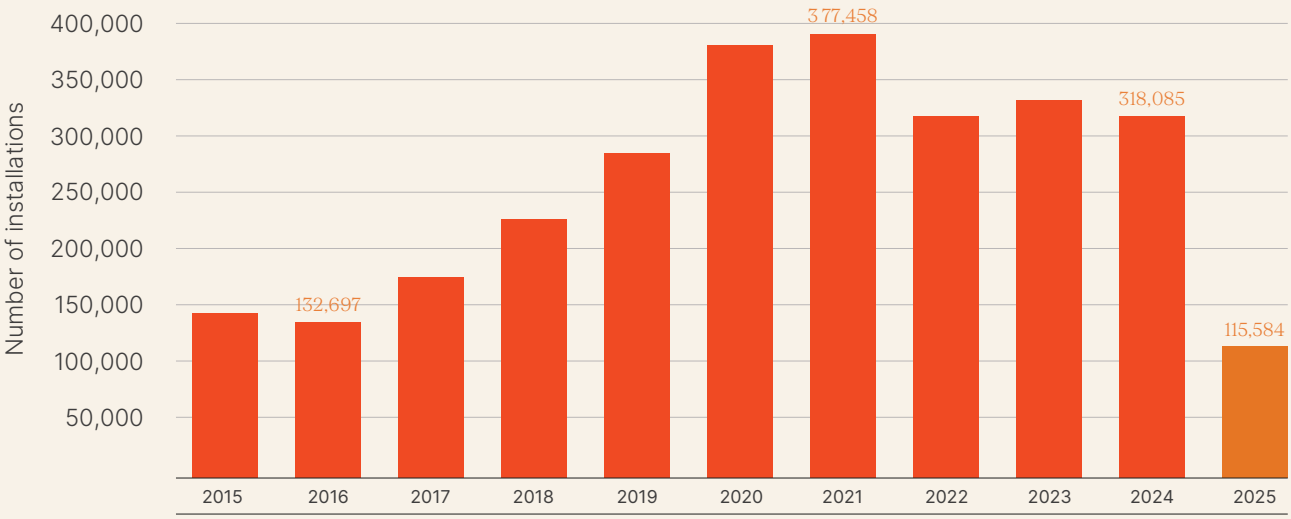


Figure 1: National number of rooftop solar systems installed, by year

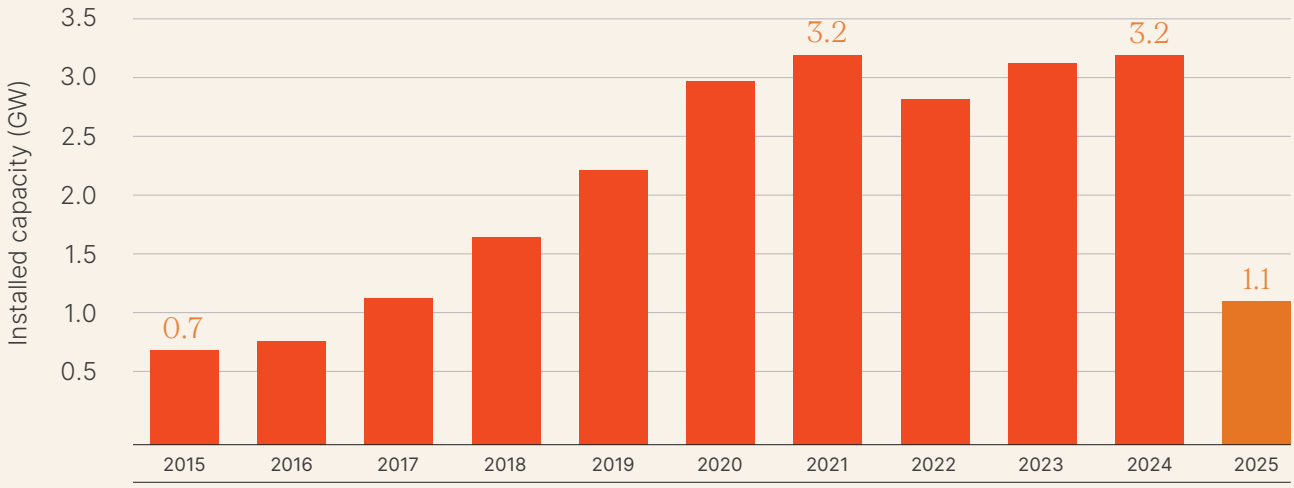


Figure 2: National installed rooftop solar capacity (GW), by calendar year

The total number of rooftop solar installations during the period was 18 per cent lower than the same period in 2024. The total installed capacity of 1.1 GW is 15 per cent lower than the 1.3 GW installed over the same period in 2024. Typically, there is a seasonal trend where these numbers surge as summer approaches.

The average size of systems installed continues to increase year-on-year. The six-month rolling average system size rose this half to 10.2 kW per system. This is an increase of 4.1 per cent when compared to the same point 12 months ago.

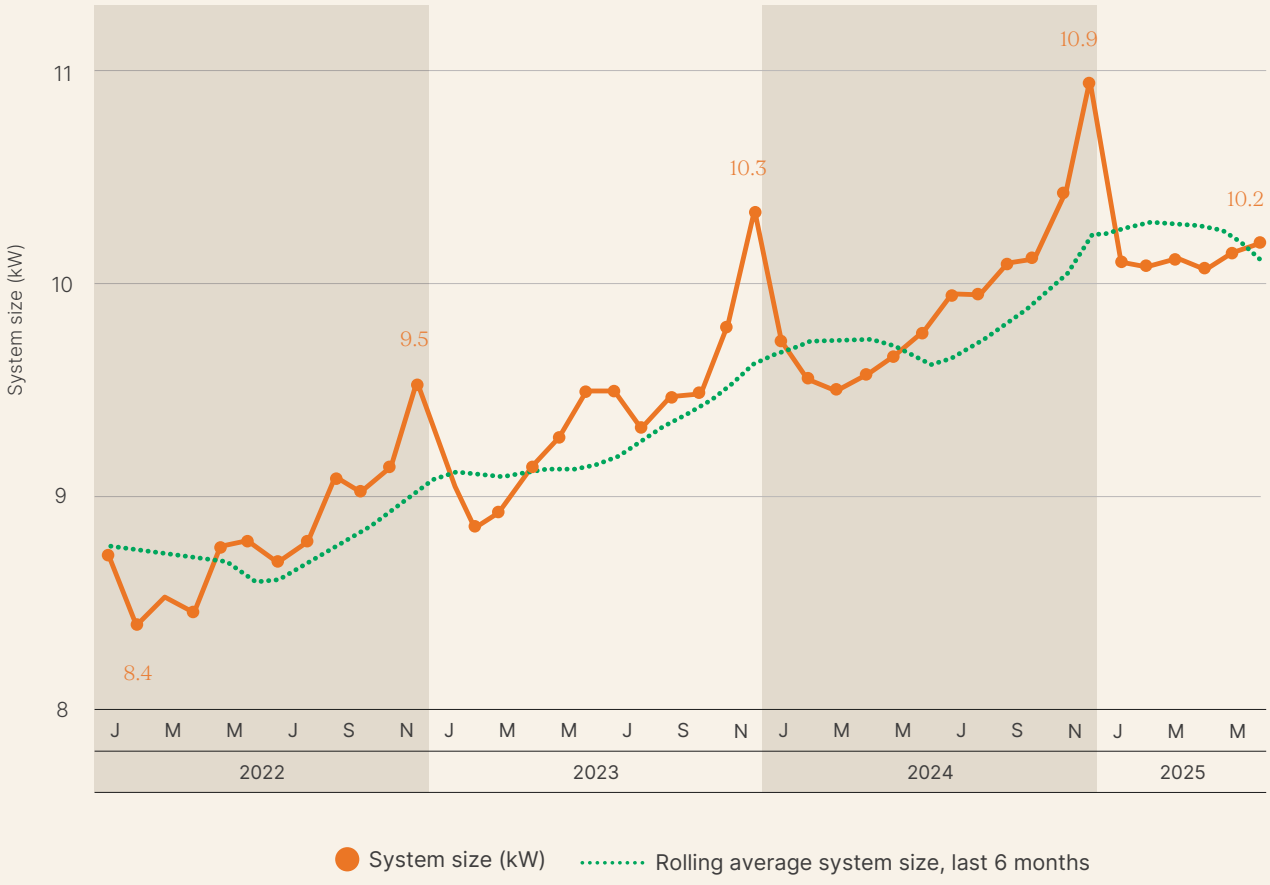


Figure 3: Average system size by registration month

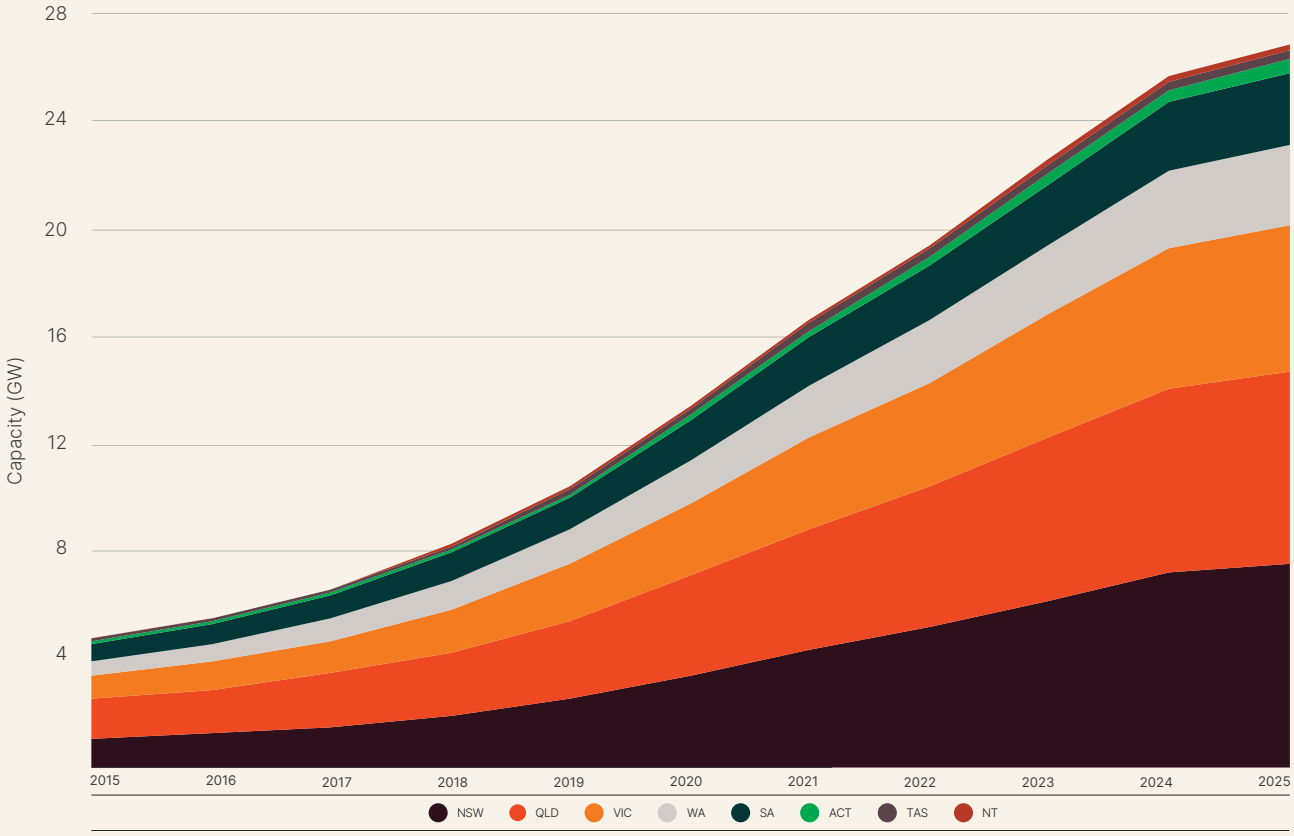


Figure 4: Cumulative annual capacity (GW) of rooftop solar, by jurisdiction

Around the states, Queensland has narrowly surpassed NSW for the first time as the leading state for total capacity installed over six months with 326 MW and 321 MW, respectively. Victoria remains in third place for the first half of the year at 230 MW.

However, New South Wales continues to boast the highest level of total installed capacity of rooftop solar overall at 7.5 GW – over a quarter of total Australian capacity. Queensland remains the state with the most installations, with 1.1 million. Queensland and New South Wales hold more than half of all rooftop solar installations across Australia.

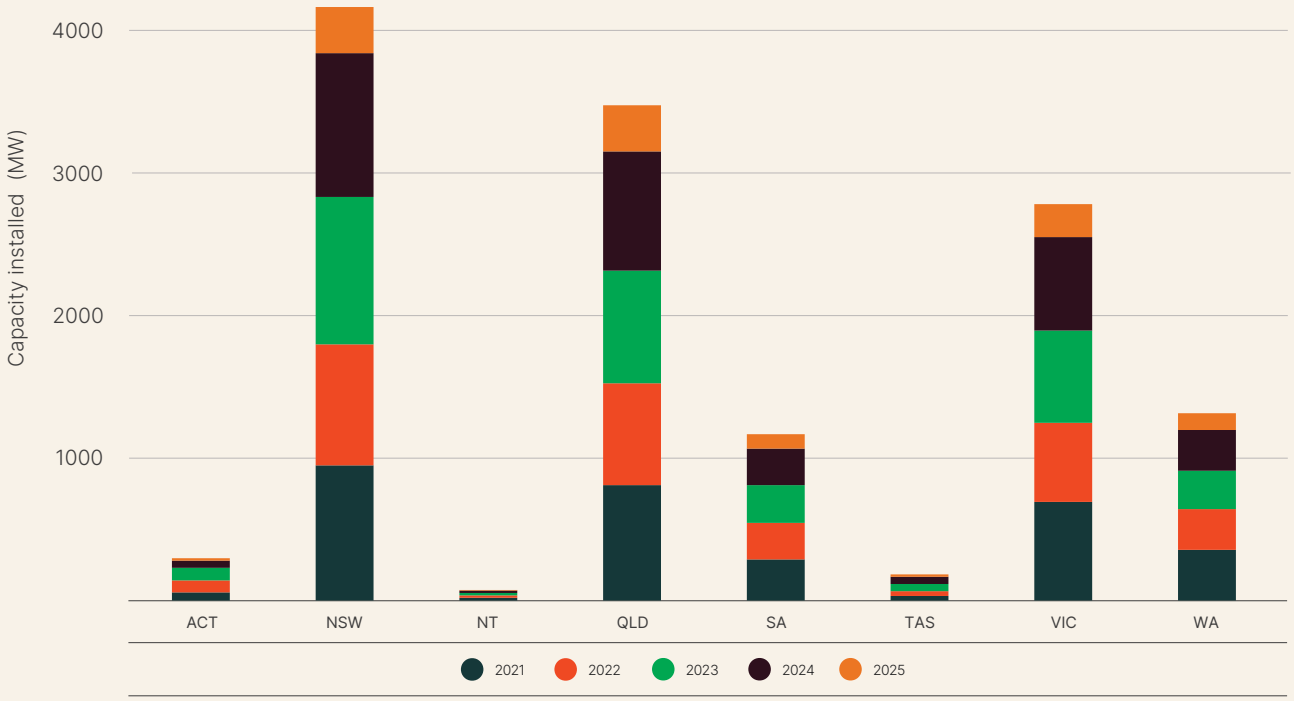


Figure 5: State annual capacity (MW) of rooftop solar by installation year, past five years

## Battery installations

With the Federal Government's Cheaper Home Batteries Program and the WA Residential Battery Scheme launching on 1 July, battery attachments to rooftop PV systems spiked towards the end of the financial year.

There were 85,000 battery sales across Australia in the first six months of 2025, a 191 per cent increase when compared to the same period 12 months ago. The rolling 12-month average of quarterly battery sales continues to rise, now standing at 32,666. This is a significant result, having increased nearly five-fold since 2022 when it reached 7,091. Cumulatively there have been more than 271,000 battery units sold across Australia. This total is close to double when compared to the same period 12 months prior, when 140,565 battery units had been sold.

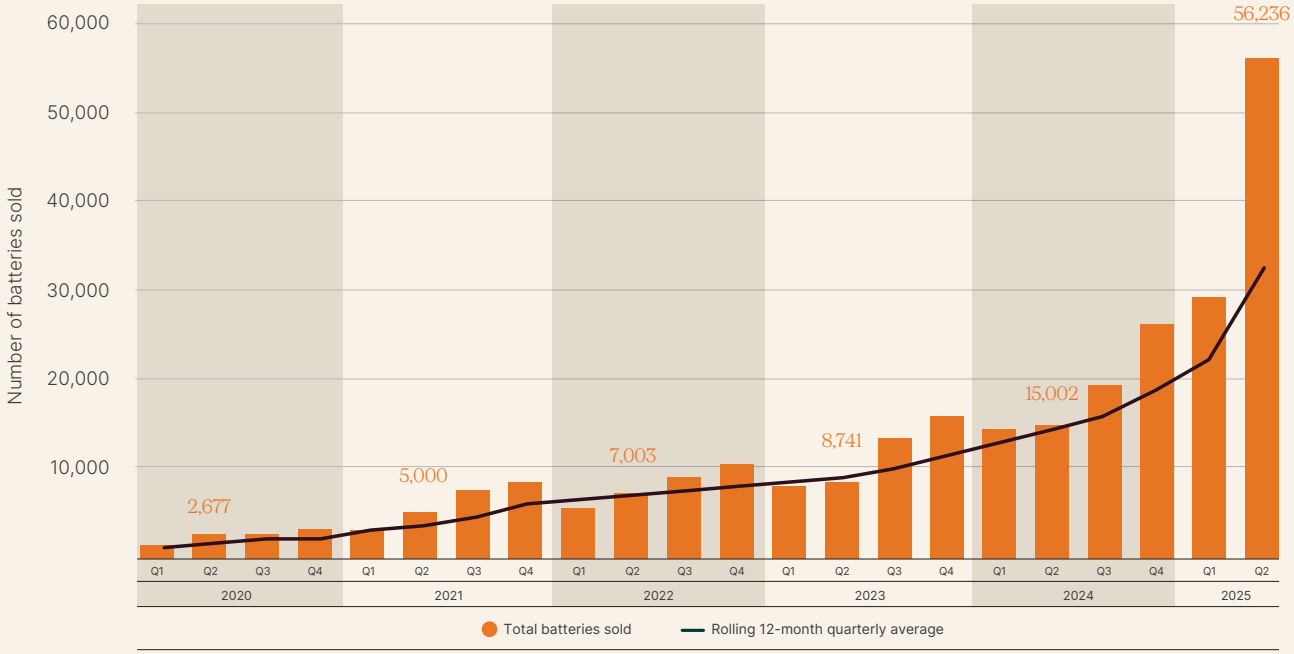


Figure 6: Total battery sales, quarterly

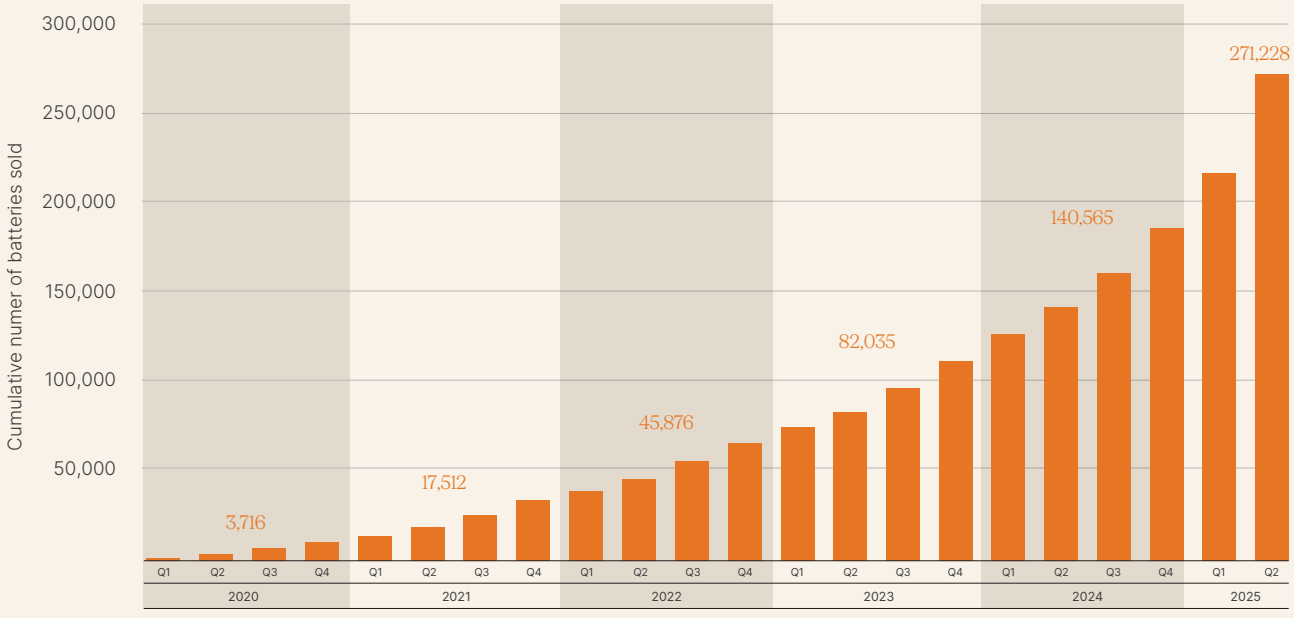


Figure 7: Cumulative battery sales, quarterly

# Industry programs

The Clean Energy Council plays a pivotal role in supporting the effective delivery of government incentive programs and maintaining the integrity of the consumer energy resources sector including through appointment by the Clean Energy Regulator as the approved listing body for solar PV modules and inverters and as the administrator of the New Energy Tech Consumer Code (NETCC).

Through the Product Accreditation Program, the Clean Energy Council assesses and approves solar panels, inverters, batteries and other key components against relevant Australian and international standards. Only products listed on the approved product lists are eligible for installation under the Small-scale Renewable Energy Scheme and other state-based rebate programs.

The NETCC governs consumer-facing practices for solar, battery and emerging energy services providers and sets best-practice requirements for marketing, quotations, contract transparency, delivery, and warranty support.

## Product accreditation

In the first half of 2025, the Federal Government announced expanded scope of the Small-scale Renewable Energy Scheme to include residential battery systems through the Cheaper Home Batteries Program, while the Western Australian Government announced the introduction of its new Residential Home Battery Scheme. With both programs set to launch on 1 July 2025, the volume of applications submitted to the Clean Energy Council for inclusion on its approved products list, increased. In the first half of 2025, 261 new product applications were received, while 182 applications were approved and 47 applications were rejected. The number of PV module applications has been in decline since the beginning of 2025, which is attributed to manufacturers having completed re-listings of modules in the lead up to the IEC 60125 Standards change in 2021.

The Clean Energy Council is implementing a range of process improvements to its products listing process to address volumes and response times without compromising the integrity of product assessments. These include the introduction of an initial documentation screening step to ensure applications are complete upon submission; improved transparency around application progress and estimated wait times; and the streamlining of internal workflows to reduce delays and improve turnaround.

As at 30 June 2025, there were 5,157 approved rooftop solar, inverter and storage products, which represents a 6.7 per cent increase compared to the previous half.

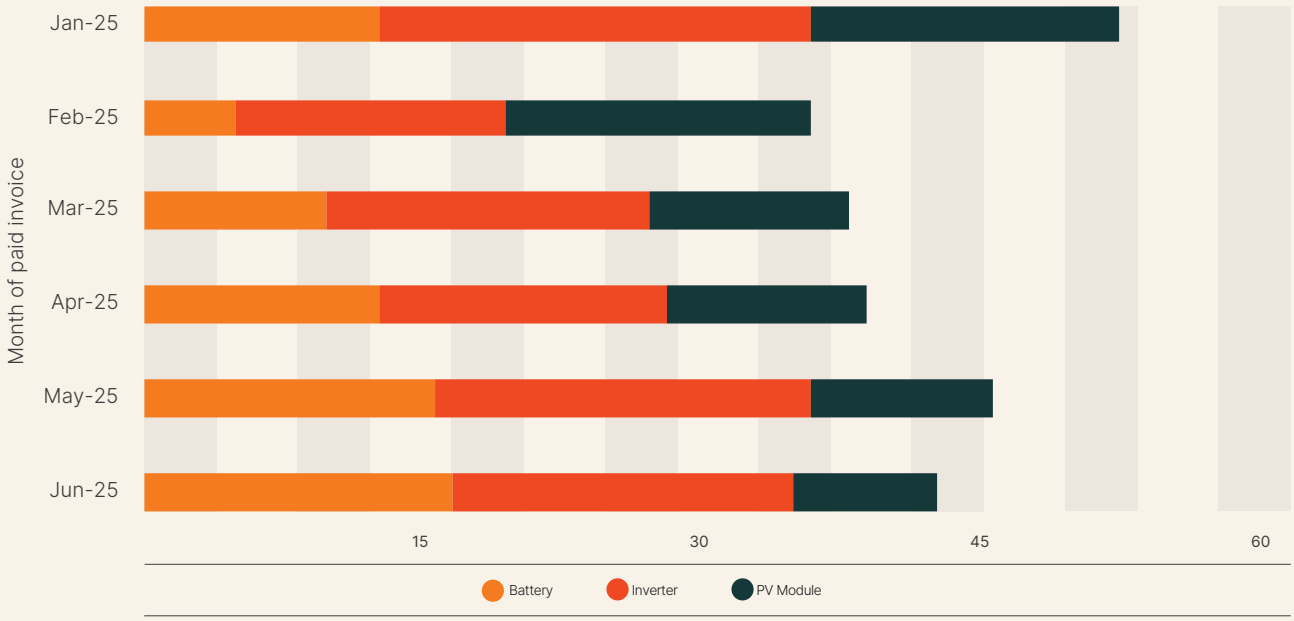


Figure 8: Total product applications received January to June 2025, monthly

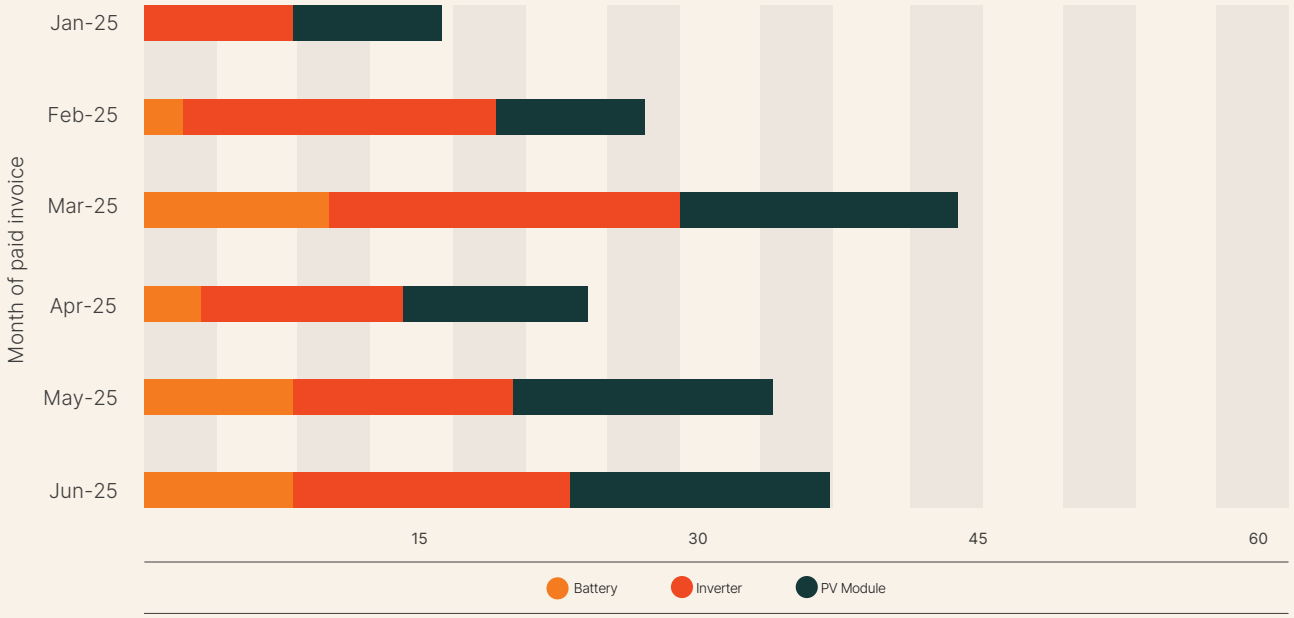


Figure 9: Total applications for products approved January to June 2025, monthly

| Product type | Number of products | Number of manufacturers |
|---|---|---|
| Battery model | 764 | 110 |
| Inverter model | 1,797 | 110 |
| Solar PV module model | 2,596 | 76 |

Table 1: Approved product breakdown

Source: Clean Energy Council

### Advancing products standards

The Clean Energy Council is actively engaged with Standards Australia and relevant technical committees to support the development and advancement of Australian Standards relating to clean energy technologies. This includes contributing to the Australian adoptions of key referenced international standards by the International Electrotechnical Commission (IEC). Key areas of focus during the first half of 2025 included:

- **AS/NZS 4777.1:2024** came into effect. This Standard superseded the 2016 version. The update for the installation of inverters now covers emerging technologies, product innovation and provides guidance for EV supply equipment capable of reverse power transfer. It also removes duplication of requirements for installations that already have a dedicated standard. Installers are reminded for the need to complete mandatory CPD training with Solar Accreditation Australia prior to September 30 2025, to ensure they maintain their accreditation with SAA.
- **AS/NZS 5139:2019** A1 – Battery Installation Safety (due for release early July)- the Clean Energy Countil advocated for this standard update to have minimal changes to lessen the impact to installers and manufacturers with feedback provided in the following areas:
    - providing alternative locations for battery labelling to ensure battery installations are more aesthetically pleasing for consumers, while maintaining visibility of crucial safety information.
    - clearer examples of diagrams pertaining to distances and zoning of battery placement
    - alignment of safety requirements to give installers the ability to provide single solutions.
- **SA TS 5573:2025** Common Smart Inverter Profile (CSIP) – Australia with Test Procedures was released on 27 June and formalises the work of the DER Integration API technical working group. The work brought together network operators and the DER. This new technical standard has minimal changes and additions, ensuring it does not impose restrictions on manufacturers already compliant with the original CSIP.
- **IEC 61215:2016** for PV modules was superseded, with the Clean Energy Council requesting certification to the new version of the standard by 1 October 2024 for listed products. The Clean Energy Council provided extensions to listings for some products certified to the previous version of the standard, and demonstrated due diligence in meeting the updated requirements following extensive consultation with industry and the Clean Energy Regulator. The extension period ended on 31 March 2025 and no extensions for these products will be provided.
- **AS 60947.3** relating to Switch-Disconnectors has been updated but is not likely to impact current listings.
- Work with Standards Australia on the development of interoperability standards continued.

### Product case reviews

Forty-three product compliance cases were opened either through a complaint or audit during the first half of 2025. Thirty-four cases were closed. Inverters had the highest number of cases both received and closed, with 24 and 18, respectively.

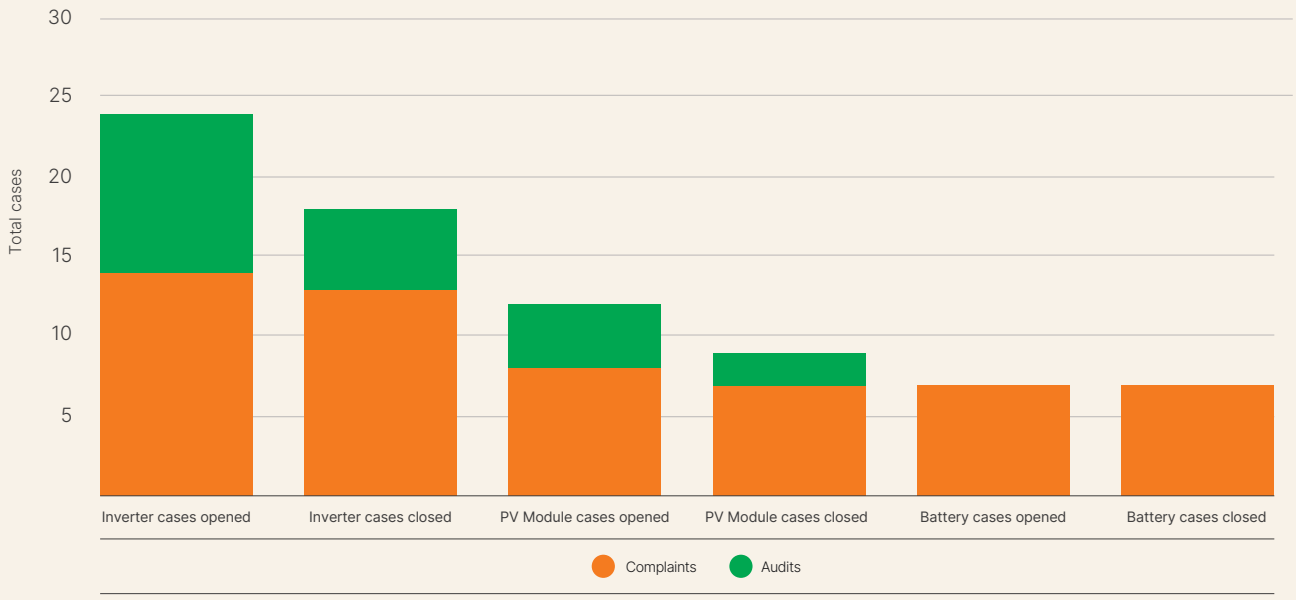


Figure 10: Share of product cases opened/closed by type, January to June 2025

### Compliance and audit outcomes

Of the 34 product compliance cases finalised in the first half of 2025, 15 per cent resulted in enforcement action. Enforcement action occurs where breaches of the product listing terms and conditions are confirmed following an investigation. Advice and education outcomes are designed to address minor breaches and do not escalate to a suspension or de-listing if corrective actions are satisfied by the manufacturer and or registered importer. The Clean Energy Council may issue a direct suspension or de-listing of approved products if there are significant breaches of the terms and conditions.

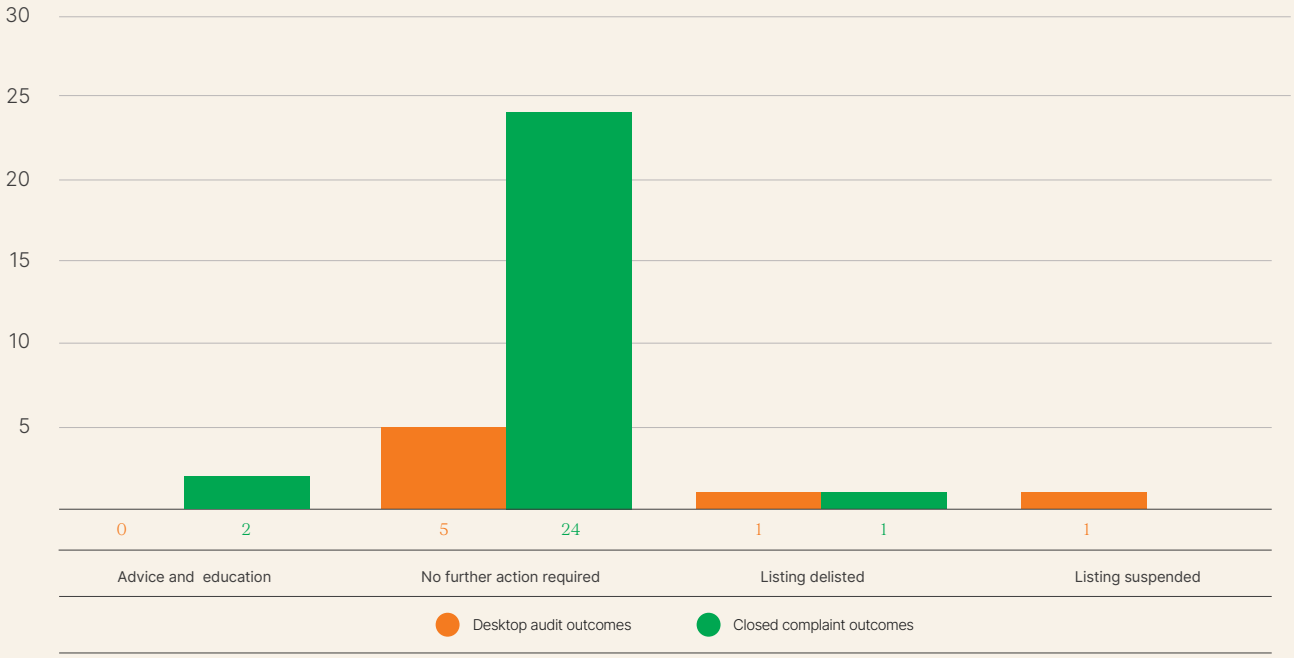


Figure 11: Compliance and audit case outcomes, January to June 2025

## New Energy Tech Consumer Code (NETCC)

As part of its Residential Battery Scheme, the Western Australian Government announced during the reporting period that installers must be New Energy Tech Code Approved Sellers. In addition, being an Approved Seller under the NETCC is listed as a requirement across the Solar Victoria Solar Homes Program, the Household Energy Upgrades Fund, the Business Growth Fund in South Australia, and sustainability rebates programs by Shellharbour Council, Randwick City Council and the City of Canterbury Bankstown in New South Wales.

| State / Territory | Number of NETCC Approved Sellers as at 30 June 2025 |
|---|---|
| VIC | 1,045 |
| NSW | 275 |
| QLD | 200 |
| SA | 95 |
| TAS | 23 |
| ACT | 53 |
| WA | 93 |
| Total NETCC Approved Sellers | 1,817 |

Table 2: Total Approved Sellers by state and territory

Note – A significant portion of Approved Sellers operate in multiple states. These figures capture the location of the company's headquarters.

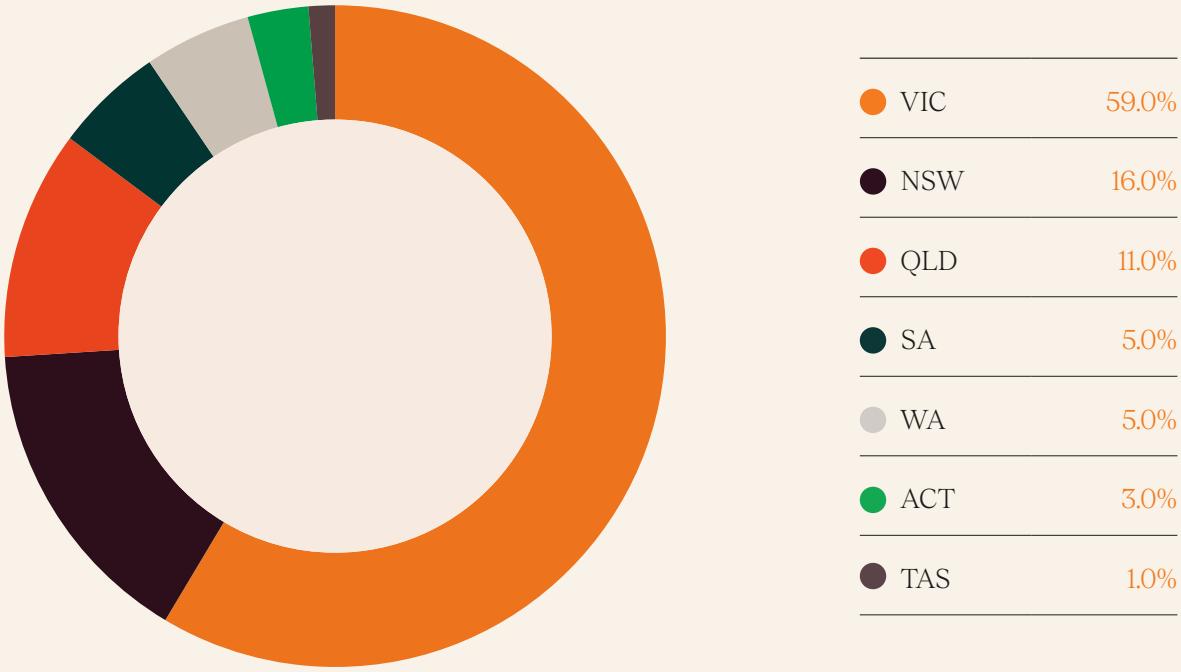


Figure 12: Share of NETCC Approved Sellers by state, as at 30 June 2025

**NETCC compliance**

Complaint cases are reactive investigations that are conducted in response to allegations of misconduct against a New Energy Tech Code Approved Seller. While the majority of NETCC cases are received from consumers, the Clean Energy Council, as the NETCC Administrator, can investigate alleged non-compliance from various sources. Audit cases are investigations that are proactively conducted by the Administrator to assess recent sales activities and test Approved Sellers on their knowledge of the NETCC.

The first half of 2025 saw 171 complaint cases opened, and 143 cases closed. Meanwhile, 96 audit cases were opened, and 120 were closed. There were 119 cases where no breach was found, while 79 cases required action.

Following the investigation of compliance cases, 85 instances of non-compliance were recorded against Approved Sellers in the first half of 2025. These outcomes are recorded as a support to comply record or a breach upheld. A support to comply record acts as a formal warning and requires less significant corrective actions to be submitted by the Approved Seller as the intention is to educate the Seller to avoid further non-compliance. This is generally applied for minor misconduct. A breach is generally upheld if the misconduct indicates systemic non-compliance or has resulted in harm to consumers or the reputation of the NETCC. Approved Sellers are required to undertake greater remedial actions to resolve breaches and can be suspended or expelled from the NETCC if breaches are not resolved. Of all the observed non-compliance, 39 per cent related to failure to provide complaint information in quotations and 20 per cent related to non-compliant contracts.

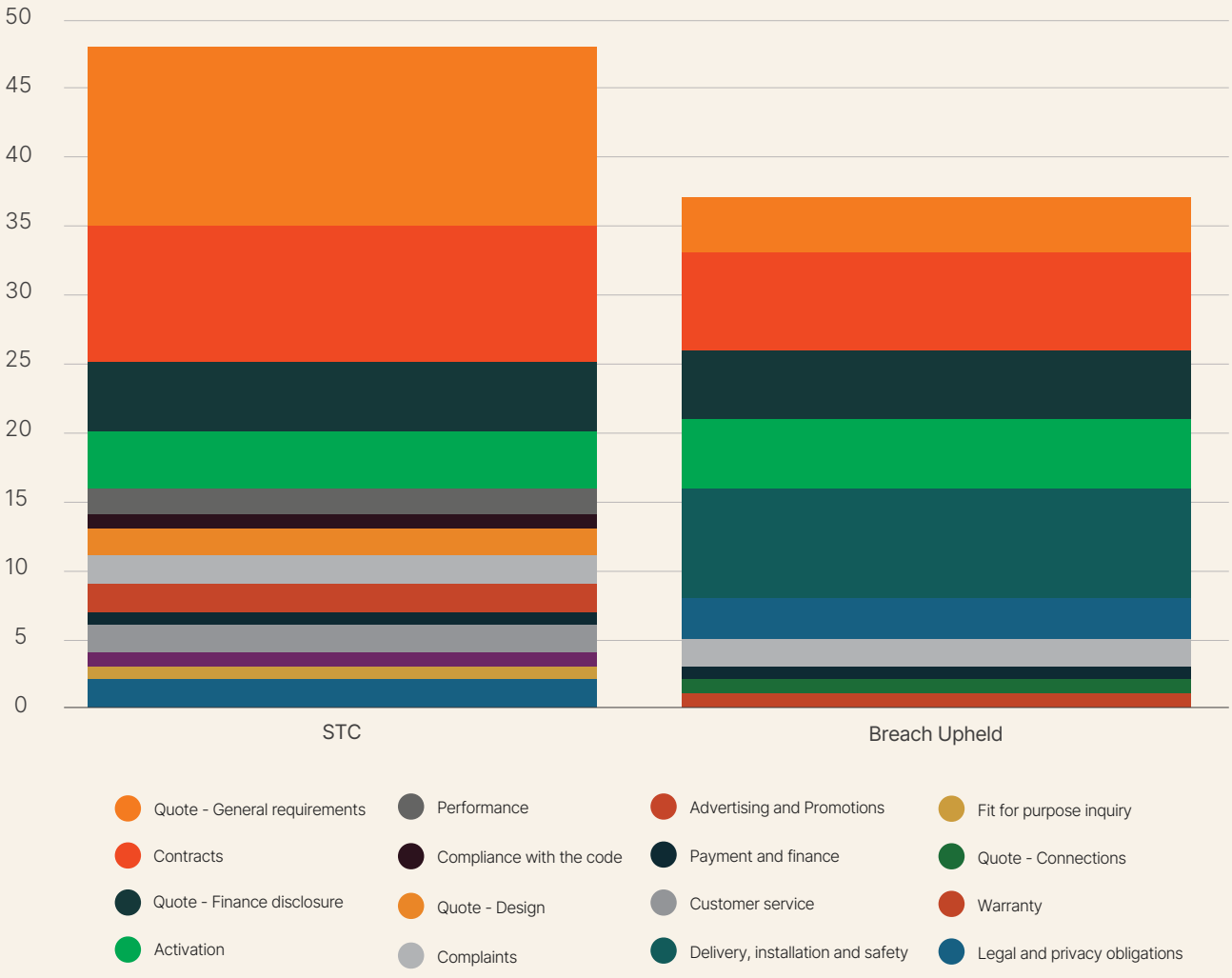


Figure 13: Recorded breaches and support to comply from complaints cases, January to June 2025

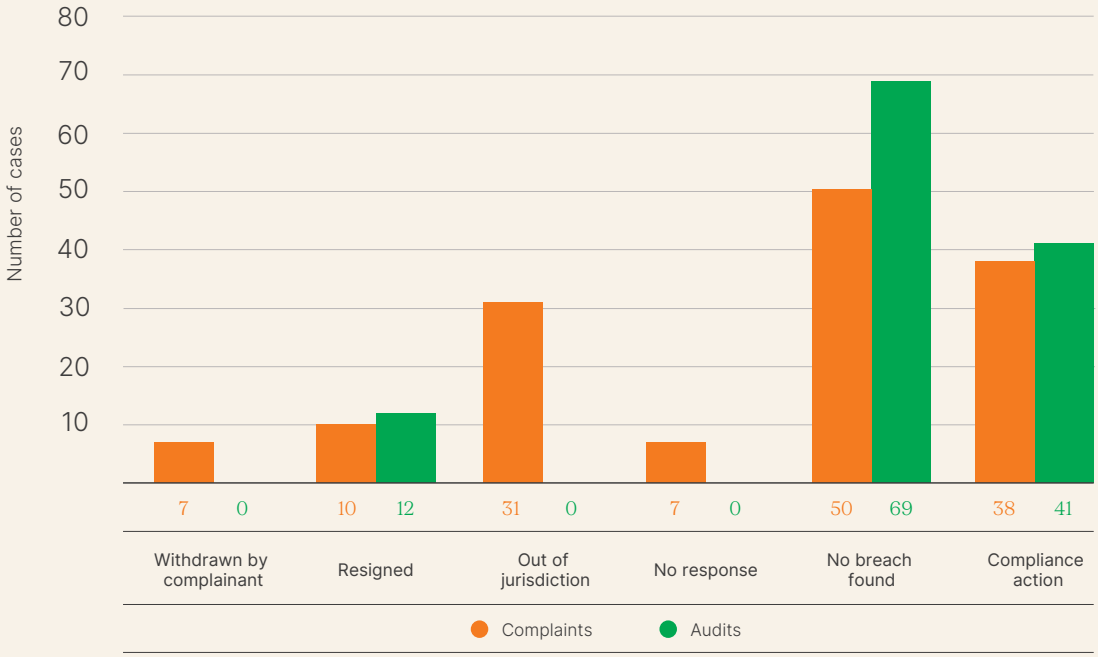


Figure 14: NETCC closed complaint case outcomes, January to June 2025

There were 265 outcomes for NETCC complaints and audit cases in the first half of 2025. Of those cases, 119 (45 per cent) saw that no breach was found, while 79 (30 per cent) required compliance action. For further information on enforcement actions undertaken by the Administrator and trends of non-compliance observed, visit NETCC Compliance activity.

From January to June 2025, Victoria had well over half of all referral notices across the country. Of Victoria's 61 referral notices, 29 were provided to Victoria's dispute resolution body, the Victorian Civil and Administrative Tribunal, while 23 were directed to Vicotria's consumer protection authority, Consumer Affairs Victoria. Three of the referral notices were sent to the Electrical Safety Authority.

Referral notices to other external bodies were also provided to complainants on 9 occasions. These other bodies include the Australian Communications and Media Authority and Solar Accreditation Australia.

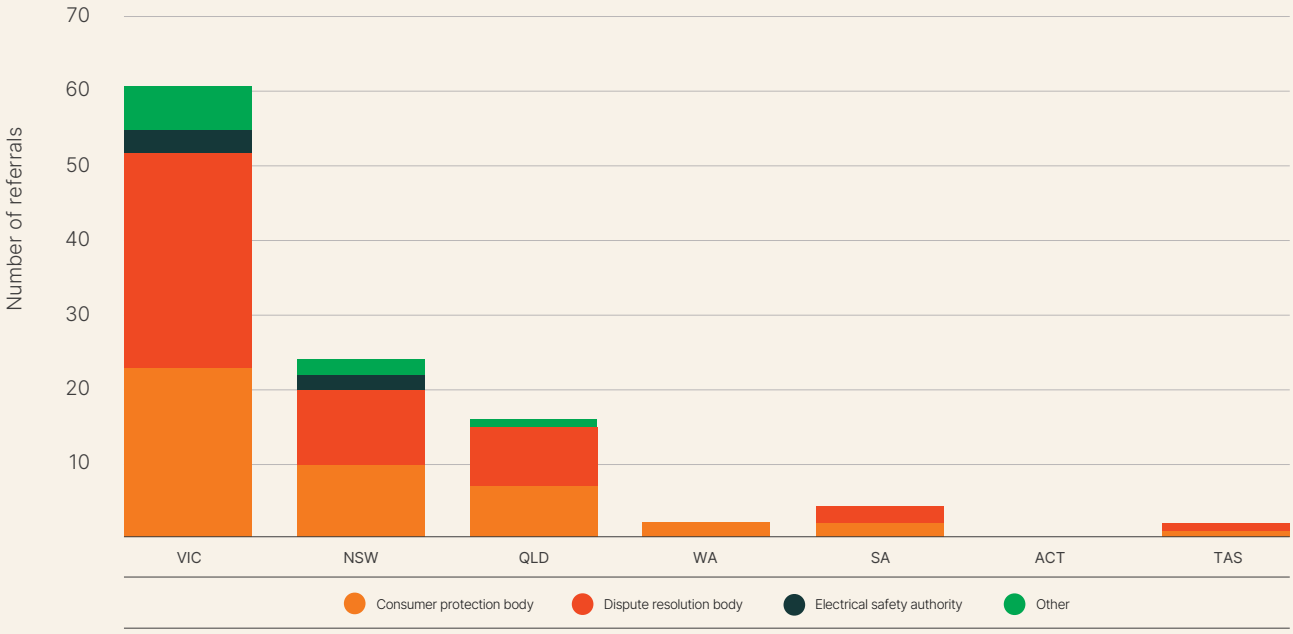


Figure 15: NETCC complaint case referral notices by state/territory, January to June 2025

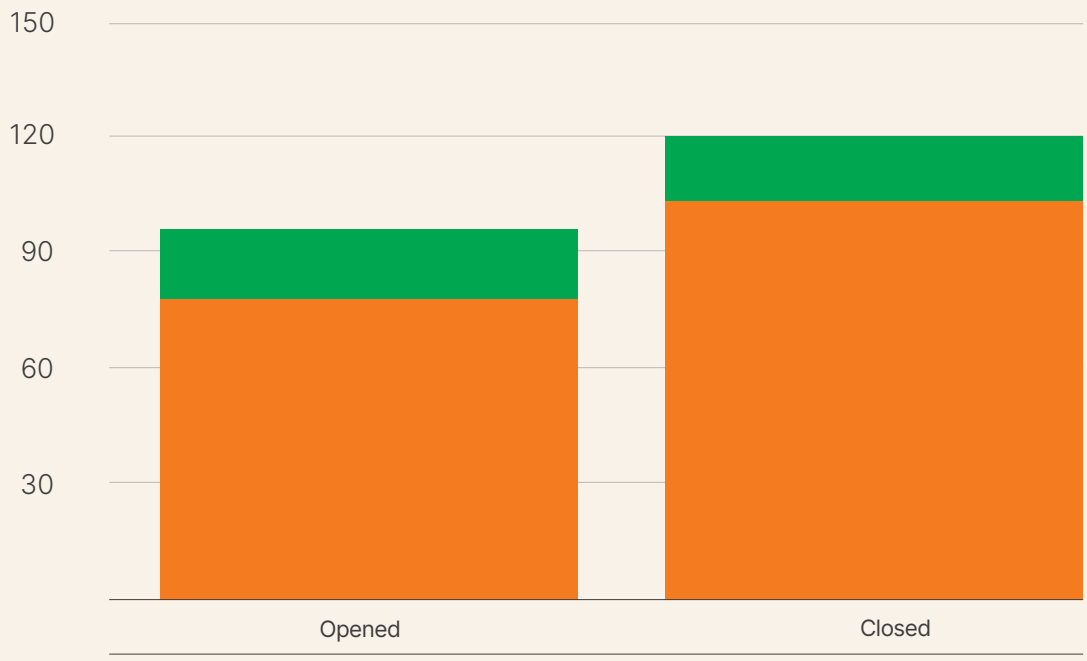


Figure 16: Audit cases opened and closed, January to June 2025

# Glossary

| | |
|---|---|
| **Battery** | Any home battery installation which is a complement to an already existing solar PV module. |
| **Consumer energy resources (CER)** | Defined as solar PV, battery storage and inverters on the Clean Energy Council's product accreditation list and installed behind the meter by consumers. |
| **NETCC** | New Energy Tech Consumer Code is a voluntary code of conduct designed by peak industry and consumer bodies to build upon existing mandatory consumer protection regulations defined by the Australian Competition and Consumer Commission (ACCC) (New Energy Tech Consumer Code \| Clean Energy Council) |
| **Product accreditation** | Defined as the Clean Energy Council's list of approved modules, inverters and batteries that meet Australian Standards for use in the design and installation of solar and battery storage systems in Australia (Products \| Clean Energy Council). |
| **Referral notice** | Referral advice that is provided to complainants to escalate their matter to external regulatory service bodies in the case that the incident is outside NETCC jurisdiction. |
| **Rooftop solar / rooftop PV** | Defined as systems up to the size of 100kW. |

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