Solar Victoria Notice to Market 2022–23

Re-published May 2022

Solar Victoria

VICTORIA State Government

Table 1: Notice to Market 2022–23 – Record of updates to this edition

In consultation with industry, Solar Victoria will periodically review requirements in this edition of the Notice to Market and publish updates.

Published date	Updates / additions	Section
31 May 2022	New edition published for 2022-23. For a summary of new recommended requirements introduced in this edition, see solar.vic.gov.au/notice-to-market	

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Contents

Minister's Foreword

Victoria is powering towards a clean energy future and, as Minister for Solar Homes, I am particularly proud of this program that makes playing a part in our renewable revolution accessible to all Victorians.

Despite the impacts of the COVID-19 pandemic in 2021, Victoria's transition to clean energy continued at pace. Thanks to our nation-leading Solar Homes Program, Victorians have enthusiastically embraced solar, making our households the envy of all other jurisdictions.

In late 2021, we reached the milestone of our solar systems producing 1GW of energy, through more than three million panels powering more than 180,000 homes. In 2021 we also saw a huge surge in home battery installations and zero emission vehicle (ZEV) purchases, as Victorians increasingly seek to maximise the energy produced by this technology.

The Solar Homes Program was launched by the Victorian Government in 2018, to help households reduce energy costs through the installation of solar photovoltaic (PV), hot water and battery systems. The Solar for Business Program then joined Solar Victoria's offerings in May 2021, followed by the Home Heating and Cooling Upgrades and ZEV Subsidy programs.

With the expansion of these programs, the Victorian Government has now provided approximately $365 million in rebates to more than 200,000 Victorians, reducing both fossil fuel consumption and household energy bills, as well as supporting growth for Victoria's solar industry.

Solar Victoria's initiatives have helped build a reputable, safe solar industry that is undoubtedly Australia's best. The Victorian Government has worked in close partnership with the solar industry and representative organisations and regulators to set the benchmark for safety and quality. Standards implemented through our Solar Homes Program have become the national industry standard. This reputation benefits customers, energy users and industry members across Victoria, and, importantly, has gained the trust of Victorians in our programs.

To maintain this enviable record of safe, quality solar installations, Solar Victoria works closely with industry stakeholders including peak bodies to maximise the benefits of clean energy for all Victorians.

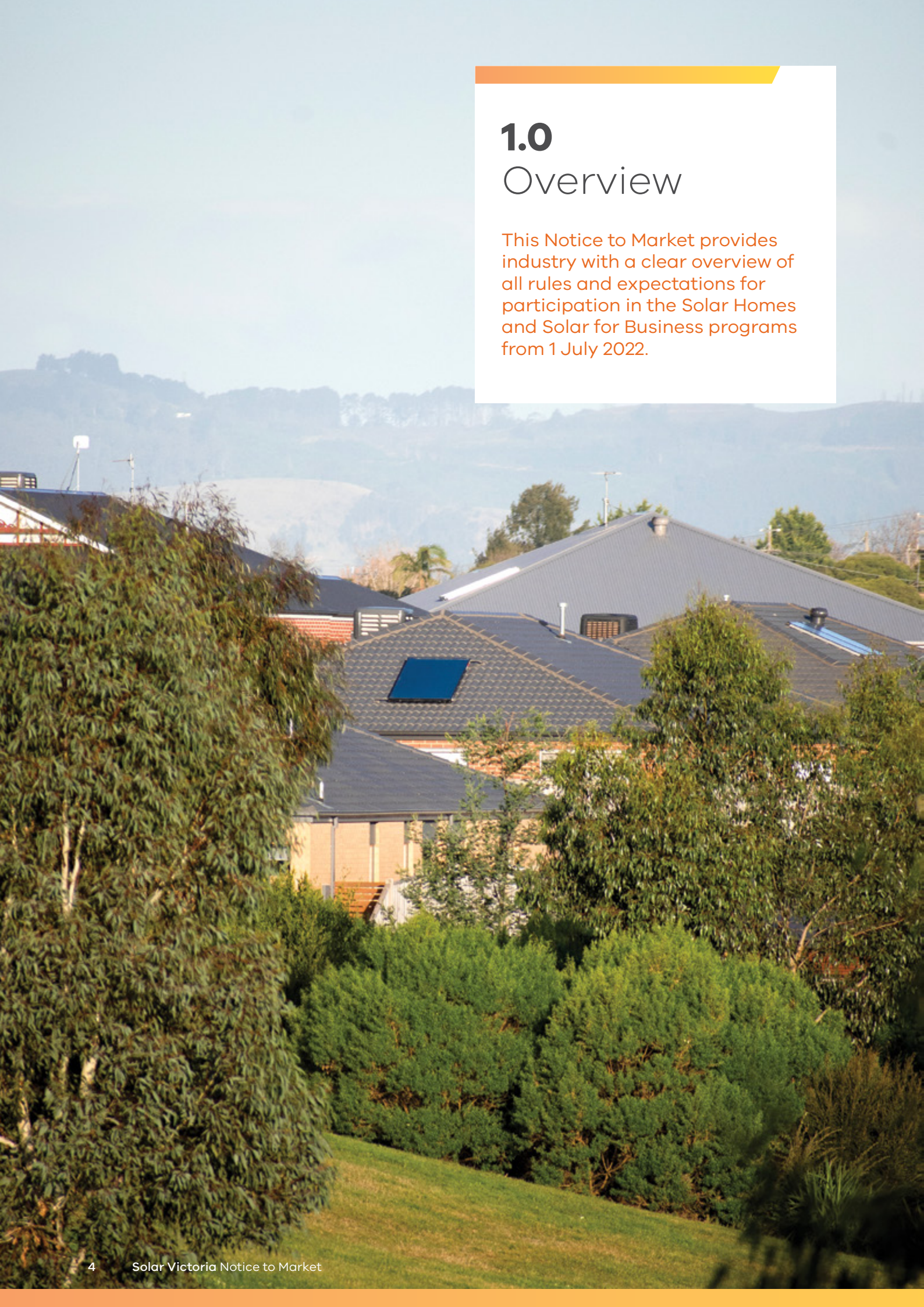
Ensuring Victorians benefit from our aim to set the highest standards for safety and quality, in March 2022 I announced a new suite of new training and workforce development initiatives as part of the Victorian Government's $11 million investment in upskilling existing solar workers and creating pathways for new jobs. Safety is at the heart of this training and will always be our number one priority.

Finally, I know it has been a tough year for many in the solar industry and there remains ongoing impacts due to the pandemic. Solar Victoria will continue to consult with all facets of industry to determine how best to provide support to reduce impacts on businesses and customers. Your feedback is always welcome.

Thank you for playing such a crucial role in helping our government create jobs and sustainable, affordable, and energy-efficient solutions that are helping lead Victoria's renewable revolution.

Hon Lily D'Ambrosio MP

Minister for Energy, Environment
and Climate Change
Minister for Solar Homes



1.0
Overview

This Notice to Market provides industry with a clear overview of all rules and expectations for participation in the Solar Homes and Solar for Business programs from 1 July 2022.

1.1 About the Notice to Market

The requirements for participants, systems and products outlined in this Notice to Market will help ensure the ongoing improvement of the solar industry. They focus on worker and customer safety, fit for purpose and future-proofed product installations and ensuring all Victorians benefit from clean and affordable solar energy.

Participation in Solar Victoria's Solar Homes and Solar for Business programs is governed by the requirements set out in this Notice to Market, as well as Solar Victoria's terms and conditions. Participants must comply with the requirements in this notice for rebates to apply to solar PV, solar battery and solar hot water systems.

This Notice to Market replaces and builds on all previous versions. Solar Victoria periodically reviews program requirements in consultation with industry and publish updates to this notice from time to time.

1.2 About Solar Victoria's programs

The Solar Homes Program is one of several Victorian Government initiatives aimed at supporting Victorians to reduce their energy costs and decreasing Victoria's reliance on non-renewable sources of electricity.

The 10-year, $1.3 billion program will support up to 778,500 Victorian households to install solar PV, solar hot water or solar battery systems at home, saving on their energy costs and reducing emissions. The program contributes to the Victorian Renewable Energy Targets of 40 per cent renewable energy by 2025 and 50 per cent by 2030, and the long-term Emissions Reduction Target of net zero greenhouse gas emissions by 2050.[1]

The Solar Homes Program is expected to generate 15 per cent of Victoria's 40 per cent renewable energy target by 2025 and 20 per cent of Victoria's 50 per cent renewable energy target by 2030. By 2027–28, the Solar Homes Program is expected to reduce Victoria's electricity sector emissions by around 1.8 million tonnes of carbon dioxide equivalent per year and reduce National Electricity Market emissions by around 3.0 million tonnes of carbon dioxide equivalent per year, below what they would otherwise have been.[2]

Since its launch in August 2018, the Solar Homes Program has driven a significant increase in residential PV installations in Victoria. In the 2020–21 financial year, Victoria recorded a 127 per cent increase in residential PV installations on 2017–18, before the program launched. In 2021, approximately 80 per cent of all small-scale solar PV systems installed in Victoria are installed under the Solar Homes Program. As of April 2022, more than 1.2 gigawatts of energy capacity coming from solar panels have been installed through the Solar Homes Program.

Over 190,000 households have taken up rebates to install solar PV, batteries and solar hot water systems under the Solar Homes Program since 2018. As well as contributing to renewable energy targets, these systems have a direct financial benefit to householders.

From December 2021, up to 2,000 eligible households have been able to sign up to the two-year Solar Victoria Virtual Power Plant pilot program, which has been designed to optimise Victoria's booming household solar network. Virtual power plants enable households with solar batteries to share their unused, clean energy with fellow Victorians, while saving on their own power bills.

Since May 2021, eligible Victorian small businesses have been able to apply for a rebate to install solar PV at their work premises through the three-year Solar for Business Program. This program will support up to 15,000 small businesses to reduce their energy costs as the Victorian economy recovers from the impact of COVID-19.

We're committed to ensuring customers are treated fairly and receive the highest standards of consumer protection when purchasing solar. We are setting nation-leading standards to protect customers who purchase a solar system under the Solar Homes and Solar for Business programs.

From 1 September 2021, consumer rights have been further protected through the introduction of a ban on unsolicited door-to-door sales for the Solar Homes and Solar for Business programs.

For more information, see solar.vic.gov.au or contact us: solar.vic.gov.au/contact

1 climatechange.vic.gov.au/reducing-emissions/emissions-targets

2 parliament.vic.gov.au/file_uploads/VRET_2020-21_Progress_Report_xssr5nBs.pdf

2.0
About rebates

This section provides a brief overview of all rebate streams available under the Solar Homes and Solar for Business programs.

2.1 All solar PV rebate streams

2.1.1 Solar for owner-occupiers

The Solar Homes Program provides a rebate on the cost of an eligible solar panel (PV) system, up to a maximum amount as listed on our website. To further reduce the upfront cost of solar PV, eligible Victorian property owners can apply for an interest-free loan equal to the rebate amount at the same time as they apply for the rebate (see section 2.6).

Over the 10-year program, Solar Homes will support 650,000 owner-occupier households to install solar PV systems, helping households to reduce their energy costs, generate clean, renewable energy and reduce their household emissions.

For more information, including eligibility criteria, see solar.vic.gov.au/solar-panel-rebate

2.1.2 Solar for rentals

The Solar Homes solar for rentals rebate stream offers eligible rental providers a rebate up to a maximum amount as listed on our website for the installation of an eligible solar PV system for up to two eligible rental properties per financial year.

Eligible rental providers can also opt to take up an interest-free loan equal to the value of their rebate, to further decrease the upfront cost of installation. Rental providers can choose to repay the loan themselves or seek a contribution of up to 50 per cent of the cost of the loan repayment from the renter, over a four-year period.

Renter contributions can only occur with the renter's consent and the arrangement is confirmed in an Agreement between the rental provider and renter.

The solar for rentals rebate stream will support 50,000 renter households over the 10-year Solar Homes Program.

For more information, including eligibility criteria, see solar.vic.gov.au/solar-rental-properties

2.1.3 Solar for community housing

The solar for community housing rebate stream boosts access to affordable energy for those who need it most, by supporting community housing providers to install solar panels reducing the cost of energy for their renters.

Not-for-profit housing providers that own or manage housing assets owned by third parties can apply for a solar PV rebate of up to a maximum amount, as listed on our website, for each tenancy.

By July 2021, the Solar Homes Program had supported the installation of solar panels in over 1091 community housing properties. Solar Victoria has seen interest from housing providers increase with the Victorian Government $2.7 billion Building Works package, first announced in May 2020, to support maintenance and upgrades of social housing properties, including energy efficiency.

For more information, including eligibility criteria, see solar.vic.gov.au/solar-community-housing

2.1.4 Solar for Business rebates

The Solar for Business Program supports Victorian businesses to reduce their operating costs by enabling them to access the benefits of renewable energy.

Since May 2021, eligible businesses have been able to apply for a rebate of up to a maximum amount as listed on our website, reducing the upfront cost of installing solar on their business premises.

The program seeks to support up to 15,000 eligible businesses over the next two years.

For more information, including eligibility criteria, see solar.vic.gov.au/solar-small-business

2.2 Solar battery rebate stream

The Solar Homes battery rebate stream offers eligible households a rebate of up to a maximum amount, as listed on our website, on the cost of an eligible solar battery.

Households can save hundreds of dollars a year on their energy bills by installing a solar battery, in addition to savings made with solar PV.

We are also encouraging the aggregation of batteries to further enhance the benefits of home battery storage. Aggregation is the process of combining small-scale distributed energy technologies like household solar or storage to increase the overall capacity and impact of technology for the individual household and the wider Victorian community.

Aggregation is becoming a vital tool. It enables increased visibility of energy usage across the grid, so that technology can be deployed in areas where there may be already high penetration of solar PV and can result in increased reliability and security of the grid.

In encouraging aggregation programs to develop, we hope to see a reduction in the cost of electricity network upgrades – so customers aren't landed with unnecessary costs.

The Solar Homes battery rebate stream will support 18,500 households to install a battery over four years to June 2023.

For more information, including eligibility criteria, see solar.vic.gov.au/solar-battery-rebate

2.3 Solar hot water rebate stream

The Solar Homes solar hot water rebate stream offers eligible households a rebate of 50 per cent up to a maximum amount, as listed on our website, on the installation of a solar hot water or heat pump hot water system.

The solar hot water rebate is suitable for households seeking to replace their old hot water system, and keen to install solar hot water or a heat pump, where solar panels might not be suitable or for households that already have solar panels installed.

The solar hot water rebate is available for installations that replace an existing hot water system which is at least three years old. It is not available to new build homes.

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

Over 10 years, the solar hot water rebate stream will assist 60,000 households to drive down their energy bills. On average, households that install solar hot water systems can expect to save between $140–$400 per year on their electricity bills

For more information, including eligibility criteria, see solar.vic.gov.au/solar-hot-water-rebate

2.4 Release dates, quantities and values

Solar Victoria is committed to working closely with stakeholders to communicate the availability of rebates, their values and closely monitor their demand. Monthly or fortnightly releases may be considered in managing the availability of rebates to effectively support industry.

Rebate releases are published at solar.vic.gov.au/key-dates-solar-homes

2.5 Eligibility

Specific criteria must be met to receive a rebate in any stream. Eligibility criteria across all rebate streams may include, for example, income-based requirements, the value of the property, occupancy status, no prior participation in a Solar Victoria program for the same address, and products being on the list of approved products.

Additional criteria that can vary across each rebate may include, for example, specific system requirements needing to be met or in place, and the age of the system being replaced.

Full eligibility criteria are detailed under each rebate at solar.vic.gov.au/solar-rebates

2.6 Loans

Customers seeking to install a solar PV system under the Solar Homes or Solar for Business programs are also able to apply for a fee-free and no-interest loan.

Solar Victoria's loans complement the solar panel rebate and allow applicants to further reduce the upfront costs of installing solar. Eligible applicants applying for the solar panel rebate have the option to take a fee-free and interest-free loan.

Once granted eligibility for a rebate, the applicant will also be eligible for a loan subject to acceptance of the loan contract and positive credit assessment (completed by Solar Victoria). Loan recipients experiencing financial hardship can contact Solar Victoria for assistance.

Under the solar for rentals rebate stream, eligible rental providers have the option to seek an up to 50 per cent contribution from the renter for the loan repayment through a signed agreement. Any costs over and above the rebate/loan amount must be borne by the rental provider.

Loans must be repaid by direct debit deposit via monthly instalments payable in arrears. Loans made available under the Solar Homes Program are for a 48 month (four-year term), while loans under the Solar for Business Program are offered for up to 24 months (two-years). Customers may opt to pay out the remaining balance of the loan at any time during the duration of the loan.

By entering into the Loan Contract, the loan customer acknowledges that:

- the terms of the Loan Contract form a legally enforceable contract on those terms
- if there is a breach of the terms of the Loan Contract, the loan customer must pay any enforcement expenses of Department of Environment, Land, Water and Planning.

3.0 Definitions – What do we mean by?

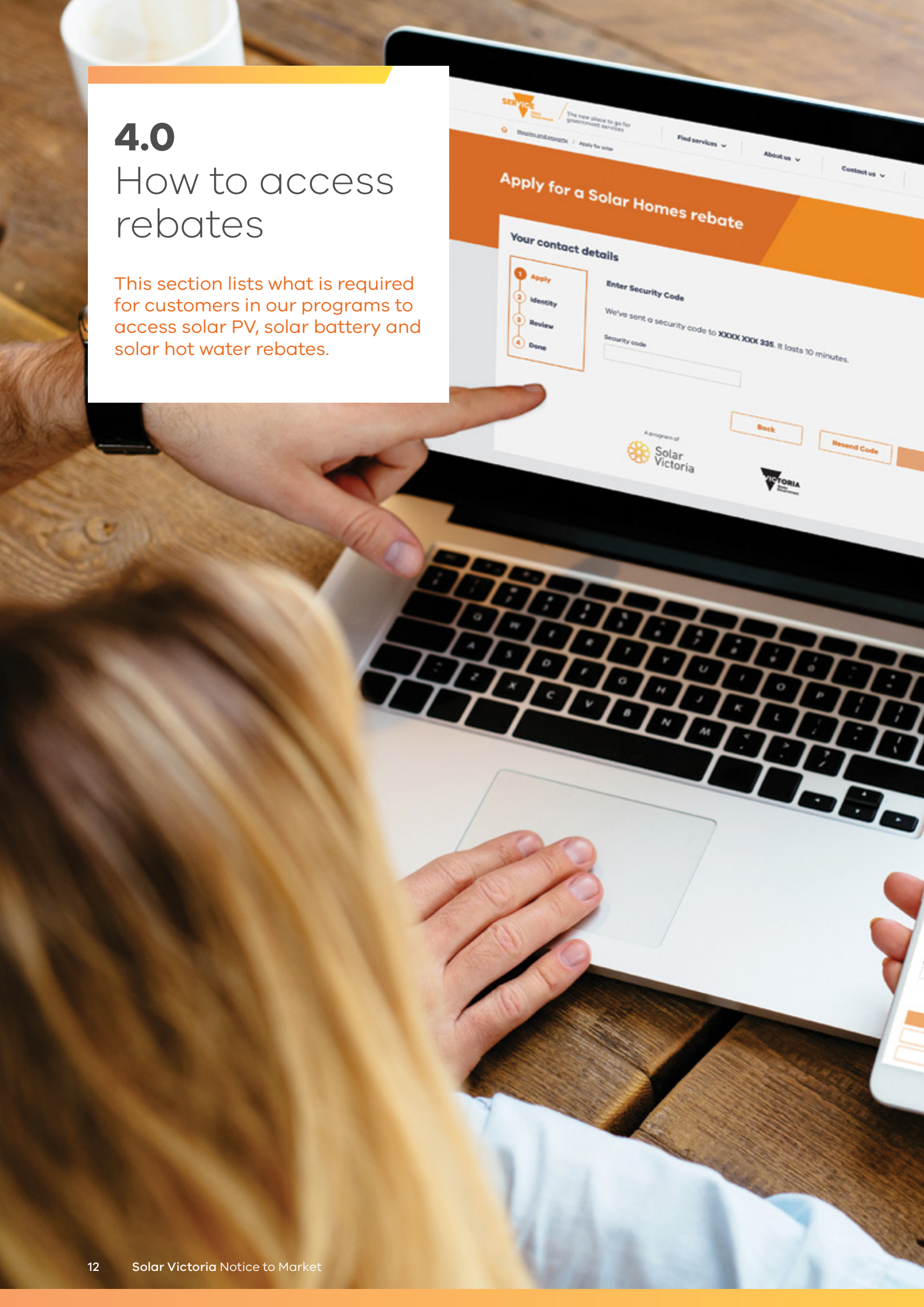
This section explains some of the words we frequently use within the Notice to Market.

Table 2: Definition of words used within the Notice to Market

When we say:	This means:
Customer	Customers are applicants for rebates under the Solar Homes and Solar for Business programs and/or persons who obtain a rebate or loan under those programs.
Installer	An installer of eligible systems, being eligible solar photovoltaic systems and ancillary equipment and/or solar battery systems and ancillary equipment and/or solar hot water system within Solar Victoria's programs.
Mandatory	Mandatory requirements must be satisfied for a participant to enter into Solar Victoria's programs. Where a participant no longer meets mandatory requirements, Solar Victoria may suspend or cancel participation in Solar Victoria's programs at its discretion. Participants must continue to meet the mandatory requirements at all times during their participation in Solar Victoria's programs. Mandatory requirements in this notice are coloured **orange**. You can use these sections as checklists.
Other on-site workers	Other on-site personnel who are involved in the installation of eligible solar PV, solar battery and/or solar hot water systems within Solar Victoria's programs, including but not limited to trades assistants, apprentices, etc.
Participant	Participan ts in the Solar Homes and Solar for Business Programs include retailers, installers and other on-site workers.
Recommended	Recommended requirements are optional and do not affect eligibility at the time of publication of this notice. They help to ensure Solar Victoria's programs deliver the best outcomes for Victorians. Recommended requirements signal to industry criteria that are likely to become mandatory in the future. Industry participants should consider early adoption of recommended requirements and plan accordingly. Recommended requirements in this notice are coloured **yellow**. You can use these sections as checklists.
Retailer	A retailer of eligible solar photovoltaic systems and ancillary equipment and/or solar battery systems and ancillary equipment and/or solar hot water systems which meet the programs' mandatory eligibility criteria, and who is registered to participate in Solar Victoria's programs as a retailer.

4.0
How to access rebates

This section lists what is required for customers in our programs to access solar PV, solar battery and solar hot water rebates.



4.1 Solar PV and battery rebates

Solar PV and solar battery rebates are accessed via the Solar Victoria portal (the portal) created for customers and retailers to easily apply and manage eligibility and rebated claims online.

Customers are only able to benefit from rebates and loans after they have received confirmation of their eligibility and have been notified that they may proceed with the installation by Solar Victoria. Rebates are only paid to retailers who have received confirmation of a customer's eligibility prior to the installation of a system.

The portal allows customers and retailers to transact with Solar Victoria. Service Victoria and State Trustees are delivery partners.

Table 3: All solar PV and solar battery rebates – mandatory portal requirements

This is mandatory:	Why?	How to register:	
Registration on the Solar Victoria portal[3]	• All solar retailers wishing to claim a rebate through Solar Victoria's programs must be registered on the Solar Victoria portal before an installation occurs. • All solar PV retailers must be authorised by Solar Victoria to participate in Solar Victoria's programs. • Authorised retailers are those who fulfil Solar Victoria's program requirements, including being a Signatory to the Clean Energy Council's Approved Solar Retailer Code of Conduct and maintaining the status of an Approved Solar Retailer with the Clean Energy Council.	To register as a retailer, please email us at retailers@team.solar.vic.gov.au or call us on 1300 376 393 – Monday to Friday from 8:00am – 6:00pm (except public holidays).	

Table 4: All solar PV and solar battery installers – mandatory requirements

This is mandatory:	Why?	Any questions?	
Registration on the Solar Victoria portal	• Accredited installers must maintain a current accreditation status to participate in Solar Victoria's programs. • All solar PV installers must be Clean Energy Council accredited before an installation can occur.	For installer queries, please email us at installers@team.solar.vic.gov.au or call us on 1300 376 393 – Monday to Friday from 8:00am – 6:00pm (except public holidays).	

4.2 Accessing other rebates

Customers of the Solar Homes solar hot water and solar for community housing rebate streams cannot access rebates via the Solar Victoria portal.

Read how to access solar hot water rebates at solar.vic.gov.au/solar-hot-water-rebate#process-for-solar-hot-water-installations

Read how to access solar for community housing rebates at solar.vic.gov.au/solar-community-housing

3 solar.vic.gov.au/industry

5.0 Requirements for all solar PV rebates

This section lists requirements that participants, systems and products must satisfy across all solar PV rebate streams.

We encourage participants to also meet the recommended requirements to help deliver the best outcomes for customers.

5.1 Solar PV retail business and workforce requirements

Retail business and workforce requirements apply to all solar PV rebate streams for owner-occupiers, renters, community housing and businesses. They aim to enhance safety and quality by maintaining rigorous standards and developing a level playing field within the industry.

For more information about training requirements in this section, including how to enrol, see solar.vic.gov.au/training-workforce-development

Table 5: All solar PV retailers – mandatory retail business requirements

This is mandatory:	Why?	
All solar PV retailers must be approved by the Clean Energy Council as a signatory to the Solar Retailer Code of Conduct (Approved Solar Retailer Scheme). More information: solar.vic.gov.au/become-approved-provider	• The Solar Retailer Code of Conduct is a voluntary scheme, authorised by the Australian Competition and Consumer Commission (ACCC), which sets requirements on sales, marketing practices and documentation, and aims to exceed the minimum set by government and regulations. • Signatories undergo a stringent application process and are subject to monitoring and a compliance and sanctions regime. • Solar Victoria will consider other equivalent ACCC authorised industry codes as they are developed.	
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.	• 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.	
Confirmation all 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). • VU22744 *Work safely in the solar industry* training unit certification.	• 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 Solar Victoria's programs.	

This is mandatory:	Why?	
Compliance with the Victorian Government's ban on electronic waste to landfill.[4]	• 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)[5] 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 electro- magnetic 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, inverter and energy storage equipment. • Sustainability Victoria lists locations to dispose of various types of e-waste. For more information on managing e-waste, see Managing e-waste[6] (EPA website).	
Confirmation all workers engaged to install systems have successfully completed online mini-training modules as required by Solar Victoria from time to time.	• Solar Victoria's mini-training modules are industry validated and customised for the solar industry in consultation with subject matter experts • Mini-training modules mandated by Solar Victoria will be available to complete online prior to the mandatory completion date set by Solar Victoria for each module. • Solar Victoria will provide reasonable notice of mandatory mini-training modules by way of Solar Victoria's website.	

Table 6: All solar PV retailers – recommended retail business requirements

This is recommended:	Why?	
Registered with Energy Safe Victoria as a Registered Electrical Contractor[7]	• Where a solar PV retailer is also a registered electrical contractor the entity is subject to the *Electrical Safety Act 1998*. Registered electrical contractors are obliged to provide safety certificates 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" according to the Australian Government's Australian Business Register.[8]	A key element of Solar Victoria's programs 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.	

4 epa.vic.gov.au/Ewaste
5 gazette.vic.gov.au/gazette/Gazettes2018/GG2018G026.pdf#page=41
6 epa.vic.gov.au/Ewaste
7 esv.vic.gov.au/licensing-coes/electrical-licences/registered-electrical-contractors/
8 abr.business.gov.au/

This is recommended:	Why?	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to "AS/NZS 5377: 2013".	• Solar Victoria's programs aim to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for PV products and materials at the end of their lifecycle. • AS/NZS 5377:2013 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment. • Future eligibility and installation requirements will be updated periodically. In particular, Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.	
Provide solar PV system owners with a financial performance estimate.	• Typically, customers purchase solar PV systems to reduce their electricity bills. However, under current Australian Standards, system owners 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.	
All workers engaged to install solar PV systems have attained CPCCCM2010B (or RIIWHS204) *Work Safely at Heights* accredited unit of competency.	• System 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.	
All workers engaged to install solar have attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	• System retailers are responsible for ensuring workers are appropriately trained to perform high-risk work. • The *Course in Working Safely in the Solar Industry* 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 systems. • Training content includes *Work safely in the solar industry* (a training unit developed and customised for the solar industry), White Card/ construction induction training, first aid and working at heights	
Undertake up to four free 90-minute business mentoring sessions from Solar Victoria's approved provider. See Section 8.2 of this Notice to Market.	• Experienced business consultants have been engaged to help participants in our programs make informed decisions to improve their business through tailored and confidential one-on-one mentoring sessions.	
We recommend solar PV retailers to advise system owners of the Victorian Energy Compare website and to utilise the solar saver tool prior to installing a solar system.	• The Victorian Energy Compare website is a Victorian state government initiative that includes a solar savings calculator using NMI (National Mering Identifier) specific data. • The solar calculator can be used by homeowners to compare the proposed solar system to their actual usage and tariff structure. • Victorian Energy Compare can be accessed at compare.energy.vic.gov.au and the solar calculator at solarcalculator.energy.vic.gov.au	

Table 7: All solar PV installers – mandatory workforce requirements

This is mandatory:	Why?	
Holds current Clean Energy Council accreditation.	• 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 an unrestricted (A Grade) electrical licence issued by Energy Safe Victoria[9]; or, holds equivalent Australian interstate electrical licence with mutual recognition by Energy Safe Victoria.	• In accordance with the Electricity Safety (Installations) Regulations 2019 and *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.	
Has 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.	• 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.	
Inverters must be set to comply with Distribution Network Service Provider (DNSP) connection agreements, including but not limited to, being correctly configured with the "Australia A" setting prior to connection and on-going utilisation.	• Victorian distribution network service providers (DNSPs) have mandated unified power quality response mode settings, defined by the "Australia A" configuration mode within AS/NZS 4777.2:2020. • All installations must comply with DNSP network connection agreements. • For more information refer Energy Network Australia's publication accessible at: energynetworks.com.au/projects/national-grid-connection-guidelines/power-quality-response-mode-settings/	
Has attained the VU22744 *Work safely in the solar industry* accredited unit of competency.	• *Work safely in the solar industry* is a solar-specific safety training unit including customised working at heights, lockout and energisation requirements, identifying and reporting on asbestos, etc. • A sector advisory group, led by the Office of the Victorian Skills Commissioner, including WorkSafe, Solar Victoria, the Electrical Trades Union, the Clean Energy Council, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers, identified a skills gap in the solar industry and developed this training unit. • Completion of *Work safely in the solar industry* is a work, health and safety control measure.	

9 esv.vic.gov.au/licensing-coes/electrical-licences/electricians-licence/

This is mandatory:	Why?	
Has attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	• 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.	
Has successfully completed online mini-training modules as required by Solar Victoria from time to time.	• Solar Victoria's mini-training modules are industry validated and customised for the solar industry in consultation with subject matter experts. • Mini-training modules may be mandated by Solar Victoria and will be available to complete online prior to the completion date set by Solar Victoria for each module. • Solar Victoria will provide reasonable notice of further mandatory mini-training modules by way of Solar Victoria's website.	

Table 8: All solar PV installers – recommended workforce requirements

This is recommended:	Why?	
Has attained CPCCCM2010B (or RIIWHS204) *Work Safely at Heights* accredited training unit.	• 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.	
Has attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	• The *Course in Working Safely in the Solar Industry* 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 systems. • Training content includes *Work safely in the solar industry* (a training unit developed and customised for the solar industry), White Card/construction induction training, first aid and working at heights.	
Install 'Non-load break DC disconnection points' where appropriate, in lieu of rooftop DC isolators, in accordance with AS/NZS 5033:2021.	• 'Non-load break disconnection devices' may in certain cases provide increased consumer safety outcomes over rooftop DC Isolators. • Rooftop DC isolators if installed incorrectly (or damaged over time) can suffer from internal arcing due to water ingress and subsequent fire risks. • AS/NZS 5033:2021 offers a choice to installers to either instate a rooftop DC isolator or a DC 'disconnection point' according to the requirements set out in the Standard.	

Table 9: Other on-site solar PV workers – mandatory workforce requirements

This is mandatory:	Why?	
Has attained the VU22744 *Work safely in the solar industry* accredited unit of competency. Same as above for installers at Table 7.	Same as above for installers at Table 7.	
Has attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	Same as above for installers at Table 7.	
Has completed industry specific mini-training as directed by Solar Victoria.	Same as above for installers at Table 7. Note: some industry specific mini-training may be relevant to accredited installers only.	

Table 10: All other on-site solar workers – recommended workforce requirements

This is recommended:	Why?	
Has attained CPCCCM2010B (or RIIWHS204) *Work Safely at Heights* accredited training unit.	Same as above for installers at Table 8.	
Has attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	Same as above for installers at Table 8.	

5.2 Solar PV system and product requirements

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

Table 11: Solar PV inverters – mandatory requirements

This is mandatory:	Why?	
Listed on Solar Victoria's Approved Solar PV Inverter List[10]	• This listing confirms inverters meet additional requirements, above minimum industry standards, to be eligible to participate in Solar Victoria's programs.	
Listed on the Clean Energy Council's Approved Inverter List[11]	• This listing confirms, via certified evidence, inverters meet minimum product standards for usage in Australia. • Listing is a requirement under the federal government's Small-scale Renewable Energy Scheme (SRES).	
Inverter(s) must have internet capability (the ability to share data via the World Wide Web) and an on-board communication port that can be used for a physical connection to another device (e.g. via ethernet, USB or RS-232). Further, if an inverter can communicate wirelessly in a manner similar to an on-board communication port (for example by providing a secure Application Programming Interface or API over Wi-Fi) that can be used for a connection to another device, this may be utilised in lieu of a physical communication port.	• 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 dynamic connection arrangements. • Approximately 99 per cent of solar PV inverters installed in the Solar Homes Program since 1 July 2019 satisfy these requirements.	
Inverter(s) must comply with AS/NZS 4777.2:2020	• The latest release of AS/NZS 4777.2 includes key new 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. • This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-042, Renewable Energy Power Supply Systems and Equipment, to supersede AS/NZS 4777.2:2015, Grid connection of energy systems via inverters, Part 2: Inverter requirements.	

10 cleanenergycouncil.org.au/industry/products/inverters/approved-inverters

11 cleanenergycouncil.org.au/industry/products/inverters/approved-inverters

Table 12: Solar PV inverters – recommended requirements

This is recommended:	Why?	
Includes remote monitoring (proprietary or third party) via secure connection.	• Monitoring facilitates greater consumer energy management and engagement. • Monitoring facilitates system fault and performance analysis.	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to AS/NZS 5377: 2013.	• Solar Victoria's programs aim to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for PV products and materials at the end of their lifecycle. AS/NZS 5377:2013 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment. • Future eligibility and installation requirements will be updated periodically. In particular, Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.	
Includes a communication protocol.	• Communication protocols support third party (e.g. aggregator, platform provider, distribution network service provider, distribution service operator, etc) visibility, communication and orchestration. • Systems with communication protocols may participate in future energy markets and/or dynamic connection arrangements.	
Inverter energy system capable of switching external loads (via inverter or third-party device).	• 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.	
Arc Fault Protection Equipment (AFPE) to IEC 63027 where a string inverter system is installed.	• Arc fault protection can reduce the likelihood of sustained Arcing through early detection and protection, increasing safety outcomes. • The IEC 63027:2019 standard applies to equipment used for the detection and optionally the interruption of electric DC arcs in photovoltaic (PV) system circuits.	

Table 13: Solar PV modules – mandatory requirements

This is mandatory:	Why?	
Listed on Solar Victoria's Approved PV Module List[12].	• This listing confirms PV modules meet the requirements, above minimum industry standards, to be eligible to participate in Solar Victoria's programs.	
Listed on the Clean Energy Council's Approved Module List[13].	• This listing confirms, via certified evidence, solar PV modules meet minimum product standards for usage in Australia. • Listing is currently a requirement under the Federal Government's Small-scale Renewable Energy Scheme (SRES).	
Listed by the Clean Energy Regulator (CER) as a participating brand in the joint CER and industry Solar Panel Validation (SPV) Initiative[14].	• Participation in this initiative is a precursor to validation. Validation confirms PV modules are: – genuine (e.g. not counterfeit) – approved (as per the Clean Energy Council's approved products list) – backed by manufacturer's warranties – meet Australian Standards – eligible for Small Scale Technology Certificates (STCs) and rebates under Solar Victoria's programs. • At least 56 manufacturers and importers participate in the validation initiative.	

12 solar.vic.gov.au/approved-products

13 cleanenergycouncil.org.au/industry/products/modules/approved-modules

14 cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/Solar-Panel-Validation-initiative

Table 14: Solar PV modules – recommended requirements

This is recommended:	Why?	
Provision of an electronic customer record confirming installed solar PV modules are verified as part of the joint CER and industry Solar Panel Validation Initiative.	• Validation provides customers with an electronic record of confirmation that their installed solar panels 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. • Validation via this initiative confirms solar PV modules are genuine, approved (as per the Clean Energy Councils approved products list), backed by manufacturers warranties, meet Australian Standards, and are eligible for Small Scale Technology Certificates (STCs) and rebates under Solar Victoria's programs.	
VDE Quality Tested; or, Certified to IEC 62941.	• VDE quality tested and IEC 62941 certified solar PV modules are those that have demonstrated a higher degree of quality assurance, predominately in the manufacturing process.	
Certified to IEC 62804 (for crystalline modules).	• Certification to IEC 62804 ensures solar PV modules offer greater durability against forms of accelerated degradation resulting in better long-term performance and reliability. • This standard only applies to crystalline solar PV modules. That is, other topologies (technology types) are not covered. This standard is especially relevant in higher voltage solar PV arrays.	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to AS/NZS 5377:2013.	• Solar Victoria's programs aim to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for PV products and materials at the end of their lifecycle. AS/NZS 5377:2013 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment. • Future eligibility and installation requirements will be updated periodically. In particular, Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.	

Table 15: Solar PV system – recommended requirements

This is recommended:	Why?	
Solar PV systems are recommended to have the capability to conform to an API in accordance with Australia's Common Smart Inverter Profile (CSIP-AUS) and the IEEE 2030.5-2018 standard, via either direct inverter integration, an external control system or via a vendor cloud - or equivalent.	• 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. • Australia's Common Smart Inverter Profile (CSIP-AUS) previously referred to as the 'Australian Implementation Guide' of open communications protocol IEEE 2030.5, was released in September 2021. • The guide is accessible at: arena.gov.au/knowledge-bank/common-smart-inverter-profile-australia/ • Solar Victoria will strongly consider mandating compliance to CSIP-AUS at an appropriate time, in consultation with industry.	

6.0 Requirements for solar battery rebates

This section lists requirements that participants, systems and products must satisfy under the solar battery rebate stream and the Virtual Power Plant pilot program.

We encourage participants to also meet the recommended requirements to help deliver the best outcomes for Victorians.

6.1 Solar battery retail business and workforce requirements

The following retail business and workforce requirements apply to rebates for Solar Homes battery rebates and the Virtual Power Plant (VPP) pilot program. They aim to enhance safety and quality by maintaining rigorous standards and developing a level playing field within the industry.

For more information about training requirements in this section, including how to enrol, see solar.vic.gov.au/training

Table 16: All solar battery retailers – mandatory retail business requirements

This is mandatory:	Why?	
All solar battery retailers must be approved by the Clean Energy Council as a signatory to the Solar Retailer Code of Conduct (Approved Solar Retailer Scheme). More information: solar.vic.gov.au/become-approved-provider	• The Solar Retailer Code of Conduct is a voluntary scheme, authorised by the Australian Competition and Consumer Commission (ACCC), which sets requirements on sales, marketing practices and documentation, and aims to exceed the minimum set by government and regulations. • Signatories undergo a stringent application process and are subject to monitoring and a compliance and sanctions regime. • Solar Victoria will consider other equivalent ACCC authorised industry codes as they are developed.	
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.	• 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.	
Confirmation all workers engaged to install solar battery systems have attained: • VU22744 *Work safely in the solar industry* training unit certification. • CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	• 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 Solar Victoria's programs.	

This is mandatory:	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 electro- magnetic 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, inverter an energy storage equipment. • Sustainability Victoria lists locations to dispose of various types of e-waste. • For more information on managing e-waste, see Managing e-waste (EPA website).	
Confirmation all workers engaged to install systems have successfully completed online mini-training modules as required by Solar Victoria from time to time.	• Solar Victoria's mini-training modules are industry validated and customised for the solar industry in consultation with subject matter experts. • Mini-training modules mandated by Solar Victoria will be available to complete online prior to the mandatory completion date set by Solar Victoria for each module. • Solar Victoria will provide reasonable notice of further mandatory mini-training modules by way of Solar Victoria's website.	

Table 17: All solar battery retailers – recommended retail business requirements

This is recommended:	Why?	
Registered with Energy Safe Victoria as a Registered Electrical Contractor	• Where a solar battery retailer is also a registered electrical contractor the entity is subject to the *Electrical Safety Act 1998*. Registered electrical contractors are obliged to provide safety certificates to parties for whom electrical work is carried out. • While registration as a Registered Electrical Contractor is not a mandatory requirement for the provision of electrical services, it places greater responsibility on the retailer to ensure worker and customer safety.	
Main business location listed as "Victoria" according to the Australian Government's Australian Business Register	• A key element of Solar Victoria's programs 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.	

This is recommended:	Why?	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to "AS/NZS 5377: 2013".	• Solar Victoria's programs aim to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for battery products and materials at the end of their lifecycle. • AS/NZS 5377:2013 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment. • Future eligibility and installation requirements will be updated periodically. In particular, Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.	
Has completed training by the Original Equipment Manufacturer (OEM) on the specific energy storage solution that is being installed.	• Installation requirements are specific to individual OEMs, and typical warranties require the installer to have been accredited by the OEM 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.	
Workers engaged to install solar battery systems have attained, CPCCCM2010B (or RIIWHS204) *Work Safely at Heights* accredited unit of competency.	• System 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.	
Workers engaged to install solar have attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	• System retailers are responsible for ensuring workers are appropriately trained to perform high-risk work. • The *Course in Working Safely in the Solar Industry* 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 systems. • Training content includes *Work safely in the solar industry* (a training unit developed and customised for the solar industry), White Card/ construction induction training, first aid and working at heights	
Undertake up to four free 90-minute business mentoring sessions from Solar Victoria's approved provider. See Section 8.2 of this Notice to Market.	• The experienced business consultants we have engaged can help participants in our programs make informed decisions to improve their business through tailored and confidential one-on-one mentoring sessions.	

Table 18: All solar battery installers – mandatory workforce requirements

This is mandatory:	Why?	
Holds current Clean Energy Council installer accreditation[15] with Battery Endorsement.	• Accreditation confirms an individual has undertaken industry specific training relevant to the installation of battery systems. • The accreditation scheme includes continuous professional development requirements and a compliance regime.	
Holds unrestricted (A Grade) electrical licence issued by Energy Safe Victoria; or, Holds equivalent Australian interstate electrical licence with mutual recognition by Energy Safe Victoria.	• 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.	
Has 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.	• 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.	
Has attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	• 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.	
Has attained the VU22744 *Work safely in the solar industry* accredited unit of competency.	• *Work safely in the solar industry* is a solar-specific safety training unit including customised working at heights, lockout and energisation requirements, identifying and reporting on asbestos, etc. • A sector advisory group, led by the Office of the Victorian Skills Commissioner, including WorkSafe, Solar Victoria, the Electrical Trades Union, the Clean Energy Council, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers, identified a skills gap in the solar industry and developed this training unit. • Completion of *Work safely in the solar industry* is a work, health and safety control measure.	

15 solaraccreditation.com.au/consumers/find-an-installer.html

This is mandatory:	Why?	
Inverters must be set to comply with Distribution Network Service Provider (DNSP) connection agreements, including but not limited to, being correctly configured with the "Australia A" setting prior to connection and on-going application.	• Victorian distribution network service providers (DNSPs) have mandated unified power quality response mode settings, defined by the "Australia A" configuration mode within AS/NZS 4777.2:2020. • All installations must comply with DNSP network connection agreements. • For more information refer Energy Network Australia's (ENA's) publication accessible at: energynetworks.com.au/projects/national-grid-connection-guidelines/power-quality-response-mode-settings/	
Has successfully completed online mini-training modules as required by Solar Victoria from time to time.	• Solar Victoria's mini-training modules are industry validated and customised for the solar industry in consultation with subject matter experts. • Mini-training modules mandated by Solar Victoria will be available to complete online prior to the mandatory completion date set by Solar Victoria for each module. • Solar Victoria will provide reasonable notice of further mandatory mini-training modules by way of Solar Victoria's website.	

Table 19: All solar battery installers – recommended workforce requirements

This is recommended:	Why?	
Has attained CPCCCM2010B (or RIIWHS204) *Work Safely at Heights* accredited training unit.	• 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.	
Has attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	• The *Course in Working Safely in the Solar Industry* 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 systems. • Training content includes *Work safely in the solar industry* (a training unit developed and customised for the solar industry), White Card/ construction induction training, first aid and working at heights.	

Table 20: All other on-site solar battery workers – mandatory workforce requirements

This is mandatory:	Why?	
Has attained the VU22744 *Work safely in the solar industry* accredited unit of competency.	• Same as above for installers at Table 18.	
Has attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	• Same as above for installers at Table 18.	
Has completed industry specific mini-training as directed by Solar Victoria from time to time.	• Same as above for installers at Table 18. • Note: some industry specific mini-training may be relevant to accredited installers only.	

Table 21: All other on-site solar battery workers – recommended workforce requirements

This is recommended:	Why?	
Has attained CPCCCM2010B (or RIIWHS204) Working Safely at Heights accredited training unit.	Same as above for installers at Table 19.	
Has attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	Same as above for installers at Table 19.	

6.2 Solar battery system and product requirements

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

Table 22: Overall energy storage system – mandatory requirements

This is mandatory:	Why?	
Listed on Solar Victoria's Approved Battery List and have the correct grid support parameters configured, including being set to 'Australia A' setting[16].	• Listing on Solar Victoria's Approved Battery List confirms that the battery system meets Solar Victoria's criteria for safety, quality and technical capability. • Components of the overall energy storage solution are each listed on the Clean Energy Council's Approved Energy Storage and Power Conversion Equipment lists, confirming via certified evidence, the products meet minimum safety requirements for use in Australia. • The CEC list has been refined for battery solutions that have been assessed to be 'VPP-capable', with technical capabilities aligned with AEMO's NEM VPP Demonstration Program[17] Minimum Capability Specifications that enable the battery to provide network support services, participate in virtual power plants and/or future distributed energy resource (DER) marketplaces. • The systems on Solar Victoria's Approved Battery List have been assessed for technical capabilities including performance, safety, internet accessibility, security, and remote registration, monitoring and control. • They represent one of first steps towards greater facilitation of DER in the network, as outlined by the Australian Open Energy Networks program and the reform program of California Rule 21 (amongst others). • Applications for new battery solutions to be included on the Solar Victoria Approved Battery List can be submitted by registered Solar Homes retailers and original equipment manufacturers via email at enquiries@team.solar.vic.gov.au	
System installed in compliance with "AS/NZS 5139:2019 - Electrical installations - Safety of battery systems for use with power conversion equipment".	• Battery installations are required to conform to "AS/NZS 5139:2019 - Electrical installations - Safety of battery systems for use with power conversion equipment", a standard explicitly relating to the safe installation of modern battery systems.	
Energy storage device complies with the Australian Best Practice Guide: Battery Storage Equipment – Electrical Safety Requirements[18].	• This guide represents industry best practice in the safe installation of home battery systems. The guide has been developed by industry associations involved in renewable energy battery storage equipment, with input from energy network operators, private certification bodies, and other independent stakeholder groups and individuals, as well as consumer and electrical safety regulators including the Clean Energy Council, Smart Energy Council, CSIRO, AI Group and the Consumer Electronics Suppliers Association.	
Provide a whole-of-system warranty (including workmanship) of a minimum of 5 years and a minimum performance warranty of 7 years under daily cycling operation.	• A minimum 5-year whole-of-system warranty is an explicit mandatory requirement of Solar Victoria's programs, including on workmanship. A further minimum performance warranty of 7 years is required under daily cycling operation, aligning with requirements for the South Australian Home Battery Scheme.	
Battery system to be registered on the Australian Energy Market Operator's Distributed Energy Resources Register.	• AEMO is obliged under the National Electricity Rules to establish a register of Distributed Energy Resources in the National Electricity Market. Solar Victoria aims to support the registration of all batteries supported under Solar Victoria's programs. • Australia's DER Register was launched on 1 March 2020 and is available at: aemo.com.au/energy-systems/electricity/der-register/about-the-der-register	

16 aemo.com.au/-/media/Files/Electricity/NEM/DER/2018/NEM-VPP-Demonstrations-program.pdf
17 aemo.com.au/-/media/Files/Electricity/NEM/DER/2018/NEM-VPP-Demonstrations-program.pdf
18 batterysafetyguide.com.au/

Table 23: Overall energy storage system – recommended requirements

This is recommended:	Why?	
Where an energy storage solution is installed within a room, a functioning smoke alarm shall be installed in the same room.	• The requirement to install a smoke alarm in the same room as an energy storage solution is included in the battery installation standard "AS/NZS 5139:2019 - Electrical installations - Safety of battery systems for use with power conversion equipment". • Safety is the top priority of Solar Victoria's programs and the installation of a smoke alarm reduces the risk of injury and property damage.	
Solar battery systems are recommended to have the capability to conform to an API in accordance with Australia's Common Smart Inverter Profile (CSIP-AUS) and the IEEE 2030.5-2018 standard, via either direct inverter integration, an external control system or via a vendor cloud - or equivalent.	• 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. • Australia's Common Smart Inverter Profile (CSIP-AUS) previously referred to as the 'Australian Implementation Guide' of open communications protocol IEEE 2030.5, was released in September 2021. • The guide is accessible at: arena.gov.au/knowledge-bank/common-smart-inverter-profile-australia • Solar Victoria will strongly consider mandating compliance to CSIP-AUS at an appropriate time, in consultation with industry.	
Solar battery systems are recommended to be installed in a manner that prevents "Cross Phasing".	• Ensuring solar batteries and solar PV 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; and – Victoria's Service and installation rules.	

Table 24: Component: Energy storage device (battery energy storage systems or battery systems) – mandatory requirements

This is mandatory:	Why?	
Listed as one of the overall energy storage solutions on Solar Victoria's Approved Battery List.	As above for overall energy solution at Table 22.	
Complies with the Australian Best Practice Guide: Battery Storage Equipment – Electrical Safety Requirements	As above for overall energy solution at Table 22.	

Table 25: Component: Energy storage device (battery energy storage systems or battery systems – recommended requirements

This is recommended:	Why?	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to AS/NZS 5377:2013.	• Solar Victoria's programs aim to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for battery products and materials at the end of their lifecycle. • AS/NZS 5377:2013 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment. • Future eligibility and installation requirements will be updated periodically. In particular, Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.	

Table 26: Component: Battery inverter (hybrid inverter or integrated power conversion equipment in a battery energy storage system) – mandatory requirements

This is mandatory:	Why?	
Listed with one of the overall energy storage solutions on Solar Victoria's Approved Battery List.	• As above for overall energy storage system at Table 21.	
Inverter(s) must comply with AS/NZS 4777.2:2020	• The latest release of AS/NZS 4777.2, includes key new 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. • This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-042, Renewable Energy Power Supply Systems and Equipment, to supersede AS/NZS 4777.2:2015, Grid connection of energy systems via inverters, Part 2: Inverter requirements.	

Table 27: Component: Battery inverter (hybrid inverter or integrated power conversion equipment in a battery energy storage system) – recommended requirements

This is recommended:	Why?	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to AS/NZS 5377:2013.	• As above for Component: Energy Storage Device at Table 25.	

7.0 Requirements for solar hot water rebates

This section lists requirements that participants, systems and products must satisfy under the solar hot water rebate stream.

We encourage participants to also meet the recommended requirements to help deliver the best outcomes for Victorians.

7.1 Solar hot water retail business and workforce requirements

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

For more information about training requirements in this section, including how to enrol, see solar.vic.gov.au/training

Table 28: Solar hot water retailers – mandatory retail business requirements

This is mandatory:	Why?	
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.	• 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.	
Confirmation all 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). • VU22744 *Work safely in the solar industry* training unit certification.	• 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 Solar Victoria's programs.	
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 electro- magnetic 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, inverter an energy storage equipment. • Sustainability Victoria lists locations to dispose of various types of e-waste. • For more information on managing e-waste, see Managing e-waste (EPA website).	
Confirmation all workers engaged to install systems have successfully completed online mini-training modules as required by Solar Victoria from time to time.	• Mini-training modules mandated by Solar Victoria will be available to complete online prior to the mandatory completion date set by Solar Victoria for each module. • Solar Victoria will provide reasonable notice of mandatory mini-training modules by way of Solar Victoria's website.	

Table 29: Solar hot water retailers – recommended retail business requirements

This is recommended:	Why?	
Main business location listed as "Victoria" according to the Australian Government's Australian Business Register	• A key element of Solar Victoria's programs 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.	
Product manufacturer, supplier, retailer and/or installer offers end-of-life management program with service provider/s certified to "AS/NZS 5377: 2013".	• Solar Victoria's programs aim to support Victoria's emerging circular economy by encouraging best practice approaches and outcomes for materials at the end of their lifecycle. • AS/NZS 5377:2013 establishes Australia's best practice benchmark for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment. • Future eligibility and installation requirements will be updated periodically. In particular, Solar Victoria recognises the national stewardship approach underway for PV products and materials at the end of their lifecycle.	
All workers engaged to install solar hot water systems have attained, CPCCCM2010B (or RIIWHS204) *Work Safely at Heights* accredited unit of competency.	• System 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.	
All workers engaged to install solar have attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	• System retailers are responsible for ensuring workers are appropriately trained to perform high-risk work. • The *Course in Working Safely in the Solar Industry* 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 systems. • Training content includes *Work safely in the solar industry* (a training unit developed and customised for the solar industry), White Card / construction induction training, first aid and working at heights	
Undertake up to four free 90-minute business mentoring sessions from Solar Victoria's approved provider. See Section 8.2 of this Notice to Market.	• The experienced business consultants we have engaged can help participants in our programs make informed decisions to improve their business through tailored and confidential one-on-one mentoring sessions.	

Table 30: Solar hot water system installers (tradespersons) – mandatory workforce requirements

This is mandatory:	Why?	
Holds the appropriate plumbing licence(s) issued by the Victorian Building Authority (VBA).	• 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 licensed plumber with the relevant qualifications.	
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), and relevant standards.	• The latest version of the National Construction Code Volume 3 (Plumbing Code of Australia) applies.	
A compliance certificate must be issued to the person who engaged the plumber for plumbing work valued at $750 or more and all gas installations affecting gas pipes.	• The value of plumbing work is the total cost of materials and labour, prior to any rebates having been applied.	
Where electrical work has occurred, a certificate of electrical safety (COES) is issued.	• An appropriate COES in accordance with Energy Safe Victoria (ESV) requirements shall be supplied. The issuing of COES: • improve electrical safety for the general public, electricity customers and electrical workers; and • ensure all electrical installation work is undertaken only by qualified persons. • Information around types of COES are available on Energy Safe Victoria's website at esv.vic.gov.au/licensing-coes/coes/prescribed-nonprescribed-work/	
Has attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	• 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.	
Has attained the VU22744 *Work safely in the solar industry* accredited unit of competency.	• A sector advisory group, led by the Office of the Victorian Skills Commissioner, including WorkSafe, Solar Victoria, the Electrical Trades Union, the Clean Energy Council, the Plumbing Pipes Trades and Employee Union, Master Plumbers, the National Electrical and Communications Association and multiple solar retailers, identified a skills gap in the solar industry and developed this training unit. • Completion of *Work safely in the solar industry* is a work, health and safety control measure.	
Has successfully completed online mini-training modules as required by Solar Victoria from time to time.	• Mini-training modules mandated by Solar Victoria will be available to complete online prior to the mandatory completion date set by Solar Victoria for each module. • Solar Victoria will provide reasonable notice of further mandatory mini-training modules by way of Solar Victoria's website.	

Table 31: All solar hot water installers (tradespersons) – recommended workforce requirements

This is recommended:	Why?	
Has attained CPCCCM2010B (or RIIWHS204) *Working Safely at Heights* accredited training unit.	• 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.	
Has attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	• The *Course in Working Safely in the Solar Industry* 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 systems. • Training content includes *Work safely in the solar industry* (a training unit developed and customised for the solar industry), White Card/ construction induction training, first aid and working at heights.	

Table 32: All other on-site solar hot water workers – mandatory workforce requirements

This is mandatory:	Why?	
Has attained the CPCCWHS1001 *Prepare to work safely in the construction industry* accredited unit of competency (White Card/construction induction card).	Same as above for installers at Table 30.	
Has attained the VU22744 *Work safely in the solar industry* accredited unit of competency.	Same as above for installers at Table 30.	
Has completed industry specific mini-training as directed by Solar Victoria from time to time.	Same as above for installers at Table 30. Note: some industry specific mini-training may be relevant to plumbers only.	

Table 33: All other on-site solar hot water workers – recommended workforce requirements

This is recommended:	Why?	
Has attained CPCCCM2010B (or RIIWHS204) *Working Safely at Heights* accredited training unit.	Same as above for installers at Table 31.	
Has attained 22515VIC *Course in Working Safely in the Solar Industry* accredited course.	Same as above for installers at Table 31.	

7.2 Solar hot water system and product requirements

The following system and product requirements for solar hot water systems aim to enhance safety and quality by maintaining rigorous standards and ensuring products are future-fit.

Table 34: Solar hot water systems – mandatory requirements

This is mandatory:	Why?	
Listed on Solar Victoria's Approved Solar Hot Water Products List[19].	• This listing confirms solar hot water systems meet additional requirements, above minimum industry standards, to be eligible to participate in Solar Victoria's programs.	
Listed on the Clean Energy Regulator's register of solar hot water heaters[20].	• Registration with the Clean Energy Regulator confirms that such systems comply with AS/NZS 2712 – and may be subject to a product certification audit and compliance regime. • Listing is currently a requirement under the federal government's Small-scale Renewable Energy Scheme (SRES).	
Listed on the Essential Services Commission's register of products[21].	• Registration with the Essential Services Commission confirms that such systems comply with AS/NZS 2712 – and includes efficiency modelling in addition to the Clean Energy Regulator Register's efficiency modelling. • Listing is a requirement under the Victorian Government's Victorian Energy Efficiency Certificates (VEEC) Scheme.	
Minimum 5-year warranty on all major components, listed as: • Solar hot water major components – Solar collector (any component in the solar collector including, but not limited to, manifold collectors, evacuated tubes, flat plate collectors, collector frames). – Heat exchanger, storage tank gas booster. • Heat pump major components – Storage tank, compressor, evaporator, condenser, water heat exchanger, any other component that has a refrigerant.	• To provide the best outcome for customers, a minimum 5-year warranty is an explicit mandatory requirement of the Solar Homes Program.	

19 solar.vic.gov.au/solar-hot-water-rebate#approved-products

20 cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/Agents-and-installers/Small-scale-systems-eligible-for-certificates/Register-of-solar-water-heaters

21 veu-registry.vic.gov.au/public/ProductRegistrySearch.aspx

8.0
Supporting the solar industry

This section outlines some of the ways we are helping support the ongoing development of the solar industry in Victoria.

8.1 Technology Guidelines

The Technology Guidelines outline the guiding principles that will drive the selection and evolution of technology within the Solar Homes and Solar for Business programs. They emphasise safety, quality and innovation, and set out the priority areas for grid integration and stability.

By creating safety and quality benchmarks for retailers and installers that exceed industry standards, the Technology Guidelines, and Solar Victoria more broadly, ensure better outcomes, support and protections for energy users.

The Technology Guidelines outline nine guiding principles across the three key priority areas:

1. Ensure safety and quality of installations.
2. Optimise integration with the grid.
3. Maximise the benefits of generation through innovation.

With the majority of Victoria's residential solar system installations now taking place within the framework of the Solar Homes Program, Solar Victoria is uniquely situated to strike the right balance between customer access to the benefits of renewable energy and maintaining and improving the stability and operation of the energy grid for all Victorians.

The measures outlined in the Technology Guidelines range from actions already being implemented to important policy issues that will require extensive development and consultation to meet the needs of Victoria's energy transformation.

The Technology Guidelines align with Victoria's *Renewable Energy Roadmap* and other Department of Environment, Land, Water and Planning initiatives.

For more information, see solar.vic.gov.au/technology-guidelines

8.2 Training and workforce development

Solar Victoria is investing $11 million to deliver a comprehensive training and workforce development package. Solar industry participants in our programs and others, including apprentices, electricians and plumbers, can upskill with free and low-cost training to support Victoria's transition to a clean and efficient energy future.

The suite of new training and workforce development initiatives announced by the Minister for Solar Homes in March 2022 include those focused on encouraging women into the residential solar industry, and upskilling licensed electrical inspectors, electricians, electrical engineers, plumbers and fourth-year plumbing apprentices with solar specific training.

Training is delivered flexibly across a range of formats and locations throughout metropolitan Melbourne and regional Victoria, making access easy for retailers, installers and others who are looking to upskill or change careers.

8.2.1 Working safely in solar training

Safety is a key priority in the delivery of Solar Victoria's programs. As our programs roll out, increased demand for solar will generate more work for Victoria's solar industry. This will create more opportunities for existing workers and bring new workers into the solar industry for the first time.

An accredited training course in our training and workforce development package, 22515VIC *Course in Working Safely in the Solar Industry*, includes mandatory and recommended units for all installers and other on-site workers in our Solar Homes and Solar for Business programs. These units are listed as requirements in Sections 5–7 of this Notice to Market.

We are also working with Master Builders Victoria to support and set clear expectations for site supervisors, through customised world-class safety leadership training which articulates minimum safety standards required to participate in our programs.

Retailers and installers in our programs and their authorised representatives can also learn the skills to help maintain good mental health free-of-charge, through a choice of two fully funded mental health first aid courses delivered by St John Ambulance.

8.2.2 Free business advice and mentoring

Solar Victoria has engaged a professional business mentoring consultancy to support the ongoing development of the solar industry in Victoria.

Business mentors through this service provide free tailored and confidential one-on-one guidance and business strategies across a range of topics to help participants build their business, create positive change and make informed decisions about the future of their business.

Retailers and installers in our programs and their authorised representatives can register for up to four free 90-minute mentoring sessions.

For more information, including how to enrol, see solar.vic.gov.au/training-workforce-development

solar.vic.gov.au