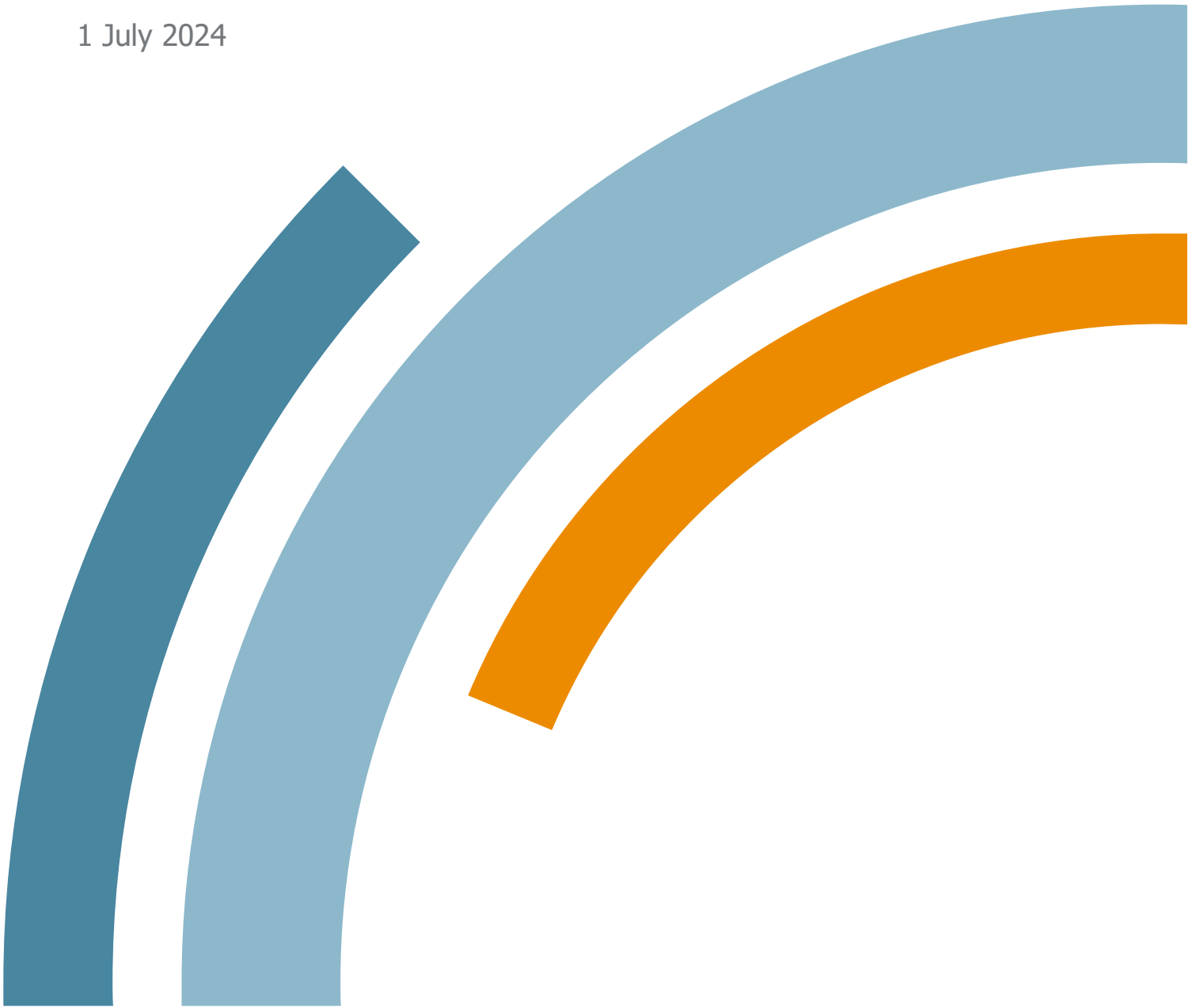


# Water Heating and Space Heating and Cooling Activity Guide

1 July 2024



**An appropriate citation for this paper is:**

Essential Services Commission 2024, Water Heating and Space Heating and Cooling Activity Guide, 1 July

**Copyright notice**

© Essential Services Commission 2024



This work, Water Heating and Space Heating and Cooling Activity Guide, is licensed under a Creative Commons Attribution 4.0 licence [[creativecommons.org/licenses/by/4.0](https://creativecommons.org/licenses/by/4.0)]. You are free to re-use the work under that licence, on the condition that you credit the Essential Services Commission as author, indicate if changes were made and comply with the other licence terms.

The licence does not apply to any brand logo, images or photos within the publication.

# Contents

Guide overview	3
1. Introduction to water heating and space heating and cooling activities	5
1.1. Water heating activities	5
1.2. Space heating and cooling activities	6
1.3. Summary of common requirements for water heating and space heating and cooling activities	6
2. Activity requirements – water heating activities	8
2.1. Eligible activities	8
2.2. Eligible premises and installation limits	9
2.3. Licence/registration requirements for installers	9
2.4. Pre-installation requirements – sizing (residential premises only)	12
2.5. Installation requirements	12
2.6. Decommissioning and disposal requirements	12
2.7. Consumer information provision requirements	16
2.8. Record-keeping requirements	17
3. Activity requirements – space heating and cooling activities	20
3.1. Eligible activities	20
3.1.1. Activity 6: Space heating and cooling – High efficiency reverse cycle air-conditioner	20
3.1.2. Activity 28: Space heating and cooling – Gas heating ductwork	24
3.2. Eligible premises and installation limits	25
3.3. Licence requirements for installers	26
3.4. Pre-installation requirements	28
3.5. Decommissioning and/or disposal requirements	29
3.5.1. Decommissioning and disposal requirements – space heating and cooling activities (activity 6)	29
3.5.2. Decommissioning and disposal requirements – space heating and cooling activities (activity 28)	32
3.6. Consumer information provision requirements	33
3.7. Record-keeping requirements	33
4. Activity process for water heating or space heating and cooling activities	37
4.1. Become accredited	37
4.2. Get product approved (if not already approved)	37
4.3. Provide advice to consumer/agree scope of work	38
4.4. Undertake the activity and collect records	38

4.5. Assignment of rights	38
4.6. Dispose of waste and debris from the activity	38
4.7. Collect documentation and create VEECs online	39
4.8. VEEC assessment	39
4.9. Commission approves or refuses VEECs for registration	40
5. Calculating the number of eligible VEECs	41
5.1. VEEC calculation method for water heating activities	41
5.2. VEEC calculation method for space heating and cooling activities	42
Appendix A: List of Refrigerants (including alternative refrigerants) with their global warming potential (GWP) values	44

# Guide overview

Accredited persons (APs) and their installers under the Victorian Energy Upgrades (VEU) program must comply with program requirements when undertaking water heating and space heating and cooling activities to create Victorian energy efficiency certificates (VEECs).

## About this guide

Use this guide for assistance in understanding the specific requirements for the water heating and space heating and cooling 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 five sections:

- Section 1: Introduction to water heating and space heating and cooling activities
- Section 2: Activity requirements for water heating activities
- Section 3: Activity requirements for space heating and cooling activities
- Section 4: Activity process for water heating or space heating and cooling activities
- Section 5: Calculating the number of eligible VEECs

## Who should use this guide?

You should use this guide if you are:

- seeking accreditation to undertake water heating and/or space heating and cooling activities under the VEU program
- an accredited person seeking guidance to undertake water heating and/or space heating and cooling activities under the VEU program
- For information about, or to apply for accreditation please refer to the commission's website: [www.esc.vic.gov.au/become-veu-accredited](http://www.esc.vic.gov.au/become-veu-accredited)

To access information about, or to apply for a product to be listed on the commission's Register of Products, please refer to the commission's website at: [www.esc.vic.gov.au/veu-product-applicants](http://www.esc.vic.gov.au/veu-product-applicants)

## Obligations and Program Guide

The [Obligations and Program Guide for Accredited Persons](#) provides overarching information about the VEU program and summarises key requirements that apply to all accredited persons and

provides information about how to create Victorian energy efficiency certificates (VEECs) under the program.

## **Legislative requirements**

The legal requirements for accredited persons and scheme participants (including installers) participating in water heating activities and space heating and cooling activities 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](http://www.esc.vic.gov.au/veu-legislation)

The information in this publication is intended to provide general guidance only. It does not constitute legal or other professional advice and should not be relied on as a statement of the law in any jurisdiction. While the commission has 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.

# 1. Introduction to water heating and space heating and cooling activities

An activity prescribed by the VEET Regulations is referred to as a 'prescribed activity'. The product category, category number and the criteria applying to that activity are contained in Schedule 2 of the VEET Regulations. Any specifications applicable to that product are published by the Secretary of the Department of Environment, Energy and Climate Action (the department) in the VEU Specifications.

Each activity must be undertaken in compliance with the legal requirements for that activity. These requirements relate to matters such as:

- code of conduct requirements
- product requirements
- eligibility requirements and installation limits
- licensing requirements for installers
- pre-installation requirements
- installation requirements
- decommissioning and disposal requirements
- consumer information provision requirements
- record-keeping requirements.

## 1.1. Water heating activities

Parts 1 and 3 of Schedule 2 of the VEET Regulations prescribe activities for the installation of efficient water heating products under the VEU program. The VEU Specifications set out eligible water heating scenarios and any additional requirements, including product performance requirements, decommissioning and disposal requirements, refrigerant requirements and pre-installation sizing requirements. The scenarios within a given activity require a different type of specified product to be installed. For this reason, each water heating activity scenario is treated as a separate activity for the purposes of VEEC creation and has its own separate creation form in the VEU Registry.

The water heating activities under the VEU program are listed in Table 1 below.

**Table 1: Current water heating activities under the VEU program**

VEU activity number
Activity 1C: Replacing an electric resistance water heater with an electric boosted solar water heater
Activity 1D: Replacing an electric resistance water heater with a heat pump water heater
Activity 3C: Replacing a gas or LPG water heater with a heat pump water heater
Activity 3D: Replacing a gas or LPG water heater with an electric boosted solar water heater

## 1.2. Space heating and cooling activities

Part 6 and 28 of Schedule 2 of the VEET Regulations prescribe activities for the installation of space heating and cooling products under the VEU program.

The VEU Specifications set out the eligible space heating and cooling scenarios and any additional requirements, including product performance requirements, decommissioning and disposal requirements, refrigerant requirements and pre-installation sizing requirements. The scenarios within a given activity are based on the type of product installed and the decommissioned product, if any. The space heating and/or cooling activities under the VEU program are listed in Table 2 below.

**Table 2: Current space heating and/or cooling activities under the VEU program**

VEU activity
Activity 6: Installing a high efficiency air-conditioner
Activity 28: Gas heating ductwork

## 1.3. Summary of common requirements for water heating and space heating and cooling activities

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* or the *Building Act 1993* or the regulations under any of those Acts.

### **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 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. Activity requirements – water heating activities

### 2.1. Eligible activities

Table 3: Eligible water heating activities – activities 1 and 3

Activity	Activity description	Product criteria
1C	Installer(s) must decommission an electric resistance water heater <sup>1</sup> and install a product which meets the product criteria.	Electric boosted solar water heater which: <ul style="list-style-type: none"> <li>• is certified by an accredited body as complying with AS/NZS 2712</li> <li>• has an insulated storage volume not exceeding 700 litres</li> <li>• achieves ≥ 60% annual energy savings determined in accordance with AS/NZS 4234:2021 and the <a href="#">Water Heating and Space Heating/Cooling Product Application Guide</a> when modelled in climate zone 4 (for activities 1C(i) and 3D)<sup>3</sup></li> </ul>
3D	Installer(s) must decommission a gas/LPG water heater <sup>2</sup> and install a product which meets the product criteria.	<ul style="list-style-type: none"> <li>• is modelled based on two load sizes. Product to be used for a medium upgrade, must be modelled under 'medium' and 'small' load conditions based on AS/NZS 4234:2021. Product intended for a small upgrade must be modelled under 'small' and 'very small' load conditions based on AS/NZS4234:2021.<sup>4</sup> (for activities 1C(i) and 3D)</li> <li>• is listed on the commission's Register of Products by the time VEECs are created.</li> </ul>
1D	Installer(s) must decommission an electric resistance water heater <sup>1</sup> and install a product which meets the product criteria.	Heat pump water heater which: <ul style="list-style-type: none"> <li>• is certified by an accredited body as complying with AS/NZS 2712</li> <li>• achieves ≥ 60% annual energy savings determined in accordance with AS/NZS 4234:2021 and the <a href="#">Water Heating and Space Heating/Cooling Product Application Guide</a> when:</li> </ul>
3C	Installer(s) must decommission a gas/LPG water heater <sup>2</sup> and install a product which meets the product criteria.	<ul style="list-style-type: none"> <li>– modelled in climate zone HP4-AU for products installed in climatic zone 4<sup>3</sup> (for activities 1D(i) and 3C)</li> <li>– modelled in climate zone HP5-AU for products installed in climatic zone 5<sup>3</sup> (for activities 1D(i) and 3D)</li> <li>• use a refrigerant that has a global warming potential of less than 700<sup>5</sup></li> </ul>

<sup>1</sup> Existing electric resistance water heater must be connected to an electric supply before it is decommissioned.

<sup>2</sup> Existing gas/LPG water heater must be connected to a gas supply before it is decommissioned.

<sup>3</sup> Product used for a 'medium upgrade' must be modelled at the 'medium' load and product used for a 'small upgrade' must be modelled at the 'small' load under AS/NZS 4234:2021 when calculating % annual energy savings.

<sup>4</sup> Modelling for two load sizes is required as the VEU Specifications provide that the Bs and Be values to be used in calculating the emission reduction for a 'medium upgrade' is to be determined when modelled with the 'small' load as defined in the AS/NZS 4234:2021 standard, and that the Bs and Be values for a 'small upgrade' is to be determined when modelled with the 'very small' load as defined in the AS/NZS 4234:2021 standard.

<sup>5</sup> See Appendix A for list of refrigerants (including alternative refrigerants) with global warming potential (GWP) values.

Activity	Activity description	Product criteria
		<ul style="list-style-type: none"> <li>is modelled based on two load sizes. Products to be used for a medium upgrade must be modelled under 'medium' and 'small' load conditions based on the AS/NZS 4234:2021. Products to be used for a small upgrade must be modelled under 'small' and 'very small' load conditions based on AS/NZS4234:2021<sup>5</sup> (for activities 1D(i) and 3D)</li> <li>is listed on our Register of Products by the time VEECs are created.</li> </ul>

## 2.2. Eligible premises and installation limits

Table 4: Eligible premises and installation limits for water heating activities

Activities	Premises type	Premises requirement	Installation limit
Activities 1 and 3	Residential	Construction of premises in which the activity is undertaken was not completed within 2 years of the activity being undertaken	Maximum of 2 products per premises
Activities 1 and 3	Non-residential	Construction of premises in which the activity is undertaken was not completed within 2 years of the activity being undertaken	Maximum of 5 products per premises

Note: For all decommissioning scenarios, only one upgrade product can be installed for each product that is decommissioned.

## 2.3. Licence/registration requirements for installers

Water heating activities under the program must be undertaken in accordance with the Building Act, Electricity Safety Act and regulations made under the legislation. Table 5 identifies current licence and/or registration requirements set out in the Plumbing Regulations 2018 and Electricity Safety (Registration and Licensing) Regulations 2020, which are administered by the Victorian Building Authority (VBA) and Energy Safe Victoria (ESV). Table 6 provides guidance from the Victorian Building Authority (VBA) on current plumbing licensing and/or registration requirements for installers undertaking heat pump water heating upgrades.

The information provided in Table 5 and Table 6 is available for general information purposes only and does not constitute legal or other professional advice. The information provides a summary of some licence and registration requirements as set out in the above Acts and regulations at the time of publication of this Guide and is not intended to be relied upon as a complete reference to an installer’s obligations under the Building Act, the Electricity Safety Act and regulations made under the legislation.

Accredited persons and installers should take appropriate measures to verify existing requirements set in other regulatory instruments at a specific point in time. Accredited persons and installers should obtain professional advice if they have any specific concerns before relying on the accuracy, currency or completeness of this information. Clarification on guidance on licensing requirements set out in Table 5 and Table 6 below should be directed to the VBA (in respect of plumbing work licence requirements) and ESV (in respect of electrical work licence requirements).

**Table 5: Licensing requirements for installers undertaking water heating activities and guidance on these requirements as administered by VBA and ESV**


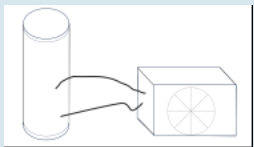
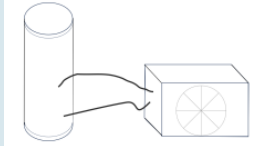
Type of work	Licensing requirements for installer(s)	Guidance on licensing requirements administered by VBA and ESV
Plumbing work	All plumbing work involved in decommissioning and/or installing a water heating product must be undertaken by an appropriately registered or licensed plumber by the VBA in accordance with the Plumbing Regulations 2018 <sup>6</sup> .	<ul style="list-style-type: none"> <li>• For plumbing work involving decommissioning an electric resistance water heater, the plumber must be registered<sup>7</sup> or licensed in water supply work.</li> <li>• For plumbing work involving decommissioning a gas-fueled water heater (gas/LPG storage, gas/LPG instantaneous or gas boosted solar), the plumber must be registered<sup>9</sup> or licensed in gas-fitting work and water supply work.</li> <li>• For plumbing work involving installing an electric boosted solar water heater, the plumber must be registered<sup>9</sup> or licensed in water supply work.</li> <li>• For plumbing work involving installing a heat pump water heater, see Table 6 below.</li> </ul>

<sup>6</sup> See [Victorian Building Authority website](#) for the different classes of plumbing works and the difference between registered and licensed plumbers.

<sup>7</sup> Registered plumbers must be supervised by licensed plumber when undertaking the plumbing work.

Electrical work	All electrical work involved in decommissioning and/or installing a water heating product must be undertaken by an appropriately licensed electrician by ESV in accordance with the Electricity Safety (Registration and Licensing) Regulations 2020.	<ul style="list-style-type: none"> <li>• For electrical work involving decommissioning an electric resistance water heater, the person must be a licensed electrician (grade A).</li> <li>• For electrical work involving decommissioning a gas-fuelled water heater (gas/LPG storage, gas/LPG instantaneous or gas/LPG boosted solar) and installing an electric water heater (electric boosted solar or heat pump), the person must be a licensed electrician (grade A)</li> <li>• For electrical work involving decommissioning an electric resistance water and installing an electric water heater (electric boosted solar or heat pump water heater), the person must be a licensed electrician (grade A).</li> </ul>
-----------------	---	---

**Table 6: Guidance from the Victorian Building Authority (VBA) on plumbing licensing requirements for installers undertaking heat pump water heating upgrades**

Heat Pump Water Heater installed (configuration and refrigerants use)	Water Heating System Being Replaced	
	Replacing electric resistance water heater	Replacing type A gas-fuelled water heaters
 <p>All In One (pre-charged integrated / self contained (where lines are connected))</p> <p>No connection required with external refrigerant unit</p>	<p>Licensed and registered plumbers in water supply work can undertake the upgrade.</p> <p>Apprentices can undertake the upgrade but must be supervised by a plumber licensed in water supply work.</p>	<p>Licensed and registered plumbers in water supply work AND gasfitting work can undertake the upgrade.</p> <p>Registered plumbers in water supply work AND gasfitting work or apprentices can undertake the upgrade but must be supervised by a plumber licensed in water supply work AND gasfitting work.</p>
 <p>Split system – water circulating.</p> <p>No use of refrigerants.</p>	<p>Licensed and registered plumbers in water supply work can undertake the upgrade.</p> <p>Apprentices who can undertake the upgrade must be supervised by a plumber licensed in water supply work.</p>	<p>Licensed plumbers in water supply work AND gasfitting work can undertake the upgrade.</p> <p>Registered plumbers in water supply work AND gasfitting work or apprentices can undertake the upgrade but must be supervised by a plumber licensed in water supply work AND gasfitting work.</p>
	<p>Licensed plumbers in water supply work AND refrigerated air conditioning work can undertake the upgrade.</p> <p>Registered plumbers in water supply work AND refrigerated air conditioning work or apprentices can undertake the upgrade.</p>	<p>Licensed plumbers in water supply work, gasfitting work AND refrigerated air-conditioning work can undertake the upgrade.</p> <p>Registered plumbers in water supply work, gasfitting work AND refrigerated</p>

Split system – refrigerant circulating.	upgrade but must be supervised by a plumber licensed in water supply work AND refrigerated air conditioning work.	air-conditioning work or apprentices can undertake the upgrade but must be supervised by a plumber licensed in water supply work, gasfitting work and refrigerated air-conditioning work.
Connection with external refrigerant unit.		
All refrigerant types (including natural refrigerants)		
All connection types (whether pre-charged/quick connect or not)		

## 2.4. Pre-installation requirements – sizing (residential premises only)

Table 7: Pre-installation sizing requirements (residential premises only)

Activity	Pre-installation requirement
1C(i), 1D(i), 3C and 3D	<p>Before the consumer agrees to undertake the activity, an accredited person or scheme participant must:</p> <ul style="list-style-type: none"> <li>• provide the consumer with a copy of the current <a href="#">VEU Water Heating Consumer Fact Sheet</a>, as published on the department’s website</li> <li>• give clear and accurate information to the energy consumer about the suitability of the product to be installed for the hot water needs of the consumer, having regard to the consumer’s premises</li> <li>• advise the energy consumer on whether the size of the product to be installed is consistent with the size recommended in the VEU Water Heating Consumer Fact Sheet.</li> </ul>

## 2.5. Installation requirements

Table 8: Installation requirements

Activity	Installation requirement
1C(i), 1D(i), 3C and 3D	The product must not be installed together (in-line) with an additional hot water storage tank or hot water system e.g. a ‘manifold system’.

## 2.6. Decommissioning and disposal requirements

The decommissioning and disposal requirements that must be complied with when undertaking water heating activities are listed in Table below.

**Table 9: Decommissioning and disposal requirements for all water heating activities**

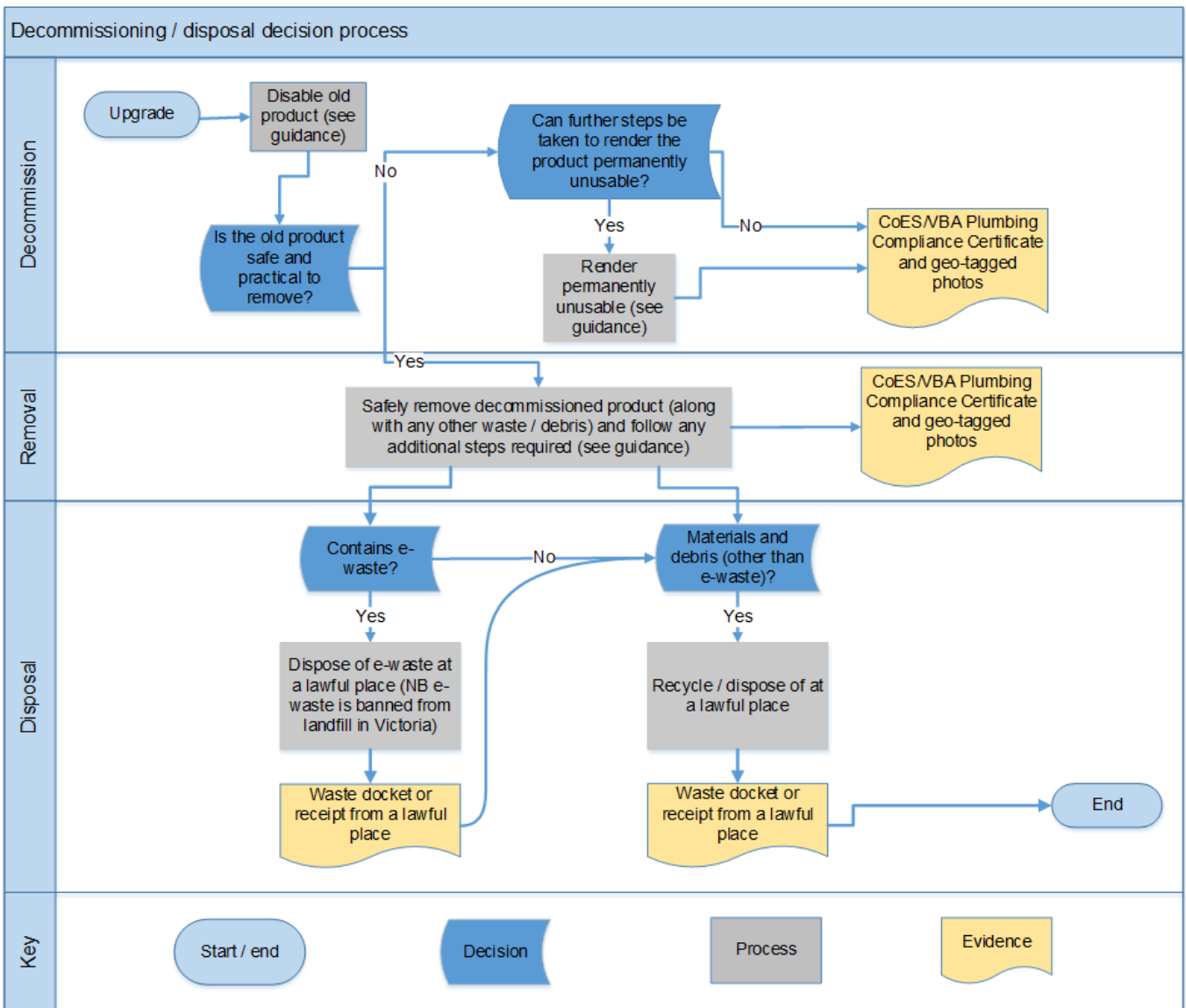
Requirement
<p>The decommissioned product must be decommissioned in a practical and safe manner to ensure it cannot be re-used again.</p>
<p>Any waste or debris generated from the activity, including the decommissioned product (where it is practical and safe to remove the decommissioned product), must be removed from the consumer's premises and disposed of in accordance with all applicable waste management requirements under the Environment Protection Act 2017 and its regulations.</p>
<p>Accredited persons or scheme participants must not install a product for the purposes of decommissioning it as part of an activity under the program (e.g. the baseline environment for a given installation has not been altered for the purposes of inflating the VEEC claim for that installation).</p>
<p>For an activity involving the decommissioning of product(s), the accredited person, the installer, and the energy consumer will need to provide a declaration to the commission stating that the decommissioned product was not installed for the purposes of decommissioning it as part of an activity under the program.</p>

The commission has developed a flowchart (see Figure 1 below) and a step-by-step guide (see Table 10 below) to assist accredited persons and scheme participants understand the key steps and decisions involved in determining how to decommission a product in a safe and practical manner.

The guidance includes:

- matters which installers must comply with as they are legislated requirements
- matters we expect installers to comply with as they align with best practice standards in order to protect the integrity of the program and consumers under the program
- guidance for installers on how to interpret a particular legislated requirement.

Figure 1: Decommissioning guidance flowchart for water heating activities





**Table 10: Decommissioning step-by-step guidance and considerations**

Stage	Decommissioning guidance
<p><b>Decommission</b></p>	<p>Steps involved in disabling the old product.</p> <ul style="list-style-type: none"> <li>• Is product connected to electrical supply? If yes, the product must be disconnected and appropriate steps taken to make the electrical connection safe.</li> <li>• Is product connected to gas supply? If yes, the product must be disconnected and appropriate steps taken to make the gas connection safe (e.g., sealed to be gastight)</li> <li>• Is product connected to water supply? If yes, the product must be disconnected and appropriate steps taken to make the inlet and outlet water connections safe (e.g., sealed to be watertight).</li> <li>• Is the water heater product attached to a solid fuel appliance? If yes, the water jacket must be removed from the solid fuel appliance or where it cannot be removed, appropriate steps taken to make the water jacket safe.</li> <li>• Is the product a gravity-fed water heater? If yes, it is the commission’s expectation that you drain the water from the tank.</li> </ul> <p>Is the old product safe and practical to remove?</p> <ul style="list-style-type: none"> <li>• If yes, the old product must be removed and recycled or disposed of appropriately.</li> <li>• If the old product is not safe and practical to remove, it is the commission’s expectation that consumers are informed that the product will be left in-situ before the consumer agrees to undertake the upgrade.</li> <li>• Products which the commission understands may not be safe and practical to remove include: <ul style="list-style-type: none"> <li>– systems where removal is impractical (e.g., gravity-fed water heater systems)</li> <li>– systems where removal would result in substantial remediation work to the building environment</li> <li>– systems where removal would raise health and safety risks. Where removal of product involves asbestos, the removal or disposal of asbestos must be removed and disposed of in accordance with applicable legislation.<sup>8</sup></li> </ul> </li> </ul> <p>If the old product is not safe and practical to remove, can further steps be taken to render the product permanently unusable in a safe and practical manner?</p> <ul style="list-style-type: none"> <li>• Steps which the commission considers may be safe and practical include: <ul style="list-style-type: none"> <li>– Removal of heating element or burner /electrical component /control board or unit.</li> <li>– If a water tank is present, damaging the tank to render permanently unusable, e.g., by drilling a hole in the tank.</li> </ul> </li> <li>• If no further safe and practical steps can be taken, leave product in a disabled state.</li> </ul>
<p><b>Removal</b></p>	<p>If it is safe and practical to remove the product:</p> <ul style="list-style-type: none"> <li>• any waste and debris (including the decommissioned product) must be removed from the consumer’s premises.</li> <li>• it is the commission’s expectation that there is clear agreement between the consumer and installer prior to the commencement of the installation about the scope of the installation, including whether a product is to be removed and the scope of any building repair work (if any) to be undertaken by the installer.</li> </ul>

<sup>8</sup> See [absestos.vic.gov.au website](http://absestos.vic.gov.au) for detailed information about responsibilities and legal duties of tradespeople and builders when dealing with asbestos.

Stage	Decommissioning guidance
<b>Disposal</b>	<ul style="list-style-type: none"> <li>You must manage your waste in accordance with the Victorian environment protection framework, established by the Environment Protection Act 2017 (EP Act) and Environment Protection Regulations 2021 (EP Regulations). This includes complying with the relevant waste duties.</li> <li>Under the EP Act and EP Regulations, waste duties apply to all business that generate, transport or receive industrial waste. In summary, businesses <a href="#">managing industrial waste</a> must: <ul style="list-style-type: none"> <li><a href="#">classify all waste streams</a> to determine the relevant waste code and waste type (industrial, priority or reportable priority waste). For instance, a decommissioned water heater or space heater is likely to be classified as waste code T300 (E-waste) which is priority waste.</li> <li>ensure waste is safely contained during <a href="#">transportation</a> and provide the transporter with enough information about the waste.</li> <li>ensure waste goes to a place that is lawfully authorised to receive it, which is called a <a href="#">lawful place</a>. Some common types of lawful places are permissioned resource recovery facilities, transfer stations and landfills. Sites with an Environment Protection Authority (EPA) permission are listed on a <a href="#">public register</a> maintained by the EPA. Note: e-waste is banned from landfill in Victoria.</li> </ul> </li> <li>Find out more about your waste duties on <a href="#">EPA's website</a>.</li> <li>If waste is to temporarily stored before it is collected and further transported for disposal, it must be stored properly and in accordance with relevant EP Act requirements, including any required <a href="#">EPA permissions</a>. Up to 5m3 of non-priority industrial waste or e-waste (excluding batteries) can be stored temporarily requiring an EPA permission.<sup>9</sup></li> </ul>

## 2.7. Consumer information provision requirements

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

**Table 11: Information to be provided to consumer for all water heating activities**

Activity stage	Document or information
Prior to undertaking the installation	<ul style="list-style-type: none"> <li><a href="#">VEET Scheme Consumer Factsheet</a>.</li> <li><a href="#">VEU Water Heating Consumer Fact Sheet</a> (residential installations only).</li> <li>Information as set out in the <a href="#">VEU Code of Conduct</a>, 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.</li> </ul>
On completion of the installation	<ul style="list-style-type: none"> <li>Tax invoice or proof of purchase</li> <li>VEEC Assignment Form</li> <li>Victorian Building Authority (VBA) Compliance Certificate and/or Certificate of Electrical Safety (as applicable to the installation).</li> <li>Manufacturer's instructions and warranty.</li> </ul>

<sup>9</sup> See schedule 1 and regulation 63 of the Environment Protection Regulations 2017.

Activity stage	Document or information
	<ul style="list-style-type: none"> <li>Information as set out in the <a href="#">VEU Code of Conduct</a> including dispute resolution information, manufacturer's instructions and warranty for products supplied or installed (if applicable), contact details of the accredited person and/or scheme participant who undertook the installation.</li> </ul>

## 2.8. Record-keeping requirements

Accredited persons are required to keep documents that record and explain all transactions and other acts engaged in, or required to be engaged in, as provided in the VEET Guidelines.

All documents are required to be maintained for at least 6 years and must be kept in writing in English or in a manner which enables the documents to be readily accessible and convertible into writing in English.

Table below sets out the detail of the records which will satisfy the record keeping requirements as set out in Annexure A to the VEET Guidelines. These records must be collected and retained by accredited for each water heating activity undertaken. The commission may require these documents to be produced.

**Table 12: Record-keeping requirements for all water heating activities**

Document(s)	Details to be provided
VEEC assignment form	Assignment form to be completed and signed by the installer and energy consumer, including signed agreement between the consumer and installer about the scope of the installation, including whether a product is to be removed and the scope of any building repair work (if any) to be undertaken by the installer.
Invoice or proof of purchase	<p>Document must identify:</p> <ul style="list-style-type: none"> <li>the installed product brand and model.</li> <li>the name and address of the energy consumer</li> <li>the name, address and ABN of the installer business</li> </ul> <p>For business or non-residential upgrades, the document must list:</p> <ul style="list-style-type: none"> <li>the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant)</li> <li>the installation address (if different to the energy consumer)</li> </ul>
Non prescribed certificate of electrical safety (CoES) <sup>10</sup>	<p>Either the VBA Compliance Certificate or CoES must detail:</p> <ul style="list-style-type: none"> <li>the installed product brand, model and serial number</li> <li>the type of the product decommissioned</li> <li>the brand and model of the decommissioned product where visible</li> </ul>

<sup>10</sup> A prescribed certificate of electrical safety is only required if the electrical mains conductors, main earthing system or main switchboard is modified.

Document(s)	Details to be provided
<p>and</p> <p>VBA Compliance Certificate<sup>11</sup></p>	<ul style="list-style-type: none"> <li>the method of decommissioning.</li> </ul> <p>An appendix(s) may be provided with the VBA Compliance Certificate or a CoES. Where an appendix is used, the following criteria must be met:</p> <ul style="list-style-type: none"> <li>the certificate must refer to the appendix and list the number of pages</li> <li>the appendix must be attached to the certificate</li> <li>each appendix page must be numbered, with the certificate number referenced on each page</li> <li>each appendix page must be signed by the plumber or electrician responsible for the completed work</li> <li>all premises being claimed for must be listed with the corresponding installed product information in the appendix (where multiple units at one address receive an upgrade)</li> <li>the type of work performed is specified for each premises being claimed for.</li> </ul>
<p>Geotagged photographs</p>	<p>Geo-tagged photographs which are date and time stamped showing:</p> <ul style="list-style-type: none"> <li>the existing product before the upgrade</li> <li>the brand, model and serial number of the existing product</li> <li>the existing product either disabled or rendered permanently unusable (where the product is not being removed from premises for disposal)</li> <li>the decommissioned product (either disabled or ready to be removed from the consumer's premises)</li> <li>the installed product after installation</li> <li>the brand, model and serial number of the installed product.</li> <li>the tank model number and heat pump model number of installed product (where product installed is a heat pump)</li> </ul> <p>All geo-tagged photographs must:</p> <ul style="list-style-type: none"> <li>be clear and in focus;</li> <li>include any relevant markings; 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 photos).</li> </ul>
<p>Disposal documentation</p>	<p>Documentation by accredited person and any third-party installer contractors, recording how the business complies with EPA waste duties, including:</p> <ul style="list-style-type: none"> <li>the classification of waste codes and waste type for the business' waste streams</li> <li>details of any contracts or arrangements with contracted transporters or disposal agents</li> <li>the name and location of the various authorised waste receivers you will be delivering your different waste streams to</li> <li>appropriate authorisation for the temporary storage of waste if more than 5m<sup>3</sup> of industrial waste (that is not reportable priority waste) is being stored by the business prior to disposal.<sup>12</sup></li> </ul>

<sup>11</sup> A VBA compliance certificate is required for all plumbing work where total value of the work (parts and labour is \$750 or more) of where work involves [specific types of plumbing work](#)

<sup>12</sup> See schedule 1 and regulation 63 of the Environment Protection Regulations 2017.

Document(s)	Details to be provided
<p>Disposal or recycling record/ disposal transportation record</p>	<p>For all decommissioned products removed from the premises, records that satisfy either option 1 or 2 below.</p> <p><u>Option 1:</u></p> <p>A waste receipt of invoice from a place authorised by the EPA to receive that particular type(s) of waste recording:</p> <ul style="list-style-type: none"> <li>• name and address of the authorised recipient</li> <li>• ACN and/or ABN of the authorised recipient</li> <li>• the date of delivery</li> <li>• waste description</li> <li>• waste amount (e.g. number of units or kg).</li> </ul> <p>Where the waste receipt or invoice is for decommissioned products from multiple upgrade sites, a document itemising the products removed per upgrade site to demonstrate the link between each upgrade site and the bulk waste receipt or invoice must be kept.</p> <p>Where the facility is unable to provide a waste receipt or invoice or where a provided waste receipt or invoice does not contain the details set out above, accredited persons may keep alternative records which enable you to demonstrate that the decommissioned product has been disposed of in compliance with the EPA legislation.</p> <p>An example of how you can meet this requirement would be to retain :</p> <ul style="list-style-type: none"> <li>• Geo-tagged photo(s) (taken at or outside the location of the EPA approved facility) of the decommissioned system including the system plate, along with a written record of the: <ul style="list-style-type: none"> <li>– name and address of the authorised recipient</li> <li>– the date of delivery</li> <li>– waste description</li> <li>– waste amount (e.g. number of units or kg)</li> <li>– decommissioned system information (e.g. brand, model, serial number).</li> </ul> </li> </ul> <p><u>Option 2:</u></p> <p>Third party contractor information – if disposed of via a contracted transporter or disposal agent, a document recording:</p> <ul style="list-style-type: none"> <li>• the name, ACN and ABN of the third party contractor company</li> <li>• the date service was provided</li> <li>• waste description</li> <li>• waste amount (e.g. number of units or kg)</li> <li>• name and address of the lawful place the waste is to be disposed at</li> <li>• ABN of the business operating the lawful place the waste is to be disposed at.</li> </ul> <p>Where the document is for decommissioned products from multiple upgrade sites, a document itemising the products removed per upgrade site to demonstrate the link between each upgrade site and the bulk waste receipt or invoice must also be maintained.</p>

## 3. Activity requirements – space heating and cooling activities

### 3.1. Eligible activities

#### 3.1.1. Activity 6: Space heating and cooling – High efficiency reverse cycle air-conditioner

Activity 6 requires installer(s) to:

- decommission product(s) under one of 11 different decommissioning scenarios, including one no decommissioning scenario (see Table 12 below)
- install one or more reverse cycle air-conditioners which meet the performance requirements from one of nine different product categories (6A, 6B(i), 6B(ii), 6C, 6D, 6E(i), 6E(ii), 6F and 6G) under the VEU Specifications (see Tables 13 and 14 below). Different product categories have been assigned to a reverse cycle air-conditioner based on whether it is ducted or non-ducted, and its size (cooling capacity).

When installing multi-split systems, all indoor units installed must be from the same original equipment manufacturer as the connected outdoor unit<sup>13</sup>.

Table 13: Eligible decommissioning scenarios for activity 6

Activity scenarios	Decommissioning scenario requirements
6A-G	(i) Installer(s) must decommission a hard-wired resistance electric room heater only <sup>14</sup> (no refrigerative air conditioner) which is the main form of heating any premises.
	(ii) Installer(s) must decommission: <ul style="list-style-type: none"><li>• a hard-wired resistance electric heater<sup>16</sup> which is the main form of heating any premises, and</li><li>• a refrigerative air conditioner (whether ducted or not)<sup>16</sup> that is not located in:<ul style="list-style-type: none"><li>○ in the case of an air conditioner in residential premises, a bedroom; or</li></ul></li></ul>

<sup>13</sup> This requirement applies from 1 January 2024.

<sup>14</sup> Existing electric appliances must be connected to an electric supply before it is decommissioned

## Activity scenarios      Decommissioning scenario requirements

- in the case of an air conditioner in business or non-residential premises, a room with an area of less than 20 m<sup>2</sup>.

(iii) Installer(s) must decommission a central electric resistance that provides heating to a space with a floor area of at least 100 m<sup>2</sup> or slab heater only<sup>16</sup> (no refrigerative air conditioner) which is the main form of heating any premises.

(iv) Installer(s) must decommission:

- a central electric resistance that provides heating to a space with a floor area of at least 100 m<sup>2</sup> or slab heater<sup>16</sup> which is the main form of heating any premises; and
- a refrigerative air conditioner (whether ducted or not)<sup>16</sup> that is not located in:
  - in the case of an air conditioner in residential premises, a bedroom; or
  - in the case of an air conditioner in business or non-residential premises, a room with an area of less than 20 m<sup>2</sup>.

(v) Installer(s) must decommission a ducted reverse cycle air conditioner<sup>16</sup> which is the main form of heating any premises.

(vi) Installer(s) must decommission a non-ducted reverse cycle air conditioner.<sup>16</sup>

(vii) Installer(s) must decommission a ducted gas heater only<sup>15</sup> (no refrigerative air conditioner) which is the main form of heating any premises.

(viii) Installer(s) must decommission:

- a ducted gas heater<sup>16</sup> which is the main form of heating any premises; and
- a refrigerative air conditioner<sup>16</sup> (whether ducted or not) that is not located in:
  - in the case of an air conditioner in residential premises, a bedroom; or
  - in the case of an air conditioner in business or non-residential premises, a room with an area of less than 20m<sup>2</sup>.

(ix) Installer(s) must decommission a non-ducted gas heater only<sup>17</sup> (no refrigerative air conditioner)

(x) Installer(s) must decommission:

- a non-ducted gas heater<sup>17</sup>; and
- refrigerative air conditioner<sup>16</sup> (whether ducted or not) that is not located in:
  - in the case of an air conditioner in residential premises, a bedroom; or

---

<sup>15</sup> Existing gas appliances must be connected to a gas supply before it is decommissioned

## Activity scenarios      Decommissioning scenario requirements

- in the case of an air conditioner in business or non-residential premises, a room with an area of less than 20m<sup>2</sup>.

(xi) No decommissioning.

**Table 14: Product criteria for reverse-cycle air conditioners to be installed under activity 6**

### Product criteria

- Product must be registered to the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Cth) (GEMS 2019 Determination).
- Product must be listed on the Register of Products by the time VEECS are created.
- For products registered to the GEMS 2019 Determination that have a HSPF and TCSPF for the specified GEMS Residential or Commercial Cold Zone, the product must:
  - achieve the minimum HSPF and TCSPF for the specified GEMS Residential Cold Zone (categories 6A, 6B, 6D, and 6F) specified in Table 14 below.
  - achieve the minimum HSPF and TCSPF for the specified GEMS Commercial Cold Zone (categories 6C and 6G) specified in Table 14 below; and
  - be registered to the relevant class (or classes) under that determination, specified in Table 14 below.
- For products registered to the GEMS 2019 Determination that do not have a HSPF and TCSPF for the specified GEMS Residential or Commercial Cold Zone, the product must:
  - achieve the minimum ACOP and AEER specified in Table 14 below
  - be registered to the relevant class (or classes) under that determination, specified in Table 14 below
- The global warming potential (GWP) of the refrigerant used in an air conditioner to be installed with a rated cooling capacity below 15 kW must be less than 700.<sup>16</sup>

<sup>16</sup> See Appendix A for list of refrigerant types with global warming potential (GWP) values.



Table 15: Minimum efficiency requirements for reverse-cycle air conditioners to be installed

VEU product category	Product description <sup>17</sup>	GEMS 2019 Class	GEMS 2019 min HSPF	GEMS 2019 min TCSPF	GEMS 2019 ACOP	GEMS 2019 AEER
6A	Ducted air to air R < 10 kW	Classes 10, 15, 18, or 19 <sup>18</sup>	3.6	4.4	3.9	3.5
6B(i)	Ducted air to air 10 kW ≤ R < 25 kW	Classes 6 (ducted units only), 11, 16 or 20 <sup>20</sup>	3.4	4.2	3.7	3.4
6B(ii)	Ducted air to air 25 kW ≤ R ≤ 39 kW	Classes 6 (ducted units only), 11, 16 or 20 <sup>20</sup>	3.2	3.6	3.7	3.4
6C	Ducted air to air 39 kW < R ≤ 65 kW	Classes 7 (ducted units only), 12, 17 or 21 <sup>20</sup>	3.2	4.8	3.5	3.2
6D	Non-ducted air to air R < 4kW	Classes 8, 13 or 18	4.2	5.4	4.4	4.1
6E(i)	Non-ducted air to air 4 kW ≤ R < 7 kW	Classes 9, 14 or 19	3.7	5.0	4.0	3.7
6E(ii)	Non-ducted air to air 7 kW ≤ R < 10 kW	Classes 9, 14 or 19	3.6	4.8	3.9	3.7
6F	Non-ducted air to air 10kW ≤ R ≤ 39kW	Classes 6 (non-ducted units only),	3.6	4.6	3.9	3.6

<sup>17</sup> 'R' refers to the standard rated standard cooling full capacity as defined in the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019.

<sup>18</sup> Products from GEMS classes 18, 19, 20 or 21 are only able to be approved under product category 6A, 6B(i), 6B(ii) and 6C from 1 January 2024

VEU product category	Product description <sup>17</sup>	GEMS 2019 Class	GEMS 2019 min HSPF	GEMS 2019 min TCSPF	GEMS 2019 ACOP	GEMS 2019 AEER
		11, 16 or 20				
6G	Non-ducted air to air 39kW < R ≤ 65kW	Classes 7 (non-ducted units only), 12, 17 or 21	2.7	5.3	3.8	3.4

### 3.1.2. Activity 28: Space heating and cooling – Gas heating ductwork

Table 16: Eligible activity scenarios under activity 28: Space heating and cooling – Gas heating ductwork

Activity	Activity description	Product criteria
28A	<p>Installers must:</p> <ul style="list-style-type: none"> <li>decommission gas heating ductwork that is connected to a ducted gas heater</li> <li>install a product which meets the product criteria</li> <li>install the ductwork according to requirements set out in AS 4254-2002</li> <li>connect it to an operable space heating product.</li> </ul>	<p>Flexible ductwork which:</p> <ul style="list-style-type: none"> <li>is constructed in accordance with AS 4254.1, tested and certified by an approved laboratory as complying with that standard, and labelled in accordance with the requirements set out in that standard</li> <li>is insulated using bulk insulation that is certified by an accredited body as complying with AS/NZS 4859.1 and achieves a minimum R-value of 1.5</li> <li>if installed in class 1 or 10 buildings, uses fittings that achieve the R-values specified by Table 3.12.5.2 of Volume Two of the BCA</li> <li>if installed in class 2 to class 9 building, uses fittings that achieve the minimum total R value specified by Specification J5.2b of Volume One of the BCA</li> <li>is listed on our Register of Products by the time VEECs are created.</li> </ul>
28B		<p>Rigid ductwork which:</p> <ul style="list-style-type: none"> <li>is constructed in accordance with AS 4254.2, certified by an approved laboratory as complying with that standard</li> <li>is longitudinally labelled at intervals of no more than 1.5 meters in characters that are clearly legible and at least 18mm high and state the duct manufacturer or assembler name, the diameter of the duct core, the R-value of the bulk insulation and whether the ductwork complies with AS 4254.2</li> </ul>

Activity	Activity description	Product criteria
		<ul style="list-style-type: none"> <li>is insulated using bulk insulation that is certified by an accredited body as complying with AS/NZS 4859.1 and achieves a minimum R-value of 1.5</li> <li>if installed in class 1 or 10 buildings, uses fittings that achieve the R-values specified by Table 3.12.5.2 of Volume Two of the BCA</li> <li>if installed in class 2 to class 9 building, uses fittings that achieve the minimum total R value specified by Specification J5.2b of Volume One of the BCA</li> <li>is listed on our Register of Products by the time VEECs are created.</li> </ul>

### 3.2. Eligible premises and installation limits

Table 17: Eligible premises and installation limits for space heating and cooling activities

Activities	Premises type	Premises requirement	Installation limits
6A, 6B (Ducted)	Residential	For activities involving decommissioning, construction of premises in which the activity is undertaken was not completed within 2 years of the activity being undertaken	1 product per premises
6A, 6B, 6C (Ducted)	Business/non-residential	For activities involving decommissioning, construction of premises in which the activity is undertaken was not completed within 2 years of the activity being undertaken	<p>5 products per premises for installations involving decommissioning</p> <p>2 products per premises for installations not involving decommissioning</p> <p>Total cap of 5 products per premises – 5 ducted products only able to be installed if the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> products are installed as a result of decommissioning an existing product</p>
6D, 6E, 6F (Non-ducted)	Residential	For activities involving decommissioning, construction of premises in which the activity is undertaken was not completed within 2 years of the activity being undertaken	<p>5 products per premises for installations involving decommissioning</p> <p>3 products per premises for installations not involving decommissioning</p> <p>Total cap of 5 products per premises – 5 non-ducted products only able to be installed if the 4<sup>th</sup> and 5<sup>th</sup> products are installed as a result of decommissioning an existing product</p>

Activities	Premises type	Premises requirement	Installation limits
6D, 6E, 6F, 6G  (Non-ducted)	Business/non-residential	For activities involving decommissioning, construction of premises was not completed within 2 years of the activity being undertaken	10 products per premises for installations involving decommissioning  3 products per premises for installations not involving decommissioning  Total cap of 10 products per premises – 10 non-ducted products only able to be installed if the 4 <sup>th</sup> to 10 <sup>th</sup> products are installed as a result of decommissioning an existing product

Note: For all decommissioning scenarios, only one upgrade product can be installed for each product that is decommissioned

### 3.3. Licence requirements for installers

Space heating activities under the program must be undertaken in accordance with the Building Act, the Electricity Safety Act, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Cth)*, and regulations made under any of those Acts. Table 17 identifies current licence and/or registration requirements set out in the Plumbing Regulations 2018, Electricity Safety (Registration and Licensing) Regulations 2020 and Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995, which are administered by the VBA, ESV and the Australian Refrigeration Council (ARC) respectively.

The information provided in Table 17 is available for general information purposes only and does not constitute legal or other professional advice. The information provides a summary of some licence and registration requirements as set out in the above Acts and regulations at the time of publication of this guide and is not intended to be relied upon as a complete reference to an installer's obligations under the Building Act, the Electricity Safety Act, the Ozone Protection and Synthetic Greenhouse Gas Management Act and regulations made under the Acts.

Accredited persons and installers should take appropriate measures to verify existing requirements set in other regulatory instruments at a specific point in time. Accredited persons and installers should obtain professional advice if they have any specific concerns before relying on the accuracy, currency or completeness of this information. Clarification on guidance on licensing requirements set out in Table 17 below should be directed to the VBA (in respect of plumbing work licence requirements), ESV (in respect of electrical work licence requirements) and ARC (in respect of refrigerant handling license requirements).

**Table 18: Licensing requirements for installers undertaking space heating and cooling activities**

Type of work	Licensing requirements for installer(s)	Guidance on licensing requirement in practice
Plumbing work	All plumbing work involved in decommissioning and/or installing a space heating and cooling product must be undertaken by an appropriately registered or licensed plumber by the Victorian Building Authority (VBA) <sup>19</sup> .	<ul style="list-style-type: none"> <li>• For plumbing work involving decommissioning gas heaters (ducted or non-ducted), the plumber must be registered<sup>20</sup> or licensed in gas-fitting work.</li> <li>• For plumbing work involving decommissioning refrigerative air conditioners (ducted or non-ducted), the plumber must be registered<sup>22</sup> or licensed in refrigerated air-conditioning work or the appropriate class of mechanical services work.</li> <li>• For plumbing work involving decommissioning or installing a reverse cycle air conditioner (ducted or non-ducted), the plumber must be registered<sup>22</sup> or licensed in refrigerated air-conditioning work or the appropriate class of mechanical services work.</li> <li>• For plumbing work involved in installing gas heating ductwork, the plumber must be registered<sup>22</sup> or licensed in the appropriate class of mechanical services work and gas fitting work.</li> </ul>
Electrical work	All electrical work involved in decommissioning and/or installing a space heating and cooling product must be undertaken by an appropriately licensed electrician by Energy Safe Victoria	<ul style="list-style-type: none"> <li>• For electrical work involving decommissioning gas heaters and installing reverse cycle air-conditioners, person must be a licensed electrician (grade A).</li> <li>• For electrical work involving decommissioning and installing the same type of electric product, person must be a Restricted Electrical Worker's Licence holder (with correct classification)<sup>21</sup> or be a licensed electrician (grade A).</li> <li>• For electrical work involving decommissioning and installing different types of electric products, person must be a licensed electrician (grade A).</li> <li>• For electrical work involving a new installation of reverse cycle air-conditioners, person must be a licensed electrician (grade A).</li> </ul>

<sup>19</sup> See [Victorian Building Authority website](#) for the different classes of plumbing works and the difference between registered and licensed plumbers.

<sup>20</sup> Registered plumbers must be supervised by licensed plumber when undertaking the plumbing work.

<sup>21</sup> See [Energy Safety Victoria website](#) for more information about the various classifications available for restricted electrical licences and the type of electrical work permitted under each classification. A Restricted Electrical Licence holder can only perform disconnection of electrical equipment and reconnection of electrical equipment of equivalent power and current in the same location without alteration to existing cables.

Type of work	Licensing requirements for installer(s)	Guidance on licensing requirement in practice
Handling of refrigerants	All work involving the handling of fluorocarbon refrigerants (refrigerants covered by the Ozone Protection and Synthetic Greenhouse Gas Management Act) must be undertaken by person holding the relevant refrigerant handling licence issued by the Australian Refrigeration Council.	See <a href="#">Arctick website</a> for detail of type of licenses required depending on type of work to be carried out.

Plumbers registered or licensed in refrigerated air-conditioning work are required to understand and comply with requirements set out in a range of AS/NZS standards, codes of practice and best practice guides when replacing or installing air-conditioners. These requirements can be found on the [VBA website](#). In addition, we recommend that installers of air-conditioner products under the program familiarise themselves with:

- the [Air Conditioning Residential Best Practice Guideline \(Victoria\)](#), a guidance document published by the Australian Institute of Refrigeration Air Conditioning and Heating (AIRAH).
- [AS/NZS 5141:2018 Residential heating and cooling systems](#) – Minimum applications and requirements for energy efficiency, performance and comfort criteria. This standard specifies the requirements for design, selection, installation, commissioning and maintenance of residential heating and cooling systems.

### 3.4. Pre-installation requirements

Table 196: Pre-installation sizing requirements for activity 6 – residential premises only

Pre-installation requirement
<p>Before the consumer agrees to undertake the activity, an accredited person or scheme participant must:</p> <ul style="list-style-type: none"> <li>• provide the energy consumer with a copy of the current <a href="#">VEU Space Heating and Cooling Consumer Fact Sheet</a>, as published on the department’s public website; and</li> <li>• give clear and accurate information to the energy consumer about the suitability of the product to be installed for the heating and cooling needs of the consumer having regard to the consumer’s premises; and</li> <li>• advise the energy consumer on whether the size of the product to be installed is consistent with the size recommended in the VEU Space Heating and Cooling Consumer Fact Sheet.</li> </ul>

## 3.5. Decommissioning and/or disposal requirements

### 3.5.1. Decommissioning and disposal requirements – space heating and cooling activities (activity 6)

The decommissioning and disposal requirements that are required to be complied with when undertaking space heating and cooling activities under activity 6 are listed in Table below.

Table 20: Decommissioning and disposal requirements for activity 6

Requirement
The decommissioned product must be decommissioned in a practical and safe manner to ensure it cannot be re-used again.
Any waste or debris generated from the activity, including the decommissioned product (where it is practical and safe to remove the decommissioned product), must be removed from the consumer's premises and disposed of in accordance with all applicable waste management requirements under the Environment Protection Act 2017 and its regulations.
Accredited persons or scheme participants must not install a product for the purposes of decommissioning it as part of an activity under the program (e.g. the baseline environment for a given installation has not been altered for the purposes of inflating the VEEC claim for that installation).
For an activity involving the decommissioning of product(s), the accredited person, the installer, and the energy consumer will need to provide a declaration to us stating that the decommissioned product was not installed for the purposes of decommissioning it as part of an activity under the program.

We have developed a flowchart (see

Figure 2) and a step-by-step guide (see Table) to assist accredited persons and scheme participants to understand the key steps and decisions in determining how to decommission a product in a safe and practical manner.

The guidance includes:

- matters which the installers must comply with as they are legislated requirements

- matters we expect installers to comply with as they align with best practice standards in order to protect the integrity of the program and consumers under the program
- guidance for installers on how to interpret a particular legislated requirement.

Figure 2: Decommissioning guidance flowchart for activity 6

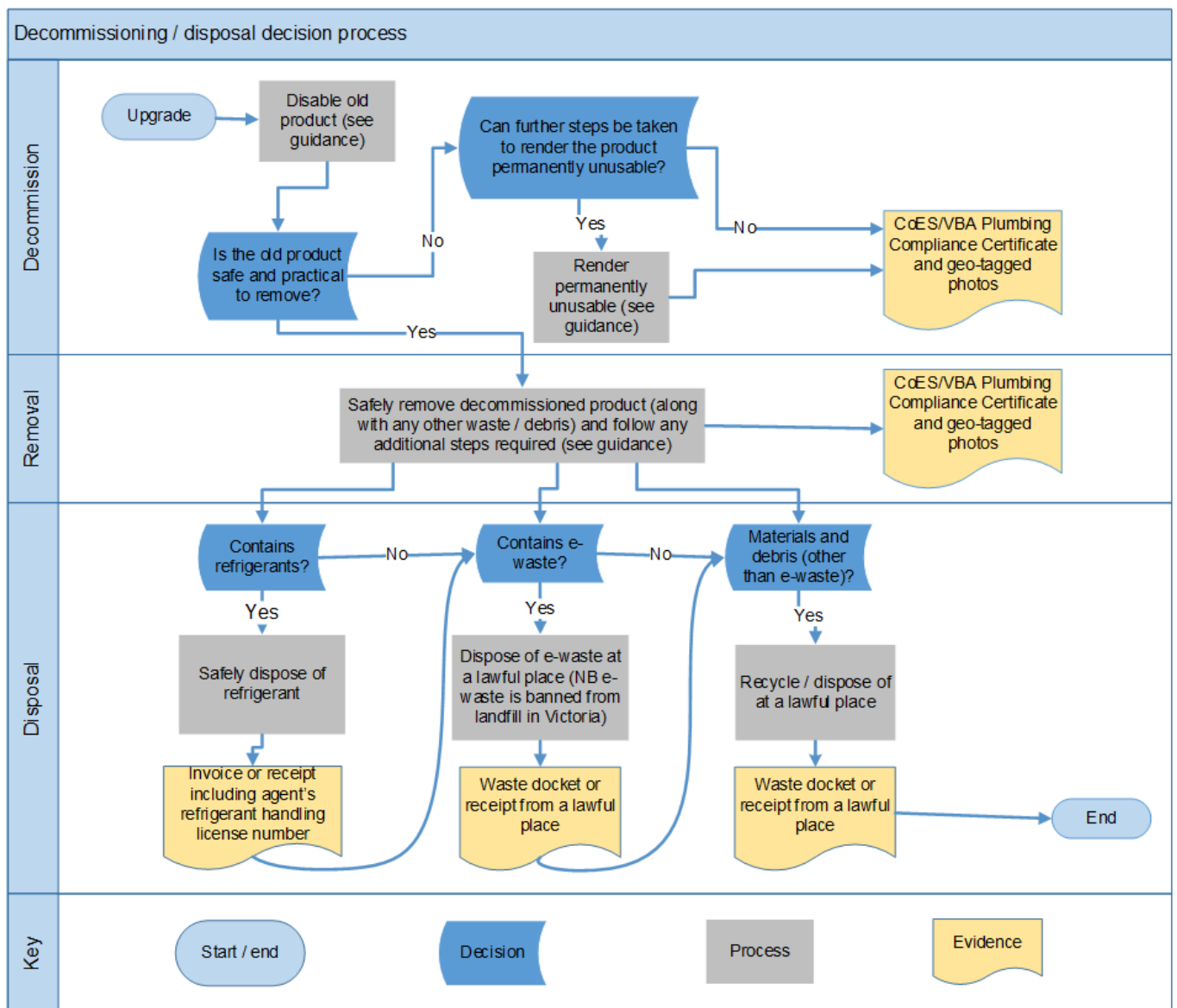




Table 21: Decommissioning step-by-step guidance and considerations for activity 6

Stage	Decommissioning guidance
<b>Decommission</b>	<p>Steps involved in disabling the old product.</p> <ul style="list-style-type: none"> <li>• Is product connected to electrical supply? If yes, the product must be disconnected, and appropriate steps taken to make the electrical connection safe.</li> <li>• Is product connected to gas supply? If yes, the product must be disconnected and appropriate steps taken to make the gas connection safe (e.g., sealed to be gastight)</li> <li>• Does product contain refrigerant? If yes, you will need to take steps to recover refrigerants for safe disposal.</li> </ul> <p>Is the old product safe and practical to remove?</p> <ul style="list-style-type: none"> <li>• If yes, the old product must be removed and recycled appropriately.</li> <li>• If the old product is not safe and practical to remove, it is the commission’s expectation that consumers are informed that the product will be left in-situ before the consumer agrees to undertake the upgrade.</li> <li>• Products which the commission understands may not be safe and practical to remove include: <ul style="list-style-type: none"> <li>– systems where removal is impractical (e.g., central electric resistance heating systems and slab heating systems)</li> <li>– systems where removal would result in substantial remediation work to the building environment</li> <li>– systems where removal would raise health and safety risks. Where removal of product involves asbestos, removal or disposal of asbestos must be removed and disposed of in accordance with applicable legislation.<sup>22</sup></li> </ul> </li> </ul> <p>If the old product is not safe and practical to remove, can further steps be taken to render the old product permanently unusable in a safe and practical manner?</p> <ul style="list-style-type: none"> <li>• Steps which the commission considers may be safe and practical include the removal of heating element or burner / electrical component / control board or unit.</li> <li>• If no further safe and practical steps can be taken, leave product in a disabled state.</li> </ul>
<b>Removal</b>	<p>If it is safe and practical to remove the product:</p> <ul style="list-style-type: none"> <li>• any waste and debris (including the product) must be removed from the consumer’s premises.</li> <li>• it is the commission’s expectation that there is clear agreement between the consumer and installer prior to the commencement of the installation about the scope of the installation, including whether a product is to be removed and the scope of any building repair work (if any) to be undertaken by the installer.</li> </ul>

<sup>22</sup> See [Absestos.vic.gov.au website](http://Absestos.vic.gov.au) for detailed information about responsibilities and legal duties of tradespeople and builders when dealing with asbestos.

Stage	Decommissioning guidance
<b>Disposal</b>	<ul style="list-style-type: none"> <li>• You must manage your waste in accordance with the Victorian environment protection framework, established by the Environment Protection Act 2017 (EP Act) and Environment Protection Regulations 20 (EP Regulations). This includes complying with the relevant waste duties.</li> <li>• Under the EP Act and EP Regulations, waste duties apply to all business that generate, transport or receive industrial waste. In summary, businesses <a href="#">managing industrial waste</a> must: <ul style="list-style-type: none"> <li>– <a href="#">classify all waste streams</a> to determine the relevant waste code and waste type (industrial, priority or reportable priority waste). For instance, a decommissioned water heater or space heater is likely to be classified as waste code T300 (E-waste) which is priority waste.</li> <li>– ensure waste is safely contained during <a href="#">transportation</a> and provide transporter enough information about the waste.</li> <li>– Ensure waste goes to a place that is lawfully authorised to receive it, which is called a <a href="#">lawful place</a>. Some common types of lawful places are permissioned resource recovery facilities, transfer stations and landfills. Sites with an EPA permission are listed on a <a href="#">public register</a> maintained by the EPA. Note: e-waste is banned from landfill in Victoria.</li> </ul> </li> <li>• Find out more about your waste duties on <a href="#">EPA's website</a></li> <li>• If waste is to temporarily stored before it is collected and further transported for disposal, it must be stored properly and in accordance with relevant EP Act requirements, including any required <a href="#">EPA permissions</a>. Up to 5m3 of non-priority industrial waste or e-waste (excluding batteries) can be stored temporarily requiring an EPA permission.<sup>23</sup></li> <li>• Fluorocarbon refrigerant contained in the product must be disposed of in accordance with the requirements set out under the Ozone Protection and Synthetic Greenhouse Gas Management Act, and the regulations under the Act. This includes a requirement for fluorocarbon refrigerants to be disposed of at a business holding a refrigerant trading authorisation (RTA) issued by the Australian Refrigeration Council.<sup>24</sup></li> </ul>

### 3.5.2. Decommissioning and disposal requirements – space heating and cooling activities (activity 28)

The decommissioning and disposal requirements that are required to be complied with when undertaking space heating and cooling activities (activity 28) are listed in Table 21 below.

Table 227: Decommissioning requirements for activity 28

Requirement
Where decommissioning is required to be undertaken as part of a prescribed activity, the decommissioned product must be disabled and rendered permanently unusable.

<sup>23</sup> See schedule 1 and regulation 63 of the Environment Protection Regulations 2017.

<sup>24</sup> See [ARCTick website](#) for more information.

## Requirement

Any decommissioned products which are disposed of under these activities must be disposed of in accordance with all applicable waste management requirements under the Environment Protection Act 2017 and its regulations. This includes e-waste products being banned from landfill in Victoria.

Accredited persons or scheme participants must not install a product for the purposes of decommissioning it as part of an activity under the program (e.g. the baseline environment for a given installation has not been altered for the purposes of inflating the VEEC claim for that installation).

For an activity involving the decommissioning of product(s), the accredited person, the installer, and the energy consumer will need to provide a declaration to us stating that the decommissioned product was not installed for the purposes of decommissioning it as part of an activity under the program.

### 3.6. Consumer information provision requirements

Table 22 below provides a summary of the records and information that must be provided to the consumer.

**Table 23: Information to be provided to consumer for all space heating and cooling activities**

Activity stage	Document or information
Prior to undertaking the installation	<ul style="list-style-type: none"><li>• <a href="#">VEET Scheme Consumer Factsheet</a>.</li><li>• <a href="#">VEU Space Heating and Cooling Consumer Fact Sheet</a> (residential installations only under activity 6).</li><li>• Information as set out in the <a href="#">VEU Code of Conduct</a>, 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.</li></ul>
On completion of the installation	<ul style="list-style-type: none"><li>• Tax invoice or proof of purchase.</li><li>• VEEC Assignment Form.</li><li>• Victorian Building Authority (VBA) Compliance Certificate and/or Certificate of Electrical Safety (as applicable to the installation).</li><li>• Manufacturer's instructions and warranty.</li><li>• Information as set out in the <a href="#">VEU Code of Conduct</a> including dispute resolution information, manufacturer's instructions and warranty for products supplied or installed (if applicable), contact details of the accredited person and/or scheme participant who undertook the installation.</li></ul>

### 3.7. Record-keeping requirements

Accredited persons are required to keep documents that record and explain all transactions and other acts engaged in, or required to be engaged in, as provided in the VEET Guidelines.

All documents are required to be maintained for at least 6 years and must be kept in writing in English or in a manner which enables the documents to be readily accessible and convertible into writing in English.

Table below sets out the detail of the records which will satisfy the record keeping requirements as set out in Annexure A to the VEET Guidelines. These records must be collected and retained by accredited for each water heating activity undertaken. The commission may require these documents to be produced.

**Table 24: Record-keeping requirements for space heating and cooling activities**

Document(s)	Details to be provided
VEEC Assignment Form	<p>Assignment form to be completed and signed by the installer and energy consumer.</p> <p>For installations under activity 6, form includes signed agreement between the consumer and installer about the scope of the installation, including whether a product is to be removed and the scope of any building repair work (if any) to be undertaken by the installer.</p>
Invoice / proof of purchase	<p>Document must list:</p> <ul style="list-style-type: none"> <li>the installed product brand and model</li> <li>the name and address of the energy consumer</li> <li>the name, address and ABN of the installer business.</li> </ul> <p>For business or non-residential upgrades, the document must list:</p> <ul style="list-style-type: none"> <li>the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant)</li> <li>the installation address (if different to the energy consumer).</li> </ul>
Non prescribed certificate of electrical safety (CoES) <sup>25</sup>  and  VBA Compliance Certificate <sup>26</sup>	<p>Either the VBA Compliance Certificate or CoES must detail:</p> <ul style="list-style-type: none"> <li>the installed product brand, model and serial number</li> <li>the type of the product decommissioned, including brand, model and serial number (where products are decommissioned as part of the installation)</li> <li>the method of decommissioning (where products are decommissioned as part of the installation)</li> <li>the floor area heated by existing product (scenarios (iii) and (iv) only)</li> </ul> <p>An appendix(s) may be provided with the VBA Compliance Certificate or a CoES. Where an appendix is used, the following criteria must be met:</p> <ul style="list-style-type: none"> <li>the certificate must refer to the appendix and list the number of pages</li> <li>the appendix must be attached to the certificate</li> <li>each appendix page must be numbered, and the certificate number is referenced on each page</li> <li>each appendix page must be signed by the plumber or electrician responsible for the completed work</li> <li>all premises being claimed for must be listed with the corresponding installed product information in the appendix (where multiple units at one address is receiving an upgrade).</li> </ul>
Geotagged photographs	Geo-tagged photographs which are date and time stamped showing:

<sup>25</sup> A prescribed certificate of electrical safety is only required if the electrical mains conductors, main earthing system or main switchboard is modified

<sup>26</sup> A VBA compliance certificate is required for all plumbing work where total value of the work (parts and labour is \$750 or more) of where work involves [specific types of plumbing work](#)

Document(s)	Details to be provided
	<ul style="list-style-type: none"> <li>the existing product before the upgrade providing eligibility (for installations involving decommissioning)</li> <li>the brand, model and serial number of the existing product (for installations involving decommissioning – not required for activity 28)</li> <li>the existing product either disabled or rendered permanently unusable where the product is not being removed from premises for disposal (for installations involving decommissioning)</li> <li>the decommissioned product either disabled or ready to be removed from the consumer’s premises (for installations involving decommissioning)</li> <li>the installed product after installation (not required for activity 28)</li> <li>the brand, model and serial number of the installed product (not required for activity 28).</li> </ul> <p>All geo-tagged photographs must:</p> <ul style="list-style-type: none"> <li>be clear and in focus</li> <li>include any relevant markings</li> <li>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 photos).</li> </ul>
Disposal documentation	<p>Documentation by you and/or your third-party installer contractors, recording how the business will comply with EPA waste duties, including:</p> <ul style="list-style-type: none"> <li>the classification of waste codes and waste type for the business’ waste streams</li> <li>details of any contracts or arrangements with contracted transporters or disposal agents</li> <li>the name and location of the various authorised waste receivers you will be delivering your different waste streams to</li> <li>appropriate authorisation for the temporary storage of waste if more than 5 m<sup>3</sup> of industrial waste (that is not reportable priority waste) is being stored by the business prior to disposal.<sup>27</sup></li> </ul>
Disposal or recycling record/ disposal transportation record	<p>For all decommissioned products removed from the premises, records that satisfy either option 1 or 2 below.</p> <p><u>Option 1:</u></p> <p>A waste receipt of invoice from a place authorised by the EPA to receive that particular type(s) of waste recording:</p> <ul style="list-style-type: none"> <li>name and address of the authorised recipient</li> <li>ACN and/or ABN of the authorised recipient</li> <li>the date of delivery</li> <li>waste description</li> <li>waste amount (e.g. number of units or kg).</li> </ul> <p>Where the waste receipt or invoice is for decommissioned products from multiple upgrade sites, a document itemising the products removed per upgrade site to demonstrate the link between each upgrade site and the bulk waste receipt or invoice must be kept.</p>

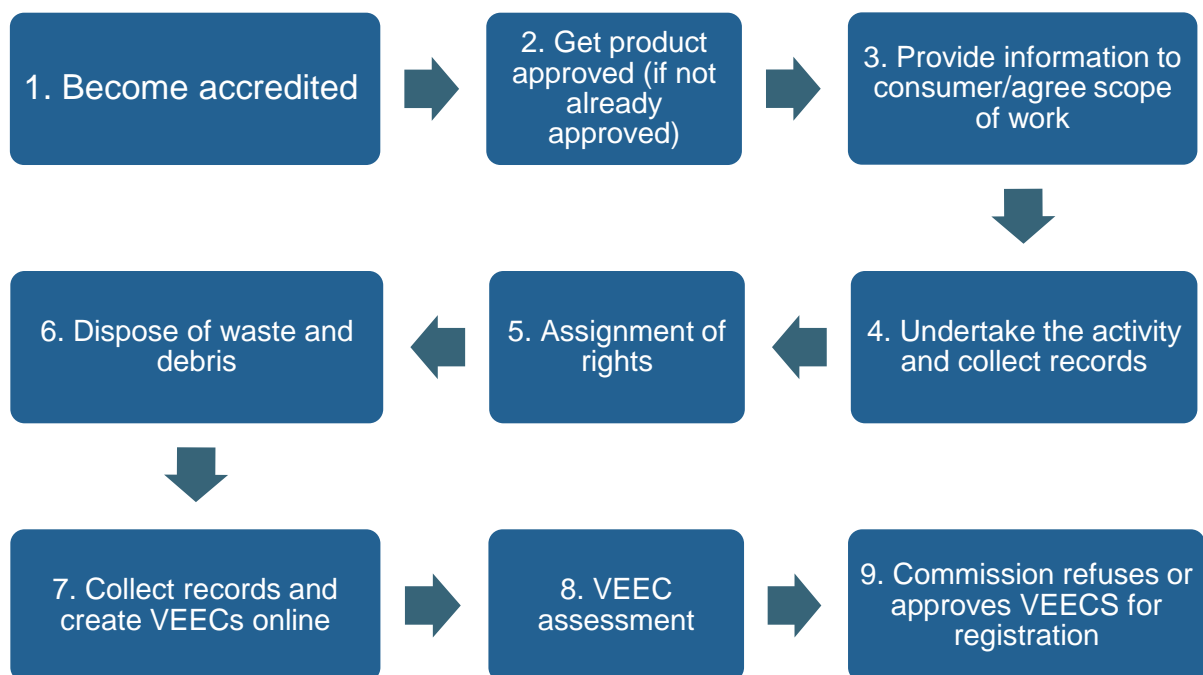
<sup>27</sup> See schedule 1 and regulation 63 of the Environment Protection Regulations 2017.

Document(s)	Details to be provided
	<p>Where the facility is unable to provide a waste receipt or invoice or where a provided waste receipt or invoice does not contain the details set out above, accredited persons may keep alternative records which enable you to demonstrate that the decommissioned product has been disposed of in compliance with the EPA legislation.</p> <p>An example of how you can meet this requirement would be to retain:</p> <ul style="list-style-type: none"> <li>• Geo-tagged photo(s) (taken at or outside the location of the EPA approved facility) of the decommissioned system including the system plate, along with a written record of the: <ul style="list-style-type: none"> <li>– name and address of the authorised recipient</li> <li>– the date of delivery</li> <li>– waste description</li> <li>– waste amount (e.g. number of units or kg)</li> <li>– decommissioned system information (e.g. brand, model, serial number).</li> </ul> </li> </ul> <p><u>Option 2:</u></p> <p>Third party contractor information – if disposed of via a contracted transporter or disposal agent, a document recording:</p> <ul style="list-style-type: none"> <li>• the name, ACN and ABN of the third party contractor company</li> <li>• the date service was provided</li> <li>• waste description</li> <li>• waste amount (e.g. number of units or kg)</li> <li>• name and address of the lawful place the waste is to be disposed at</li> <li>• ABN of the business operating the lawful place the waste is to be disposed at.</li> </ul> <p>Where the document is for decommissioned products from multiple upgrade sites, a document itemising the products removed per upgrade site to demonstrate the link between each upgrade site and the bulk waste receipt or invoice must also be maintained.</p>
Refrigerant recovery and disposal (activity 6 only)	Agent's refrigerant handling license number recorded on VEEC assignment form (where upgrade involves the handling of fluorocarbon refrigerants covered by the Ozone Protection and Synthetic Greenhouse Gas Management Act)

## 4. Activity process for water heating or space heating and cooling activities

This section provides you with an overview of the steps for undertaking a water heating and/or space heating and cooling activity under the program.

Figure 3: Activity process steps for water heating or space heating and cooling activities



### 4.1. Become accredited

A person or organisation must be accredited/approved to undertake the relevant activity to create VEECs for the activity. Visit [www.esc.vic.gov.au/become-veu-accredited](http://www.esc.vic.gov.au/become-veu-accredited) for information on how to become accredited.

### 4.2. Get product approved (if not already approved)

To create VEECs for water heating and or space heating and cooling activities, the product installed must be listed as an approved product on our [Register of Products](#). Accredited persons should check our register to see if the product you wish to install has already been approved as another organisation may have submitted the product for approval (e.g. product manufacturer/supplier).

Learn more about getting products approved in our Water Heating and Space Heating/Cooling Product Guide at [www.esc.vic.gov.au/veu-product-applicants](http://www.esc.vic.gov.au/veu-product-applicants).

### **4.3. Provide advice to consumer/agree scope of work**

Prior to undertaking the upgrade, accredited persons or scheme participants must provide the consumer with information as listed in Table for water heating activities and Table for space heating and cooling activities.

There should be agreement between the consumer and installer prior to the commencement of the installation about the scope of the installation, including whether a product is to be removed and the scope of any building repair work (if any) to be undertaken by the installer.

### **4.4. Undertake the activity and collect records**

Installer must comply with all installation and decommissioning requirements as detailed in the VEET Regulations and VEU Specification. In addition, certificates cannot be created unless a prescribed activity is undertaken in accordance with the provisions of the Electricity Safety Act 1998, the Gas Safety Act 1997, the Occupational Health and Safety Act 2004 or the Building Act 1993 or the regulations under any of those Acts.

The installer must collect records as listed in Table for water heating activities and Table for space heating and cooling activities.

### **4.5. 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. A VEEC assignment form must be completed for accredited persons to create VEECs and demonstrate compliance with the legislation.

Download the VEEC assignment form template for these activities from the [water heating and space heating and cooling page](#) on the commission's website.

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 consider taking steps to 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). Details of how to comply can be found at: <https://ovic.vic.gov.au/privacy/>.

### **4.6. Dispose of waste and debris from the activity**

For all water heating installations and space heating and cooling installations undertaken under activity 6, installers must remove, or arrange for the removal of, any waste or debris generated from the activity, including the decommissioned product (where it is practical and safe to remove



the decommissioned product), from the consumer's premises and disposal in accordance with all applicable waste management requirements under the *Environment Protection Act 2017*.

Product disposal must be undertaken in accordance with all applicable waste management requirements under the Environment Protection Act and the fluorocarbon refrigerant disposal requirements under the Ozone Protection and Synthetic Greenhouse Gas Management Act and the regulations under any of those Acts.

See Table for disposal records to be collected for water heating activities and Table for disposal records to be collected for space heating and cooling activities.

#### **4.7. Collect documentation and create VEECs online**

Prior to creating VEECs for an activity, accredited persons must have collected the required documents as specified in Table for water heating activities and Table for space heating and cooling activities. The commission may ask for these records as part of our certificate assessment process.

To create VEECs, you can upload the activity using either an upload form or the online user interface on the VEU Registry. Different activity types have different data input requirements, so it is important that you input the correct data in the relevant fields.

After you press the 'create' button, the VEECs associated with your activities are created and assigned a unique identifier.

A certificate creation fee of \$2.33 per certificate is invoiced at the point of VEEC creation for all VEECS you submit. We issue invoices on Tuesdays and Thursdays each week for VEECs created before 6am on that day. If an activity you created is returned to you as an external duplicate, you may withdraw the activity in the VEU registry system before the 6 am invoicing deadline on Tuesdays and Thursdays to avoid being charged the fee. You will be able to reconcile invoices with your created activities in the VEU registry.

#### **4.8. 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 VECCs have been created in accordance with the VEET Act and VEET Regulations. We may require you submit to us record evidence as part of that assessment process.

#### **4.9. Commission approves or refuses VEECs for registration**

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 to us.

## 5. Calculating the number of eligible VEECs

The number of Victorian energy efficiency certificates (VEECs) you receive for a given water heating or space heating and cooling activity is awarded based on the method and variables set out in the VEU Specifications.

### 5.1. VEEC calculation method for water heating activities

There are a range of different GHG equation reduction calculations for water heating activities under the program. Table sets out the different activity scenarios, equation references in the VEU Specifications and applicable period for the different equations for awarding VEECs under the program.

You can use the VEEC calculator to [www.veu-registry.vic.gov.au/calculators](http://www.veu-registry.vic.gov.au/calculators) to calculate the number of expected VEECS for the below activities. You will need to enter details of an approved product (i.e. the product brand, product model, and system size (for activities 1C and 1D)) and postcode for the installation to calculate eligible VEECS for an activity.

We have prepared the VEEC Calculator to assist you to calculate the number of eligible VEECs for a given activity, but you should not rely on this calculator to discharge your legal responsibilities. We do not guarantee the accuracy of the calculator. It is up to you to verify the accuracy of the VEECs eligible to be created for an activity by reference to the relevant equation in the VEU Specifications.

Table 25: Activity scenarios, equation references and applicable period for water heating activities

Activity scenario	Upgrade product standard	Equation reference in VEU Specifications	Applicable period
1C(i): Decommissioning electric and installing electric boosted solar	Product tested and modelled to AS/NZS 4234:2021	Equation 1.1 of VEU Specifications	From 31 May 2023
1D(i): Decommissioning electric and installing heat pump	Product tested and modelled to AS/NZS 4234:2021	Equation 1.3 of VEU Specifications	From 31 May 2023
3C: Decommissioning gas and installing heat pump	Product tested and modelled to AS/NZS 4234:2021	Equation 3.1 of VEU Specifications	From 31 May 2023

Activity scenario	Upgrade product standard	Equation reference in VEU Specifications	Applicable period
3D: Decommissioning gas and installing electric boosted solar	Product tested and modelled to AS/NZS 4234:2021	Equation 3.2 of VEU Specifications	From 31 May 2023

## 5.2. VEEC calculation method for space heating and cooling activities

There are a range of different GHG equation reduction calculations for space heating and cooling activities under the program.

Table 25 sets out the different activity scenarios, equation references in the VEU Specifications and applicable period for the different equations for awarding VEECs under the program.

You can use the VEEC calculator to [www.veu-registry.vic.gov.au/calculators](http://www.veu-registry.vic.gov.au/calculators) to calculate the number of expected VEECS for the below activities. You will need to enter details of an approved product (i.e. the product brand and product model), activity scenario, and postcode for the installation to calculate eligible VEECS for an activity.

We have prepared the VEEC Calculator to assist you to calculate the number of eligible VEECs for a given activity, but you should not rely on this calculator to discharge your legal responsibilities. We do not guarantee the accuracy of the calculator. It is up to you to verify the accuracy of the VEECS eligible to be created for an activity by reference to the relevant equation in the VEU Specifications

**Table 268: Activity scenarios, equation references and applicable period for space heating and cooling activities**

Activity scenario	Upgrade product standard	Equation reference in VEU Specifications	Applicable period
6A to 6G (i-xi): Installing high efficiency GEMS registered air-conditioner	Product registered to the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Cth)	Equations 6.1 to 6.5 of VEU Specifications	From 31 May 2023
28: Retrofitting gas ductwork with flexible or rigid ductwork	Product tested as complying with: <ul style="list-style-type: none"> <li>• AS 4254.1 (for flexible ductwork)</li> <li>• AS 4254.2 for rigid ductwork</li> </ul>	Equation 28.1 of VEU Specifications	Ongoing – no change

## Appendix A: List of Refrigerants (including alternative refrigerants) with their global warming potential (GWP) values

Table 27: List of refrigerant types with their global warming potential (GWP) values\*

Refrigerant type	Substance name	GWP	Refrigerant type	Substance name	GWP
R-1234yf	HFO-1234yf	5	R-32	HFC-32	675
R-1234ze(E)	HFO-1234ze	5	R-365MFC	HFC-365MFC	794
R-125	HFC-125	3500	R-404A	HFC-404A	3922
R-1270	HC-1270	5	R-407A	HFC-407A	2107
R-12A	HC-12A	5	R-407B	HFC-407B	2804
R-134A	HFC-134A	1430	R-407C	HFC-407C	1774
R-143A	HFC-143a	4470	R-407D	HFC-407D	1627
R-152A	HFC-152a	124	R-407E	HFC-407E	1552
R-170	HC-170	5	R-407F	HFC-407F	1825
R-227EA	HFC-227EA	3220	R-407G	HFC-407G	1463
R-22A	HC-22A	5	R-41	HFC-41	92
R-23	HFC-23	14800	R-410A	HFC-410A	2088
R-236CB	HFC-236CB	1340	R-410B	HFC-410B	2229
R-236EA	HFC-236EA	1370	R-413A	HFC-413A	2053
R-236FA	HFC-236FA	9810	R-417A	HFC-417A	2346
R-245CA	HFC-245CA	693	R-417B	HFC-417B	3027
R-245FA	HFC-245FA	1030	R-417C	HFC-417C	1809
R-290	HC-290	3	R-419A	HFC-419A	2967

Refrigerant type	Substance name	GWP
R-419B	HFC-419B	2384
R-421A	HFC-421A	2631
R-421B	HFC-421B	3190
R-422A	HFC-422A	3143
R-422B	HFC-422B	2526
R-422C	HFC-422C	3085
R-422D	HFC-422D	2729
R-422E	HFC-422E	2592
R-423A	HFC-423A	2280
R-424A	HFC-424A	2440
R-425A	HFC-425A	1505
R-426A	HFC-426A	1508
R-427A	HFC-427A	2138
R-428A	HFC-428A	3607
R-429A	HFC-429A	13
R-430A	HFC-430A	94
R-43-10MEE	HFC-43-10MEE	1640
R-431A	HFC-431A	36
R-434A	HFC-434A	3245
R-435A	HFC-435A	26

Refrigerant type	Substance name	GWP
R-437A	HFC-437A	1805
R-438A	HFC-438A	2264
R-439A	HFC-439A	1983
R-440A	HFC-440A	144
R-442A	HFC-442A	1888
R-444A	HFC-444A	87
R-444B	HFC-444B	293
R-445A	HFC-445A	129
R-446A	HFC-446A	459
R-447A	HFC-447A	582
R-447B	HFC-447B	739
R-448A	HFC-448A	1386
R-449A	HFC-449A	1396
R-449B	HFC-449B	1411
R-449C	HFC-449C	1250
R-450A	HFC-450A	601
R-451A	HFC-451A	146
R-451B	HFC-451B	160
R-452A	HFC-452A	2139
R-452B	HFC-452B	697

Refrigerant type	Substance name	GWP
R-452C	HFC-452C	2219
R-453A	HFC-453A	1765
R-454A	HFC-454A	236
R-454B	HFC-454B	465
R-454C	HFC-454C	145
R-455A	HFC-455A	145
R-456A	HFC-456A	684
R-457A	HFC-457A	136
R-458A	HFC-458A	1650
R-500	HFC-500	8077
R-502A	HC-502A	5
R-503	HFC-503	14560

Refrigerant type	Substance name	GWP
R-507A	HFC-507A	3985
R-508A	HFC-508A	13214
R-508B	HFC-508B	13396
R-512A	HFC-512A	189
R-513A	HFC-513A	629
R-513B	HFC-513B	593
R-515A	HFC-515A	386
R-600	HC-600	5
R-600A	HC-600A	3
R-601A	HC-601a	5
R-717	HC-717	0
R-744	HC-744	1

\* Sources: [Intergovernmental Panel on Climate Change \(IPCC\) fourth assessment report, 2007](#) and [the Department of Climate Change, Energy, the Environment and Water website](#).



## Document version history

CM Reference: C/21/28378

Version	Amendments	Effective date
1.0	First release	10 December 2018
1.1	Update to: <ul style="list-style-type: none"><li>remove requirement for an installer to show photo ID</li><li>fix an error to product criteria under Activity 7 and 10</li></ul>	21 February 2019
2.0	Update to: <ul style="list-style-type: none"><li>incorporate 10 June 2019 VEU specifications amendments</li><li>include activity 28 into this activity guide</li></ul>	10 June 2019
2.1	Revision to reflect introduction of EPA's e-waste policy	1 July 2019
2.2	<ul style="list-style-type: none"><li>Update to incorporate changes to evidentiary requirements:<ul style="list-style-type: none"><li>added brand and model of existing product to Certificate of Electrical Safety for activities 1B, 1C, 1D, 1F and 3B</li><li>update to move certain information requirements from VBA Compliance Certificate to Certificate of Electrical Safety for activities 5A(ii) and 7A(ii)</li><li>added geo-tagged photos of installed product to activity 5A(iii)</li></ul></li><li>Update to outline criteria for use of appendix(s) with VBA Compliance Certificate and Certificate of Electrical Safety in common requirements</li></ul>	28 November 2019
2.3	Update to clarify evidentiary requirements for invoices for business and non-residential activities	1 April 2021
2.4	Update to: <ul style="list-style-type: none"><li>provide greater flexibility on persons able to decommission water heaters and the document that can capture the details of decommissioning</li><li>clarify:<ul style="list-style-type: none"><li>licensing and evidentiary requirements for the decommissioning of wood-fired room heaters and fireplaces.</li><li>that two different products must be decommissioned for scenarios 10A(iv) and 10A(v)</li></ul></li></ul>	11 November 2021

	products eligible for scenarios 10A(iii) and 10A(v)	
2.5	Update to reflect minor updates to activities 23 and 28 to align with VEU Specifications - Version 13.0	19 September 2022
3.0	Update to document structure and to reflect new activity requirements contained in amended VEET Regulations and VEU Specifications – 15.0	31 May 2023
3.1	Update to: <ul style="list-style-type: none"> <li>clarify eligible premises requirement for activity 6</li> <li>clarify record-keeping requirements for water heating activities and activity 6</li> </ul>	29 June 2023
3.2	Update to: <ul style="list-style-type: none"> <li>Remove reference to water heating and space heating activities which became ineligible from 30 June 2023 (Part, 1A, 1D, 1F and 3B</li> <li>Clarify eligibility requirements in regard to decommissioning scenarios</li> <li>Clarify details of disposal and recycling records</li> <li>Clarify guidance relating to licensing requirements for installation of split system heat pump water heaters</li> </ul>	17 October 2023
3.3	Revision to reflect changes to VEEC creation fee process	1 November 2023
3.4	Update to reflect updated product requirements for multi-split products in VEU Specifications V16.	16 November 2023
3.5	Update to provide additional guidance on disposal or recycling record/ disposal transportation record requirement	7 December 2023
3.6	Update to remove minor references to water heating and space heating activities which became ineligible from 30 June 2023	19 January 2024
3.7	Revision to reflect amendment to VEET regulations banning cold-call telemarketing and doorknocking under the program	1 May 2024
3.8	Update to: <ul style="list-style-type: none"> <li>Remove water heating products no longer eligible from 1 July 2024</li> <li>Clarify refrigerant handling and disposal requirements</li> <li>Clarify licensing requirements, in particular for heat pump water heater upgrades</li> </ul>	1 July 2024