Rooftop solar and storage report

July—December 2025

CLEAN ENERGY COUNCIL

About this report

This is the fifth edition of the Clean Energy Council's (CEC) 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, SunWiz, with supplementary data from Green Energy Markets. They are the Clean Energy Council's data partner for our annual Clean Energy Australia report and will be referenced in some instances. The data in the report's section on installer, products and approved seller accreditation is drawn from CEC 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.

Contents

Highlights

Rooftop PV finished the year with solid results, with 139,080 units installed in the second half of 2025.

Total installations in 2025 reached 254,664, representing over 2.6 GW of newly installed capacity into the grid.

There are now 4.3 million households with rooftop PV, amounting to 28.3 GW worth of installed capacity.

There were a record breaking 183,245 battery units sold in the second half of 2025 after the introduction of the Federal Government's Cheaper Home Batteries scheme.

Based on recent performance, rooftop PV is expected to surpass the 2029/30 required total capacity by 1 GW.

There are currently 6419 approved rooftop PV, inverter and storage products across Australia.

[1] Open Electricity - Open Electricity: All Regions

Installations and capacity trends

Solar PV installations

The second half of 2025 saw 139,080 rooftop PV units installed across Australia, amounting to 1.5 GW of installed capacity. Rooftop PV continues to be a reliable contributor to the nation's energy mix, with a generation share of 14.2% in the second six months of 2025 (up from 13.4% in the same period 12 months ago and 7.2% in 2020).

The total installed capacity of rooftop PV for 2025 reached 2.6 GW from 254,664 installations. This is in addition to the 3.3 GW worth of large-scale renewable generation projects commissioned over the same period.

This was the first time since 2020 that total annual rooftop PV installations did not surpass 300,000, suggesting we have now passed the peak of rooftop PV installations as consumers turn their demand towards small-scale batteries.

There is now an overall total of **4.3 million** rooftop PV installations across Australia, representing **28.3 GW** of generation capacity.

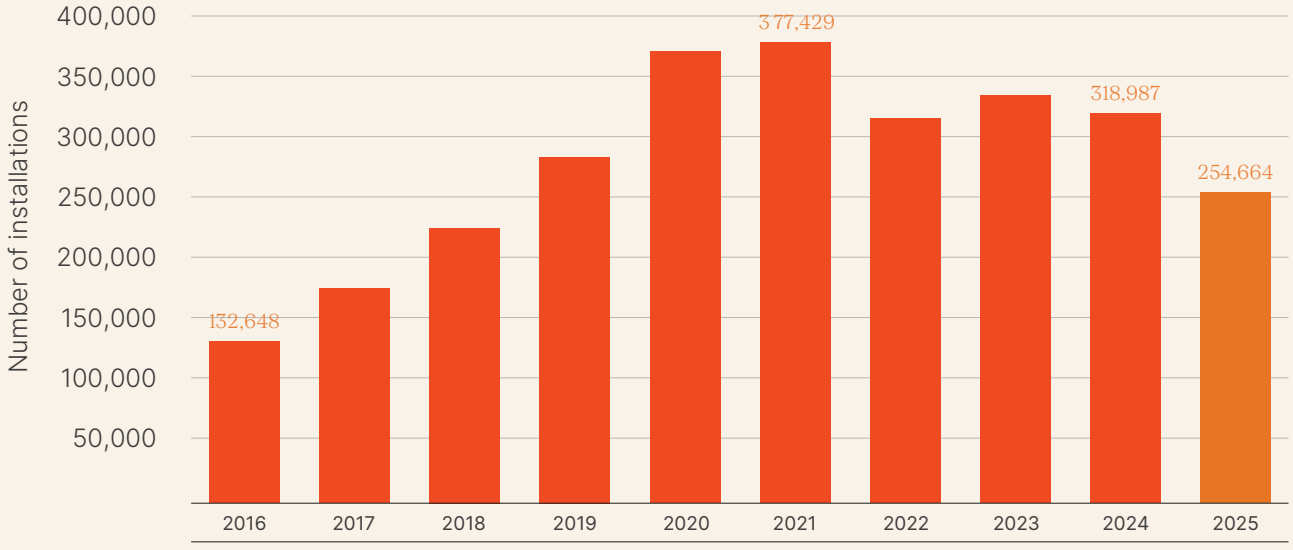

Figure 1: National number of systems installed, by year

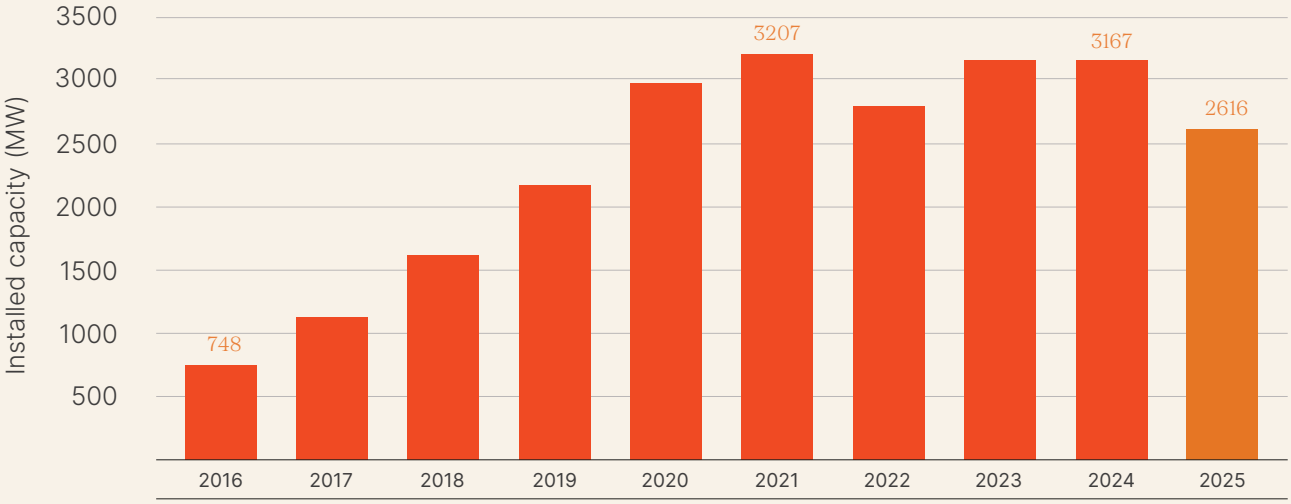

Figure 2: National installed rooftop PV capacity (MW), by year

The average size of systems installed continues to increase year-on-year. Traditionally, December breaks the record for the highest average system size and 2025 was no different, with a new record of 11.6 kW. As a result the six-month rolling average system size increased in the last few months of 2025, and is now sitting at 10.6 kW per system. This is an increase of 4 per cent when compared to the same point 12 months ago.

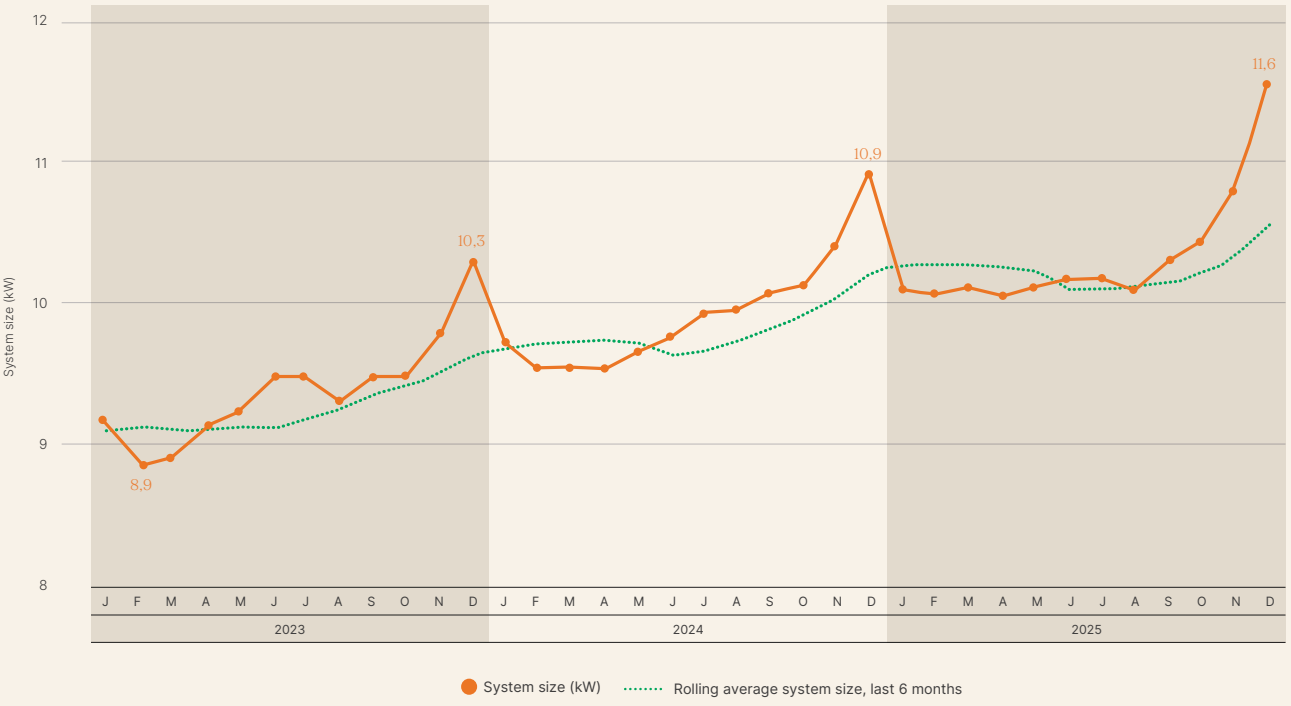

Figure 3: Average system size by registration month

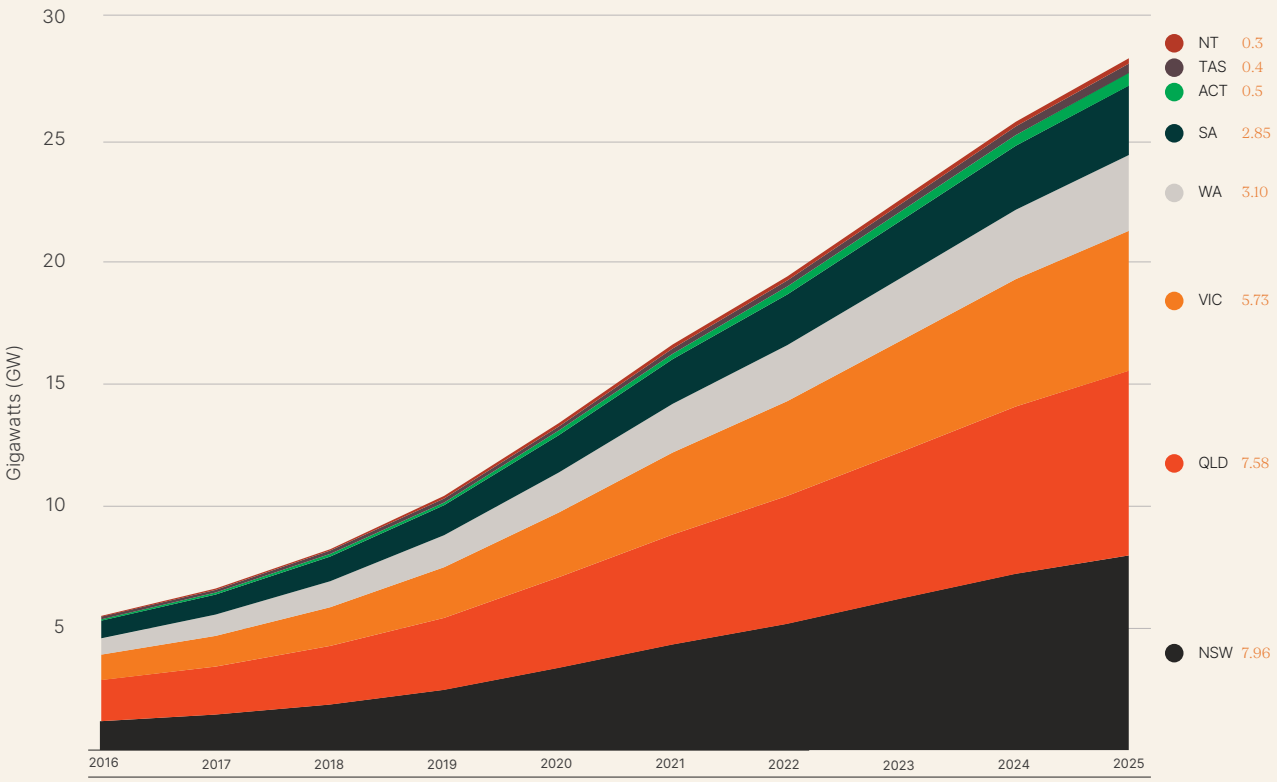

Figure 4: Cumulative annual capacity (MW) of rooftop PV, by jurisdiction

Around the states in 2025, New South Wales led the way for total annual capacity installed for the 8th year running, with 761 MW installed. Again, coming in second place was Queensland with 714 MW, while Victoria rounded out the top 3 with 526 MW installed.

New South Wales continues to boast the highest level of total installed capacity of rooftop PV at just shy of 8 GW. Queensland meanwhile narrowly remains as the state with the most installations with 1.16 million. New South Wales and Queensland hold over half of all rooftop PV installations across Australia.

Rooftop PV projected capacity

According to AEMO's 2024 Integrated System Plan, by 2029/30, Distributed PV is projected to reach 36.1 GW of capacity in the NEM[2]. This projection required an annual run rate of 2.5 GW of newly installed Rooftop PV from 2023/24 onwards. Over the last five years, the NEM has installed an annual average of 2.7 GW of Rooftop PV.

The chart below compares the required run rate against the projected performance based on actual results. It projects that by 2029/30 we will have surpassed the required amount of Rooftop PV capacity by 1 GW. This highlights the significant performance by Rooftop PV in helping Australia to meet its renewable energy targets.

Figure 5: Projected 2024 ISP Distributed PV versus projected PV installations

[2] Appendix 2. Generation and Storage Development Opportunities, AEMO

Battery installations

With the Federal Government's Cheaper Home Batteries Program launching from the 1st of July, battery attachments to rooftop PV systems have seen huge growth throughout 2025. In the last six months of 2025, there were 183,245 battery sales across Australia, a four-fold increase compared to the same period 12 months ago. The rolling 12-month average of quarterly battery sales rapidly increased to a new record of 67,169.

Cumulatively there have now been 454,473 battery units installed across Australia. This figure has more than doubled since the end of 2024, when it reached 185,798 units sold.

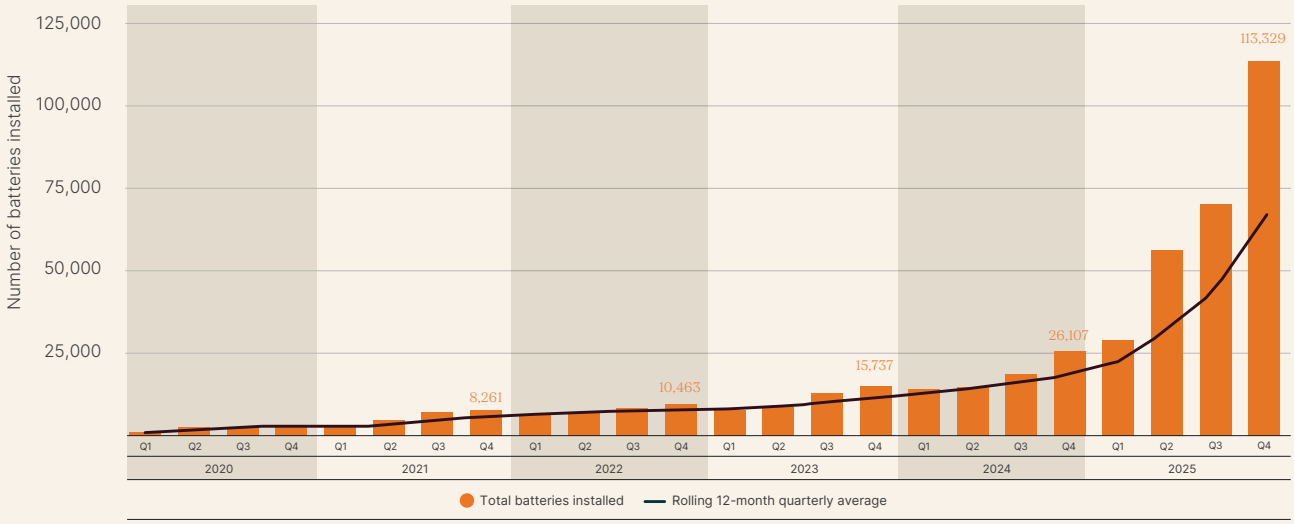

Figure 6: Total battery installations, quarterly

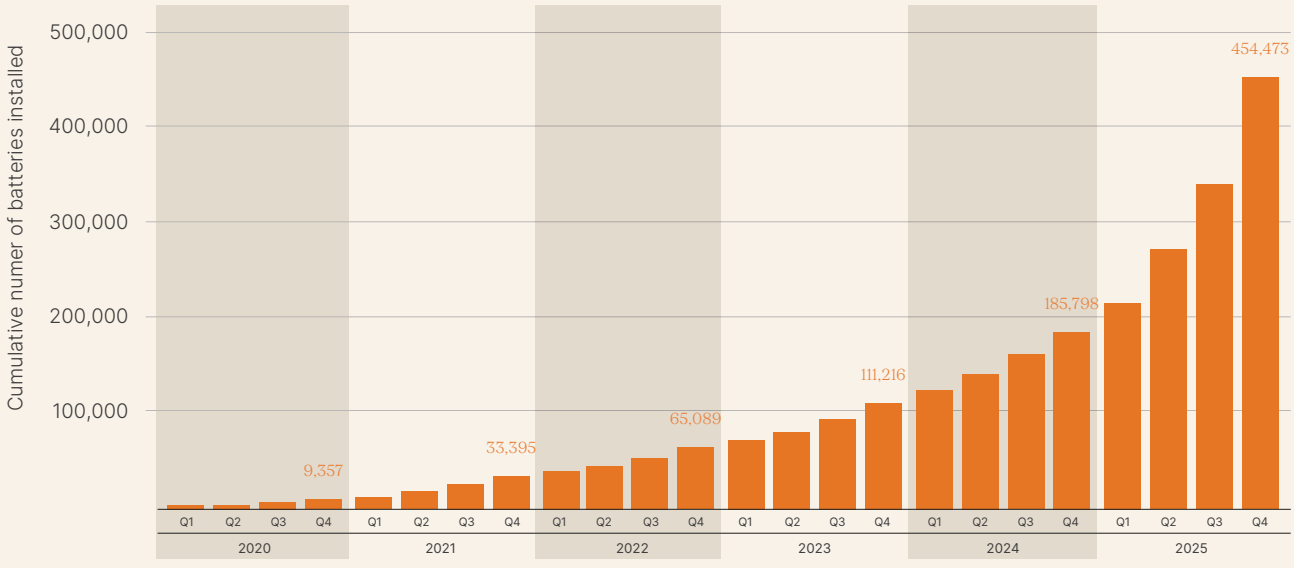

Figure 7: Cumulative battery installations, quarterly

Industry programs

The CEC manages the Product Accreditation Program, which assesses and approves solar panels, inverters, and batteries against relevant Australian and International Standards. Only products listed on the CEC's Approved Product Lists are eligible for installation under the Small-scale Renewable Energy Scheme (SRES) and other state-based incentive programs. As battery incentives expand nationally, the CEC is working proactively with the State and Federal Governments, manufacturers, retailers and installers to ensure that products used in government programs meet safety, quality, and performance benchmarks, thereby protecting consumers while supporting market confidence.

In parallel, the CEC is the administrator of the New Energy Tech Consumer Code (NETCC), which governs consumer-facing practices for solar, battery, and emerging energy technology and services providers. The NETCC sets best-practice requirements for marketing, quotations, contract transparency, installation, complaints handling and warranty support. Participation in some government-funded programs is contingent on businesses being NETCC Approved Sellers. This helps to ensure consumers receive accurate information and fair treatment throughout the sales and installation process.The combination of product accreditation and the NETCC consumer protection framework provides a comprehensive industry assurance mechanism, supporting safe installations, minimising consumer harm, and underpinning public trust in clean energy program.

This reporting period also marked the significant step-change in government incentive programs, with several new or expanded programs commencing or scaling during H2 2025. This includes the introduction of the Cheaper Home Battery Program and the WA Residential Battery Scheme on 1 July, alongside the other state programs such as the Victorian Energy Upgrades (VEU) Energy Upgrades for Commercial and Industrial (C&I) sites, and the QLD Solar for Apartment Renters program. These developments increased the volume and urgency of product eligibility assessments and placed greater emphasis on consumer safeguards. This highlights the need for consistent program requirements and clear assurance frameworks that apply to both approved products and participating sellers.

Australia's small-scale renewables section is undergoing a period of significant transformation, driven by the introduction of new targeted Government incentive programs designed to accelerate the uptake of distributed energy resources. The following section of this report outlines the product accreditation and NETCC activity for H2, 2025.

Product accreditation

The CEC's Product Accreditation Program supports product eligibility for the Small-Scale Renewable Energy Scheme (SRES) and a growing suite of state-based incentive programs. The CEC maintains a list of approved energy storage devices, inverters, power conversion equipment and Solar PV Modules that have been assessed against the relevant Australian and International Standards. The CEC's product accreditation program is delivered in collaboration with government, electrical safety regulators, certifiers, network providers and product manufacturers to support safety and performance assurance outcomes for products installed under the SRES and other incentive programs.

The Australian Government expanded the scope of the SRES to include residential battery systems through the launch of the Cheaper Home Batteries Program on 1 July 2025. This expansion represents a significant evolution of the scheme, providing an estimated upfront discount of approximately 30% for eligible battery installations. The program is expected to support the installation of more that 2 million home batteries by 2030, enabling greater self-consumption, supporting grid resilience, and facilitating consumer participation in emerging energy services markets.

Complementing the federal initiative, state and territory governments are also increasing support for storage technologies. In Western Australia, the WA Residential Battery Scheme provides additional rebates and no-interest loans to support up to 100,000 households to install battery storage. Rebates are administered through Western Australia's two main electricity providers, Synergy and Horizon Power, with maximum upfront incentives ranging from $1,300 to $3,800 depending on customer location. When combined with the federal program,

households may be eligible to receive up to $7,500 in total support for a battery installation.

A key design feature of the WA scheme is mandatory participation in Virtual Power Plant (VPP) arrangements, ensuring installed batteries are network-integrated and able to contribute to broader system stability. In doing so, the scheme is intended to deliver direct consumer benefits while aligning distributed assets with state and national reliability objectives.

Together, these programs represent a coordinated, multi-jurisdictional effort to scale small-scale renewables beyond generation into storage and smart electricity management. They are central to Australia's energy transition objectives and form a critical component of our industry programs, driving consumer choice, supporting decarbonisation targets, and enabling long-term energy system transformation.

In the second half of 2025 there have been 261 new applications received, while 260 applications were approved and 62 applications were rejected or withdrawn. A monthly breakdown over the last six months for both applications and approvals by product type are shown below:

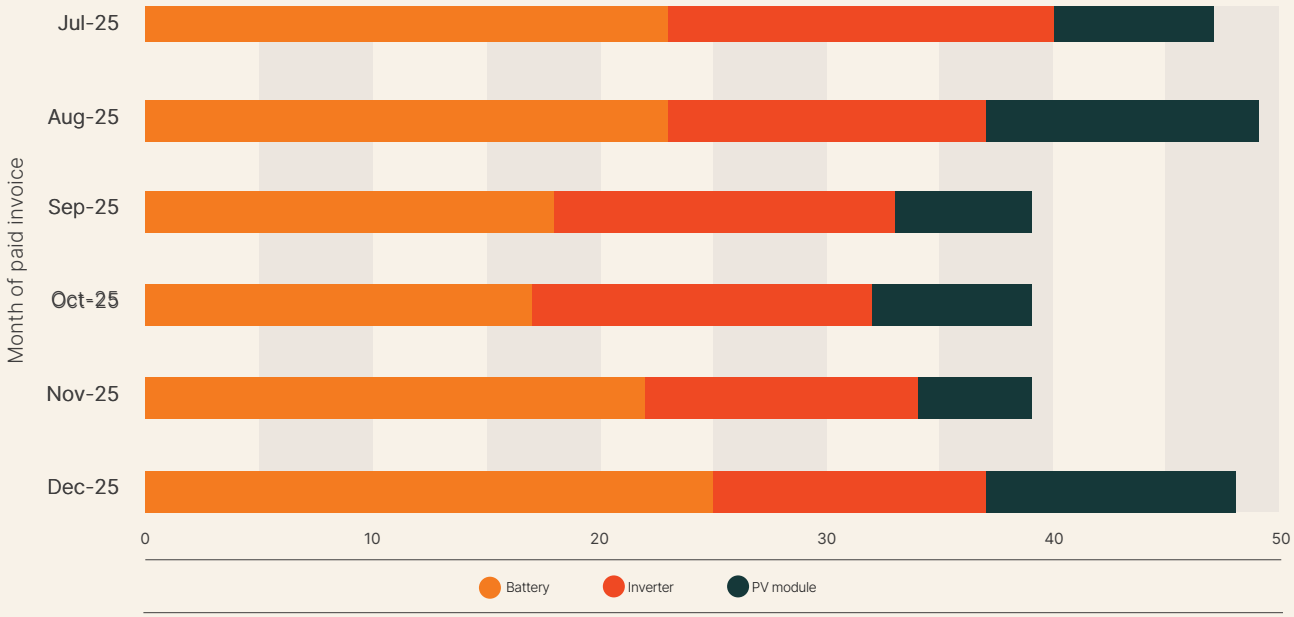

Figure 8: Total applications received from July–December 2025, monthly

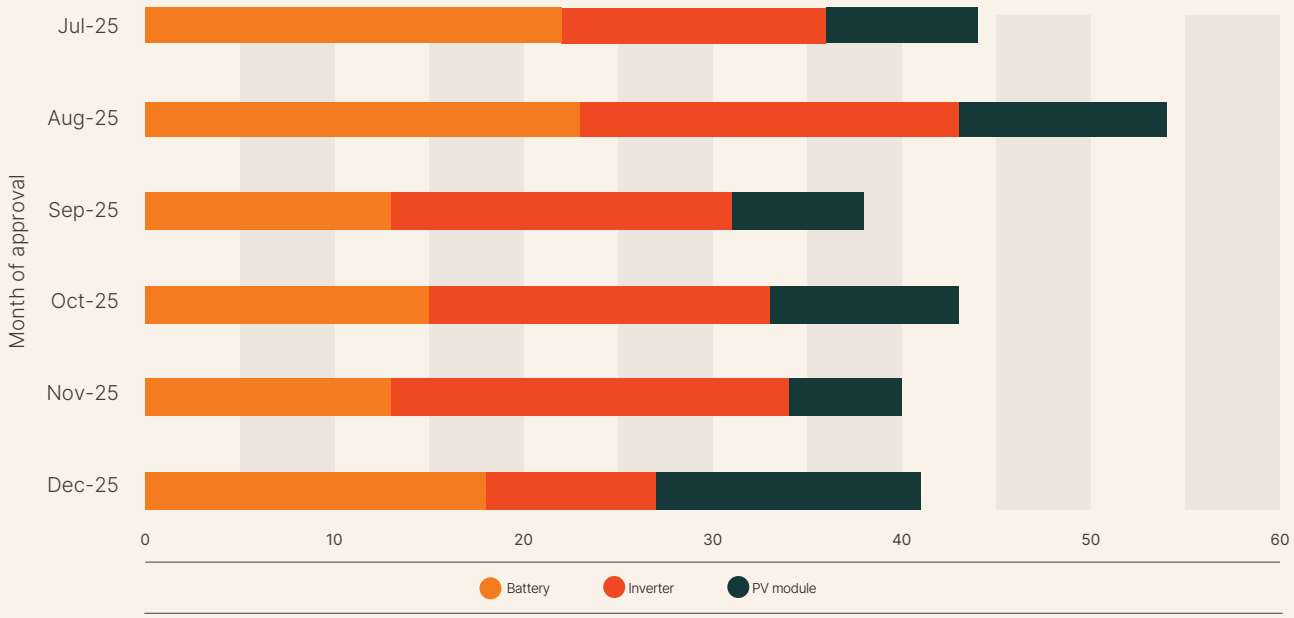

Figure 9: Total applications approved from July–December 2025, monthly

The CEC recorded sustained high volume of applications for batteries and inverters listings throughout H2 2025, reflecting continued growth in distributed energy uptake and increase market activity associated with the expansion of battery incentive programs. Battery application volumes remain high across the period with 128 applications received, aligning with the commencement of the Cheaper Home Battery Program.

Across H2 2025, the CEC received 261 product listing applications and approved 260, indicating high processing efficiency across the reporting period. Batteries represented 49% of all applications received, followed by inverters and power conversion equipment application (33%) and PV modules (18%). Rejection and withdrawal totalled 62 for the period, driven primarily by battery applications. These outcomes reinforce the importance of complete, high-quality submissions and clear supporting evidence at the point of application lodgement.

The CEC has continued to implement targeted process improvements to manage demand and improve end-to-end assessment efficiencies without compromising the integrity of product assessments. These improvements include an enhanced initial documentation screening step to confirm completeness at submission, improved transparency for applicants regarding application process, and streamlined internal workflows to support more efficient assessment. While safety and technical rigour remain non-negotiable, these enhancements are intended to support product approvals and ensure the program continues to meet the needs of the rapidly evolving market.

As at 31 December 2025, there were 6,419 approved PV modules, inverters and batteries published on the CEC approved product lists. This represents an increase of 1,262 models (+24.5%) compared to 30 June 2025 (5,157 models). Growth over the period was led by battery systems, which increased from 764 to 1,259 models (+495; +64.8%) and expanded from 110 to 123 manufacturers (+13; +11.8%), reflecting the accelerating uptake of energy storage and the expended battery incentive environment. Inverter models increased from 1,897 to 1,965 (+168; +9.3%), while PV modules increased from 2,596 to 3,195 (+599; +23.1%).

Product type	Number of products	Number of manufacturers
Battery model	1259	123
Inverter model	1965	107
Solar PV modules model	3195	85

Table 1: Approved product breakdown as at 31 December 2025

Source: Clean Energy Council

Advancing Products Standards

CEC is actively engaged with Standards Australia and relevant technical committees to support the development and advancement of Australian Standards. This includes contributing to the Australian adoptions of key referenced international standards by the International Electrotechnical Commission (IEC).

The key areas of work in the second half of 2025 are summarised below:

- **AS/NZS 4777.2:2020 Amd 2:2024 Grid connection of energy systems via inverters, Part 2: Inverter Requirements** was published by Standards Australian in August 2024 to cover product requirements for inverters with key updates including supply type terminology, removal of IEC 62109 requirements for battery only products, generation limit control parameters and region C set points. In August 2025, the CEC completed transition to the new requirements.
- **IEC 61730:2023 Photovoltaic (PV) Module safety qualification** – The CEC announced in November 2025, the staged adoption of the updated PV module safety standards for the CEC Approved PV Module List. Under the staged transition arrangement, new PV module applications may be certified to IEC 61730:2016 or IEC 61730:2023 prior to 1 May 2026, with IEC 61730:2023 required for all new applications from 1 May 2026.
- **Standards Australia Technical Specification Electrical Energy Storage Equipment – Safety Requirements (SA TS 5398:2025)** - The CEC announced transition arrangements for updated battery safety specifications in December 2025. From 1 January 2026, the CEC will accept battery applications under SA TS 5398:2025, while continuing to accept applications under the Best Practices Guide: Battery Storage Equipment – Electrical Safety Requirements until 31 December 2026 to support transition.

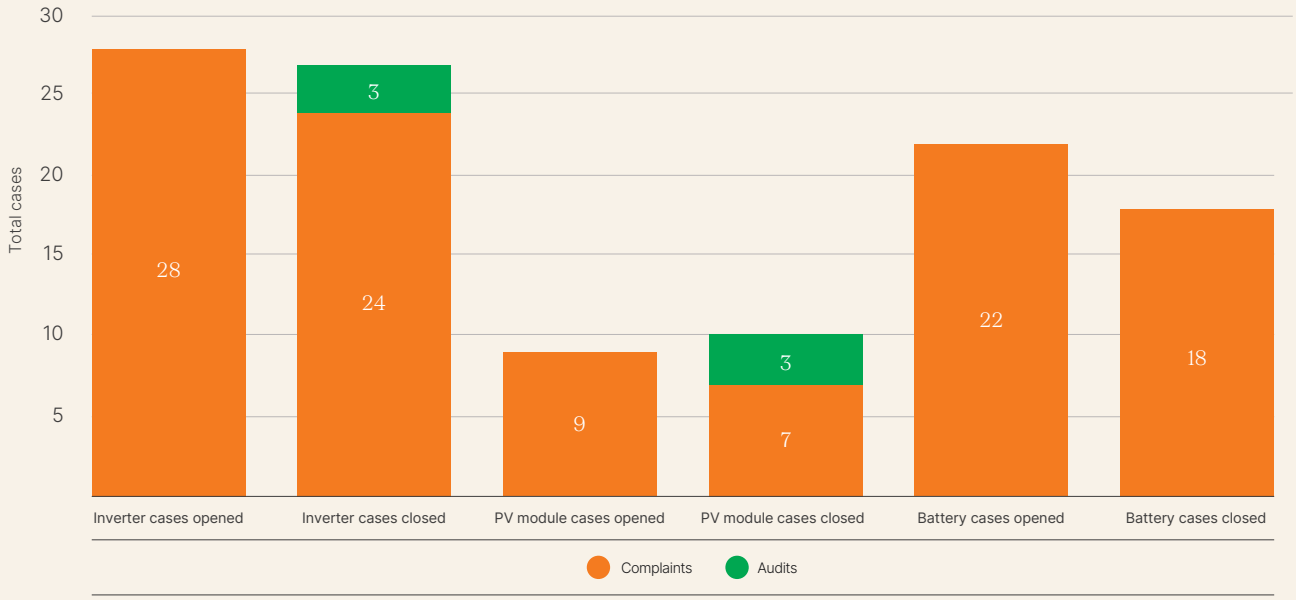

Figure 10: Share of product cases opened/closed by type, H2 2025

The graph above shows 59 cases were opened on product compliance either through a complaint or audit in the second half of 2025, while 55 were closed. Inverters had the highest number of cases both received and closed, with 28 and 27, respectively.

Of the 55 product compliance cases finalised in H2 2025, 15 per cent resulted in enforcement action. Enforcement action occurs where breaches of the CEC's product listing Terms and Conditions (T&Cs) are confirmed following an investigation of CEC approved products. 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 CEC may issue a direct suspension or de-listing of CEC approved products if there are significant breaches of the T&Cs.

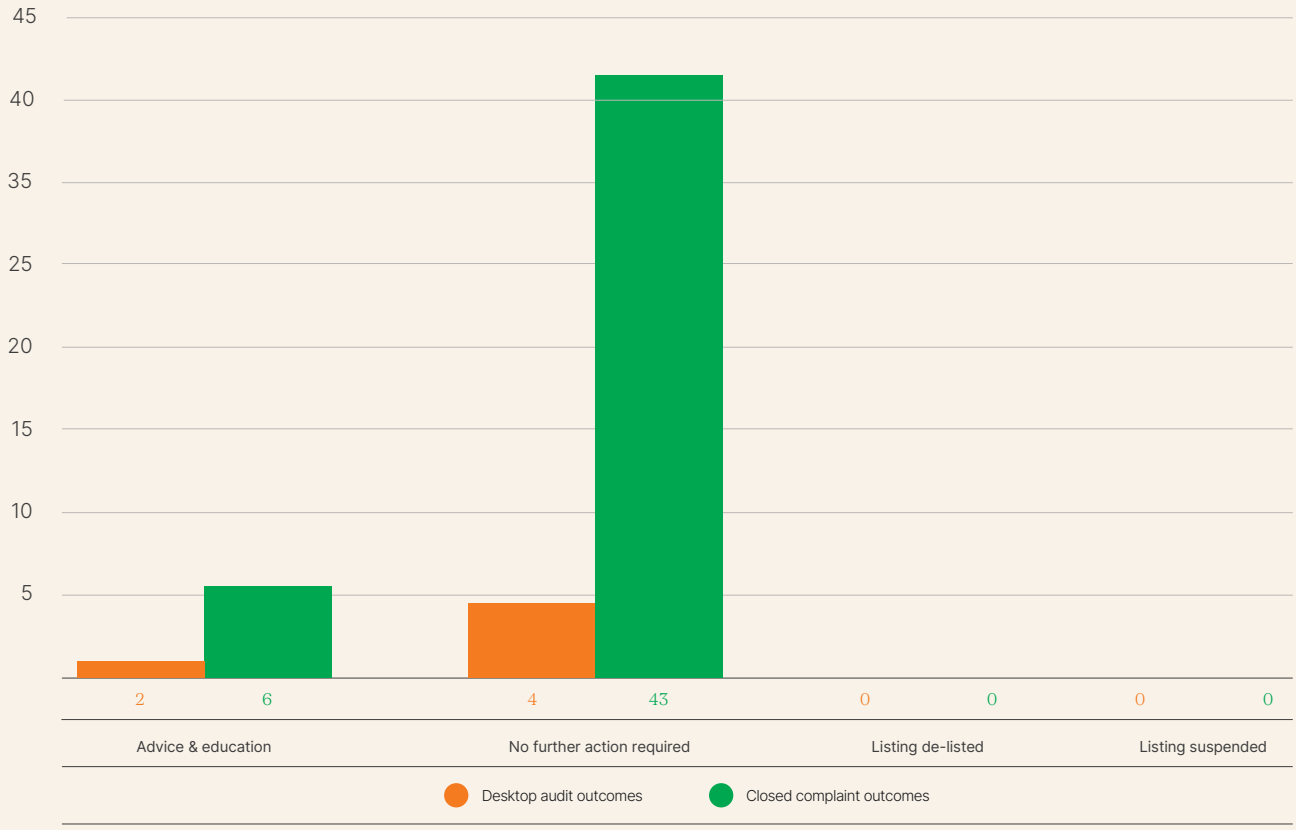

Figure 11: Complaint and Audit case outcomes, July–December 2025

New Energy Tech Consumer Code (NETCC)

The New Energy Tech Consumer Code (NETCC) reflects the sector's commitment to high standards of consumer protection, supporting consumer confidence in, and engagement with the industry throughout the energy transition.

The Code establishes a set of minimum standards across the entire customer journey, from marketing and sales through to installation and after-sales support.

Code signatories commit to complying with best-practice standards, including:

- Honest, transparent and accessible marketing and advertising
- Responsible sales practices and protections for vulnerable customers
- Transparent quoting and fit-for-purpose NET offerings
- Clear, fair and understandable contract terms, including finance arrangements
- Compliant and safe installation practices
- Clear information about technology operation and performance
- Minimum warranty standards
- Transparent and accessible complaint handling processes.

The NETCC aims to create an end-to-end experience in which consumers feel informed, empowered and confident to make decisions in their own interests when purchasing or engaging with new energy technologies.

In October the NETCC hit a significant milestone, surpassing 2,000 approved sellers across Australia. This growth has been supported by the inclusion of the NETCC in state-based government programs, which signal to industry the expected standards and level of consumer protection required when participating in these rebate schemes, and delivering new energy tech product or service to consumers. Following the announcement of the WA Residential Battery Program, the NETCC experienced a marked increase in industry engagement. During the second half of the year, the NETCC received 162 new applications from WA-based businesses seeking to become approved sellers and commit to the Code standards. Over this period, WA recorded the highest number of approved sellers nationally.

In mid-Dec QLD Government announced the Supercharged Solar for Renters program. While only a short reporting window falls within the second half of the year, the NETCC has already observed a notable increase in applications from Queensland based businesses and anticipates similar upward trends as the program progresses.

The inclusion of NETCC Approved Sellers in these government schemes strengthens consumer protections, helps prevent harm through robust checks and balances, and promotes the necessary trust and confidence in the new energy tech market.

State / Territory	Number of NETCC Approved Sellers as at 31 December 2025
VIC	1132
NSW	300
QLD	214
SA	137
TAS	54
ACT	54
WA	220
Total NETCC Approved Sellers	2112

Table 2: Approved sellers by state and territory

Note – A significant portion of these approved seller operate in multiple states. These figures capture where the company's headquarters are based.

The majority of approved NETCC sellers (54%) are from Victoria. Next is New South Wales with 14 per cent, then Western Australia with 10 per cent.

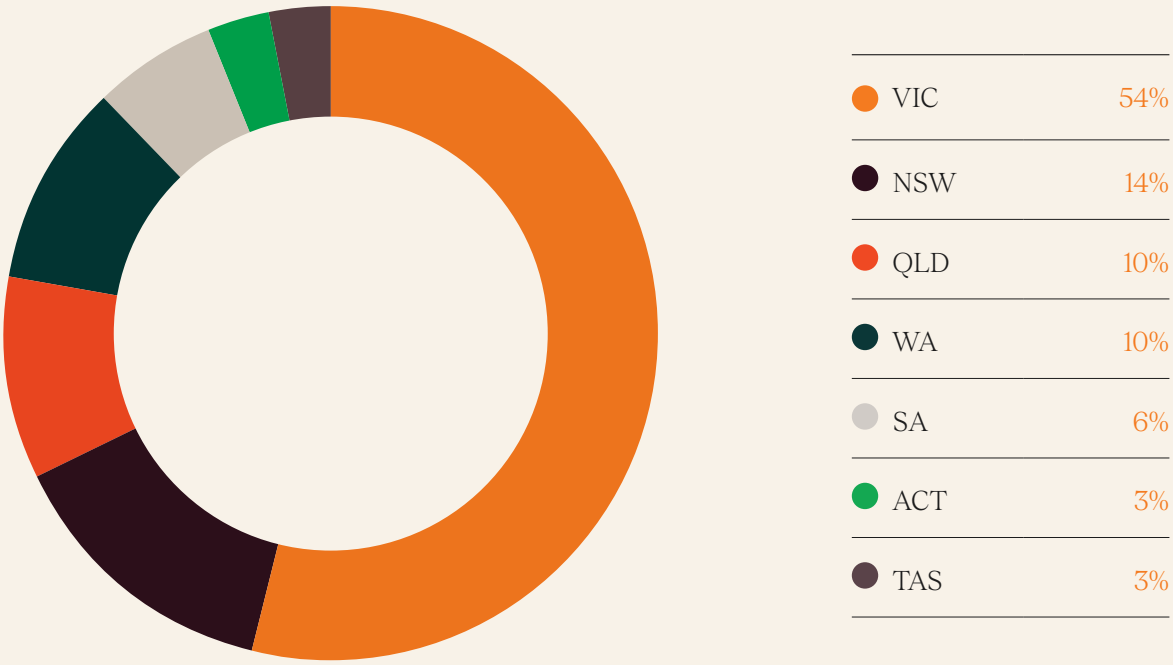

Figure 12: Share of NETCC signatories by state, as of 31 December 2025

NETCC Compliance

NETCC undertakes investigation of breaches either through a complaint or an audit finding. Complaint cases are reactive investigations that are conducted in response to allegations of misconduct against a New Energy Tech Approved Seller. The majority of NETCC cases are received from New Energy Tech consumers. However, the CEC (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 NETCC complaint cases opened, while 143 were closed. Meanwhile, 96 audit cases were opened, while 120 were closed. There were 119 cases where no breach was found, while 79 cases required compliance action.

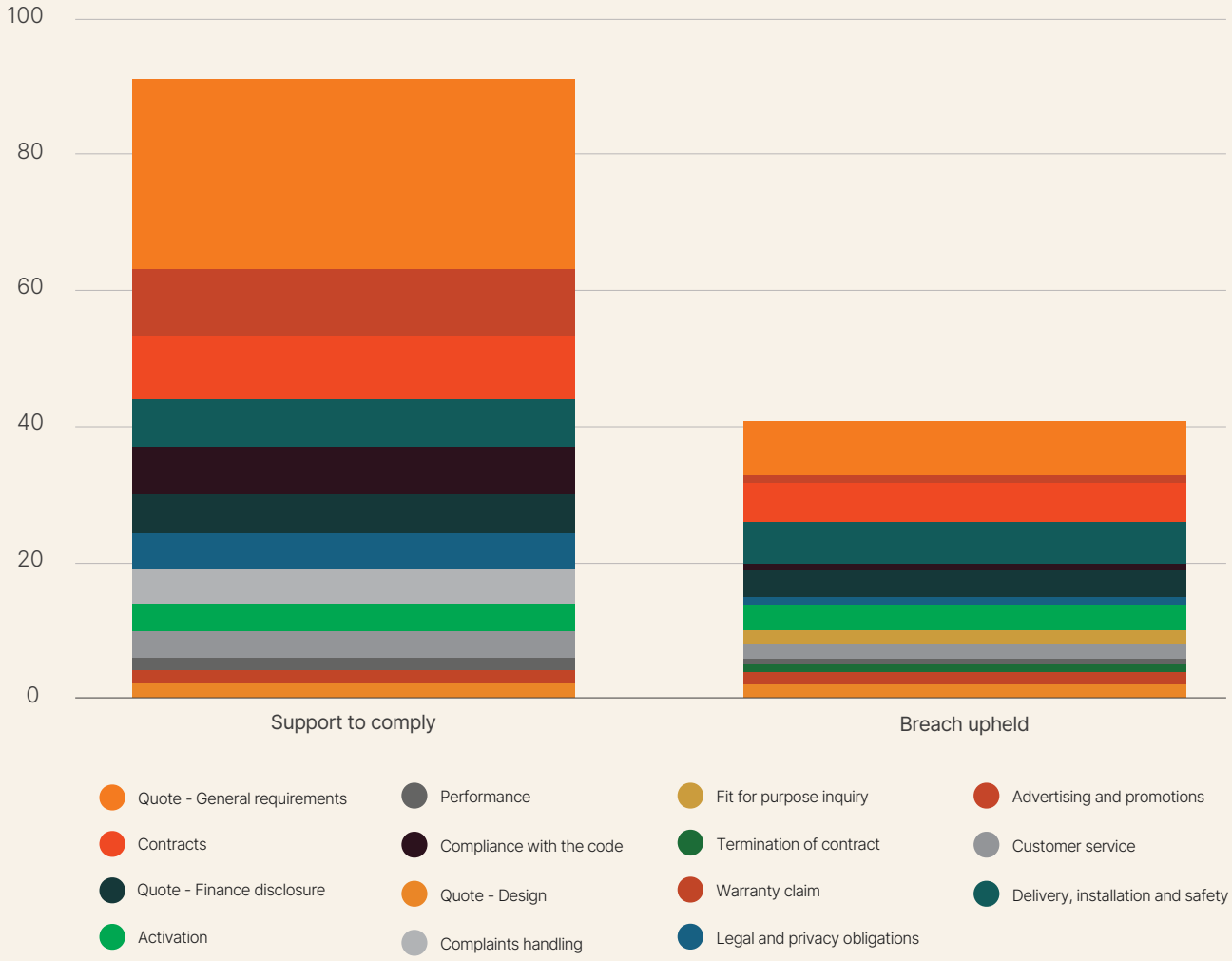

Figure 13: Recorded breaches and STCs from complaints cases, July–December 2025

Following the investigation of complaint cases, 85 instances of non-compliance were recorded against Approved Sellers in the second half of 2025. These outcomes are recorded as Support to Comply (STC) record or a Breach Upheld. An STC 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 and 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% related to failure to provide complaint information in quotations and 20% related to non-compliant contracts.

There were 300 outcomes for NETCC complaints and audit cases in the second half of 2025. Of those cases, 136 (45%) saw that no breach was found, while 76 (25%) required compliance action. For further information on enforcement actions undertaken by the Administrator and trends of non-compliance observed, please visit the NETCC Compliance activity page.

Closed cases that result in 'no response' or 'withdrawn by complainant' are generally closed as the Administrator has not obtained sufficient evidence or consent to progress with an investigation. For closed cases that result in no breach found or out of jurisdiction, the NETCC Administrator may refer the complainant to an external body that can assist them with their complaint or dispute. Cases that result in a 'resigned' outcome means the Approved Seller resigned from the NETCC program before the investigation was completed and is referred to if the Seller, its directors or owners attempt to re-enter the NETCC program.

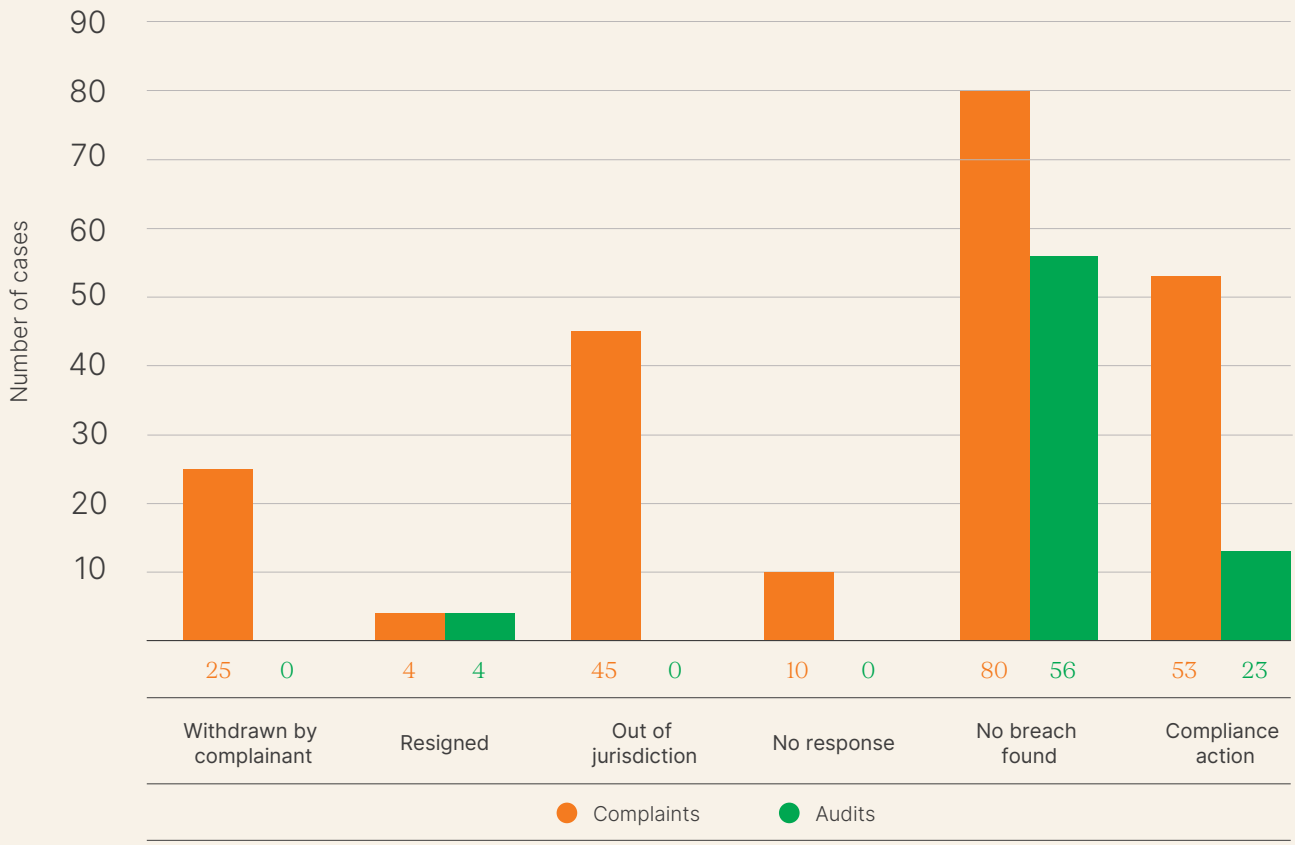

Figure 14: NETCC closed complaint case outcomes, July–December 2025

Of the referral notices issued in the second half of 2025, the majority were for Victorian complaint cases with 78. Next were New South Wales and Queensland, with 35 and 15, respectively. This is consistent with the ratio of Signatories from these three states as 53% of Signatories are based in Victoria, 14% in New South Wales and 10% in Queensland.

Where an incident or complaint is outside the NETCC's jurisdiction, the complainant is provided with a referral notice based on the nature of the complaint. This ensures the matter is addressed by the appropriate external body such as a dispute resolution body, regulator, or consumer protection authority. The NETCC Administrator is not a dispute resolution body and does not have the jurisdiction under the Code to arbitrate commercial, civil, or financial disputes. This may result in investigations where the Administrator only investigates some aspects of a complaint and provides referral advice for others.

Of Victoria's 78 referral notices, 33 went to Victoria's dispute resolution body, the Victorian Civil and Administrative Tribunal, while 38 went to Vicotria's consumer protection authority, Consumer Affairs Victoria. Five of the referral notices went to the Electrical Safety Authority, Energy Safe Victoria. Victoria had over half of all referral notices across the country.

Referral notices to other external bodies were also provided to complainants 17 times. These other bodies include the Australian Communications and Media Authority and Solar Accreditation Australia.

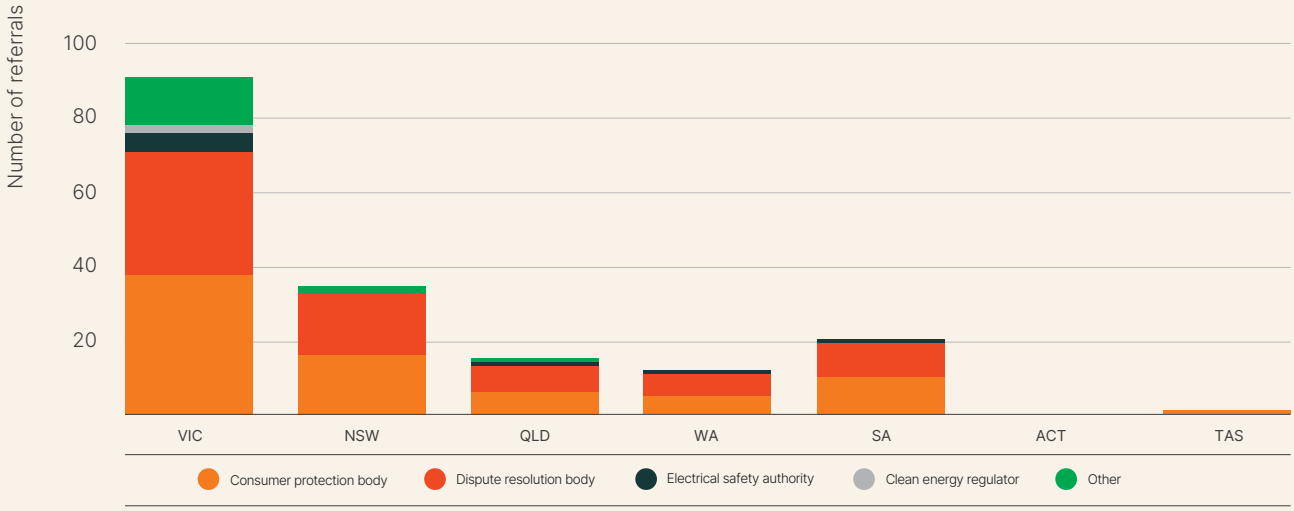

Figure 15: NETCC complaint case referral notices by state/territory, July–December 2025

The Administrator launched the NETCC compliance auditing program in 2024. The audits aim to proactively identify compliance gaps and assists NETCC Approved Sellers by applying a support to comply approach which provides education to improve how businesses sell new energy tech products and services. There are two types of audits the Administrator conducts:

1. **Competency Audits** consist of a multiple-choice questionnaire to be completed by randomly selected Approved Sellers. The questionnaire is designed to test the Seller's knowledge of the NETCC and is time restrained and requires a minimum score of 80% to pass. Failure to pass or cooperate and complete the questionnaire results in a competency audit case being opened against the Approved Seller.
2. **Robust Audits** require selected Approved Sellers to submit recently used New Energy Tech sales documentation. The Administrator assesses the documentation and the Seller's online presence against key requirements of the NETCC under a robust audit case. Approved Sellers can be selected at the Administrator's discretion, including those with a history of non-compliance.

The second half of 2025 saw the Administrator open 77 competency audits cases and 11 robust audit cases. The Administrator closed 67 competency audit cases and 16 robust audit cases following an investigation.

Further information relating to NETCC compliance audits can be found on the NETCC Compliance activity page.

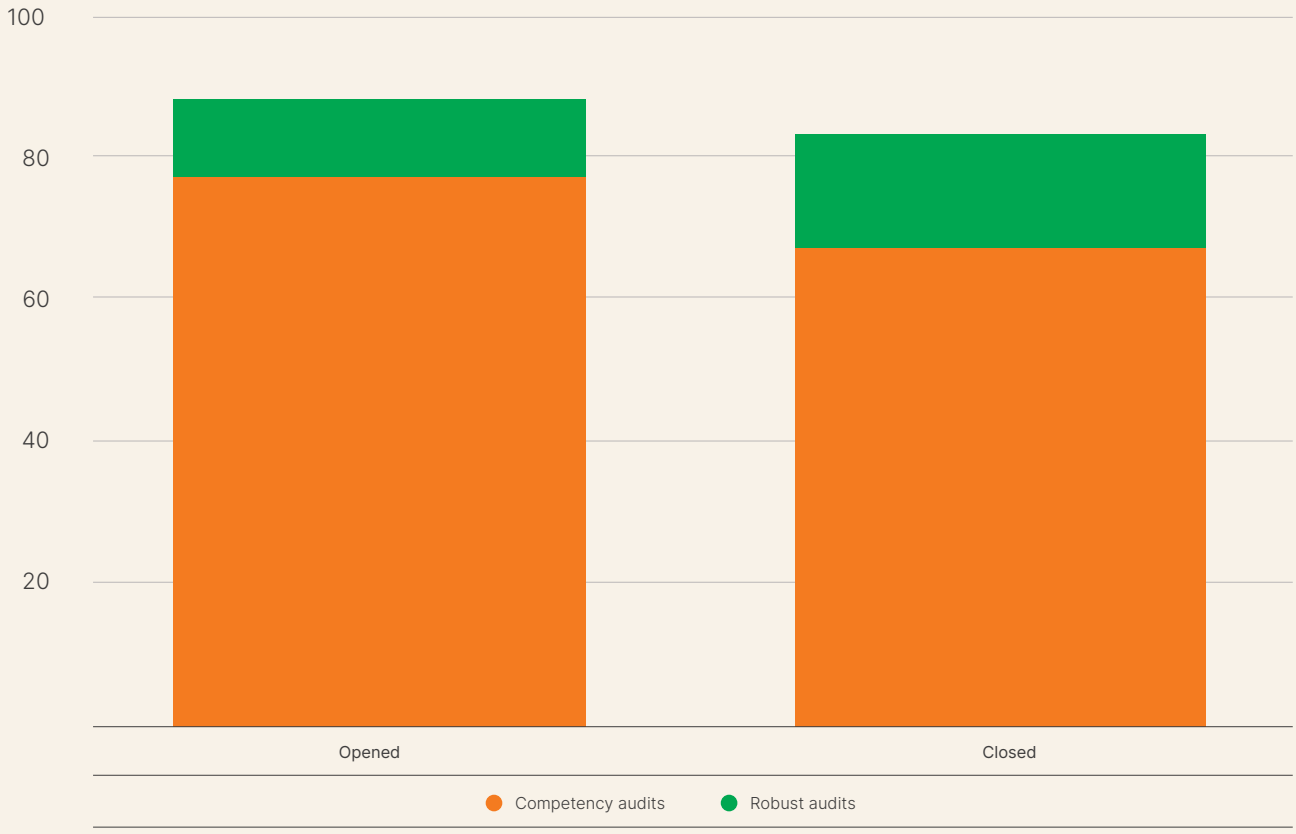

Figure 16: Audit cases opened and closed, H2 2025

Consumer Information Products

The Administrator provides products to assist consumers with the purchase and maintenance of their new energy technology.

The NETCC website contains various Consumer Information Products to assist consumers with the installation and use of their new energy tech.

These products inform consumers how to research their options before purchasing and can help consumers get the most value from their energy system.

These free Consumer Information Products were developed in collaboration with Energy Consumers Australia to explain key information to help consumers make informed purchased decision. The guides cover:

- **Solar**
- **Battery Storage**
- **Home Energy Monitoring**
- **Going off Grid**
- **Electrical Vehicles.**

Glossary

Battery	Any home battery installation which is a complement to a solar PV unit.
Consumer energy resources (CER)	Defined as solar PV, battery storage and inverters on the CEC 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.

Level 20, 180 Lonsdale Street
Melbourne VIC Australia 3000

+61 3 9929 4100
info@cleanenergycouncil.org.au

cleanenergycouncil.org.au