ESSENTIAL SERVICES COMMISSION

Commercial and Industrial Solar Photovoltaic Systems Activity Guide

23 December 2025

Acknowledgement

We acknowledge the Traditional Owners of the lands and waterways on which we work and live.

We acknowledge all Aboriginal and Torres Strait Islander communities, and pay our respects to Elders past and present.

As the First Peoples of this land, belonging to the world's oldest living cultures, we recognise and value their knowledge, and ongoing role in shaping and enriching the story of Victoria.

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Essential Services Commission 2025, Commercial and Industrial Solar Photovoltaic Systems Activity Guide: 23 December 2025

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Guide overview

Accredited persons (APs) and scheme participants (including solar system designers, solar system installers and on-site workers) under the Victorian Energy Upgrades (VEU) program must comply with program requirements when undertaking commercial and industrial solar photovoltaic system (C&I solar) activities to create Victorian energy efficiency certificates (VEECs).

About this guide

Use this guide for assistance in understanding the specific requirements for C&I solar activities under the VEU program. This document also provides guidance about the key requirements that must be met and expectations of the commission in the carrying out of prescribed activities.

The guide has six sections:

- Section 1: Introduction to the C&I solar activity
- Section 2: Requirements for personnel undertaking the C&I solar activity
- Section 3: Activity requirements for the C&I solar activity
- Section 4: Record-keeping requirements for the C&I solar activity
- Section 5: C&I solar activity process
- Section 6: Calculating Victorian energy efficiency certificates for the C&I solar activity

Who should use this guide

You should use this guide if you are:

- considering applying for accreditation to undertake C&I solar activities under the VEU program
- an accredited person seeking guidance to undertake C&I solar activities under the VEU program
- a solar system designer or solar system installer planning to undertake C&I solar activities under the VEU program.

This guide will help you to understand the activity requirements you must meet to create and register VEECs for the C&I solar activity.

You should also review the Obligations and Program Guide for Accredited Persons to obtain more information about the VEU program framework and key requirements that apply to all accredited persons creating Victorian energy efficiency certificates (VEECs) under the program.

How to apply for accreditation to undertake C&I solar activities under the VEU program

For information about applying for accreditation, please refer to the commission's website: www.esc.vic.gov.au/become-veu-accredited.

You will need to review the Application Guide for Accredited Persons published on the above page for information:

- on how to apply for accreditation and the decision process
- information on the matters we consider when determining whether an applicant is 'competent and capable' and 'fit and proper' to undertake the C&I solar activity.

We will only approve an application for accreditation to undertake the C&I solar activity if we consider you are fit and proper and competent and capable to undertake the activity.

Legislative requirements

The legal requirements for accredited persons and scheme participants (including installers) participating in the C&I solar activity under the VEU program are set out in:

- Victorian Energy Efficiency Target Act 2007 (the VEET Act)
- Victorian Energy Efficiency Target Regulations 2018 (the VEET Regulations)
- Victorian Energy Upgrades Specifications 2018 (the VEU Specifications)
- Victorian Energy Efficiency Target Guidelines (the VEET Guidelines).

These documents can be accessed at: www.esc.vic.gov.au/veu-legislation

This guide should not be relied upon as substitute for legal advice and should be read in conjunction with the above source documents. While we have made every effort to provide current and accurate information, you should obtain professional advice if you have any specific concern, before relying on the accuracy, currency or completeness of this information. In the event of inconsistency between this guide and the source documents, the content in the source documents apply.

Feedback on this guide

We have consulted with key industry bodies and invited feedback from stakeholders in developing our guidance and requirements in this guide. We are committed to working with industry to ensure the requirements we set are effective, practical, and aligned with industry best practices. To support this objective, we welcome your feedback on the requirements outlined in this guide. To provide feedback, please contact VEU Support on veu@esc.vic.gov.au or (03) 9032 1310.

1. Introduction to the C&I solar activity

Accredited persons are able to claim VEECs for upgrades undertaken under the program's C&I solar activity (activity 47), as well as small scale technology certificates (STCs) and/or large-scale generation certificates (LGCs) under the Renewable Energy Target scheme (established under the Renewable Energy (Electricity) Act 2000 of the Commonwealth)

The Department of Energy, Environment and Climate Action (DEECA) introduced the C&I solar activity to the VEU program under Part 47 of the VEET Regulations, with additional requirements (including product requirements, pre-installation requirements and installation requirements) published in the VEU Specifications.

The C&I solar activity under the VEU program involves installing a solar photovoltaic (PV) system (consisting of inverters and PV modules) that has a solar PV module capacity of more than or equal to 30 kW and less than or equal to 200 kW that:

- is connected to a distribution network to produce and deliver energy
- is installed in compliance with the relevant Distribution Network Service Provider's negotiated connection contract (DNSP contract)
- is either a new connection or a connection alteration
- uses solar PV modules (solar panels) listed on the Clean Energy Council (CEC) approved modules list
- uses inverters listed on the CEC approved inverters list.

The activity also needs to comply with additional product requirements, pre-installation requirements and installation requirements listed in the Part 47 of the VEU Specifications. These requirements are outlined in this guide.

The C&I solar activities are based on a deemed method for calculating Victorian energy efficiency certificates (VEECs) under the VEU program. If your C&I solar activity is complex or does not meet the C&I solar activity requirements, you may be able to create VEECs under the measurement and verification (M&V) method for project-based activities (PBA) under the VEU program.

You cannot claim VEECs for the installation of the same solar PV system under both deemed C&I solar activity and PBA under the VEU program. Find out how to participate in project-based activities at www.esc.vic.gov.au/project-based-activities

1.1. Which activities are eligible?

For C&I solar activities to be eligible under the VEU program,

- the activity must take place at an eligible site
- the products installed must be eligible
- the activity must be undertaken from the date the relevant accredited person was approved to undertake C&I solar activities
- the activity must meet activity installation limits set out in section 1.1.3 below
- the activity must be undertaken in accordance with all applicable accreditation conditions activity requirements, training and competency requirements and record-keeping requirements.

Table 1 below sets out eligible C&I solar activity scenarios for solar PV systems under this activity.

Table 1: Eligible activity scenarios for the C&I solar activity (activity 47)

Product category/ Activity scenario	Requirement of system to be installed
47A	A solar PV system that has a solar PV module capacity of more than or equal to 30 kW and less than or equal to 100 kW: • is connected to a distribution network to produce and deliver energy • is installed in compliance with the relevant DNSP contract • can be either a new connection or a connection alteration • uses solar photovoltaic modules (solar panels) listed on the CEC approved modules list; and • uses inverters listed on the CEC approved inverters listed • has a total connected inverter capacity of at least 30kVA as installed and per the relevant DNSP contract
47B	A solar PV system that has a solar PV module capacity of more than 100 kW and less than or equal to 200 kW that: • is connected to a distribution network to produce and deliver energy • is installed in compliance with the relevant DNSP contract • can be either a new connection or a connection alteration • uses solar PV modules (solar panels) listed on the CEC approved modules list; and • uses inverters listed on the CEC approved inverters listed

- has a total connected inverter capacity of at least 30kVA as installed and per the relevant DNSP contract

1.1.1. Eligible products

Products to be installed under the C&I solar activity are not required to be listed in the VEU Register of Products. Products eligible to be installed under the C&I solar activity under the VEU program must meet the product requirements listed in table 2 below.

Accredited persons and scheme participants involved in the design and installation of solar photovoltaic (PV) systems under the VEU program are responsible for ensuring that all products used are listed on the CEC list of approved modules and inverters and comply with additional requirements listed in table 2 below.

Table 2: Additional product requirements (including product pre-installation and installation requirements) for C&I solar activity scenarios

Product category/ Activity scenario	Requirement type	Product criteria
47A and B	Product listing requirement	Solar modules and inverters must be listed on the CEC list of approved modules and inverters at the time of installation and not subject to a determination by the commission for exclusion under regulation 36(6A) of the VEET Regulations.
47A and B	Product warranty requirement	• All inverters installed must be covered by a warranty against defects for a period of at least 5 years from the date of installation, purchase or supply (as applicable). • All solar PV modules installed must be covered by a warranty against defects for a period of at least 10 years from the date of installation, purchase or supply (as applicable). In addition to the requirements of a warranty against defects under the ACL (Victoria), the warranty must also include the contact details of who to contact regarding the product warranty obligations in Australia in the event of a product failure, if the person who gives the warranty is not in Australia.
47A and B	Installation requirement	Solar PV system installed must support a monitoring portal capable of tracking system performance, system energy production and system energy consumption, and which is able to be accessed by the end user.

47A – for systems less than 100 kW	Pre-installation requirement	All solar PV module manufacturers must be listed by the Clean Energy Regulator as a participating brand in the industry-led Solar Panel Validation Initiative.

1.1.2. Eligible sites, locations and upgrade system types

Eligible sites

To be eligible, the activity must:

- be undertaken at a non-residential premises[1] or site that is grid-connected.
- not be undertaken at:
  - a building that is classified as a Class 2 building (i.e. multi-unit residential buildings, e.g. apartment building).
  - at a 'scheduled activity premises' as defined in Regulation 4 of the VEET Regulations, unless it has been 'opted in' to the program as described in Regulation 28.

Eligible locations on sites

Solar PV systems can be installed in any location on eligible sites, including:

- solar PV panels mounted on rooftops (i.e. rooftop solar)
- solar PV panels mounted on outdoor structures (i.e. solar canopies)
- solar PV panels mounted on buoyant structures that float on bodies of waters (i.e. floatavoltaics)
- solar PV panels mounted on ground (i.e. ground-mounted solar)

Eligible system upgrade types

Solar systems able to be installed may fall under one of the following system upgrade types:

- New system being the first solar PV system installed at a particular NMI at a particular site

[1] This activity is not eligible to be undertaken at 'residential premises' which are defined in the VEET Regulations to mean:

(a) a building classified as a Class 1 building under Part A6 of Volume One of the Building Code; or

(b) a sole-occupancy unit in a building classified as a Class 2 building under Part A6 of Volume One of the Building Code; or

(c) a sole-occupancy unit in a building classified as a Class 3 building under Part A6 of Volume One of the Building Code; or

(d) a building classified as a Class 4 building under Part A6 of Volume One of the Building Code.

- Replacement system where all existing solar PV system components are removed/decommissioned
- Extension system where additional PV modules and inverters are added to an existing solar PV system.

The total solar system PV module capacity installed under the C&I solar activity of the VEU Program for all the above installation types must not exceed 200kW as specified in the DNSP contract.

1.1.3. Installation limits

A maximum of one solar PV system can be installed per National Metering Identifier (NMI) at a site. The NMI associated with the solar PV system installation must be clearly specified in the DNSP contract.

Refer to Appendix A for further guidance on what sites and system types are eligible for installation under the C&I solar activity of the VEU program.

1.2. Common activity requirements

Accredited persons and scheme participants must ensure that they undertake all VEU activities in accordance with the program rules as listed in the VEET Act, VEET Regulations (including the code of conduct provisions), VEU Specifications and VEET Guidelines.

In addition, all activities under the VEU program must be undertaken in accordance with the provisions of the *Australian Consumer Law*, the *Electricity Safety Act 1998*, the *Gas Safety Act 1997*, the *Occupational Health and Safety Act 2004* and the *Building Act 1993* or the regulations under any of those Acts.

Accredited persons must comply with all conditions of their accreditation, including any additional conditions imposed in relation to the C&I solar activity.

Marketing and lead generation requirements

Accredited persons and scheme participants (such as lead generators) must comply with all relevant laws when undertaking lead generation and marketing activities under the program including:

- the VEU code of conduct provisions in Schedule 6 of the VEET Regulations, including the ban on 'cold-call' telemarketing and doorknocking lead generation or marketing practices under the VEU program.
- Australian Consumer Law (Victoria) when engaging in lead generation and marketing practices permitted under the program.
- Telecommunications (Telemarketing and Research Calls) Industry Standard 2017 when engaging in telemarketing practices permitted under the program.
- Spam Act 2003 and the Spam Regulations 2021 when sending email or sms text messages for lead generation or marketing under the program. A summary of obligations is provided by the Australian Communications and Media Authority.

For further information on meeting your obligations under the VEU code of conduct, please review the code of conduct guideline and various supporting resources (including fact sheets and consumer resources) which are published on the commission website.

2. Requirements for personnel undertaking the C&I solar activity

2.1. Compliance with legislation and managing safety risks

A certificate cannot be created if the prescribed activity is not undertaken in accordance with provisions of the *Australian Consumer Law*, the *Electricity Safety Act 1998*, the *Gas Safety Act 1997*, the *Occupational Health and Safety Act 2004*, the *Building Act 1993* and regulations made under those acts.

An accredited person is responsible for ensuring any persons undertaking a prescribed activity (called scheme participants) are complying with all relevant legislation. We take non-compliance with these requirements seriously, particularly due to the potential safety risks associated with non-compliance. Accredited persons found creating certificates where the solar systems installed is not consistent with those requirements may be the subject of enforcement action.

To minimise risk and ensure a safe work environment, you and your installers should be aware of the risks involved in installing solar PV systems. Below are links to a number of reference documents published by other regulatory agencies:

- Guide to managing the risks of rooftop solar installation work published by Safe Work Australia
- Working safely when installing photovoltaic (PV) systems published by Energy Safe Victoria

2.2. Role of the lead designer and lead installer

Where multiple individuals are involved in the design or installation of a solar PV system, a designated **lead installer** and **lead designer** must be appointed for each installation.

The lead installer must be the individual on-site responsible for managing the installation of the solar system, including supervising other installers and ensuring compliance of the installation with VEU program requirements and relevant legislation. The lead designer must be the person leading the design of the solar PV system and ensuring that the system design is undertaken in accordance with relevant standards and program requirements.

These individuals:

- are responsible for signing the declaration on the VEEC assignment form, confirming that the system was designed and installed in accordance with relevant standards and program requirements

- must be registered with the commission before any VEECs are created for the C&I solar activity.

These individuals cannot be engaged to merely provide quality assurance on the design or install of the system at the point of completing the VEEC assignment form.

2.3. Required licensing, training and competency requirements

All solar system installations must be undertaken by persons holding the correct registration or licenses as required by legislation, including the Electrical Safety Act 1998 and regulations made under the Act.

Solar system designers and installers must also comply with the training and competency requirements set by the commission in the VEET Guidelines and need to provide evidence of compliance with these requirements to accredited persons.

2.3.1. Training and competency requirements for solar system designers

Solar system designers are responsible for:

- planning and designing the solar PV system layout
- ensuring the solar system meets Australian Standards and local grid requirements
- selecting approved panels and inverters
- producing documentation to support system performance, safety, and compliance

Table 3 below outlines the accreditations that a solar system designer must hold to design C&I solar PV systems for installation in the VEU program.

Table 3: Training and competency requirements for solar system designers

Accreditation	Detail
Solar Accreditation Australia (SAA) accreditation	Solar designers must hold current SAA accreditation in one of the following categories: • Grid Connected PV (GCPV) Design Only, or • GCPV Design & Installation.

2.3.2. Licensing, training and competency requirements for solar system installers

A solar system installer is defined as persons carrying out electrical installation work in relation to the installation of C&I solar systems as defined under the *Electricity Safety Act 1998.* Installers are responsible for the safe and correct installation of solar PV systems in accordance with relevant

legislation (including the *Electricity Safety Act 1998*), relevant Australian Standards (including AS/NZS 3000 Wiring rules) and Solar Accreditation Australia (SAA) requirements.

Table 4 below outlines the licenses, accreditations and training that installers must hold/complete to install solar PV systems under the C&I solar activity.

Table 4: Required training and competency requirements for solar system installers

Licence/accreditation/ training unit	Detail
SAA accreditation	Lead solar system installer must hold current SAA accreditation in one of the following categories: • GCPV Installation Only, or • GCPV Design & Installation.
Licensed electrician[2]	All electrical work involved in installation of the solar PV systems must be performed by a licensed electrician (A Grade). An apprentice electrician or supervised electrical worker can perform the work if supervised by a licensed electrician pursuant to section 39 of the *Electricity Safety Act 1998* and Regulation 507 of the Electricity Safety (General) Regulations 2019.
Working at heights safely training	All installers must have completed one of the following units of competency: • VU23631 Work safely on roofs with renewable energy systems, or • VU22744 Work Safely in the Solar industry.
White card / construction induction card	All Installers must have completed one of the following units of competency: • CPCWHS1001 Prepare to work safely in the construction industry. • CPCCWHS1001 Prepare to work safely in the construction industry

Table 5 below outlines the training we recommend solar system installers complete

[2] For useful guidance on who can undertake electrical installation work in C&I solar installations, please refer to Large-scale solar farms page published by Energy Safe Victoria

Table 5:Recommended training for solar system installers

Training unit	Detail
Decommissioning training	We recommend installers complete 2679 VIC Course in Decommissioning Solar PV for Safe Reuse or Recycling in order to support removal of replaced solar PV systems or system components in accordance with best practice approaches and to effectively manage e-waste and consider options other than disposal.
Manufacturer training for system installed	We recommend installers complete any training offered by the manufacturer on the specific solar PV solution that is being installed given: • installation requirements are usually specific to individual manufacturers, and warranties may require the installer to be accredited by the manufacturer • Specific training increases the competence of installers across the sector and provides greater assurance for the safety of installations.

2.3.3. Training and competency requirements for all other on-site solar PV workers

Other on-site solar PV workers are persons who may be involved in constructing the solar system, but not involved in carrying out electrical installation work. These persons may undertake other work such as:

- digging trenches, footings and other civil works,
- fetching and carrying tools and materials
- erecting solar panel support frames
- attaching panels (if extra-low voltage (ELV)) and other mechanical tasks.
- These persons cannot install or connect combiner boxes, direct buried cables, inverters, earthing systems or attach cables to structures.

Table 6 below outlines training that these persons must hold to be working on-site of C&I solar system installation projects.

Table 6: Required training and competency requirements for all other on-site solar PV system workers

Training unit	Detail
Working at heights safely training	On-site workers must have completed one of the following units of competency: • VU23631 Work safely on roofs with renewable energy systems, or

	• VU22744 Work Safely in the Solar industry.
White card / construction induction card	On-site workers must have completed one of the following units of competency: • CPCWHS1001 Prepare to work safely in the construction industry. • CPCCWHS1001 Prepare to work safely in the construction industry

2.4. Record keeping and registration requirements

Accredited persons must:

- maintain a register of licenses, accreditations and training to confirm all solar system designers and installers involved in undertaking the C&I solar activity have met all the licensing, training and competency requirements as set out above
- register the lead installer, lead designer and electrician who signs off on the certificate of electrical safety (CoES) for the activity (if CoES is not signed by the lead installer) as scheme participants via their VEU account in the VEU Registry prior to creating VEECs for activities undertaken by these persons
- submit proof of the license, accreditations and training of the lead installer, lead designer and electrician who signs off on the CoES for the activity (if CoES is not signed by the lead installer) when registering them as scheme participants in the VEU Registry.

3. Activity requirements for C&I Solar

Accredited persons should be aware of, and adhere to, below activity requirements to ensure compliance with legislation

3.1. Assignment of rights

An important program requirement is the valid assignment of the right to create VEECs from the energy consumer[3] to an accredited person. A VEEC assignment form must be signed by the energy consumer for accredited persons to create VEECs and demonstrate compliance with the legislation. You must also take steps to confirm that the person signing the assignment form has authority to sign on behalf of the energy consumer where the energy consumer is a corporate entity.

Download the VEEC assignment form template for this activity from the Commercial and Industrial Solar PV System activity page on the commission's website.

Energy consumers must be provided a copy of the VEEC assignment form at the time of signing (for written forms) or within 10 business days of signing (for electronic forms). Accredited persons should ensure that all personal information collected in the VEEC assignment form is held in accordance with the Information Privacy Principles under the Privacy and Data Protection Act 2014 (Vic). You can find more information on these principles at: https://ovic.vic.gov.au/privacy/.

3.2. SAA Installation requirements

Accredited persons and scheme participants undertaking C&I solar activities must size the system in accordance with SAA requirements for the design and installation of grid-connection solar photovoltaic systems as published here: SAA Requirements

We have listed the sizing requirements below for your ease of reference per SAA Requirements – Version 1.7. This is not authoritative and you should refer to the SAA requirements document for further guidance.

[3] Energy consumer can be the person/business consuming electricity or gas at a site/premises (e.g. tenant), or the landlord /owner of the site/premises.

3.2.1. PV to inverter ratio requirement – no batteries and AC coupled battery systems

For C&I solar activities without DC coupled battery systems, the following SAA sizing requirements must be met:

- the inverter nominal AC power output must be at least 75% of the PV array's peak power
- the total PV array size must not exceed the manufacturer's maximum allowable array size specifications.

3.2.2. PV to inverter ratio requirement – DC coupled battery systems

For C&I solar activities with DC coupled battery systems, the following SAA sizing requirements must be met:

- the inverter nominal AC power output can be less than 75% of the PV array's peak power
- the total PV array size must not exceed the inverter manufacturer's maximum allowable array size specifications.

We note that as SAA accredited installers, solar system installers are also expected to comply with all the requirements set out in the SAA requirements document, including installation requirements set out in section 5 of the document.

3.3. Compliance with relevant standards

All solar PV systems must be designed and installed in accordance with applicable standards and regulatory requirements. These include, but are not limited to:

- AS/NZS 3000 - Wiring Rules
- AS/NZS 5033:2021 - Installation and safety requirements for photovoltaic (PV) arrays
- AS/NZS 4777.1:2024 - Grid connection of energy systems via inverters - Part 1: Installation requirements
- AS/NZS 4777.2:2020 - Grid connection of energy systems via inverters – Part 2: Inverter requirements

It is the responsibility of accredited persons and scheme participants to ensure full compliance with these standards throughout the design and installation of solar PV systems.

For further guidance on solar installations, refer to Energy Safe Victoria's solar installations resource: Energy Safe Victoria – Solar Installations

3.4. Compliance with DNSP requirements

Accredited persons and scheme participants are responsible for ensuring that all solar PV system installations comply with the technical schedules and conditions outlined in the pre-approval and DNSP negotiated connection contract. This includes, but is not limited to:

- Compliance with all requirements specified in the negotiated connection contract.
- Installations passing electrical inspections and having a valid Certificate of Electrical Safety and electrical works request.
- Compliance with DNSP commissioning test reports and any other relevant tests required as part of the DNSP contract

We note the relevant DNSP is responsible for monitoring and enforcing compliance with the terms of the DNSP contract.

3.5. Quality assurance review requirements

It is anticipated that additional quality assurance activities may be required by accredited persons undertaking C&I solar activities. This may involve for example, an increase in assurance audit (potentially both frequency and sampling) or application of quality assurance review requirements via conditions on accreditation. For example, conditions on accreditation may require reporting on quality assurance activities, undertaking independent inspections of installations or meeting additional compliance assurance requirements prior to certificate creation.

3.5.1. Licensed Electrical Inspector (LEI) inspection checklist requirement

In Victoria, a licensed electrical inspector (LEI) must be engaged to inspect and certify solar PV systems is safe for connecting to the grid. The LEI is required to complete the inspection section of the Certificate of Electrical Safety (CoES) confirming the installation is compliant.

For C&I solar system installations under the VEU program, accredited persons must ensure the LEI who inspects and certifies the system also completes and signs off on an inspection assessment checklist as published in the VEET Guidelines (if any). The current checklist focuses on assessment of items which are a safety hazard which poses an imminent risk of damage to property or persons if not addressed. The LEI must complete and sign this checklist prior to completing the inspection section of the CoES in respect of the solar system installation.

Download a copy of the inspection assessment checklist template from the commission website here.

Accredited persons must collect a copy of the completed inspection assessment checklist and provide it to the commission upon request. We may request that accredited persons upload the checklist when creating Victorian energy efficiency certificates (VEECs) for this activity.

3.6. Consumer information provision requirements

Table 7 below provides a summary of the records and information that must be provided to the consumer:

Table 7: Information to be provided to consumer for all commercial and industrial solar activities

Activity stage	Document or information
Prior to undertaking the installation	• Consumer quote and site-specific design and performance information • VEET Scheme Consumer Factsheet. • Information as set out in the VEU Code of Conduct, including clear and accurate information on the activity (e.g. product performance and suitability of the product to that person and premises), information about your rights and obligations under the VEU program, terms and conditions of the contract, and contact details of the person to be undertaking the installation.
On completion of the installation	• Tax invoice • VEEC assignment form • Certificate of Electrical Safety • Information as set out in the VEU Code of Conduct including dispute resolution information, manufacturer's instructions, warranty for products supplied or installed (if applicable), and contact details of the accredited person and/or scheme participant who undertook the installation. • Minimum 10 year warranty against defects document for solar PV modules installed containing the business's name, address, email address and phone number of who in Australia to contact regarding product warranty obligations in the event of a product failure • Minimum 5 year warranty against defects document for inverters installed containing the business's name, address, email address and phone number of who in Australia to contact regarding product warranty obligations in the event of a product failure.

4. Record-keeping requirements for accredited persons

Accredited persons must collect records to demonstrate that each C&I solar activity has been undertaken in accordance with the VEET Regulations and VEU Specifications. Accredited persons are required to maintain documentation for each C&I solar activity and provide it to us upon request.

4.1. Record-keeping obligations

Accredited persons must keep appropriate records to verify all details of the activity which relate to the calculation of greenhouse gas abatement and the creation of VEECs.

We may ask to review these records prior to VEECs being registered, or up to six years after they are registered, as evidence that your upgrade complies with the legislation.

Your records must be an auditable record of the work undertaken. If your documentation fails to provide an auditable record of the work undertaken, you may be required to surrender VEECs equivalent to those which we cannot verify or be subject to other compliance and enforcement actions.

4.2. Geo-tagged photograph requirements

Accredited persons are required to take geo-tagged photographs to verify that the installation has been performed in accordance with the VEET Regulations. Geo-tagged photographs must:

- be clear and in focus
- include any relevant markings
- include a date stamp showing the date the photographs were taken
- include the GPS derived latitude and longitude coordinates. This should be stored in the metadata and generated automatically by the device used to take the geo-tagged photographs.

4.3. Minimum record-keeping requirements

For each C&I solar activity, APs must collect the evidence described in table 8 below.

Table 8: Record-keeping requirements for C&I solar activities (activity 47)

Requirement	Documentation	Description
Assignment of rights to create VEECs	VEEC assignment form	All fields in the VEEC assignment form must be completed and signed by the AP, the lead solar system designer, lead solar system installer and energy consumer, including signing of declarations as listed in the VEEC assignment form.
Evidence of information provided to energy consumer	Consumer quote and site-specific design and performance information	The consumer quote and site-specific design and performance information must include: • full system specifications, including quantity, size, brand and model of all components (modules, inverters, batteries (if applicable)) • detail of product and installation warranties applicable to the different components • written advice regarding applicable feed-in tariffs and any export constraints (as relevant) • expected system performance, including one or more of the following: – estimates for energy production – expected cost savings – expected payback period • total price of the eligible system, including a detailed breakdown of all costs – VEEC incentive and other incentive amounts (e.g. STCs) to be applied; and – the amount to be paid by the energy customer, including any upfront deposit required to be paid prior to the scheduled installation of the solar PV system activity. • We also recommend the quote and site-specific design include: • installation details including installation timeline and who is responsible for obtaining permits • a clear list of what is and isn't included in the quote

		• a visual representation, such as a satellite photo or 3D image, showing the proposed panel layout
Evidence of commercial transaction	Tax invoice	A valid tax invoice for the work carried out including: • the name, address, and Australian Business Number (ABN) of the supplier business • the name, address, and ABN/Australian Company Number (ACN) of the energy consumer • the date of issue of the invoice • the installation address • the brand(s) and model(s) of all installed solar PV modules and quantity • the brand(s) and model(s) of all installed inverters and quantity • the brand(s) and model(s) of all installed batteries and quantity (if batteries are installed) • the price of the system installed (before VEEC incentive is applied) • the VEEC incentive and other incentive amounts (e.g. small scale technology certificates (STCs)) applied • the amount paid by the energy consumer (after VEEC incentive and other incentives are applied).
Evidence of registered installer(s)	Geo-tagged photos of lead installer(s)	• Pre-installation photo of the installer - Taken in front of premises or business signage before any work begins with photo identification • Mid-installation photo of the installer - During inverter setup/mounting, installation of panels or racking going down. • Post-installation/commissioning photo of the installer - During commissioning of inverter, completion of panel installations or system demonstration with the authorised signatory (energy consumer). • Nb: Where the lead installer changes, photo evidence the attendance of each lead installer at the relevant installation stage must be collected.

Upgrade product(s)	Technical specification/data sheet(s)	Manufacturer datasheets must be supplied for each of the following installed components: • Inverter(s) • PV module(s) • Battery (if applicable) Each datasheet must clearly display the product model, electrical specifications, and relevant certifications.
Upgrade product(s)	Geo-tagged photos of installed inverter(s)	The photos must show: • the mounted inverter in its installed location • the brand and model of the inverter(s) • the serial number on the inverter label(s) (clearly visible and legible).
Upgrade product(s)	Geo-tagged photos of installed panels	The photos must show: • all newly installed panels at the installation site • the brand and model of the panel(s) • as many panels in frame as possible. At least one aerial or elevated photograph should be taken to capture the full solar PV array. If the entire array cannot be captured in a single photo, multiple photographs may be taken.
Upgrade product(s) (as required)	Geo-tagged photo(s) of installed batteries (if installed)	The photo(s) must show the mounted battery unit(s) in its installed location.
Installation requirement – monitoring portal	One of the following: • Geo-tagged photo(s) of the activity monitoring portal • A video (less than 2GB in size) of the active monitoring portal	The evidence must clearly show the monitoring portal interface showing: • Real-time data displaying solar energy generation, system performance and on-site energy consumption. • System identification information (such as the monitoring portal serial number, address or NMI) where the solar PV system has been installed.

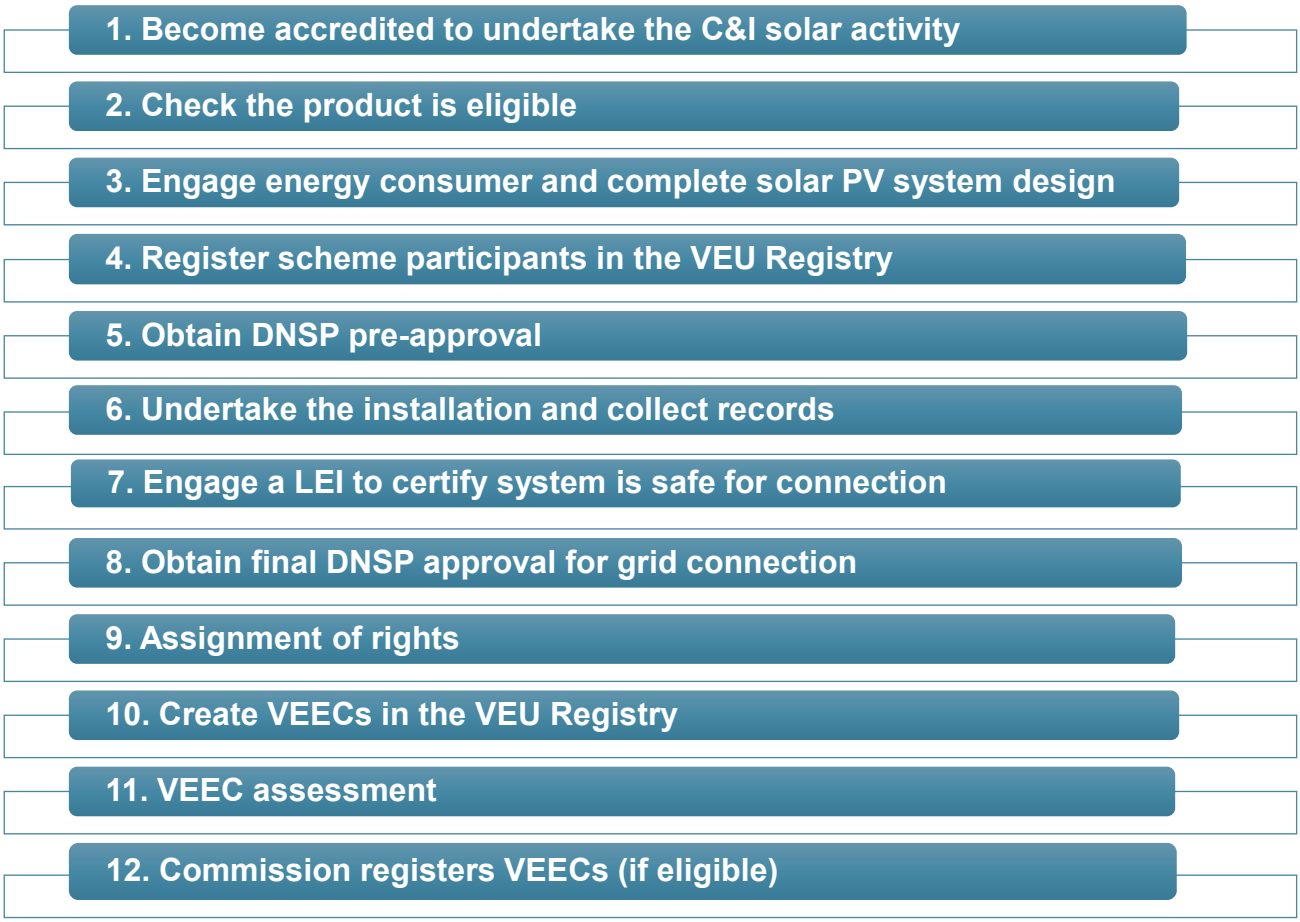
	• Report output from the monitoring portal	
Evidence of compliance with Electrical Safety Act 1998	Certificate of electrical safety (CoES)	The CoES must clearly detail the work performed and must include: • type and quantity of components installed (e.g. panels, inverter model, battery system) • whether the work involved a new installation, upgrade, or replacement • system configuration (e.g. description of system layout).
Evidence of key safety risks having been assessed and rectified as needed	Inspection assessment checklist	The inspection assessment checklist must have been completed and signed by the LEI who inspected and certified the system for connection to the grid Download a copy of the checklist template here
Evidence of solar system design and specifications	Single-line diagram (SLD)	The SLD must accurately reflect the solar system layout, must be in electronic format (no hand drawn sketches), and must include the following requirements: • Title block, containing: – drawing name, unique drawing number – date and version number – solar system designer and authoriser name – site address and national meter identifier (NMI) • key/legend to single-line diagram • Labels distinguishing between existing and new components of the solar PV system installation[4]. • System details, including:

[4] If the system is an extension or upgrade, you must provide detailed information on the position of the new panels relative to the existing system (i.e. east of existing panels, on northern roof, on shed etc.). SLDs without detail of the location of the new panel(s) may not be accepted.

		– total system size (kW/kVA) – number and model of solar panels – number and model of inverters – battery system details (if applicable) – export control settings and limits – phases involved (single-phase or three-phase) • Electrical configuration details, including string configuration) To assist us to review SLDs in a timely manner, we recommend the following information also be captured in the SLD to clearly and accurately represent the solar PV system's electrical layout. • wiring from panels to inverter, inverter to site loads, and inverter to grid • all switchboards (e.g. MSB, DB, PVDB) clearly labelled • main solar and battery isolators (must be lockable with a padlock and labelled) • point of supply and boundary to DNSP network • circuit breakers, anti-islanding protection, contactors, CT/VT connections, earth and neutral connections and communication links • energy management system and export limiting devices • clearly marked backup/essential loads circuit and non-essential loads circuit (if used).
Evidence the system is installed, operational and capable of generating electricity	Document evidencing system is DNSP connected (e.g. DNSP approval/ commissioning document, meter reconfiguration and activation document)	The document must show: • the NMI or address confirming the specific site where the solar upgrade has been installed • date of connection/energisation.

5. C&I solar activity process

This section provides you with the process for undertaking a commercial and industrial solar activity under the program



5.1. Become accredited to undertake the C&I solar activity

You must be accredited/approved to undertake the C&I solar activity to create VEECs. To become accredited/approved to undertake this activity, we must be satisfied that you are competent and capable and fit and proper to undertake the activity.

Visit www.esc.vic.gov.au/become-veu-accredited to access the Application Guide for Accredited Persons and for more information on how to become accredited.

5.2. Check the product is eligible

Accredited persons and/or scheme participants must ensure that solar PV panels and inverters installed under the program's C&I solar activity meet product requirements set for the activity. Refer to table 2 above for further information on these requirements.

5.3. Engage energy consumer and complete solar PV system design

Before selling and installing systems, solar PV system designers must design the system appropriate to the energy consumer's needs and the location of installation. The energy consumer must be provided a quote and site-specific design and system performance information prior to signing a contract for system installation. The requirements for what need to be included in the consumer quote and site-specific design and performance information is listed in Table 8.

This helps ensure the consumer is provided the necessary information (including system's specifications, expected system performance, government incentive amounts, and price to be paid for the solar PV upgrade) to enable them to make an informed choice on their solar system purchase.

5.4. Register scheme participants in the VEU Registry[5]

Accredited persons must register the lead installer, lead designer and licensed electrician who signs off on the CoES of an activity (if CoES is not signed by the lead installer) as scheme participants via their VEU account in the VEU Registry prior to creating VEECs for activities undertaken by them.

You can register these personnel as a scheme participant in the VEU Registry under 'My Account'. You will need to submit evidence of their relevant license, accreditations and/or training when registering them as scheme participants in the VEU Registry (see section 2.4 above).

We will review and approve registration of scheme participants for this activity. You will only be able to select individuals as scheme participants as part of VEEC creation after we have verified them for registration in the VEU Registry.

5.5. Obtain DNSP pre-approval

Accredited persons and/or scheme participants must ensure they obtain all necessary approvals prior to undertaking a solar PV system installation. This includes gaining the necessary pre-

[5] We note that we are currently working on deploying changes to the VEU Registry to support creation of VEECs and registration of scheme participants for this activity. We anticipate these changes will be live on 25 November.

approvals from the relevant DNSP for grid connection and system integration to ensure the system can be safely and technically connected to the grid.

For detailed information on DNSP approval processes and technical requirements, contact the DNSP responsible for the geographic area where the C&I solar upgrade will occur.

5.6. Undertake the installation and collect records

Solar system designers and installer must comply with the program rules as set out in the VEET Regulations and VEU Specifications, as well as other relevant legislation, including the *Electricity Safety Act 1998*, the *Gas Safety Act 1997*, the *Occupational Health and Safety Act 2004*, and the *Building Act 1993* (and any regulations made under any of those Acts) when undertaking the installation. Records outlined in section 4 of this document must also be collected during the installation.

5.7. Engage a LEI to certify system is safe for connection

An accredited person or scheme participant must engage a Licensed Electrical Inspector (LEI) to inspect and certifying solar PV systems are safe for connecting to the grid. The LEI who inspects and certifies the system must also sign off on an inspection assessment checklist. This checklist, which is only required for C&I solar system installations undertaken under the VEU program, is additional to the requirement for the LEI to sign the inspection section of the installation's CoES.

5.8. Obtain final DNSP approval for grid connection

Final approval from the relevant DNSP must be obtained before VEECs can be created for a C&I solar activity. The approval confirms that the solar PV system complies with all DNSP technical and safety requirements and is complete and capable of producing electricity.

On completion of the installation, the energy consumer must be provided with records listed under section 3.6 of this guide.

The accredited person and/or installer must collect records as listed under section 4 of this guide.

5.9. Assignment of rights

An important part of the certificate creation process is the valid assignment of the right to create VEECs from the consumer to an accredited person.

The assignment form must be completed and relevant declarations signed by the accredited person, lead solar system installer, lead solar system designer and energy consumer. Ensure the signatory has the legal authority to sign on behalf of the energy consumer entity.

5.10. Create VEECs in the VEU Registry

Prior to creating VEECs for an activity, accredited persons must have collected the required records for the installation as specified in section 4 of this guide. We may ask for these records as part of our certificate assessment process.

To create VEECs in the VEU Registry, you can upload the activity using the activity submission form in the VEU Registry. After you press the 'submit' button, the VEECs associated with your activities are created and assigned a unique identifier.

A certificate creation fee[6] per certificate applies to all VEECs created by an accredited person. We issue invoices on Tuesdays and Thursdays each week for VEECs created by accredited persons. If you identify an issue with activities you have submitted for creation, to avoid being charged a creation fee for VEECs you have created, you will need to withdraw the VEECs before 6am on Tuesday and Thursdays.

5.11. VEEC assessment

Once you have paid your certificate creation fees, we will assess the created VEECs for eligibility for registration. This process involves checks to verify that VEECs have been created in accordance with the VEET Act and VEET Regulations. Given the complex nature of these upgrades and the potential VEEC volumes involved for a single installation, a detailed assessment of each activity submitted for VEEC creation may be conducted. We may require you submit to us record evidence as part of that assessment process.

5.12. Commission registers VEECs (if eligible)

Once your VEEC creation claims have been validated, we will register your VEECs and notify you that the VEECs are available to be traded and/or surrendered.

[6] See VEU program fees page to find out certificate creation fee amount:

6. Calculating VEECs

The number of Victorian energy efficiency certificates (VEECs) you receive for a given C&I solar activity is based on the deemed abatement associated with the activity.

For C&I solar activities, the deemed abatement is calculated using assumptions about an upgrade situation's key variables, such as system size, the deemed lifetime of a solar PV system, and estimated on-site consumption of solar across a range of business types.

Due to these assumptions, the deemed abatement calculated may vary from the actual abatement achieved for a particular upgrade. If you wish to claim VEECs using a more accurate abatement value, the measurement and verification method for project-based activities is an available option.

The key variables used to calculate the number of VEECs for the commercial and industrial solar activity are:

- System size
- Lifetime
- Input factor
- Regional factor

The VEEC calculation method is detailed further in part 47 of the VEU Specifications. Appendix B includes examples of VEEC calculations for this activity.

An explanation of some of the key calculation variables is provided below.

6.1. Calculation variables

6.1.1. System size

The system size input value is the total rated solar photovoltaic module power output (in kW)

6.1.2. Input factor

The input factor is based on the estimated on-site self-consumption of solar across a range of business types.

The input factors are as follows:

- For a system size less than or equal to 100 kW is 0.133
- For a system size more than 100 kW is 0.25

6.1.3. Lifetime

The lifetime provided for all scenarios for the C&I solar activity is 10 years.

6.1.4. Regional factor

Regional factor is the input value used to account for fluctuations in average energy usage due to distribution losses. The regional factors are as follows:

- For upgrades in metropolitan Victoria the regional factor is 0.98
- For upgrades in regional Victoria the regional factor is 1.04.

Appendix A: C&I solar activity – eligibility of different installation scenarios

Scenario 1 – Installation of a solar PV systems above 200 kW

An energy consumer wants to install a system greater than 200 kW and claim VEECs for the first 200 kW of the system

- The installation is **not eligible** to claim VEECs for the system under C&I solar activity as it is above the maximum size allowable for the activity of 200kW
- The M&V method under the PBA stream is an available option to claim VEECs for installation of solar PV systems above 200 kW.

Scenario 2 – Claiming under both C&I solar activity and M&V for the same solar PV system (between 30kW and 200kW)

An energy consumer wants to claim upfront VEECs under the C&I solar deemed activity by installing a 200 kW solar system and 'top-up' incentives by undertaking an M&V activity for the same system.

- The installation is not eligible to claim VEECs under both the C&I solar activity (deemed method) and M&V method.
- C&I solar systems can be installed under either the C&I solar activity (deemed method) or the measurement and verification method for project-based activities. VEECs cannot be claimed for the same system under both methods.

Scenario 3 – Installing an initial 30 to 200 kW system and installing additional capacity under M&V method

An energy consumer wants to install a solar system greater than 200 kW (say 500kW) in two stages. For example, they want to:

- install a 200 kW system and claim VEECs under the C&I solar activity (first stage), and
- install an additional 300kW system and claim VEECs under the M&V method (second stage)

- The first stage installation is **eligible** to claim VEECs under the C&I solar activity provided the system is installed and energised. A DNSP contract evidencing energisation of the 200kW system will be required.
- The second stage installation is **eligible** to claim VEECs under the M&V method. The energy savings from the 200kW system must be excluded as part of the M&V project.

Scenario 4 – Installing a 30 to 200kW solar PV system in stages

An energy consumer wants to install a 200kW solar system in two stages. For example, they wish to install a 100kW system in the first stage (in order to claim STCs for the installation) and to then install an additional 100kW system in the second stage. Both systems are connected to the same NMI. The energy consumer wishes to claim VEECs for the entire 200kW system.

- The installation **is eligible** to claim VEECs for the whole 200kW system provided the VEECs are claimed after both 100 kW systems have been energised and the DNSP contract evidences energisation of a 200kW system. The records collected evidencing the installation of the system (e.g. single line diagram) must also show installation of a 200kW system.

Scenario 5 – Installing additional capacity (extensions)

An energy consumer with an existing 100 kW system wants to install an additional 200 kW capacity and to claim VEECs for the additional 200kW capacity.

- The installation **is eligible** to claim VEECs for the additional 200kW system capacity installed. The DNSP contract must evidence the installation and energisation of the additional 200kW system. The SLD for must clearly show the existing system and new system.

Appendix B: Calculation for C&I solar activities and worked examples

VEECs for these activities are calculated using the following equation (VEECs equivalent to tonnes of CO_2 equivalent emissions abated):

$$GHG\ Eq.Reduction = System\ size \times Input\ factor \times Lifetime \times Regional\ Factor$$

- GHG Eq.: greenhouse gas equivalent, in tonnes of CO_2 equivalents
- System size: Total rated solar photovoltaic module power output (in kW) (as per VEU Specifications)
- Input factor: Input value based on system size (as per VEU Specifications)
- Lifetime: Lifetime factor (as per VEU Specifications)
- Regional factor: climatic region applicable to the site (as per VEU Specifications)

Worked examples for creating VEECs

Activity 47A – System with solar PV module output of 40kW in Regional Victoria

- System size is 40kW based on the total rated solar photovoltaic module power output (in kW)
- Input factor is 0.133 for a system size less than or equal to 100 kW
- Lifetime is 10
- Regional factor is 1.04 for upgrades in regional Victoria

Table 9: Worked example for activity 47A: A solar photovoltaic system that has a solar photovoltaic module capacity of more than or equal to 30 kW and less than or equal to 100 kW

Activity	Upgrade example scenario	Greenhouse gas equivalent reduction equation	VEECs generated
47A	Installing a solar system in regional Victoria	40 x 0.133 x 10 x 1.04	55

Activity 47B – System with solar PV module output of 200kW in Metropolitan Victoria

- System size is 200kW based on the total rated solar photovoltaic module power output (in kW)
- Input factor is 0.25 for a system size more than 100 kW.
- Lifetime is 10

- Regional factor is 0.98 for upgrades in metropolitan Victoria

Table 10: Worked examples for activity 47B: A solar photovoltaic system that has a solar photovoltaic module capacity of more than 100 kW and less than or equal to 200 kW t

Activity	Upgrade example scenario	Greenhouse gas equivalent reduction equation	VEECs generated
47B	Installing a solar system in Metropolitan Victoria	200 x 0.25 x 10 x 0.98	490

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1.0	First release	31 October 2025
1.1	Updates to guide to include new inspection assessment checklist as part of record-keeping requirements	23 December 2025