Solar Victoria Notice to Market 2025-26

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Solar Victoria

VICTORIA State Government

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it.

We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

DEECA is committed to genuinely partnering with Victorian Traditional Owners and Victoria's Aboriginal community to progress their aspirations.

The Mirring artwork is reproduced with the permission of the Artist, Thomas Day of Gunditjmara, Yorta Yorta and Wemba Wemba Country.

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Minister’s Foreword

Leading the way to home electrification with products and systems that are fit-for-purpose and future-ready, and an industry that puts customers, safety and quality first.

Victoria’s track record for the renewable energy transition is clear, with our state establishing itself as a leader - nationally and around the world - over the last decade. Driven by strong targets of 95 per cent renewable electricity generation by 2035 and net-zero greenhouse gas emissions by 2045, we’re getting on with the job of transitioning to clean energy.

Victorian households are continuing to play a vital role in meeting our renewable energy target, thanks to the rebates and loans provided through our 10-year $1.3 billion Solar Homes Program. It is one of the largest sustainability and renewable energy programs in the country, accelerating uptake of solar and electrification, and helping Victorians take control of their energy bills. The program has been hugely successful in driving and responding to consumer demand. Over 385,000 rooftop solar PV, energy efficient hot water, and solar battery systems have been installed across Victoria with the support of the Solar Homes program.

Since launching in August 2018, we have developed innovative programs that bring more renewable energy to more Victorians and support more electric homes. The Commonwealth and Victorian governments’ jointly funded Solar for Apartments Program has installed solar PV systems in more than 900 multi-unit dwellings and apartments. The Residential Electrification Grants Program is delivering innovative projects that boost residential solar and support more electric homes at scale, and to further reduce greenhouse gas emissions.

Homeowners and renters are excited to benefit from lower energy bills through self-generated solar electricity. Authorised retailers and installers are just as committed to ensuring they deliver on the highest standards of safety and quality, which is at the heart of the Solar Homes Program.

The Solar Victoria Notice to Market commits everyone involved in the delivery of the Solar Homes Program to improving safety and quality standards and protecting workers and customers. Key to continuous improvement is a collaborative compliance approach with regulators.

Our partnership with the solar electrical industry through the Solar Victoria Training and Workforce and Development program has seen more than 600 electricians and fourth-year apprentices gain the skills and knowledge to become qualified designers and installers in PV or battery storage systems. And our work with the plumbing industry has resulted in more than 1,000 plumbers and fourth-year apprentices being able to design and install heat pump hot water systems and have a better understanding of the energy efficiency requirements of 7-star energy efficiency building standards.

New requirements and recommendations in this Notice to Market focus on products and systems installed through the Solar Homes Program being fit-for-purpose and future-ready. They also seek to further strengthen consumer protections and the safety of workers and Solar Homes customers across Victoria.

We thank the many industry colleagues Solar Victoria has engaged to develop and refine the program requirements and recommendations within this Notice to Market. Our shared commitment to delivering the best outcomes for Solar Homes customers is playing a significant role in Victoria’s clean energy transition.

Hon Lily D’Ambrosio MP

Minister for Energy and Resources

Section 1: Overview

This section explains the purpose of the Notice to Market, highlights new requirements and recommendations this edition, and provides an overview of Solar Victoria's rebates and loans.

1.1 About the Notice to Market

The Solar Homes Program is a discretionary program. Participation is governed by the requirements set out in this Notice to Market as well as Solar Victoria's terms and conditions, such as those for retailers and installers.

Retailers, installers and other workers must comply with the requirements in this notice for Solar Homes incentives to apply to solar PV, solar battery, and hot water systems. Practices and installations must always comply with the requirements, including at the time of quoting and at installation.

The Notice to Market provides retailers and installers with a clear statement of business and workforce requirements, and system and product requirements. The requirements are outcome-focused, based on the principles in the Solar Victoria Technology Guidelines.

The energy transition continues to gather pace. To successfully administer the program and embrace the benefits of emerging technologies and market developments, Solar Victoria interprets the Notice to Market requirements through the lens of the Technology Guidelines.

This edition of the Notice to Market comes into effect on 1 July 2025. Some new requirements come into effect on 1 September 2025, to give industry an opportunity to prepare, which is stated in those sections.

1.2 New and updated requirements and recommendations in this edition

There are two new mandatory requirements and eight new recommendations in this edition of the Notice to Market.

New requirements seek to help customers realise their investments in distributed energy resources, maintain our focus on consumer protections, and continue to uplift the safety and quality of products and systems installed under the Solar Homes Program.

We have also consolidated and streamlined existing requirements.

1.2.1 New mandatory requirements

The new mandatory requirements effective from 1 September 2025 relate to:

- Expanded product warranties to include labour (see sections 3.1.1, 3.2.1, 3.2.3, 4.1.1, 4.2.1, 5.1.1 and 5.2.1).
- New plumbers entering the program having completed appropriate training in the design and installation of heat pump hot water systems (see section 5.1.3).

1.2.2 Updated mandatory requirements

The updates we have made to existing mandatory requirements relate to:

- Retailers and manufacturers across all streams providing warranty coverage of 5 years minimum, with the warranty to include cost of freight or transport by supplier, and all ancillary/auxiliary devices required to make the core product or system work (see sections 3.1.1, 3.2.1, 3.2.3, 4.1.1, 4.2.1, 5.1.1 and 5.2.1).
- Retailers providing the warranty documents to the customer (see sections 3.1.1, 4.1.1 and 5.1.1).
- Holding a current Refrigerant Handling Licence issued by the Australian Refrigeration Council (ARC) applies also to **decommissioning** a split hot water heat pump with synthetic refrigerant circulating through the pipework (see section 5.1.3).

We have also made minor updates to other requirements to ensure the Notice to Market remains current and relevant.

1.2.3 New recommendations

The new recommendations effective from 1 July 2025 relate to:

- Hot water retailers providing a financial performance estimate to the customer (see section 5.1.2)
- Training and competency provisions for retailers and installers regarding whole-of-system design and/or systems thinking (see sections 3.1.2, 3.1.4, 4.1.2, 4.1.4, 5.1.2 and 5.1.4)
- Completion of manufacturer specific training to apply to solar PV and hot water products and systems, not just battery (see sections 3.1.4 and 5.1.4)
- Completion of training in 22679VIC *Course in Decommissioning Solar PV Panels for Safe Reuse or Recycling* (see section 3.1.4).
- Solar PV retailers offering ongoing solar PV system servicing to customers (see section 3.1.2).
- Inverters supplying a single socket outlet in the event of a grid outage (see sections 3.2.2 and 4.2.2).

- Batteries to switch to back-up power mode if there is grid disturbance or an outage (see section 4.2.2).
- Hot water systems to be offered, designed and installed as fit for purpose (see section 5.1.2).

1.3 About our rebates and loans

For more detailed information about our rebates and loans, including values and eligibility criteria, see Solar Homes Program.

1.3.1 Solar PV rebate

We provide rebates and interest-free loans to eligible homeowners with existing homes, homes under construction, rental properties, and community housing providers towards the cost of installing an eligible solar PV system, up to a maximum amount listed on our website.

We also provide grants to eligible apartment households toward the installation of eligible solar PV systems.

See Solar panel (PV) rebate.

See Solar rebates for community housing.

See Solar for Apartments program.

1.3.2 Solar battery loan

We provide interest-free loans to homeowners towards the cost of installing an eligible solar battery system, up to a maximum amount listed on our website. While the solar battery loan program closed to applications in May 2025, the new Notice to Market includes requirements and recommendations to apply to battery systems still to be installed from approved applications.

See Solar battery loans.

1.3.3 Hot water rebate

We provide rebates to homeowners with existing homes towards the cost of installing an eligible hot water system, up to a maximum amount listed on our website. From 1 July 2025 a higher rebate will also be available for customers who choose eligible hot water products with locally made content.

We also have a process for emergency hot water installations, so Victorians don't have to wait if their system has broken down.

See Hot water rebate.

1.4 Acknowledgements

We consulted with key stakeholders to develop this Notice to Market 2025–26 and considered feedback in designing the mandatory requirements and recommendations as well as other updates.

We would like to thank everyone who contributed to the development of this Notice to Market.

Representatives from the following agencies contributed to the Notice to Market 2025–26:

- Energy Safe Victoria
- Clean Energy Regulator
- WorkSafe Victoria
- Victorian Building Authority
- Clean Energy Council
- Solar Accreditation Australia
- Energy and Water Ombudsman Victoria
- Energy Consumers Australia
- Consumer Action Law Centre
- Brotherhood of St Laurence
- CHOICE
- National Electrical and Communications Association
- Master Plumbers Victoria
- Australian and New Zealand Water Heating Association
- Energy Efficiency Council
- Plumbing Industry Climate Action Centre

We also conducted targeted engagement with the Solar Victoria Industry and Consumer Reference Group and with manufacturers, retailers and installers participating in the Solar Homes Program.

Section 2: Definitions

This section explains some of the words frequently used within the Notice to Market.

Accreditation Scheme Operator (ASO)

Organisation appointed by the Clean Energy Regulator (CER) as the installer and designer accreditation scheme operator (ASO) under the Small-scale Renewable Energy Scheme (SRES).

Customer/ Consumer

Customers/ consumers are applicants for rebates under the Solar Homes Program and/ or persons who obtain a rebate or loan under that program.

Installer

An installer of eligible systems, being eligible solar PV systems and ancillary equipment and/ or solar battery systems and ancillary equipment and/ or hot water systems within the Solar Homes Program.

Hot water system

Hot water system means a hot water system as defined in the Retailer Terms and Conditions.

Mandatory

Mandatory requirements must be satisfied for a participant to enter into the Solar Homes Program.

Where a participant no longer meets mandatory requirements, Solar Victoria may suspend or cancel participation in the Solar Homes Program at its discretion.

Participants must always meet the mandatory requirements during their participation in the Solar Homes Program.

Other on-site workers

Other on-site personnel who are involved in the installation of eligible solar PV, solar battery, and/ or hot water systems within the Solar Homes Program, including but not limited to trades assistants, apprentices, etc.

Recommendation

Recommendations are optional and do not affect eligibility at the time of publication of this notice. They help to ensure the Solar Homes Program delivers the best outcomes for Victorians.

Recommendations signal to industry matters that are likely to become mandatory in the future. Industry participants should consider early adoption of recommendations and plan accordingly.

Retailer

A retailer of eligible solar PV systems and ancillary equipment and/ or solar battery systems and ancillary equipment and/or hot water systems which meet the program's mandatory eligibility criteria, and who is registered to participate in the Solar Homes Program as a retailer.

Standards

Any reference to an Australian or international standard (AS, AS/NZS, IEC, IEEE, etc.) refers to the specified standard as last amended, unless the year of the standard is otherwise referenced.

Solar battery system

Solar battery system means a solar battery system as defined in the Retailer Terms and Conditions.

Solar sharing technology

Technology that allows multiple discrete NMI meters to share the output of a single inverter to provide a supplementary solar PV supply to occupants of a multi-tenanted building.

Solar PV system

Solar PV system means a solar PV system as defined in the Retailer Terms and Conditions.

Section 3: Requirements for all solar PV rebates

This section lists requirements that retailers and installers, systems and products **must satisfy** across all solar PV rebates. It also includes recommendations.

3.1 Solar PV retail business and workforce requirements

The following retail business and workforce requirements apply to all solar PV system rebates for owner-occupiers, renters and community housing. They aim to enhance safety and quality by maintaining rigorous standards and developing a level playing field within the industry.

3.1.1 Solar PV retailers – mandatory retail business requirements

Signatory to the New Energy Tech Consumer Code

Mandatory: Solar PV retailers must be a signatory to the New Energy Tech Consumer Code (NETCC) program administered by the Clean Energy Council (CEC) and maintain the status of NET Approved Seller in order to remain an authorised solar PV retailer under the Solar Homes Program.

Why:

- The NETCC replaces the Approved Solar Retailer Code of Conduct as a set of service standards and consumer protections that build on the previous Code, expanding it to new energy technology beyond solar to batteries, electric vehicle chargers and more.
- The Code requires solar PV retailers to commit to quality service and stronger consumer protections than Australian Consumer Law and the national small-scale renewable energy certificate (STC) scheme provide for.
- New signatories to the NETCC undergo a stringent application process and are subject to a monitoring, compliance, and sanctions regime.
- Becoming a NET Approved Seller and authorised solar PV retailer highlights a commitment to high standards across sales and marketing, quotes and contracts, delivery and installation, and warranties and support.
- Administered by the CEC, the NETCC was initially approved by the ACCC and is governed by an independent council of industry and consumer bodies including Energy Consumers Australia, Consumer Action Law Centre and Energy Networks Australia. Compliance with and enforcement of the code is undertaken by an independent monitoring and compliance panel.
- More information:
  - New Energy Tech Consumer Code
  - Become an authorised solar retailer or installer

Record of no prosecutions

Mandatory: Solar PV retailers must have no prosecutions under the Occupational Health and Safety Act 2004 and/ or the Occupational Health and Safety Regulations 2017 (or equivalent legislation/regulations in other Australian jurisdictions) resulting in a plea of guilty or a finding of guilt in the past three years.

Why:

- Compliance with relevant occupational health and safety acts and regulations protect the health, safety and welfare of employees and other people at work.
- Confirming compliance with relevant occupational health and safety acts and regulations aims to ensure that the health and safety of employees and the public are not put at risk by work activities.

Completion of accredited safety training

Mandatory: Solar PV retailers must confirm that all their workers engaged to install solar PV systems have attained:

- *CPCCWHS1001 Prepare to work safely in the construction industry* accredited unit of competency (White Card/ construction induction card).
- *VU23631 Work safely on roofs with renewable energy systems* unit certification (previously obtained *VU22744 Work safely in the solar industry* accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Retailers are responsible for ensuring workers are appropriately trained to perform high-risk work.
- Retailers must perform due diligence to ensure all workers meet the regulated and contractual requirements of participating in the Solar Homes Program.

Completion of specific training and/or mentoring identified by Solar Victoria

Mandatory: Solar PV retailers must confirm that all their workers engaged to install systems have successfully completed training and/ or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/ will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria for each module.
- Solar Victoria will provide reasonable notice of mandatory training and/ or mentoring on its website at Training and Workforce Development.

Ban on telemarketing and door-to-door sales

Mandatory: Solar PV retailers, or parties acting on behalf of the retailer, must not conduct sales of eligible systems as part of the Solar Homes program using door-to-door or telemarketing sales techniques.

The ban:

- prohibits 'cold-call' telemarketing and door-to-door sales techniques to all types of consumers
- prohibits telemarketing and door-to-door sales to prospective or previous customers from being outsourced to contractors or marketing companies
- only permits marketing or sales calls at the request of the consumer or with their express permission, and only within three months or a timeline specified when the consumer opts into calls, and only in accordance with the New Energy Tech Consumer Code
- permits calls to notify a previous customer of a product fault or recall that affects them.

Why:

- This protects consumers, particularly vulnerable cohorts, from persistent, unsolicited or nuisance calls and pressure sales tactics.
- This prevents contacting consumers who are listed on the 'Do Not Call Register'.
- This aligns with the Victorian Energy Upgrades program marketing ban administered by the Essential Services Commission.
- This prevents reputational harm to the Solar Homes Program by being associated with nuisance telemarketing and door-to-door marketing techniques.

Note: the telemarketing prohibition came into effect under the Solar Homes program on 1 May 2024 and door-to-door sales prohibition commenced on 1 September 2021 via the Retailer Terms and Conditions (see Instruction issued 30 April 2024).

Recording of serial numbers

Mandatory: Solar PV retailers must maintain a record of all eligible solar PV systems installed under the Solar Homes Program. The record shall include the make, model, serial numbers, the time, date, and address of installation, for each system.

The records must be made available to Solar Victoria upon request.

Why:

- To proactively assist manufacturers, regulators, and government bodies in the event of a product safety recall or other related product issue.
- To enable tracking of where products are located for the purpose of end-of-life management.

Provide a financial performance estimate to customer

Mandatory: Solar PV retailers must provide solar PV system customers with a financial performance estimate.

Why:

- Typically, customers purchase solar PV systems to reduce their electricity bills. However, under current Australian Standards, customers are only required to receive an electricity performance estimate with no consideration of estimated cost savings.
- Greater transparency of the financial benefits of installing solar PV systems empowers customers to make informed decisions.

Solar PV panel and system removal from residence

Mandatory: Solar PV retailers are responsible for removing replaced solar PV systems, or system components (for example, PV panels, inverters and cabling) from the premises, unless expressly requested not to do so by the customer.

Why:

- The Victorian Government banned e-waste from entering landfill in Victoria, effective 1 July 2019.
- Retailers are best placed to manage the appropriate removal of solar PV systems.
- Applies to the retailer who is providing the new system.

Compliance with the ban on electronic waste to landfill

Mandatory: Solar PV retailers must comply with the Victorian Government's ban on electronic waste to landfill.

Why:

- The Victorian Government has banned e-waste from landfill in Victoria, effective 1 July 2019. E-waste is growing three times faster than general municipal waste in Australia, and it contains both valuable and hazardous materials that can be recovered when they reach the end of their working life.
- The Waste Management Policy (e-waste) was approved by the Executive Council on 26 June 2018 and gazetted on 28 June 2018. The Victorian Government Gazette e-waste order can be found on pages 1457 to 1463.
- E-waste describes any device which requires an electromagnetic current (including anything with a plug, cord or battery) to operate and includes all solar products at the end of their useful life i.e. panels, inverters and energy storage equipment.
- More information: Managing e-waste.

UPDATED Consumer protection through whole-of-system warranty

Mandatory: Solar PV retailers must provide a minimum five year whole-of-system warranty for all eligible systems, including any solar sharing technology, under the Solar Homes Program (including quality of work).

The warranty commencement date is to be the date the system is handed over to the customer.

Retailers are responsible for ensuring that products are procured and installed so that product warranties are not voided.

The customer must not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal

Retailers must also provide the customer with documentation confirming the terms and conditions of the whole-of-system and product warranties, and who to contact in the event of a system or product failure.

The system must be serviced as per the product manufacturer’s requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, visit Consumer Affairs Victoria.

3.1.2 Solar PV retailers – recommendations for retail business

Registration as an Electrical Contractor

Recommended: Solar PV retailers should be registered with Energy Safe Victoria as a Registered Electrical Contractor.

Why:

- Where a solar PV retailer is also a Registered Electrical Contractor the entity is subject to the Electricity Safety Act 1998. Registered Electrical Contractors are obliged to provide Certificates of Electrical Safety to parties for whom electrical work is carried out.
- Registration as a Registered Electrical Contractor places greater responsibility on the retailer to ensure worker and customer safety.

Main business location listed as 'Victoria'

Recommended: The main business location of the solar PV retailer should be listed as "Victoria" according to the Australian Government's Australian Business Register.

Why:

- A key element of the Solar Homes Program concerns driving job creation with strong local content and industry development to build local supply chains. Prioritising businesses with a main business location of Victoria contributes to achieving this.

Completion of accredited safety training course

Recommended: Solar PV retailers should confirm that workers engaged to install solar PV systems have attained 22657VIC *Working Safely on Rooftop Renewable Energy Systems* (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- Retailers have a responsibility to ensure workers are appropriately trained to perform high-risk work.
- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/ construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: Solar PV retailers should confirm all their workers engaged to install solar PV systems have attained CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited unit of competency.

See Work safely in the solar industry.

Why:

- Retailers are responsible for ensuring workers are appropriately trained to perform high-risk work.
- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

NEW Completion of system design training

Recommended: Solar PV retailers should complete training pertaining to whole-of-system design and/or systems thinking.

Why:

- Systems and products are becoming more complex and integrated, and so retailers and installers are required to undertake more upfront design work.
- This supports holistic thinking and futureproofing when designing and installing energy solutions as customers continue to electrify their homes.

Records of solar panel and PV system disposal to a lawful place

Recommended: To comply with the Victorian Government's ban on electronic waste to landfill under the Environment Protection Regulations 2021 (EP regulations), solar PV retailers should keep records and evidence of 'lawful place' disposal during replacement of solar PV systems, or system components (for example, PV panels, inverters and cabling).

Why:

- The Victorian Government banned e-waste from entering landfill in Victoria, effective 1 July 2019.
- Retailers are best placed to manage the disposal of solar PV systems.
- A producer of waste must take all reasonable steps to ensure that the waste is received at a 'lawful place' authorised to receive that type of waste in order to comply with ban.
- Documenting the disposal of solar PV systems demonstrates compliance with the EP regulations.
- For more information about 'lawful place', see the Environment Protection Authority Victoria website.

End-of-life management certified to AS/NZS 5377

Recommended: Solar PV retailers should offer end-of-life management programs, during replacement or disposal, with service provider/s certified to AS/NZS 5377.

Why:

- The Solar Homes Program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for solar PV products and materials at the end of their lifecycle.
- AS/NZS 5377 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.
- Solar Victoria recognises the national stewardship approach underway for solar PV products and materials at the end of their lifecycle.
- See How to manage end-of-life solar PV.

NEW Advise customers to service their solar PV system

Recommended: Prior to completing commissioning, solar PV retailers should advise the customer of the benefits of properly maintaining and servicing their solar PV system.

If requested by the customer, retailers should provide information on their solar PV system servicing offering.

Servicing should only be performed by a licenced electrician who holds Accreditation Scheme Operator (ASO) installer accreditation, and as a minimum include panel cleaning, visual inspection, electrical safety checks and testing, and performance testing.

The frequency should be based on site-specific factors such as local weather and environmental conditions, and the service history, but typically should not be at intervals greater than every 2 years.

Why:

- Regular servicing of the solar PV system helps to maximise the amount of electricity it generates, extend the lifespan of the panels and system components, and maintain warranties by:
  - Ensuring the panels are operating at peak efficiency.
  - Identifying and addressing potential issues early, like damage, corrosion, or loose connections, before they become major problems.
  - Checking the system is safe and functioning correctly.
- For information for customers, see How to clean and maintain solar panels and the Energy Safe Victoria website.

Advise customers to use the Victorian Energy Compare website

Recommended: Solar PV retailers should advise customers of the Victorian Energy Compare website and to utilise the solar saver tool prior to installing a solar PV system.

Why:

- The Victorian Energy Compare website is a Victorian Government initiative that includes a solar savings calculator using NMI (National Metering Identifier) specific data.
- The solar calculator can be used by homeowners to compare the proposed solar PV system to their actual usage and tariff structure.
- Solar Victoria refers customers to the Victorian Energy Compare website to calculate how much money they could save on energy bills by installing solar panels. This includes via our:
  - Householder e-newsletter
  - Solar Hub including Buyers Guides
  - consumer education and customer service activities, including events.
- Victorian Energy Compare and the solar calculator can be accessed at compare.energy.vic.gov.au.

3.1.3 Solar PV installers – mandatory workforce requirements

Holds ASO accreditation

Mandatory: Solar PV installers must hold installer accreditation for grid connected photovoltaic systems under the accreditation scheme offered by the Accreditation Scheme Operator (ASO).

Why:

- Accreditation confirms an individual has undertaken industry specific training relevant to the installation of solar PV systems.
- The accreditation scheme includes continuous professional development requirements and a compliance regime.
- Accreditation is currently a requirement under the Federal Government's Small-scale Renewable Energy Scheme (SRES).

Holds A Grade electrical licence issued by Energy Safe Victoria

Mandatory: Solar PV installers must hold an unrestricted (A Grade) electrical licence issued by Energy Safe Victoria or hold an equivalent Australian interstate electrical licence with mutual recognition by Energy Safe Victoria.

Why:

- In accordance with the Electricity Safety (Installations) Regulations 2019 and the Electricity Safety Act 1998, complete installation of a grid-connected solar PV system qualifies as prescribed electrical installation work and must therefore be done by a licensed electrician.

Record of no prosecutions

Mandatory: Solar PV installers must have no prosecutions under the Occupational Health and Safety Act 2004 and/or the Occupational Health and Safety Regulations 2017 (or equivalent legislation/regulations in other Australian jurisdictions) resulting in a plea of guilty or a finding of guilt in the past three years.

Why:

- Compliance with relevant occupational health and safety acts and regulations protects the health, safety and welfare of employees and other people at work.
- Confirming compliance with relevant occupational health and safety acts and regulations aims to ensure that the health and safety of employees and the public are not put at risk by work activities.

Attainment of White Card/construction induction card

Mandatory: Solar PV installers must have attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card / construction induction card).

See Work safely in the solar industry.

Why:

- White Card training sets out requirements for performing safe work practices, identifying risks and satisfying work requirements.
- Occupational Health and Safety Regulations 2017 state that construction induction training must be undertaken by workers engaged in construction and the installation of electricity services.
- Completion of White Card training is a work health and safety risk control measure.

Completion of accredited safety training unit

Mandatory: Solar PV installers must have attained the VU23631 *Work safely on roofs with renewable energy systems* (previously obtained VU22744 *Work Safely in the Solar industry* accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Work safely on roofs with renewable energy systems is a tailored safety training unit which includes customised working at heights, lockout and energisation requirements, identification and reporting on asbestos, etc.
- A sector advisory group identified a skills gap in the solar industry and developed this training unit. The advisory group was led by the Office of the Victorian Skills Commissioner and included representatives from WorkSafe Victoria, Solar Victoria, the Electrical Trades Union, the CEC, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers.
- Completion of Work safely on roofs with renewable energy systems is a work health and safety control measure.

Completion of specific training and / or mentoring identified by Solar Victoria

Mandatory: Solar PV installers must ensure they and all their on-site workers engaged to install systems have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

NEW Installed in compliance with AS/NZS 5033

Mandatory: Solar PV systems must be installed in compliance with AS/NZS 5033.

Why:

- Solar PV installations are required to conform to AS/NZS 5033, a standard explicitly relating to the safe installation of modern solar PV systems.
- Installers must also take into consideration the manufacturer's installation instructions.

UPDATED Inverter settings must comply with DNSP connection agreements

Mandatory: Solar PV inverters must be configured to comply with Distribution Network Service Provider (DNSP) connection agreements, including the power quality response mode being set to "Australia A" .

Why:

- DNSPs have mandated unified power quality response mode settings, defined by the "Australia A" configuration mode within AS/NZS 4777.2.
- All installations must comply with DNSP connection agreements.
- See guidance on How to correctly configure inverter settings.

UPDATED Active internet connection

Mandatory: To support emergency backstop and flexible connection arrangements, the solar PV system must be connected to the internet as part of commissioning, where practicable to do so.

In cases where a reliable internet connection is not present, the installer must connect temporarily via a mobile device (i.e. hotspot) during commissioning to register the system.

Why:

- Examples of where it is considered not practicable to connect the eligible system to the internet include:
  - there is no reliable connection available (including new builds); or
  - it is cost prohibitive to do so.
- Supports:
  - the rollout of emergency backstop, which enables network operators to curtail excess solar generation when required.
  - the future implementation of flexible connection arrangements by DNSPs, enabling more roof top solar to be installed and the possibility to participate in future energy markets.

  For more information, see Requirements for Distributed Solar – Victoria's Emergency Backstop Mechanism, Supporting guidance for industry.
- Supports compliance with DNSP connection agreement.
- Enables retailers / manufacturers to provide software updates to resolve safety and performance issues.
- Allows customers to monitor performance of their solar PV system.

3.1.4 Solar PV installers – recommendations for workforce

Completion of accredited safety training course

Recommended: Solar PV installers should attain 22657VIC *Working Safely on Rooftop Renewable Energy Systems* accredited course (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: Solar PV installers should attain CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited training unit.

See Work safely in the solar industry.

Why:

- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

NEW Completion of system design training

Recommended: Solar PV installers should complete training pertaining to whole-of-system design and / or systems thinking.

Why:

- Systems and products are becoming more complex and integrated, and so retailers and installers are required to undertake more upfront design work.
- This supports holistic thinking and futureproofing when designing and installing energy solutions as customers continue to electrify their homes.

NEW Completion of manufacturer training for the system installed

Recommended: Solar PV installers should complete any training offered by the manufacturer on the specific solar PV solution that is being installed.

Why:

- Installation requirements are specific to individual manufacturers, and warranties may require the installer to be accredited by the manufacturer in addition to receiving basic solar PV installation training.
- Specific training increases the competence of installers across the sector and provides greater assurance for the safety of installations.

NEW Completion of accredited decommissioning solar PV training unit

Recommended: Solar PV installers should attain 22679VIC *Course in Decommissioning Solar PV for Safe Reuse or Recycling*.

Why:

- The Solar Homes Program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for materials at the end of their lifecycle.
- Retailers are responsible for removing replaced solar PV systems, or system components from the premises, and this training supports retailers to effectively manage e-waste and consider options other than disposal.
- System retailers have a responsibility to ensure workers are appropriately trained to perform high-risk work.
- Course in *Decommissioning Solar PV for Safe Reuse or Recycling* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for decommissioning solar PV systems.

End-of-life management certified to AS/NZS 5377

Recommended: Solar PV installers should offer end-of-life management programs, during replacement or disposal, with service provider/s certified to AS/NZS 5377.

Why:

- The Solar Homes program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for solar PV products and materials at the end of their lifecycle.
- AS/NZS 5377 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.
- Solar Victoria recognises the national stewardship approach underway for solar PV products and materials at the end of their lifecycle.
- See How to manage end-of-life solar PV.

Advise customers to use the Victorian Energy Compare website

Recommended: Solar PV installers should advise customers of the Victorian Energy Compare website and how to utilise the solar saver tool prior to installing a solar PV system.

Why:

- The Victorian Energy Compare website is a Victorian Government initiative that includes a solar savings calculator using NMI (National Metering Identifier) specific data.
- The solar calculator can be used by homeowners to compare the proposed solar PV system to their actual usage and tariff structure.
- Solar Victoria refers customers to the Victorian Energy Compare website to calculate how much money they could save on energy bills by installing solar panels. This includes via our:
  - Householder e-newsletter
  - Solar Hub including Buyers Guides
  - consumer education and customer service activities, including events.
- Victorian Energy Compare and the solar calculator can be accessed at compare.energy.vic.gov.au.

3.1.5 All other on-site solar PV workers – mandatory workforce requirements

Attainment of White Card/construction induction card

Mandatory: On-site solar PV workers must have attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).

Why:

- White Card training sets out requirements for performing safe work practices, identifying risks and satisfying work requirements.
- Occupational Health and Safety Regulations 2017 state that construction induction training must be undertaken by workers engaged in construction and the installation of electricity services.
- Completion of White Card training is a work health and safety risk control measure.

Completion of accredited safety training unit

Mandatory: On-site solar PV workers must have attained the VU23631 *Work safely on roofs with renewable energy systems* accredited unit of competency (previously obtained VU22744 *Work Safely in the Solar industry* accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Work safely on roofs with renewable energy systems is a solar-specific safety training unit which includes customised working at heights, lockout and energisation requirements, identification and reporting on asbestos, etc.
- A sector advisory group identified a skills gap in the solar industry and developed this training unit. The advisory group was led by the Office of the Victorian Skills Commissioner and included representatives from WorkSafe Victoria, Solar Victoria, the Electrical Trades Union, the CEC, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers.
- Completion of *Work safely on roofs with renewable energy systems* is a work health and safety control measure.

Completion of specific training and / or mentoring identified by Solar Victoria

Mandatory: On-site solar PV workers engaged to install systems must have successfully completed training and / or mentoring as required by Solar Victoria from time to time.

Why:

- Solar Victoria's training and mentoring are industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

3.1.6 All other on-site solar workers – recommendations for workforce

Completion of accredited safety training course

Recommended: On-site solar PV workers should attain 22657VIC *Working Safely on Rooftop Renewable Energy Systems* accredited course (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: On-site solar PV workers should attain CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited training unit.

See Work safely in the solar industry.

Why:

- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

3.2 Solar PV system and product requirements

The following system and product requirements apply to all solar PV rebates for owner-occupiers, renters and community housing. They aim to enhance safety and quality by maintaining rigorous standards and ensuring products are future-fit.

3.2.1 Solar PV inverters – mandatory requirements

Listed on the Solar Victoria inverter product list

Mandatory: Solar PV inverters must be listed on the Solar Victoria inverter product list.

Why:

- This listing confirms inverters meet additional requirements, above minimum industry standards, to be eligible to participate in the Solar Homes program.

Listed on the CEC approved inverters list

Mandatory: Solar PV inverters must be listed on the CEC Approved Inverters List.

Why:

- This listing confirms, via certified evidence, inverters meet minimum product standards for use in Australia.
- Listing is a requirement to participate in the Federal Government's Small-scale Renewable Energy Scheme (SRES).

UPDATED Compliance with AS/NZS 4777.2

Mandatory: Solar PV inverters must comply with AS/NZS 4777.2.

Why:

- AS/NZS 4777.2 includes inverter capabilities related to increased grid support features, disturbance ride-through capabilities and test procedure clarity, as well as product requirements for inbuilt DC isolation devices.
- AS/NZS 4777.2 requires that a set of operational instructions are to be provided to view inverter settings in read-only mode for verification. This assists LEIs to verify compliance of installations, including power response mode setting, and supports Solar Victoria's assurance program.

Internet capability and an on-board communication port

Mandatory: Solar PV inverters must have internet capability (the ability to share data via the World Wide Web).

Why:

- Internet capability and an on-board communication port (or equivalent) are minimum infrastructure requirements to enable communication between inverter energy systems and third parties.
- Systems with these minimum requirements may participate in future energy markets and/or flexible connection arrangements.

UPDATED Solar PV inverters compliant to IEEE 2030.5 and CSIP-AUS

Mandatory: To support emergency backstop and flexible connection arrangements, solar PV inverters must be listed on CEC Approved Inverters list to conform to IEEE 2030.5 and Common Smart Inverter Profile – Australia (CSIP-AUS).

Compliance with this requirement can be achieved via direct inverter integration, an external control system or vendor cloud (or equivalent).

Why:

- Industry adoption of IEEE 2030.5 and CSIP-AUS inverters supports:
  - the rollout of emergency backstop, which enables network operators to curtail excess solar generation when required.
  - the future implementation of flexible connection arrangements by DNSPs, enabling more rooftop solar to be installed and the possibility to participate in future energy markets.
- Exceptions apply for battery inverters, due to the time required for industry to be ready.
- For more information, see Requirements for Distributed Solar – Victoria's Emergency Backstop Mechanism, Supporting guidance for industry.

UPDATED Consumer protection through product warranty

Effective from 1 September 2025. As a transitional provision until then, the 2024-25 Notice to Market product warranty requirement remains in place.

Mandatory: Solar PV inverter manufacturers must provide a minimum five year product warranty for all eligible inverters under the Solar Homes Program.

The warranty commencement date is to be the date the system is handed over to the customer.

The warranty must cover all components supplied by the manufacturer, including:

- inverters
- external measurement devices and gateways

The customer must not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal

The product must be serviced as per the manufacturer's requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This allows retailers and manufacturers to jointly determine the most appropriate commercial arrangements to provide the required warranty coverage to the customer.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

UPDATED Consumer protection for solar sharing technology

Effective from 1 September 2025. As a transitional provision until then, the 2024-25 Notice to Market product warranty requirement remains in place.

Mandatory: Solar sharing technology suppliers must provide a minimum five-year product warranty for all eligible solar sharing technologies under the Solar Homes program.

The warranty commencement date is to be the date the system is handed over to the customer.

The warranty must cover all components supplied by the supplier, including:

- inverter power sharing device
- smart controllers
- external measurement devices, gateways and WiFi dongles

The customer must not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal

The product must be serviced as per the manufacturer's requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This allows retailers and manufacturers to jointly determine the most appropriate commercial arrangements to provide the required warranty coverage to the customer.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

3.2.2 Solar PV inverters – recommendations

UPDATED Power quality response mode – region settings

Recommended: Solar PV inverters should only have the power quality response mode region settings listed in AS/NZS 4777.2, with “Australia A” listed as the default setting.

A user should also be able to easily view the current setting on the inverter’s digital display or software portal.

Why:

- DNSPs have mandated unified power quality response mode settings, defined by the “Australia A” configuration mode within AS/NZS 4777.2.
- All installations must comply with DNSP connection agreements.
- Removal of old grid settings and having “Australia A” as the default setting reduces the chance of the incorrect setting being used.
- This supports LEIs to easily check that the correct setting has been selected.

Electricity data available to view

Recommended: End users should be able to view both solar generation and energy consumption via a software solution supplied as part of the installation of the solar PV system.

Why:

- Solar Victoria wants to ensure consumers (and their authorised agents) can freely and easily access data from their meter, locally so that they can optimise their generation and consumption to reduce their bills.
- If consumers can’t access this via their PV or battery inverter app, they can use an ‘In-Home Display’ connected to their Smart Meter. Alternatively, consumers can request this data the day after (not live) from their DNSP.

Solar PV system capable of switching external loads

Recommended: Solar PV systems should be capable of switching external loads (via the inverter or third-party device).

Why:

- The functionality to switch loads facilitates increased self-consumption of generated solar power resulting in better financial outcomes for households and optimises integration with the grid.

NEW Supply during a power outage

Recommended: Solar PV inverters should be able to supply a single socket outlet in the event of a grid outage where another energy source is available. The supply is limited to the energy source available, such as the connected solar PV array and / or battery.

Why:

- During an extended power outage it will provide households with access to basic provision of electricity to power and / or charge small devices such as phone batteries and radios.

3.2.3 Solar PV modules – mandatory requirements

Listed on the Solar Victoria solar PV product list

Mandatory: Solar PV modules must be listed on the Solar Victoria solar PV product list.

Why:

- This listing confirms solar PV modules meet the requirements, above minimum industry standards, to be eligible to participate in the Solar Homes program.

Listed on the CEC approved modules list

Mandatory: Solar PV modules must be listed on the CEC Approved Modules List.

Why:

- This listing confirms, via certified evidence, solar PV modules meet minimum product standards for usage in Australia.
- Listing is a requirement to participate in the Federal Government's Small-scale Renewable Energy Scheme (SRES).

NEW Eligible for STCs

Mandatory: The solar PV retailer must ensure the solar PV system is designed and installed such that it is eligible for the creation of STCs.

This includes ensuring that the serial number of each solar PV module supplied as part of the solar PV system is listed in the Clean Energy Regulator (CER) solar panel serial number ledger, and the number is valid.

If requested by the customer, retailers must also ensure the customer is provided with documentary evidence to support a STC claim.

Why:

- A valid listing in the serial number ledger provides assurance that the solar PV module is:
  - genuine (e.g. not counterfeit)
  - approved as per the CEC approved products list
  - backed by manufacturer's warranties
  - compliant with Australian Standards
  - eligible for Small Scale Technology Certificates (STCs) and rebates under the Solar Homes program.
- A customer can either assign their STC rights to a registered agent or pursue creation of STCs themselves. For the latter case, the customer will need to submit the documentary evidence required by CER to support their claim.

UPDATED Consumer protection through product warranty

Effective from 1 September 2025. As a transitional provision until then, the 2024-25 Notice to Market product warranty requirement remains in place.

Mandatory: Solar PV module manufacturers must provide a minimum five year product warranty for all eligible modules under the Solar Homes Program.

The warranty commencement date is to be the date the system is handed over to the customer.

The warranty must cover all components supplied by the manufacturer, including:

- photovoltaic modules
- module junction box and accompanying cabling and connectors.

The customer must not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal

The product must be serviced as per the manufacturer's requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This allows retailers and manufacturers to jointly determine the most appropriate commercial arrangements to provide the required warranty coverage to the customer.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.

- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

3.2.4 Solar PV modules – recommendations

UPDATED Listed as a participating brand in the SPV Initiative

Recommended: Solar PV module manufacturers should be listed by the CER as a participating brand in the industry-led Solar Panel Validation (SPV) Initiative.

Why:

- Participation in this initiative:
  - makes it easier for manufacturers/importers to upload serial number data to the ledger.
  - gives installers onsite confirmation of a solar panel's eligibility.
  - helps agents to create STCs.
  - enables CER to process STC claims faster.

UPDATED Confirmed as part of the SPV Initiative

Recommended: Solar PV retailers should ensure that customers are provided with an electronic customer record confirming installed solar PV modules are verified as part of the industry-led SPV Initiative.

Why:

- Validation via this initiative provides customers with an electronic record that confirms their installed solar PV modules are verified as part of the initiative.
- The record includes information such as the make and model of the solar PV modules, serial numbers, the time and date of installation and the location.

UPDATED Consumer protection through product performance warranty

Recommended: Solar PV module manufacturers should provide a performance warranty that panels will deliver 90 per cent production at 10 years and 80 per cent at 25 years.

The warranty commencement date should be the date the system is handed over to the customer.

Why:

- This supports customers to receive high quality products that do not suffer from a significant drop in production over their lifetime.

Section 4: Requirements for solar battery loans

This section lists requirements that retailers and installers, systems and products **must satisfy** under the solar battery interest-free loan. It also includes recommendations.

4.1 Solar battery retail business and workforce requirements

The following retail business and workforce requirements apply to solar battery loans. They aim to enhance safety and quality by maintaining rigorous standards and developing a level playing field within the industry.

4.1.1 Solar battery retailers – mandatory retail business requirements

Signatory to the New Energy Tech Consumer Code

Mandatory: Solar battery retailers must be a signatory to the New Energy Tech Consumer Code (NETCC) program administered by the Clean Energy Council (CEC), and maintain the status of NET Approved Seller in order to remain an authorised solar battery retailer under the Solar Homes Program.

Why:

- The NETCC replaces the Approved Solar Retailer Code of Conduct as a set of service standards and consumer protections that build on the previous Code, expanding it to new energy technology beyond solar to batteries, electric vehicle chargers and more.
- The Code requires solar retailers to commit to quality service and stronger consumer protections than Australian Consumer Law and the national small-scale renewable energy certificate (STC) scheme provide for.
- New signatories to the NETCC undergo a stringent application process and are subject to a monitoring, compliance, and sanctions regime.
- Becoming a NET Approved Seller and authorised solar battery retailer highlights a commitment to high standards across sales and marketing, quotes and contracts, delivery and installation, and warranties and support.
- Administered by the CEC, the NETCC was initially approved by the ACCC and is governed by an independent council of industry and consumer bodies including Energy Consumers Australia, Consumer Action Law Centre and Energy Networks Australia. Compliance with and enforcement of the code is undertaken by an independent monitoring and compliance panel.
- More information:
  - New Energy Tech Consumer Code
  - Become an authorised solar retailer or installer

Record of no prosecutions

Mandatory: Solar battery retailers must have no prosecutions under the Occupational Health and Safety Act 2004 and/or the Occupational Health and Safety Regulations 2017 (or equivalent legislation / regulations in other Australian jurisdictions) resulting in a plea of guilty or a finding of guilt in the past three years.

Why:

- Compliance with relevant occupational health and safety acts and regulations protect the health, safety and welfare of employees and other people at work.
- Confirming compliance with relevant occupational health and safety acts and regulations aims to ensure that the health and safety of employees and the public are not put at risk by work activities.

UPDATED Completion of accredited safety training

Mandatory: Solar battery retailers must confirm all their workers engaged to install solar battery systems have attained:

- *VU23631 Work safely on roofs with renewable energy systems* training unit certification if the worker is required to carry out rooftop activities (previously obtained *VU22744 Work safely in the solar industry* accredited unit of competency is still valid).
- *CPCCWHS1001 Prepare to work safely in the construction industry* accredited unit of competency (White Card / construction induction card).

See Work safely in the solar industry.

Why:

- System retailers are responsible for ensuring workers are appropriately trained to perform high-risk work.
- Retailers must perform due diligence to ensure all workers meet the regulated and contractual requirements of participating in the Solar Homes Program.

Completion of specific training and / or mentoring identified by Solar Victoria

Mandatory: Solar battery retailers must confirm that all their workers engaged to install systems have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

Ban on telemarketing and door-to-door sales

Mandatory: Solar battery retailers, or parties acting on behalf of the retailer, must not conduct sales of eligible systems as part of the Solar Homes Program using door-to-door or telemarketing sales techniques.

The ban:

- prohibits 'cold-call' telemarketing and door-to-door sales techniques to all types of consumers
- prohibits telemarketing and door-to-door sales to prospective or previous customers from being outsourced to contractors or marketing companies
- only permits marketing or sales calls at the request of the consumer or with their express permission, and only within three months or a timeline specified when the consumer opts into calls, and only in accordance with the New Energy Tech Consumer Code
- permits calls to notify a previous customer of a product fault or recall that affects them.

Why:

- This protects consumers, particularly vulnerable cohorts, from persistent, unsolicited or nuisance calls and pressure sales tactics.
- This prevents contacting consumers who are listed on the 'Do Not Call Register'.
- This aligns with the new Victorian Energy Upgrades program marketing ban administered by the Essential Services Commission.
- This prevents reputational harm to the Solar Homes Program by being associated with nuisance telemarketing and door-to-door marketing techniques.

Note: the telemarketing prohibition came into effect under the Solar Homes Program on 1 May 2024 and door-to-door sales prohibition commenced on 1 September 2021 via the Retailer Terms and Conditions (see Instruction issued 30 April 2024).

Recording of serial numbers

Mandatory: Solar battery retailers must maintain a record of all eligible solar battery systems installed under the Solar Homes Program. The record shall include the make, model, serial number/s, the time, date, and address of installation, for each system.

The records must be made available to Solar Victoria upon request.

Why:

- To proactively assist manufacturers, regulators, and government bodies in the event of a product safety recall or other related product issue.
- To enable tracking of where products are located for the purpose of end-of-life management.

Provide a financial performance estimate to customer

Mandatory: Solar battery retailers must provide solar battery system customers with a financial performance estimate.

Why:

- Typically, customers purchase solar battery systems to reduce their electricity bills. However, under current Australian Standards, customers are only required to receive an electricity performance estimate with no consideration of estimated cost savings.
- Greater transparency of the financial benefits of installing solar battery systems empowers customers to make informed decisions.

Retailer obligation to ensure installer provided with labelling kit

Mandatory: The retailer must ensure that an AS/NZS 5139 compliant labelling kit is provided to the installer for the purpose of commissioning a battery.

Why:

- Correct installation of the supplied product is an obligation of the retailer under contract law/Australian Consumer Law.
- This requirement will support better compliance with AS/NZS 5139.
- Correct battery labelling supports servicing by technicians and emergency services when responding to potential incidents.
- Addresses a gap as battery manufacturers are not currently required to provide AS/NZS 5139 compliant battery labelling kits.
- The retailer is accountable for ensuring a battery labelling kit is provided.
- For battery labelling guidance, see Solar Victoria's Technical guidance sheet 2.4: Labelling requirements.

Compliance with the ban on electronic waste to landfill

Mandatory: Solar battery retailers must comply with the Victorian Government's ban on electronic waste to landfill.

Why:

- The Victorian Government has banned e-waste from landfill in Victoria, effective 1 July 2019. E-waste is growing three times faster than general municipal waste in Australia, and it contains both valuable and hazardous materials that can be recovered when they reach the end of their working life.
- The Waste Management Policy (e-waste) was approved by the Executive Council on 26 June 2018 and gazetted on 28 June 2018. The Victorian Government Gazette e-waste order can be found on pages 1457 to 1463.
- E-waste describes any device which requires an electromagnetic current (including anything with a plug, cord or battery) to operate and includes all solar products at the end of their useful life i.e. panels, inverters and energy storage equipment.
- For more information, see Managing e-waste.

UPDATED Consumer protection through whole-of-system warranty

Mandatory: Solar battery retailers must provide a minimum five year whole-of-system warranty for all eligible systems under the Solar Homes Program (including quality of work).

The warranty commencement date is to be the date the system is handed over to the customer.

Retailers are responsible for ensuring that products are procured and installed so that product warranties are not voided.

The customer must not be required to pay upfront nor incur any expense associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal

Retailers must also provide the customer with documentation confirming the terms and conditions of the whole-of-system and product warranties, and who to contact in the event of a system or product failure.

The system must be serviced as per the product manufacturer's requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

4.1.2 Solar battery retailers – recommendations for retail business

Registration as an Electrical Contractor

Recommended: Solar battery retailers should be registered with Energy Safe Victoria as a Registered Electrical Contractor.

Why:

- Where a solar battery retailer is also a Registered Electrical Contractor the entity is subject to the Electricity Safety Act 1998. Registered Electrical Contractors are obliged to provide Certificates of Electrical Safety to parties for whom electrical work is carried out.
- Registration as a Registered Electrical Contractor places greater responsibility on the retailer to ensure worker and customer safety.

Main business location listed as 'Victoria'

Recommended: The main business location of the solar battery retailer should be listed as "Victoria" according to the Australian Government's Australian Business Register.

Why:

- A key element of the Solar Homes Program concerns driving job creation with strong local content and industry development to build local supply chains. Prioritising businesses with a main business location of Victoria contributes to achieving this.

Completion of accredited safety training course

Recommended: Solar battery retailers should confirm all their workers engaged to install solar battery systems have attained 22657VIC *Working Safely on Rooftop Renewable Energy Systems* (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- Retailers have a responsibility to ensure workers are appropriately trained to perform high-risk work.
- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: Solar battery retailers should confirm all their workers engaged to install solar battery systems have attained CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited unit of competency.

See Work safely in the solar industry.

Why:

- Retailers are responsible for ensuring workers are appropriately trained to perform high-risk work.
- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

NEW Completion of system design training

Recommended: Solar battery retailers should complete training pertaining to whole-of-system design and/or systems thinking.

Why:

- Systems and products are becoming more complex and integrated, and so retailers and installers are required to undertake more upfront design work.
- This supports holistic thinking and futureproofing when designing and installing energy solutions as customers continue to electrify their homes.

End-of-life management certified to AS/NZS 5377

Recommended: Solar battery retailers should offer end-of-life management programs, during replacement or disposal, with service provider/s certified to AS/NZS 5377.

Why:

- The Solar Homes Program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for solar battery products and materials at the end of their lifecycle.

- AS/NZS 5377 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.
- Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.
- See How to manage end-of-life solar PV.

Advise customers to use the Victorian Energy Compare website

Recommended: Solar battery retailers should advise customers of the Victorian Energy Compare website and how to utilise the solar saver tool prior to installing a solar battery system.

Why:

- The Victorian Energy Compare website is a Victorian Government initiative that includes a solar savings calculator using NMI (National Metering Identifier) specific data.
- The solar calculator can be used by homeowners to compare the proposed solar PV system to their actual usage and tariff structure.
- Solar Victoria refers customers to the Victorian Energy Compare website to calculate how much money they could save on energy bills by installing solar panels. This includes via our:
  - Householder e-newsletter
  - Solar Hub including Buyers Guides
  - consumer education and customer service activities, including events.
- Victorian Energy Compare and the solar calculator can be accessed at compare.energy.vic.gov.au.

4.1.3 Solar battery installers – mandatory workforce requirements

Holds ASO accreditation

Mandatory: Solar battery installers must hold installer accreditation for grid connected battery systems under the accreditation scheme offered by the Accreditation Scheme Operator (ASO).

Why:

- Accreditation confirms an individual has undertaken industry specific training relevant to the installation of solar battery systems.
- The accreditation scheme includes continuous professional development requirements and a compliance regime.

Holds A Grade electrical licence issued by Energy Safe Victoria

Mandatory: Solar battery installers must hold an unrestricted (A Grade) electrical licence issued by Energy Safe Victoria or hold an equivalent Australian interstate electrical licence with mutual recognition by Energy Safe Victoria.

Why:

- In accordance with the Electrical Safety (General) Regulations 2019, complete installation of a grid-connected solar battery system qualifies as prescribed electrical installation work and must therefore be done by a licensed electrician.

Record of no prosecutions

Mandatory: Solar battery installers must have no prosecutions under the Occupational Health and Safety Act 2004 and / or the Occupational Health and Safety Regulations 2017 (or equivalent legislation / regulations in other Australian jurisdictions) resulting in a plea of guilty or a finding of guilt in the past three years.

Why:

- Compliance with relevant occupational health and safety acts and regulations protect the health, safety and welfare of employees and other people at work.
- Confirming compliance with relevant occupational health and safety acts and regulations aims to ensure that the health and safety of employees and the public are not put at risk by work activities.

Attainment of White Card/construction induction card

Mandatory: Solar battery installers must have attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).

See Work safely in the solar industry.

Why:

- White Card training sets out requirements for performing safe work practices, identifying risks and satisfying work requirements.
- Occupational Health and Safety Regulations 2017 state that construction induction training must be undertaken by workers engaged in construction and the installation of electricity services.
- Completion of White Card training is a work health and safety risk control measure.

UPDATED Completion of accredited safety training unit

Mandatory: Solar battery installers must have attained the *VU23631 Work safely on roofs with renewable energy systems* accredited unit of competency if they carry out rooftop activities as part of the installation (previously obtained VU22744 *Work Safely in the Solar industry* accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Work safely on roofs with renewable energy systems is a tailored safety training unit which includes customised working at heights, lockout and energisation requirements, identification and reporting on asbestos, etc.
- A sector advisory group identified a skills gap in the solar industry and developed this training unit. The advisory group was led by the Office of the Victorian Skills Commissioner and included representatives from WorkSafe Victoria, Solar Victoria, the Electrical Trades Union, the CEC, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers.
- Completion of Work safely on roofs with renewable energy systems is a work health and safety control measure.

Completion of specific training and / or mentoring identified by Solar Victoria

Mandatory: Solar battery installers must ensure they and all their on-site workers engaged to install systems have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

UPDATED Installed in compliance with AS/NZS 5139

Mandatory: Solar battery system must be installed in compliance with AS/NZS 5139.

Why:

- Battery installations are required to conform to AS/NZS 5139, a standard explicitly relating to the safe installation of modern battery systems.
- Under AS/NZS 5139 suitable physical protection of battery systems is the responsibility of the installer.
- AS/NZS 5139 includes requirements for installing battery systems in locations that a vehicle may access, and installers are advised to exercise caution when assessing such locations.
- Correct battery labelling supports servicing by technicians and emergency services if responding to potential incidents.
- Under AS/NZS 5139 application of battery labels is the responsibility of the installer.
- Installers must also take into consideration the manufacturer's installation instructions when applying labels.
- To help meet this requirement, see Technical guidance sheet 2.1 Physical protection of battery systems and Technical guidance sheet 2.4 Labelling requirements at Battery installation technical guidance sheets.

Smoke alarm installation for energy storage systems

Mandatory: Where an energy storage solution is installed in a room under the same roof as a residence (e.g. a garage or storeroom), a suitable smoke alarm shall be installed within that room.

The smoke alarm shall comply with AS 3786:2014 or AS 3786:2023, or where the use of the area is likely to result in smoke alarms causing spurious signals, shall comply with AS 1670.1.

It is recommended that wherever practicable to do so, the smoke alarm should be hard wired and be interconnected with other residence smoke alarms or have some secondary alert system within the residence.

Why:

- It is recommended to install a smoke alarm in the same room as an energy storage solution in the battery installation standard AS/NZS 5139.
- Safety is a top priority of the Solar Homes Program, and the installation of a smoke alarm reduces the risk of injury and property damage.

UPDATED Inverters must be set to comply with DNSP agreements

Mandatory: Inverters must be configured to comply with Distribution Network Service Provider (DNSP) connection agreements, including the power quality response mode being set to “Australia A” .

Why:

- DNSPs have mandated unified power quality response mode settings, defined by the “Australia A” configuration mode within AS/NZS 4777.2.
- All installations must comply with DNSP connection agreements.
- See guidance on How to correctly configure inverter settings.

Active internet connection

Mandatory: The solar battery system must be connected to the internet as part of commissioning where practicable to do so.

In cases where a reliable internet connection is not present, the installer must connect temporarily via a mobile device (i.e. hotspot) during commissioning to register the system.

Why:

- Examples of where it is considered not practicable to connect the eligible system to the internet include:
  - there is no reliable connection available (including new builds); or
  - it is cost prohibitive to do so.
- Enables retailers and manufacturers to provide software updates to resolve safety and performance issues
- Allows customers to monitor performance of their battery system.

4.1.4 Solar battery installers – recommendations for workforce

Completion of accredited safety training course

Recommended: Solar battery installers should attain 22657VIC *Working Safely on Rooftop Renewable Energy Systems* accredited course (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: Solar battery installers should attain CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited training unit.

See Work safely in the solar industry.

Why:

- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

NEW Completion of system design training

Recommended: Solar battery installers should complete training pertaining to whole-of-system design and/or systems thinking.

Why:

- Systems and products are becoming more complex and integrated, and so retailers and installers are required to undertake more upfront design work.
- This supports holistic thinking and futureproofing when designing and installing energy solutions as customers continue to electrify their homes.

Completion of manufacturer training for the system installed

Recommended: Solar battery installers should complete any training offered by the manufacturer on the specific energy storage solution that is being installed.

Why:

- Installation requirements are specific to individual manufacturers, and warranties may require the installer to have been accredited by the manufacturer in addition to receiving basic battery installation training.
- Specific training increases the competence of installers across the sector and provides greater assurance for the safety of installations.

End-of-life management certified to AS/NZS 5377

Recommended: Solar battery installers should offer end-of-life management programs, during replacement or disposal, with service provider/s certified to AS/NZS 5377.

Why:

- The Solar Homes program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for solar battery products and materials at the end of their lifecycle.
- AS/NZS 5377 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.
- Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.
- See How to manage end-of-life solar PV.

Advise system customers to use the Victorian Energy Compare website

Recommended: Solar battery installers should advise customers of the Victorian Energy Compare website and how to utilise the solar saver tool prior to installing a solar battery system.

Why:

- The Victorian Energy Compare website is a Victorian Government initiative that includes a solar savings calculator using NMI (National Metering Identifier) specific data.
- The solar calculator can be used by homeowners to compare the proposed solar PV system to their actual usage and tariff structure.
- Solar Victoria refers customers to the Victorian Energy Compare website to calculate how much money they could save on energy bills by installing solar panels. This includes is our:
  - Householder e-newsletter
  - Solar Hub including Buyers Guides
  - consumer education and customer service activities, including events.
- Victorian Energy Compare and the solar calculator can be accessed at compare.energy.vic.gov.au.

Installation to prevent “Cross Phasing”

Recommended: Solar battery systems are recommended to be installed in a manner that prevents “Cross Phasing”.

Why:

- Ensuring solar batteries and solar PV systems are on the same phase for multiphase customers improves direct self-consumption.
- Victoria’s net metering arrangement does not require per phase balancing for multiphase customers. A solar PV and solar battery system can be installed on separate phases – with no financial impact to a customer (except where grid export limits are reached).
- Battery cross phasing can result in network unbalance, potentially avoided higher line voltages and unnecessary exacerbation of power qualities in the network.
- Victoria’s net metering arrangement is defined in:
  - Chapter 7 of the National Electricity Rules
  - AEMO’s Metrology Procedures
  - Victorian Service and Installation Rules.

4.1.5 All other on-site solar battery workers – mandatory workforce requirements

Attainment of White Card/construction induction card

Mandatory: On-site solar battery workers must have attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).

See Work safely in the solar industry.

Why:

- White Card training sets out requirements for performing safe work practices, identifying risks and satisfying work requirements.
- Occupational Health and Safety Regulations 2017 state that construction induction training must be undertaken by workers engaged in construction and the installation of electricity services.
- Completion of White Card training is a work health and safety risk control measure.

UPDATED Completion of accredited safety training unit

Mandatory: On-site solar battery workers must have attained the VU23631 *Work safely on roofs with renewable energy systems* accredited unit of competency if they carry out rooftop activities as part of the installation (previously obtained VU22744 *Work Safely in the Solar Industry* accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Work safely on roofs with renewable energy systems is a tailored safety training unit which includes customised working at heights, lockout and energisation requirements, identification and reporting on asbestos, etc.
- A sector advisory group identified a skills gap in the solar industry and developed this training unit. The advisory group was led by the Office of the Victorian Skills Commissioner and included representatives from WorkSafe Victoria, Solar Victoria, the Electrical Trades Union, the CEC, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers.
- Completion of *Work safely on roofs with renewable energy systems* is a work health and safety control measure.

Completion of specific training and/or mentoring identified by Solar Victoria

Mandatory: On-site solar battery workers engaged to install systems must have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

4.1.6 All other on-site solar battery workers – recommendations for workforce

Completion of accredited safety training course

Recommended: On-site solar battery workers should attain 22657VIC *Working Safely on Rooftop Renewable Energy Systems* accredited course (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

NEW Completion of accredited safety training unit (working at heights)

Recommended: On-site solar battery workers should attain CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited training unit.

See Work safely in the solar industry.

Why:

- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

4.2 Solar battery system and product requirements

The following system and product requirements apply to all solar battery loans. They aim to enhance safety and quality by maintaining rigorous standards and ensuring products are future-fit.

4.2.1 Solar Battery Systems – mandatory requirements

UPDATED Listed on the Solar Victoria battery product list

Mandatory: Solar Battery Systems must be listed on the Solar Victoria battery product list.

Why:

- Listing on our battery product list confirms that the Solar Battery System meets Solar Victoria's criteria for safety, quality and technical capabilities.
- The CEC list has been refined by Solar Victoria for Solar Battery Systems that are 'VPP-capable', with technical capabilities aligned with AEMO's NEM VPP Demonstration Program Minimum Capability.

NEW Listed on the CEC approved product lists

Mandatory: The battery and inverter components of Solar Battery Systems must be listed on the respective CEC Approved Modules and Inverters lists.

Why:

- These listings provide assurance, via certified evidence, that:
  - batteries and inverters meet minimum product standards for use in Australia
  - batteries comply with the BPG
  - inverters comply with AS/NZS 4777.2
  - basic warranty documentation is available

UPDATED Complies with Australian Best Practice Guide

Mandatory: Batteries must comply with the Australian Best Practice Guide: Battery Storage Equipment – Electrical Safety Requirements.

Why:

- The guide provides consistent and transparent minimum safety criteria for household situations.
- The guide has been developed by industry with input from consumer and electrical safety regulators, energy network operators, private certification bodies, and other independent stakeholder groups and individuals, including the CEC, Smart Energy Council, CSIRO, AI Group and the Consumer Electronics Suppliers Association.
- SA TS 5398 Battery Storage Equipment Electrical Safety Requirements, a national technical specification, is under development and is anticipated to be released mid to late 2025.

UPDATED Compliance with AS/NZS 4777.2

Mandatory: Inverter(s) must comply with AS/NZS 4777.2.

Why:

- AS/NZS 4777.2 includes inverter capabilities related to increased grid support features, disturbance ride-through capabilities and test procedure clarity, as well as product requirements for inbuilt DC isolation devices.
- AS/NZS 4777.2 requires that a set of operational instructions are to be provided to view inverter settings in read-only mode for verification. This assists LEIs to verify compliance of installations, including power response mode setting, and supports Solar Victoria's assurance program.

NEW Compatibility of major components

Mandatory: The following major components of the solar battery system must be compatible with each other in accordance with the manufacturer's published compatibility statement(s):

- battery
- inverter
- battery management system
- external measurement devices, gateways and Wi-Fi dongles.

Why:

- CEC requires compatibility statements to be available for download on a publicly accessible English language website.
- Compatibility statements provide assurance that manufacturers have tested equipment for interoperability including allowing firmware updates and monitoring capabilities.
- Declared compatibility provides better outcomes through:
  - improved safety via critical safety updates
  - efficient energy management and extended battery lifespan
  - monitoring and control via provision of real time data
  - seamless integration of major components.

NEW Open communication protocol

Mandatory: The solar battery system must include an open communication protocol that supports:

- remote registration of the system via API (or equivalent) to remote services
- remote monitoring
- remote control
- remote configuration of firmware and operational settings by authorised parties.

Compliance with this requirement can be achieved via direct integration, an external control system or vendor cloud (or equivalent).

Why:

- This supports new products being VPP-capable.
- Open communication protocols support visibility, communication and orchestration for third parties. This could include aggregators, platform providers, DNSPs, etc.
- Systems with open communication protocols may participate in future energy markets and/or flexible connection agreements.

NEW Cybersecurity

Mandatory: Solar battery systems must incorporate protection to a suitable standard against electronic intrusion and tampering by unauthorised parties.

As a minimum, products, product settings, APIs, and user and system data must be secured using industry standard techniques, including:

- password protection
- restricting administrative privileges
- at-rest and in-transit encryption of data, including data requests and data responses (AES, https, etc.)
- exchanging minimal necessary information
- event logging and diagnostic tools.

Ideally, the industry standard techniques should also include multi-factor authentication, data masking, employing API gateways, rate limiting, and traffic management.

Why:

- This supports products to have minimum level of cybersecurity.
- This supports requirements for small-scale batteries which come into effect from 4 March 2026 under the Cyber Security Act 2024 and Cyber Security (Security Standards for Smart Devices) Rules 2024.
- This aligns with principles contained within the Australian Energy Sector Cyber Security Framework (AESCSF).

UPDATED Consumer protection through product warranty

Effective from 1 September 2025. As a transitional provision until then, the 2024-25 Notice to Market product warranty requirement remains in place.

Mandatory: Battery system manufacturers must provide a minimum five year product warranty for all eligible battery systems under the Solar Homes Program.

The warranty commencement date is to be the date the system is handed over to the customer.

The warranty must cover all components supplied by the manufacturer, including:

- battery
- inverter
- battery management system
- external measurement devices, gateways and Wi-Fi dongles

The customer must not be required to pay upfront nor incur the following expenses associated with a successful warranty claim:

- parts or materials
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances

Ideally, the customer should not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- labour
- removal, installation or re-installation
- disposal

The product must be serviced as per the manufacturer's requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

UPDATED Consumer protection through product performance warranty

Mandatory: Battery system manufacturers must provide a minimum performance warranty of 7 years under daily cycling operation (or equivalent level of performance warranty defined using an industry accepted measure such as MWh of aggregate throughput).

The warranty commencement date is to be the date the system is handed over to the customer.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This supports customers to receive high quality products that do not suffer from a significant drop in storage capacity over their lifetime.
- This enables manufacturers to define performance in a manner aligned with their performance testing program.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

4.2.2 Solar Battery Systems – recommendations

UPDATED Conformance with the Battery PerformanceAS5374

Recommended: Solar battery system performance should be tested, reported and warranted in conformance with AS 5374.

Why:

- This supports customers to receive high quality products that do not suffer from a significant drop in production over their lifetime.
- It also supports the next steps towards the development of a national product standard for residential battery systems.

UPDATED Power quality response mode – region settings

Recommended: Solar battery inverters should only have the power quality response mode region settings listed in AS/NZS 4777.2, with “Australia A” listed as the default setting.

A user should also easily be able to view the current setting on the inverter’s digital display or software portal.

Why:

- DNSPs have mandated unified power quality response mode settings, defined by the “Australia A” configuration mode within AS/NZS 4777.2.
- All installations must comply with DNSP connection agreements
- Removal of old grid settings and having “Australia A” as the default setting reduces the chance that the incorrect setting will be used.
- This supports LEIs to easily check that the correct setting has been selected.

Electricity data available to view

Recommended: End users should be able to view both battery usage and energy consumption via a software solution supplied as part of the installation of the solar battery system.

Why:

- Solar Victoria wants to ensure consumers (and their authorised agents) can freely and easily access data from their meter, locally so that they can optimise their generation and consumption to reduce their bills.
- If consumers can’t access this via their PV or battery inverter app, they can use an ‘In-Home Display’ e.g., Powerpal or Emerald Planet connected to their Smart Meter. Alternatively, consumers can request this data the day after (not live) from their DNSP.

API integration capability

Recommended: Solar battery systems are recommended to have API integration capabilities conforming to IEEE 2030.5 and Common Smart Inverter Profile – Australia (CSIP-AUS), via either direct inverter integration, an external control system or via a vendor cloud - or equivalent.

** Solar Victoria will strongly consider mandating compliance to CSIP-AUS at an appropriate time, in consultation with industry. **

Why:

- An industry adopted communications protocol will help to standardise the interoperability approach. Interoperability is seen as the key enabler to unlock future energy markets through widespread aggregation and orchestration of DER.
- CSIP-AUS previously referred to as the ‘Australian Implementation Guide’ of open communications protocol IEEE 2030.5, was released in September 2021.
- See ARENA Common Smart Inverter Profile.

NEW Back-up power during a power outage

Recommended: Solar battery systems should be designed and installed to switch over to back-up power mode in the event of a grid outage.

Why:

- During an extended power outage it will provide households with access to basic provision of electricity for a period for selected back-up circuits. Depending on the customer's need, this could be a single socket outlet for a small load, or larger loads such as heating, cooling and cooking, or full home back-up for a period.
- Depending on the customer's needs, switching could be automatic or manual.

NEW Supply during a power outage

Recommended: Inverters should be able to supply a single socket outlet in the event of a grid outage where another energy source is available. The supply is limited to the energy source available, such as the connected solar PV array and / or battery.

Why:

- During an extended power outage, it will provide households with access to basic provision of electricity to power and/or charge small devices such as phone batteries and radios.

Section 5: Requirements for hot water rebates

This section lists requirements that retailers and installers, systems and products **must satisfy** under the hot water rebate. It also includes recommendations.

5.1 Hot water retail business and workforce requirements

The following retail business and workforce requirements for hot water rebates aim to enhance safety and quality by maintaining rigorous standards and developing a level playing field within the industry.

5.1.1 Hot water retailers – mandatory retail business requirements

Record of no prosecutions

Mandatory: Hot water retailers must have no prosecutions under the Occupational Health and Safety Act 2004 and/or the Occupational Health and Safety Regulations 2017 (or equivalent legislation / regulations in other Australian jurisdictions) resulting in a plea of guilty or a finding of guilt in the past three years.

Why:

- Compliance with relevant occupational health and safety acts and regulations protect the health, safety and welfare of employees and other people at work.
- Confirming compliance with relevant occupational health and safety acts and regulations aims to ensure that the health and safety of employees and the public are not put at risk by work activities.

Completion of accredited safety training

Mandatory: Hot water retailers must confirm all their workers engaged to install solar hot water systems have attained:

- CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card / construction induction card).
- VU23631 *Work safely on roofs with renewable energy systems* training unit certification if the worker is required to carry out rooftop activities (previously obtained VU22744 *Work Safely in the Solar industry* accredited unit of competency is still valid).

Why:

- System retailers have a responsibility to ensure workers are appropriately trained to perform high-risk work.
- Retailers must perform due diligence to ensure all workers meet the regulated and contractual requirements of participating in the Solar Homes Program.

Completion of specific training and/or mentoring identified by Solar Victoria

Mandatory: Hot water retailers must confirm that all their workers engaged to install systems have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

Ban on telemarketing and door-to-door sales

Mandatory: Hot water retailers, or parties acting on behalf of the retailer, must not conduct sales of eligible systems as part of the Solar Homes Program using door-to-door or telemarketing sales techniques.

The ban:

- prohibits ‘cold-call’ telemarketing and door-to-door sales techniques to all types of consumers
- prohibits telemarketing and door-to-door sales to prospective or previous customers from being outsourced to contractors or marketing companies
- only permits marketing or sales calls at the request of the consumer or with their express permission, and only within three months or a timeline specified when the consumer opts into calls, and only in accordance with the New Energy Tech Consumer Code
- permits calls to notify a previous customer of a product fault or recall that affects them.

Why:

- This protects consumers, particularly vulnerable cohorts, from persistent, unsolicited or nuisance calls and pressure sales tactics.
- This prevents contacting consumers who are listed on the ‘Do Not Call Register’.

- This aligns with the new Victorian Energy Upgrades program marketing ban administered by the Essential Services Commission.
- This prevents reputational harm to the Solar Homes program by being associated with nuisance telemarketing and door-to-door marketing techniques.

Note: the telemarketing prohibition came into effect under the Solar Homes Program on 1 May 2024 and door-to-door sales prohibition commenced on 1 September 2021 via the Retailer Terms and Conditions (see Instruction issued 30 April 2024).

Recording of serial numbers

Mandatory: Hot water retailers must maintain a record of all eligible hot water systems installed under the Solar Homes Program. The record shall include the make, model, serial number/s, the time, date, and address of installation, for each system.

The records must be made available to Solar Victoria upon request.

Why:

- To proactively assist manufacturers, regulators, and government bodies in the event of a product safety recall or other related product issue.
- To enable tracking of where products are located for the purpose of end-of-life management.

Compliance with the ban on electronic waste to landfill

Mandatory: Hot water retailers must comply with the Victorian Government's ban on electronic waste to landfill.

Why:

- Compliance with the Victorian Government's ban on electronic waste to landfill.
- The Victorian Government has banned e-waste from landfill in Victoria, effective 1 July 2019. E-waste is growing three times faster than general municipal waste in Australia, and it contains both valuable and hazardous materials that can be recovered when they reach the end of their working life.
- The Waste Management Policy (e-waste) was approved by the Executive Council on 26 June 2018 and gazetted on 28 June 2018. The Victorian Government Gazette e-waste order can be found on pages 1457 to 1463.
- E-waste describes any device which requires an electromagnetic current (including anything with a plug, cord or battery) to operate and includes all solar products at the end of their useful life i.e. panels, inverters and energy storage equipment.
- For more information, see Managing e-waste.

UPDATED Consumer protection through whole-of-system warranty

Mandatory: Hot water retailers must provide a minimum five year whole-of-system warranty for all eligible systems under the Solar Homes Program (including quality of work).

The warranty commencement date is to be the date the system is handed over to the customer.

Retailers are responsible for ensuring that products are procured and installed so that product warranties are not voided.

The customer must not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal

Retailers must also provide the customer with documentation confirming the terms and conditions of the whole-of-system and product warranties, and who to contact in the event of a system or product failure.

The system must be serviced as per the product manufacturer’s requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

5.1.2 Hot water retailers – recommendations for retail business

Main business location listed as 'Victoria'

Recommended: The main business location of the hot water retailer should be listed as "Victoria" according to the Australian Government's Australian Business Register.

Why:

- A key element of the Solar Homes Program concerns driving job creation with strong local content and industry development to build local supply chains. Prioritising businesses with a main business location of Victoria contributes to achieving this.

Completion of accredited safety training course

Recommended: Hot water retailers should confirm all their workers engaged to install solar have attained 22657VIC *Working Safely on Rooftop Renewable Energy Systems* (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- Retailers have a responsibility to ensure workers are appropriately trained to perform high-risk work.
- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: Hot water retailers should confirm all their workers engaged to install hot water systems have attained, CPCCCM2012 (or RIIWHS204) *Work Safely at Heights* accredited unit of competency.

See Work safely in the solar industry.

Why:

- Retailers are responsible for ensuring workers are appropriately trained to perform high-risk work.
- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

NEW Completion of system design training

Recommended: Hot water retailers should complete training pertaining to whole-of-system design and/or systems thinking.

Why:

- Systems and products are becoming more complex and integrated, and so retailers and installers are required to undertake more upfront design work.
- This supports holistic thinking and futureproofing when designing and installing energy solutions as customers continue to electrify their homes.

NEW Fit-for-purpose enquiry

Recommended: Hot water retailers should ensure hot water systems are offered, designed and installed as fit-for-purpose in light of a customer's circumstances, needs and expectations and having regard to matters such as:

- hot water consumption profile
- maximising self-consumption of solar generation
- future-proofing potential changes to occupancy and household needs over time.

Why:

- Undersized units are generally less expensive upfront but need to run for longer periods to recharge the tank with hot water and may not be able to deliver hot water at the desired temperature when it is required.
- Oversized units are generally more expensive upfront, less energy efficient, and switch on and off too often ('short cycling') which may result in excessive wear and tear.
- Where a customer is seeking to maximise self-consumption of solar generation, the unit will need to be sized for winter conditions (daylight hours, minimum air temperatures, etc.) in Victoria.
- Hot water consumption profiles can differ significantly from customer-to-customer, for example differences in delivered volume and temperature throughout the day, and seasonal requirements.

Hot water tank sizing requirement

Recommended: Hot water storage tanks should be sized in line with the following size guide:

Recommended tank size for hot water heaters

Number of bedrooms	Number of occupants	Recommended tank size
1-2	1-2	150-225 litres
3	2-4	225-300 litres
4 or more	4+	More than 300-litres

Why:

- It is recommended that a hot water system should store at least 75 litres of hot water for each person living at a property. This includes some extra capacity to account for changes in consumption.
- A system that is too small for a household may mean regularly running out of hot water.
- A system that is too large for a household will cost more to buy and run.
- Recommended tank sizing from consultation provided by Renew during the creation of the Hot Water Buyers Guide.

Hot water heat pump fit-for-purpose for climate

Recommended: For hot water heat pumps, the minimum operating temperature specified on the product datasheet should be lower than the minimum recorded temperature as specified by the Bureau of Meteorology

See BOM Climate data online.

Why:

- To ensure the hot water heat pump will not be installed outside of its operating range to prevent failures.
- To reduce the probability of hot water heat pumps being perceived as unreliable.
- The Bureau of Meteorology data is to be used because it is public data and is used by the Clean Energy Regulator (CER).

NEW Provide a financial performance estimate to customer

Recommended: If a hot water retailer makes a claim that a customer is likely to achieve a favourable return on investment, the retailer should provide the customer with a written financial performance estimate.

As a minimum, the estimate should be prepared on a defensible basis, use and document reasonable assumptions, and itemise the following:

- total installed cost of the eligible system prior to any incentives being applied
- each incentive being applied
- any further discounts being applied
- forecast energy savings
- anticipated servicing and maintenance costs.

Implementation of this recommendation can be achieved by providing a financial performance estimate which conforms to the financial disclosure requirements set out in the NETCC or Solar Victoria's guidance sheet (or equivalent).

Why:

- Customers may purchase solar hot water systems and hot water heat pumps to reduce their energy bills.
- Greater transparency of the financial benefits and costs of installing hot water systems empowers customers to make informed decisions.
- Providing financial performance estimates supports industry-led work to develop and implement minimum energy performance standards, a key priority and recommendation of the Roadmap for Heat Pump Hot Water Systems in Australia, released in July 2024.
- For financial performance estimate guidance, see NETCC and Solar Victoria's guidance sheet.

End-of-life management certified to AS/NZS 5377

Recommended: Hot water retailers should offer end-of-life management programs, during replacement or disposal, with service provider/s certified to AS/NZS 5377.

Why:

- The Solar Homes Program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for hot water products and materials at the end of their lifecycle.
- AS/NZS 5377 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.

Advise customers to use the Victorian Energy Compare website

Recommended: Hot water retailers should advise customers of the Victorian Energy Compare website and how to utilise the solar saver tool prior to installing a hot water system.

Why:

- The Victorian Energy Compare website is a Victorian Government initiative that includes a solar savings calculator using NMI (National Metering Identifier) specific data.
- The solar calculator can be used by homeowners to compare the proposed solar PV system to their actual usage and tariff structure.
- Solar Victoria refers customers to the Victorian Energy Compare website to calculate how much money they could save on energy bills by installing solar panels. This includes via our:
  - Householder e-newsletter
  - Solar Hub including Buyers Guides
  - consumer education and customer service activities, including events.
- Victorian Energy Compare and the solar calculator can be accessed at compare.energy.vic.gov.au.

5.1.3 Hot water installers – mandatory workforce requirements

Holds appropriate VBA-issued plumbing accreditation

Mandatory: Hot water installers must hold the appropriate plumbing accreditation issued by the Victorian Building Authority (VBA).

Why:

- The VBA regulates plumbers, plumbing work and plumbing standards.
- In accordance with the Building Act 1993 and the Plumbing Regulations 2018, installation of a solar hot water / heat pump hot water system must be done by a plumber with the relevant accreditation issued by the VBA.
- To lawfully carry out plumbing work in the Solar Homes Program, hot water installers must be one of the following:
  - licensed in the class with the VBA
  - registered in the class (or hold provisional registration in the class) with the VBA
  - be in training under the supervision of a licensed plumber.
- For plumbing work involving installing a split system heat pump water heater, the plumber must be registered or licensed in water supply work and refrigerated air-conditioning work.

UPDATED Holds the appropriate Australian Refrigeration Council licence

Mandatory: Hot water installers must hold a current Refrigerant Handling Licence issued by the Australian Refrigeration Council (ARC) if installing or decommissioning a split hot water heat pump with synthetic refrigerant circulating through the pipework.

Why:

- Under the Commonwealth Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (the Regulations) a person installing or decommissioning a split hot water heat pump with synthetic refrigerant circulating through the pipework requires a Refrigerant Handling Licence issued by ARC.
- This requirement does not apply to heat pumps that circulate water between the two units.

NEW Record of no prosecutions

Mandatory: Hot water installers must have no prosecutions under the Occupational Health and Safety Act 2004 and / or the Occupational Health and Safety Regulations 2017 (or equivalent legislation / regulations in other Australian jurisdictions) resulting in a plea of guilty or a finding of guilt in the past three years.

Why:

- Compliance with relevant occupational health and safety acts and regulations protects the health, safety and welfare of employees and other people at work.
- Confirming compliance with relevant occupational health and safety acts and regulations aims to ensure that the health and safety of employees and the public are not put at risk by work activities.

Attainment of White Card/construction induction card

Mandatory: Hot water installers must have attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).

See Work safely in the solar industry.

Why:

- White Card training sets out requirements for performing safe work practices, identifying risks and satisfying work requirements.
- Occupational Health and Safety Regulations 2017 state that construction induction training must be undertaken by workers engaged in construction and the installation of electricity services.
- Completion of White Card training is a work health and safety risk control measure.

UPDATED Completion of accredited safety training unit

Mandatory: Hot water installers must have attained the VU23631 *Work safely on roofs with renewable energy systems* accredited unit of competency if they carry out rooftop activities as part of the installation (previously obtained VU22744 *Work Safely in the Solar industry* accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Work safely on roofs with renewable energy systems is a tailored safety training unit which includes customised working at heights, lockout and energisation requirements, identification and reporting on asbestos, etc.
- A sector advisory group identified a skills gap in the solar industry and developed this training unit. The advisory group was led by the Office of the Victorian Skills Commissioner and included representatives from WorkSafe Victoria, Solar Victoria, the Electrical Trades Union, the CEC, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers.
- Completion of *Work safely on roofs with renewable energy systems* is a work health and safety control measure.

Completion of specific training and / or mentoring identified by Solar Victoria

Mandatory: Hot water installers must ensure they and all their on-site workers engaged to install systems have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and / or mentoring on its website at Training and Workforce Development.

NEW Completion of heat pump hot water system training

Effective from 1 September 2025

Mandatory: Hot water installers must complete appropriate training regarding the design and installation of heat pump hot water systems.

Compliance with this requirement can be achieved by demonstrating any of the following:

- completion of the Upskilling Plumbers Program delivered by Plumbing Industry Climate Action Centre (PICAC)
- completion of training delivered by a manufacturer for a heat pump product on the Solar Victoria hot water product list which covers design and installation
- completion of training otherwise approved by Solar Victoria from time to time
- is an existing installer in the Solar Homes Program who continues to actively participate in the program.

Why:

- This will ensure registered and licensed plumbers have obtained minimum competencies understanding energy efficiency requirements, and design and install energy efficient hot water system heat pumps.
- This allows plumbers to undertake training and upskill via different methods.

Compliance with regulations, the code and standards

Mandatory: Installation of a solar water heater or heat pump water heater must be in accordance with:

- the Plumbing Regulations 2018;
- the National Construction Code Volume 3 (Plumbing Code of Australia);
- AS/NZS 5149 (heat pumps);
- other relevant standards; and
- the manufacturer’s specifications.

Why:

- The latest version of the National Construction Code Volume 3 (Plumbing Code of Australia) applies.
- AS/NZS 5149 includes requirements for installing heat pumps with flammable/toxic refrigerants in occupied/confined spaces and installers are advised to exercise caution with the location of heat pump systems.

Issue of compliance certificate

Mandatory: A compliance certificate must be issued by a licensed plumber to the customer who engaged the plumber for plumbing work with a total value of $750 or more, before discounts and incentives.

The requirement also applies to all gas installations affecting gas pipes.

Why:

- A compliance certificate is issued by a licensed plumber to certify the work they carry out complies with the relevant plumbing standards, codes and regulations.
- Only a licenced plumber may issue a compliance certificate – unlicensed registered plumbers cannot issue a compliance certificate.
- A licensed plumber is required to lodge a compliance certificate with the VBA within 5 days of completing the work to remove a hot water system and install a hot water system.
- The licensed plumber must also issue the customer with a signed compliance certificate within 5 days of the work being completed. It is an important record that helps protect against faulty workmanship.

Issue of Certificate of Electrical Safety

Mandatory: Where electrical work has occurred, a Certificate of Electrical Safety (COES) must be issued.

Why:

- An appropriate COES in accordance with Energy Safe Victoria requirements shall be supplied. The issuing of COES:
  - improves electrical safety for the general public, electricity customers and electrical workers; and
  - ensures all electrical installation work is undertaken only by qualified persons.
- See Certificates of Electrical Safety.

5.1.4 Hot water installers– recommendations for workforce

Completion of accredited safety training course

Recommended: Hot water installers should attain 22657VIC *Working Safely on Rooftop Renewable Energy Systems* accredited course (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: Hot water installers should attain CPCCCM2012 (or RIIWHS204) *Working Safely at Heights* accredited training unit.

See Work safely in the solar industry.

Why:

- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

NEW Completion of system design training

Recommended: Hot water installers should complete training pertaining to whole-of-system design and / or systems thinking.

Why:

- Systems and products are becoming more complex and integrated, and so retailers and installers are required to undertake more upfront design work.
- This supports holistic thinking and futureproofing when designing and installing energy solutions as customers continue to electrify their homes.

NEW Completion of manufacturer training for the system installed

Recommended: Hot water installers should complete any training offered by the manufacturer on the specific hot water solution that is being installed.

Why:

- Installation requirements are specific to individual manufacturers, and warranties may require the installer to be accredited by the manufacturer in addition to receiving basic hot water installation training.
- Specific training increases the competence of installers across the sector and provides greater assurance for the safety of installations.

Completion of Australian Refrigeration Council (ARC) training accreditation

Recommended: Hot water installers should attain the ARC Green Scheme Accreditation if installing a split hot water heat pump with natural refrigerant circulating through the pipework.

Why:

- The ARC Green Scheme Accreditation supports best practice for natural refrigerant handling when working with split system hot water heat pumps.
- Provides installers with better understanding and education to protect themselves and the household from flammable or toxic refrigerants.

End-of-life management certified to AS/NZS 5377

Recommended: Hot water installers should offer end-of-life management programs, during replacement or disposal, with service provider/s certified to AS/NZS 5377.

Why:

- The Solar Homes Program aims to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for hot water products and materials at the end of their lifecycle.
- AS/NZS 5377 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.

Advise system customers to use the Victorian Energy Compare website

Recommended: Hot water installers should advise customers of the Victorian Energy Compare website and how to utilise the solar saver tool prior to installing a hot water system.

Why:

- The Victorian Energy Compare website is a Victorian Government initiative that includes a solar savings calculator using NMI (National Metering Identifier) specific data.
- The solar calculator can be used by homeowners to compare the proposed solar PV system to their actual usage and tariff structure.
- Solar Victoria refers customers to the Victorian Energy Compare website to calculate how much money they could save on energy bills by installing solar panels. This includes via our:
  - Householder e-newsletter
  - Solar Hub including Buyers Guides
  - consumer education and customer service activities, including events.
- Victorian Energy Compare and the solar calculator can be accessed at compare.energy.vic.gov.au.

Electrical installation requirements for hot water heat pumps

Recommended: The electrical installation of a hot water heat pump should meet the following requirements:

- has a dedicated circuit for the connection of the hot water unit
- the circuit is protected by an appropriately rated overcurrent protection device and is Residual Current Device (RCD) protected.

Why:

- Ensures best practice in terms of operational safety for plug-in and fixed wired hot water heat pumps.
- A dedicated circuit prevents nuisance tripping from occurring.

5.1.5 All other on-site hot water workers – mandatory workforce requirements

Attainment of White Card / construction induction card

Mandatory: On-site hot water workers must have attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).

See Work safely in the solar industry.

Why:

- White Card training sets out requirements for performing safe work practices, identifying risks and satisfying work requirements.
- Occupational Health and Safety Regulations 2017 state that construction induction training must be undertaken by workers engaged in construction and the installation of electricity services.
- Completion of White Card training is a work health and safety risk control measure.

UPDATED Completion of accredited safety training unit

Mandatory: On-site hot water workers must have attained *the* VU23631 *Work safely on roofs with renewable energy systems* accredited unit of competencyif they carry out rooftop activities as part of the installation (previously obtained VU22744 Work Safely in the Solar industry accredited unit of competency is still valid).

See Work safely in the solar industry.

Why:

- Work safely on roofs with renewable energy systems is a tailored safety training unit which includes customised working at heights, lockout and energisation requirements, identification and reporting on asbestos, etc.
- A sector advisory group identified a skills gap in the solar industry and developed this training unit. The advisory group was led by the Office of the Victorian Skills Commissioner and included representatives from WorkSafe Victoria, Solar Victoria, the Electrical Trades Union, the CEC, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers.
- Completion of *Work safely on roofs with renewable energy systems* is a work health and safety control measure.

Completion of specific training and/or mentoring identified by Solar Victoria

Mandatory: On-site hot water workers engaged to install systems must have successfully completed training and/or mentoring as required by Solar Victoria from time to time.

Why:

- Training and mentoring mandated by Solar Victoria is/will be industry validated and customised for the solar industry in consultation with subject matter experts.
- Training and mentoring mandated by Solar Victoria will be available to complete prior to the mandatory completion date set by Solar Victoria.
- Solar Victoria will provide reasonable notice of mandatory training and/or mentoring on its website at Training and Workforce Development.

5.1.6 All other on-site hot water workers – recommendations for workforce

Completion of accredited safety training course

Recommended: Has attained 22657VIC *Working Safely on Rooftop Renewable Energy Systems* accredited course (previously obtained 22515VIC *Course in Working Safely in the Solar Industry* is still valid).

See Work safely in the solar industry.

Why:

- *Working Safely on Rooftop Renewable Energy Systems* is an accredited training program and provides vocational outcomes for persons wishing to gain the skills and knowledge required for the safe installation of solar PV systems.
- Training content includes VU23631 *Work safely on roofs with renewable energy systems* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.

Completion of accredited safety training unit (working at heights)

Recommended: On-site hot water workers should attain CPCCCM2012 (or RIIWHS204) *Working Safely at Heights* accredited training unit.

See Work safely in the solar industry.

Why:

- This training sets out the requirements to work safely on construction sites where the work activity involves working above 1.5 metres from ground level and where fall protection measures are required.
- Completion of *Work Safely at Heights* training is a work health and safety risk control measure.

5.2 Hot water system and product requirements

The following system and product requirements apply to all hot water rebates. They aim to enhance safety and quality by maintaining rigorous standards and ensuring products are future-fit.

5.2.1 Hot water systems – mandatory requirements

Listed on the Solar Victoria hot water product list

Mandatory: Hot water units must be listed on the Solar Victoria hot water product list.

Why:

- This listing confirms solar hot water systems meet additional requirements, above minimum industry standards, to be eligible to participate in the Solar Homes Program.

Listed on the CER solar hot water heater register

Mandatory: Hot water units must be listed on the CER's register of solar hot water heaters.

Why:

- Registration with the CER confirms that such systems comply with AS/NZS 2712 and may be subject to a product certification audit and compliance regime.
- Listing is a requirement to participate in the Federal Government's Small-scale Renewable Energy Scheme (SRES).

Listed on the Essential Services Commission register of products

Mandatory: Hot water units must be listed on the Essential Services Commission's register of products.

Why:

- Registration with the Essential Services Commission confirms that such systems comply with AS/NZS 2712 and includes efficiency modelling in addition to the CER's efficiency modelling.
- Listing is a requirement to participate in the Victorian Government's Victorian Energy Upgrades (VEU) program.

Heat pump hot water systems restricted to products containing low GWP refrigerants

Mandatory: Hot water heat pumps must contain refrigerants with a Global Warming Potential (GWP) less than 700 as defined in the Intergovernmental Panel on Climate Change (IPCC) version 4.

Why:

- High GWP refrigerants contribute towards climate change if released into the atmosphere at end-of-life or from leakage.
- Removal of high GWP refrigerants will contribute towards national commitments under the 2016 Kigali Amendment as well as state and national emission reduction targets.
- Restriction of products with less than 700 GWP is consistent with the Essential Services Commission product requirement for heat pump hot water systems to participate in the Victorian Energy Upgrades program.
- The GWP is defined in the IPCC fourth assessment report 2007 (version 4).

UPDATED Hot water heat pump end-user configurable integrated timer

Mandatory: Hot water heat pumps, as a minimum requirement, must have:

- an end-user (customer or occupant) configurable integrated timer that is accessible via an external control panel or interface and allows the hot water heat pump to run between a specified time window; or,
- be connected to a solar PV system and runs the hot water heat pump during periods of solar generation.

The unit shall be capable of running outside of this time window for adequate hot water delivery, to support defrost cycles and to inhibit the growth of Legionella bacteria as per AS 3498.

These features shall be provided as part of the standard product.

Compliance with this requirement can be achieved by providing a control panel mounted on the unit or remotely, or via a wireless controller or software solution.

Why:

- This allows an end-user to optimise the heating schedule to suit their needs and circumstances, for example to seasonally adjust to maximise self-consumption of solar generation or effectively manage their tariff.

- As heat pumps operate most efficiently in warmer temperatures, timers can improve the unit's efficiency.
- Timers can reduce the probability of failures for heat pumps running in colder climates.
- Timers can reduce the likelihood of noise complaints at night while people are sleeping.
- This removes risk to human safety or damage to components from an end-user attempting to access a timer contained within the internal working of the system.

UPDATED Consumer protection through product warranty

Effective from 1 September 2025 As a transitional provision until then, the 2024-25 Notice to Market product warranty requirement remains in place.

Mandatory: Hot water manufacturers must provide a minimum five year product warranty for all eligible hot water units under the Solar Homes program.

The warranty commencement date is to be the date the system is handed over to the customer.

The warranty must cover all components supplied by the manufacturer, including:

- For solar hot water units:
  - Storage tank, solar collector (any component in the solar collector including, but not limited to, manifold collectors, evacuated tubes, flat plate collectors, collector frames), heat exchanger, controller, thermostat, and valves.
- For hot water heat pumps:
  - Storage tank, compressor, evaporator, condenser, expansion valve, any other component that has refrigerant, water heat exchanger, controller, thermostat, and valves.

The customer must not be required to pay upfront nor incur any expenses associated with a successful warranty claim, including:

- parts or materials
- labour
- inspections or tests to investigate, support or prove the claim
- freight, transport, insurances or customs clearances
- removal, installation or re-installation
- disposal.

The product must be serviced as per the manufacturer's requirements to maintain the warranty.

This warranty is in addition to any customer guarantees that apply automatically under the Australian Consumer Law.

Why:

- Solar Victoria is aiming to improve program controls to protect consumers and meet compliance requirements.
- This allows retailers and manufacturers to jointly determine the most appropriate commercial arrangements to provide the required warranty coverage to the customer.
- This supports the Terms and Conditions for retailers to participate in Solar Victoria programs.
- For more information on consumer guarantees and warranties, see the Consumer Affairs Victoria website.

5.2.2 Hot water systems – recommendations

NEW Hot water heat pump end-user remote monitoring and control

Recommended: Hot water heat pumps should be installed with smart controllers that support remote monitoring and control and enable end users to view hot water data via a software solution.

As a minimum, the hot water data should include delivered hot water volume, delivered hot water temperature, estimated hot water volume remaining ('usable hot water'), electricity consumption, operating mode, periods whenever the electric booster operates (if fitted), and error codes.

Why:

- Smart controllers support the use of mobile apps to allow end users to conveniently monitor, schedule and control the unit as well as view hot water data so that they can optimise system operation, for example to reduce their bills.
- Increased data access will assist with early diagnosis of emerging performance issues with the unit.
- Smart controllers also support the integration of hot water systems with other DER, for example to optimise self-consumption of solar generation, connect to a home energy management system (HEMS), and access the internet to utilise cloud-based solutions.
- Smart controllers are a first step towards greater facilitation of DER in the network, for example the possibility to participate in future energy markets and/or flexible connection arrangements.

UPDATED Includes an open communication protocol

Recommended: The installed hot water system should include an open communication protocol.

Why:

- Open communication protocols facilitate interoperability among smart home devices, mobile apps and cloud services by avoiding the use of proprietary signals. Examples of established and emerging open protocols include BACNet, Modbus, CSIP-AUS and Matter.
- Open communication protocols support third party (e.g. aggregator, platform provider, distribution network service provider, distribution service operator, etc) visibility, communication and orchestration.
- Systems with open communication protocols may participate in future energy markets and / or flexible connection arrangements.

Access to hot water during a power outage

Recommended: Hot water manufacturers should ensure the hot water unit can deliver the remaining hot water in the tank during a power outage provided there is no interruption to mains water supply.

Why:

- During a power outage it will ensure households have access to hot water for a period for bathing and cleaning purposes.
- As households electrify, it is necessary that key appliances, such as hot water systems, can provide benefits to consumers during power outages or interruptions.

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