

Appliance Activity Guide

10 December 2018



An appropriate citation for this paper is:

Essential Services Commission 2018, Appliance Activity Guide, 10 December

Copyright notice

© Essential Services Commission 2018



This work, *Appliance Activity Guide*, is licensed under a Creative Commons Attribution 4.0 licence [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 photographs within the publication.

Contents

Introduction	1
About this guide	1
Who should use this guide	1
Legal context for this document	1
1. Introduction to residential and non-residential appliances activities	3
1.1. In home display (IHD) unit activities	3
1.1.1. Compliance with the Energy Retail Code	3
1.1.2. Binding request for ZigBee IHD units	3
1.1.3. Binding reports for ZigBee IHD units	5
1.1.4. Ongoing customer support	5
1.1.5. Privacy issues	5
1.2. Residential/non-residential appliances activities	5
1.3. Non-residential appliances activities	6
1.4. Mandatory safety training	6
1.5. Common requirements for appliances activities (where relevant)	7
2. Requirements for in-home display unit activities	8
2.1. Activity 30: In-home display units	8
2.1.1. Activity 30A: Installing a ZigBee in-home display (IHD) unit	8
2.1.2. Activity 30B: Installing a non-ZigBee in-home display (IHD) unit	10
3. Requirements for residential/non-residential appliances activities	12
3.1. Activity 19: Destruction of pre-1996 refrigerator or freezer	12
3.2. Activity 22: High efficiency refrigerator and freezer	13
3.3. Activity 24: High efficiency television	14
3.4. Activity 25: Energy efficient clothes dryer	15
3.5. Activity 26: High efficiency pool pump	16
4. Requirements for non-residential appliances activities	17
4.1. Activity 31: High efficiency motor	17
4.2. Activity 32: Refrigerated display cabinet	18
4.3. Activity 33 – Refrigeration/ventilation fan motor	19
4.4. Activity 36: Water efficient pre-rinse spray valve	21
Activity 36A(i): Pre-rinse spray valve replacing a pre-rinse spray valve	21
Activity 36A(ii): Installing a pre-rinse spray valve	22
Appendix A: In Home Display Installation Process	23

Introduction

Accredited persons (APs) and their installers under the Victorian Energy Upgrades (VEU) program must comply with program requirements when undertaking appliance activities (including refrigerator and freezers, televisions, pool pumps, in home displays, and motors) to create Victorian energy efficiency certificates (VEECs).

About this guide

Use this guide for assistance in meeting the specific requirements (product, installation, decommissioning, training, safety and evidence) for space conditioning, shower rose and incandescent lighting activities.

The guide is split into four key sections:

- Section 1: Introduction to appliances activities
- Section 2: Residential/non-residential appliances activities
- Section 3: Non-residential appliances activities

You should read this guide in conjunction with our Obligations and Program Guide for Accredited Persons for:

- overarching information about the Victorian Energy Upgrades program,
- your obligations under the program
- guidance on how to create Victorian energy efficiency certificates (VEECs) under the program.

Access this document at www.esc.vic.gov.au/veu-accredited-persons

Who should use this guide

You should use this guide if you are:

- accredited or seeking accreditation to undertake appliances activities (including refrigerator and freezers, televisions, pool pumps, in home displays, and motors) under the program
- an installer seeking to undertake installations for these activities under the program.

To apply to become accredited for these activities, access the required documents from:

www.esc.vic.gov.au/become-veu-accredited

Access information on applying for listing of a product on our Register of Products at

www.esc.vic.gov.au/veu-product-applicants

Legal context for this guide

We have prepared this guide as a general summary of relevant parts of:-

- 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).

View these documents at www.esc.vic.gov.au/veu-legislation

This guide should not be relied upon as substitute for legal advice and should be read in conjunction with the above source documents. In the event of inconsistency between this guide and the source documents, the content in the source documents apply.

1. Introduction to residential and non-residential appliances activities

The VEET Regulations incorporate a fresh start rule, which means that premises that previously received an upgrade under the program prior to 10 December 2018 will not be prevented from receiving further upgrades. The installation limits set out in Schedule 4 of the regulations (and detailed in this activity guide) apply only to installations undertaken in residential premises from 10 December 2018.

Activities still need to meet any relevant baseline and decommissioning requirements.

1.1. In home display (IHD) unit activities

Products available for installation under this activity are classified either as a ZigBee or non-ZigBee product. IHD units that obtain electricity consumption information directly from a smart meter must be ZigBee. ZigBee means a product that can communicate directly with the smart meter. Smart meters and ZigBee IHDs are equipped with a low-power wireless radio transmitter based on the ZigBee standard.

Non-Zigbee IHD units do not communicate directly with a smart meter. Generally, they require a sensor and transmitter to be installed on a residence's electricity meter or main electricity cable. This enables household energy consumption to be measured and transmitted to the IHD display via short-range radio signals.

Refer to Appendix A for a process map of an in-home display installation.

1.1.1. Compliance with the Energy Retail Code

APs engaged in the IHD activity should be familiar with Clause 4.7 of the *Energy Retail Code, Version 8, 2011*. The Energy Retail Code governs the marketing activities, service levels and customer complaint handling processes of energy retailers. Clause 4.7 also requires information on how energy consumption and cost information will compare to that on the customer's bill to be disclosed to the customer. As APs undertaking the IHD activity will be providing and installing products that display energy consumption information, you should be guided by this and must disclose how the data displayed on the IHD unit compares to the information on the energy consumer's bill.

1.1.2. Binding request for ZigBee IHD units

For a ZigBee IHD unit to obtain electricity consumption information from the smart meter, it needs to 'bind' to it. This binding process is when a smart meter connects to an IHD, to enable it to read the electricity consumption information. The binding process is to be initiated by you (the AP) as

the installer, completed by the Distributed network service provider (DNSP), and then confirmed by you (the AP).

To bind an IHD unit to a smart meter, the DNSP requires specific details about both the IHD unit and the smart meter. This information must be gathered by you and submitted to the DNSP. The DNSP requires the following information to open a binding window¹:

- National Meter Identification number (NMI) - this is a 10-digit number that identifies the site to the DNSP and can be found on the customer's electricity bill
- NMI checksum - this is a single numeral used to assist with data validation and is usually the eleventh character of the NMI
- meter serial number
- VEET approved device (yes/no)
- IHD device name, class and type
- IHD manufacturer
- IHD model number
- IHD serial number
- IHD firmware version
- Battery powered (yes/no)
- Home Area Network identifier/code
- MAC address - the Media Access Control address (MAC address), or 'MAC ID', is unique to each IHD and enables the smart meter to identify the customer's IHD unit in order to bind.

The information listed above is required by the DNSP to enable them to bind the IHD unit to the meter. The DNSP uses this information to send a message to the smart meter to ask it to open a 'binding window' and search for that customer's IHD unit. The length of the binding window is generally determined by the binding process set up by the AP and DNSP. Once the binding window is open, the meter seeks the signal from the customer's IHD unit, initiates the bind and completes it.

The binding request may be in the form of an email to the DNSP, a telephone call, or it can be done through an internet portal, depending on the binding process implemented by that DNSP. APs must confirm which process the relevant DNSP in that area uses to facilitate IHD binding.

Once the product is installed, any meter data from previous occupants should not be read by the IHD unit. It is your responsibility to purge or reset the IHD unit to start recording information from the binding day forward. This prevents the meter data of previous occupants being disclosed.

¹ **Please note:** this list is indicative only and may be amended. Please contact the customer's DNSP to confirm what information they require.

1.1.3. Binding reports for ZigBee IHD units

To verify that an installation of a Zigbee IHD unit has taken place, we require confirmation from the DNSP that a specific smart meter has been bound to a specific IHD unit. This confirmation ensures that VEECs are created for unique binds only. This binding information is contained within a binding report, created by DNSPs and submitted to us. The binding report contains the NMI and MAC address for each IHD unit that has bound to a meter in that DNSP's service area. Under section 60 of the Act, we may request this information and must receive it within a specified time frame of not less than 10 business days.

1.1.4. Ongoing customer support

This activity requires you to establish a suitable method of ongoing customer support. The nature and extent of that support must be disclosed to the customer. As part of the ongoing customer support, you must:

- provide the customer with a helpline number
- inform the customer on how to troubleshoot device issues.

1.1.5. Privacy issues

The information that is transmitted from the meter to the IHD unit is considered personal information and therefore subject to the National Privacy Principles (NPPs). DNSPs have a responsibility to ensure that meter data is handled according to the *Privacy Act 1988* and the NPPs. APs undertaking the IHD activity must also abide by the relevant privacy legislation. As a result, APs will have to confirm that a customer is the registered electricity account holder for that premises, or their authorised agent.

Customers should be fully briefed on data privacy issues relating the installation of an IHD unit. This should include information on how the device operates and stores information and for how long, as well as how to delete historical data.

1.2. Residential/non-residential appliances activities

There following activities are included in this activity category:

- Activity 19: Destruction of pre-1996 refrigerator or freezer
- Activity 22: High efficiency refrigerator and freezer
- Activity 24: High efficiency television
- Activity 25: Energy efficient clothes dryer
- Activity 26: High efficiency pool pump

Activities 22, 24 and 25 only require the purchase of products eligible under the VEET Regulations (and not the physical installation of these products as required in other activities under the program).

1.3. Non-residential appliances activities

The following activities are covered by this activity category:

- Activity 31: High efficiency motor
- Activity 32: Refrigerated display cabinet
- Activity 33: Refrigeration/ventilation fan motor activities
- Activity 36: Water efficient pre-rinse spray valve activities

1.4. Mandatory safety training (MST)

Installers must obtain units of competency before they can undertake certain activities. Installers are approved for activities by having a certificate of competency from a registered training organisation (RTO) for the relevant units. We require all installers new to the scheme to have current MST units for each prescribed activity they intend to work in before we approve them as installers. See Table 1 for available MST units for each of the three MST groups.

All installers must have completed the required training to undertake installations for high efficiency pool pump (activity 26). Fully qualified and licensed electricians and plumbers, and registered builders are exempt from these requirements.

You will have to make sure that installers for the above activities are submitted and approved by us prior to undertaking installations under the scheme. This includes electricians, plumbers and builders. You must keep your installer database up to date and keep files on record to support those entries (whether that be a copy of their licence of completion of the relevant MST unit).

Table 1: Mandatory safety training requirements

Group	Available Mandatory Safety Training units	
Group A: Units relating to health and safety risks and OH&S requirements	VU21858:	Minimise health and safety risk when retrofitting for energy and water efficiency.
	CPCCOHS2001A:	Apply OHS requirements, policies and procedures in the construction industry.
	CPCPCM2043A:	Carry out WHS requirements.
Group B: Unit relating to energy and water efficiency retrofits	VU21859:	Undertake retrofitting to improve energy and water efficiency.
Group C: Units relating to working at heights	CPCCCM2010B:	Work safely at heights.
	CPCCCM2010:	Work safely on scaffolding higher than two meters.
	RIIWH204D:	Work safely at heights.

1.5. Common requirements for appliances activities (where relevant)

Accredited person (AP) requirements

You, or your associate, or an entity under your instructions, must not install a product for the purposes of decommissioning it as part of an activity under the program (e.g. you have not altered the baseline environment for a given installation for the purposes of inflating the VEEC claim for that installation).

For an activity involving the decommissioning of product(s), you, your 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.

You must ensure your installers provide copies of the following documents to the energy consumer, where applicable:

- VEEC assignment form
- Invoice/proof of purchase
- Manufacturer's instructions
- VBA Compliance Certificate and/or Certificate of Electrical Safety.

2. Requirements for in-home display unit activities

2.1. Activity 30: In-home display units

2.1.1. Activity 30A: Installing a ZigBee in-home display (IHD) unit

Requirements	Description
Activity	Installers must • install a product which meets the product criteria below. • complete a site assessment to assess whether: – the premises is suitable for an IHD installation – the meter installed at the premises is compatible with the type of IHD unit to be installed – the proposed environment of the display is appropriate to ensure satisfactory transmission and no signal interference. • install the unit in a DNSP area approved by the Essential Services Commission • successfully bind the installed unit to the consumer's smart meter • ensure that the consumer's specific tariff and National Meter Identification (NMI) is entered into the unit and is accurate • explain to the consumer which charges will be represented on the unit and that these will not necessarily match the consumer's bill • provide consumers with a manual, troubleshooting guide and warranty for the installed unit • show consumers how to use the installed unit, or in the case of a mail-out provide sufficient information on the installation process and how to use the units • explain the privacy issues associated with IHD units to consumers • purge or reset the IHD units at the point of installation to make sure the meter data of previous occupants is not disclosed.
Product criteria	An in-home display unit that when installed in relation to an AMI² metering installation provides information on the total electricity consumption of the residential premises directly to the consumer, complies with the Zigbee Smart Energy Profile Specification and Zigbee Smart Energy Standard, and when tested in a manner approved by us: • determines electricity consumption information from the sensing apparatus at least every 30 seconds

² Advanced metering infrastructure (AMI) is an integrated system of smart meters, communication networks, and data management systems that enables two-way communication between utilities and customers.

Requirements	Description
	• stores electricity energy consumption information from the previous 45 days • displays to the consumer (or relays to a device that displays to the consumer) in a numerical format and non-numerical format and in a manner that allows the consumer to easily distinguish between low and high consumption the: – electricity energy consumption information from the previous 45 days in intervals no longer than one hour per day of information displayed and one day per week of information displayed – average total household electrical power consumption (in Watts) for the displayed period, which must be updated at least every 30 seconds – total household electricity energy consumption (in kWh) for the displayed period and the cost of that consumption, which must be updated at least every 30 seconds. • displays to the consumer (or relays to a device that does this) the tariff (in cost per unit of energy consumed) and the total cost of electricity consumed for the period displayed • permanently erases all consumption and tariff information held by the product including information entered by the consumer • has an average electric power consumption of not more than 0.6 Watts when operating under normal circumstances • if battery powered, uses a battery that has a manufacturer's rated lifetime of at least 5 years when operating under normal circumstances. • is listed on the our Register of Products by the time VEECs are created.
Training/licensing	• Installers must be appropriately trained on the functionality and limitations of the IHD that they are installing. • Clamp-on-type IHD units must be installed by a licensed electrician registered by Energy Safe Victoria.
Eligible environments and installation limits	Residential premises – maximum of one product.
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/ proof of purchase listing all products and models installed. • Non-prescribed Certificate of Electrical Safety if clamp on devices are involved.

2.1.2. Activity 30B: Installing a non-ZigBee in-home display (IHD) unit

Requirements	Description
Activity	Installers must: • install a product which meets the product criteria below. • complete a site assessment to assess whether: – the premises is suitable for an IHD installation – the meter installed at the premises is compatible with the type of IHD unit to be installed – the proposed environment of the display is appropriate to ensure satisfactory transmission and no signal interference. • physically install the unit and connect it to the sensing apparatus. • ensure that the consumer's specific tariff and National Meter Identification (NMI) is entered into the unit and is accurate • explain to the consumer which charges will be represented on the unit and that these will not necessarily match the consumer's bill • provide consumers with a manual, troubleshooting guide and warranty for the installed unit, including information on how to reinstall their IHD unit should it be removed, as well as adhesives to facilitate reinstallation, if required • show consumers how to use the installed unit, or in the case of a mail-out provide sufficient information on the installation process and how to use the IHD unit • explain the privacy issues associated with IHD units to consumers • purge or reset the IHD units at the point of installation to make sure the meter data of previous occupants is not disclosed.
Product criteria	An in-home display unit that when installed in relation to any sensing apparatus provides information on the total electricity consumption of the residential premises directly to the consumer, and when tested in a manner approved by us that: • determines electricity consumption information from the sensing apparatus at least every 30 seconds • stores electricity energy consumption information from the previous 45 days • displays to the consumer (or relays to a device that displays to the consumer) in a numerical format and non-numerical format and in a manner that allows the consumer to easily distinguish between low and high consumption the: – electricity energy consumption information from the previous 45 days in intervals no longer than one hour per day of information displayed and one day per week of information displayed – the average total household electrical power consumption (in Watts) for the displayed period, which must be updated at least every 30 seconds – the total household electricity energy consumption (in kWh) for the displayed period and the cost of that consumption, which must be updated at least every 30 seconds. • displays to the consumer (or relays to a device that does this) the tariff (in cost per

Requirements	Description
	unit of energy consumed) and the total cost of electricity consumed for the period displayed • permanently erases all consumption and tariff information held by the product including information entered by the consumer • has an average electric power consumption of not more than 0.6 Watts when operating under normal circumstances • provides electricity energy consumption information that is accurate to within 5% of actual electricity consumption • if battery powered, uses a battery that has a manufacturer's rated lifetime of at least 5 years when operating under normal circumstances • uses, for its communications with the sensing apparatus and any display device, an encrypted communication protocol that is approved by the ESC • is listed on our Register of Products by the time VEECs are created.
Training/licensing	• Installers must be appropriately trained on the functionality and limitations of the IHD unit that they are installing. • Clamp-on-type IHD units must be installed by a licensed electrician registered by Energy Safe Victoria.
Eligible environments and installation limits	Residential premises – maximum of one product.
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/ proof of purchase listing all products and models installed. • Non -prescribed Certificate of Electrical Safety if clamp on devices are involved. • Binding reports from the DNSP to confirm a specific smart meter has been successfully bound to a specific IHD unit.

3. Requirements for residential/non-residential appliances activities

3.1. Activity 19: Destruction of pre-1996 refrigerator or freezer

This activity is only valid under the program up till 9 December 2020.

Requirements	Description
Activity	Destruction, by the disposal of, in accordance with the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 of the Commonwealth, scheduled substances (within the meaning of that Act) contained in a refrigerator or freezer manufactured before 1996 and in working order
Product criteria	Refrigerator/freezers must have been manufactured before 1996 and currently in working order ³ .
Training/licensing	Scheduled substances in the refrigerator or freezer are destroyed by a person holding Refrigerant Handling License granted by the ARC (Australian Refrigeration Council Ltd).
Eligible environments and installation limits	• Residential premises – no limits. • Business/non-residential premises – no limits.
Evidence	For each activity you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Where oral assignment occurs (for residential premises only) you must ensure: – accurate consumer details are recorded and kept – mandatory information as set out in the VEEC assignment form is explained to the consumer – verbal consent to the assignment of the right to create certificates is given freely.

³ Working order is defined as “the state of something, as a mechanism, when it is functioning properly”. For the purpose of Activity 19, this means that all key components of a refrigerator or freezer must be present and functioning properly; i.e. compressor, heat exchanging pipes, expansion valve, and refrigerant. We recognise that for some residential roadside collection programs it is necessary to remove the door of the refrigerator or freezer for safety reasons. In this instance, refrigerators or freezers with doors intentionally removed for this purpose may be considered in working order, provided they key componentry satisfies the definition provided above.

3.2. Activity 22: High efficiency refrigerator and freezer

Requirements	Description
Activity	Purchasing a product which meets one of the product criteria below.
Product criteria (22A – Single door refrigerator)	A single door refrigerator that: • is a group 1 refrigerator as defined by Greenhouse and Energy Minimum Standards (Household Refrigerating Appliances) Determination 2012 (Cth) • has a total storage volume of not less than 100 litres and not more than 700 litres (as defined by AS/NZS 4474.1:2007) • has a star rating index of 2.5, determined in accordance with AS/NZS 4474.2 • is listed on the GEMS Register at the time of purchase • is listed on our Register or Products by the time VEECs are created.
Product criteria (22B – Two door refrigerator)	A two door refrigerator that: • is a Group 4, 5B, 5S or 5T refrigerator as defined by Greenhouse and Energy Minimum Standards (Household Refrigerating Appliances) Determination 2012 (Cth) • has a total storage volume of not less than 100 litres and not more than 700 litres (as defined by AS/NZS 4474.1:2007) • has a star rating index of 3.5, determined in accordance with AS/NZS 4474.2 • is listed on the GEMS Register at the time of purchase • is listed on our Register or Products by the time VEECs are created.
Product criteria (22C – Chest freezer)	A chest freezer that: • is a group 6C product as defined by Greenhouse and Energy Minimum Standards (Household Refrigerating Appliances) Determination 2012 (Cth) • has a total storage volume of not less than 100 litres and not more than 700 litres (as defined by AS/NZS 4474.1:2007) • has a star rating index of 3.5, determined in accordance with AS/NZS 4474.2 • is listed on the GEMS Register at the time of purchase • is listed on our Register or Products by the time VEECs are created.
Product criteria (22D - Upright freezer)	An upright freezer which: • is a group 6U or 7 product as defined by Greenhouse and Energy Minimum Standards (Household Refrigerating Appliances) Determination 2012 (Cth) • has a total storage volume of not less than 100 litres and not more than 700 litres (as defined by AS/NZS 4474.1:2007) • has a star rating index of 3.0, determined in accordance with AS/NZS 4474.2 • is listed on the GEMS Register at the time of purchase • is listed on our Register or Products by the time VEECs are created.

Requirements	Description
Eligible environments and installation limits	• Residential premises – no limits. • Business/non-residential premises – no limits.
Evidence	For each sale you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/ proof of purchase listing all products (brand and model) installed.

3.3. Activity 24: High efficiency television

Requirements	Description
Activity	Purchasing a product which meets the product criteria below
Product criteria	A television that: • has a star rating of 7 stars • CEC on the energy rating label of not more than 300 kWh/y • is listed on the GEMS Register at the time of purchase • is listed on our Register or Products by the time VEECs are created. Measurement, testing and rated must be in accordance with the Greenhouse and Energy Minimum Standards (Television) Determination 2013 (No.2).
Eligible environments and installation limits	• Residential premises – maximum of two products. • Business/non-residential premises – no limits.
Evidence	For each sale you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/ proof of purchase listing all products (brand and model) installed.

3.4. Activity 25: Energy efficient clothes dryer

Requirements	Description
Activity	Purchasing a product which meets the product criteria below.
Product criteria	A stand-alone electric clothes dryer (not part of a combination washer/dryer) that: • is registered for energy labelling • has a star rating of 7 stars • is listed on the GEMS Register at the time of purchase • is listed on our Register or Products by the time VEECs are created. Measurement, testings and ratings must be in accordance with the Greenhouse and Energy Minimum Standards (Rotary Clothes Dryers) Determination 2015.
Eligible environments and installation limits	• Residential premises – maximum of one product • Business premises/non-residential premises – no limits
Evidence	For each sale you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/ proof of purchase listing all products and models installed.

3.5. Activity 26: High efficiency pool pump

Requirements	Description
Activity	Installer must install a product which meets the product criteria below.
Product criteria	A domestic pool or spa pump that has a single phase, single speed, dual speed, multiple speed or a variable speed pump unit that: • has an input power of not less than 100W and not more than 2500W, when determined in accordance with AS 5102.1 • is part of the E3 Committee's voluntary energy rating labelling program for swimming pool pump-units (Rules for participation November 2010), or else registered for energy labelling under AS 5102.2 • is listed on our Register or Products by the time VEECs are created.
Training/licensing	Installers must complete the following MST units: • one MST unit from Group A • one MST unit from Group B Refer to Table 1 above. If the installation requires wiring work, the installer must be a licensed electrician registered with Energy Safe Victoria.
Eligible environments and installation limits	• Residential premises – maximum of one product • Business/non-residential premises – no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/ proof of purchase listing all products (brand and model) installed. • Non-prescribed Certificate of Electrical Safety if wiring work is required. • VBA Compliance Certificate if value of plumbing work over \$750.

4. Requirements for non-residential appliances activities

4.1. Activity 31: High efficiency motor

Requirements	Description
Activity	Installer must install a product which meets the product criteria below.
Product criteria (31A – MEPS high efficiency motor)	A three-phase cage induction motor that: • has 2,4,6 or 8 poles • is listed on the Commonwealth GEMS Register at the time of the installation • is listed on our Register or Products by the time VEECs are created.
Product criteria (31B – super-premium motor)	A three-phase cage induction motor that: • has a rated output of not less than 0.75 and not more than 185 kW (as determined in accordance with AS 60034.1-2009 as published on 15 July 2009) • meets the requirements for an IE4 (super-premium) efficiency level motor proposed in Annex A of IEC/TS 60034-31 (when tested in accordance with IEC60034-2-1) • has 2,4 or 6 poles • is listed on our Register of Products by the time VEECs are created.
Training/Licensing	Installers must be licensed electricians registered with Energy Safe Victoria.
Eligible environments and installation limits	Business/non-residential premises – no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • 'Fit-for-purpose' declaration that the work conducted meets the requirements of the VEET Act, the VEET Regulations and these evidence requirements, and is fit-for-purpose. The declaration should also be acknowledged and signed-off by the energy consumer. • Invoice/ proof of purchase listing all products (brand and model) installed. • Certificate of Electrical Safety detailing the nature and type of work done.

4.2. Activity 32: Refrigerated display cabinet

Requirements	Description
Activity	Installer must install a product which meets the product criteria below.
Product criteria	A refrigerated display cabinet that: • achieves the high efficiency level within the meaning of Greenhouse and Energy Minimum Standards (Refrigerated Display Cabinets) Determination 2012 • is listed on the Commonwealth GEMS Register at the time of the installation • is listed on our Register or Products by the time VEECs are created.
Training/licensing	Installers must be licensed electricians registered with Energy Safe Victoria.
Eligible environments and installation limits	Business/non-residential premises – no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Non-prescribed Certificate of Electrical Safety detailing the nature and type of work done. • Invoice/ proof of purchase listing all products (brand and model) installed. • 'Fit-for-purpose' declaration that the work conducted meets the requirements of the VEET Act and the VEET Regulations, and is fit-for-purpose. The declaration should also be acknowledged and signed-off by the energy consumer.

4.3. Activity 33 – Refrigeration/ventilation fan motor

Requirements	Description
Activity	Installer must install a product which meets the product criteria below.
Product criteria (33A: Fan motor in a refrigerated display cabinet, commercial freezer or cool room)	A fan motor installed in a refrigerated display cabinet, commercial freezer or cool room that is: • an electronically commutated motor (being a permanent magnet motor with electronic commutation) and – if an internal rotor motor, has a rated motor output of not more than 600 Watts – if an external rotor motor, has a rated motor input of not more than 800 Watts • listed on our Register of Products by the time VEECs are created.
Product criteria (33B: Fan motor in an air-handling system)	A fan motor installed into a ducted fan or partition fan in an air-handling system as defined in ISO 13349:2010 that is: • an electronically commutated motor (being a permanent magnet motor with electronic commutation) and – if an internal rotor motor, has a rated motor output of not more than 600 Watts – if an external rotor motor, has a rated motor input of not more than 800 Watts • listed on our Register of Products by the time VEECs are created.
Training/licensing	Installer must: • be a licensed electricians registered with Energy Safe Victoria • be a licensed refrigeration technician, and supply their licence number and compliance certificate (where any handling of refrigerant is required) • hold other licences which may include a plumbing licence and/or a refrigerant handling licence with the Victorian Building Authority (if it is appropriate to do so for the specific installation). You must maintain a register of installers' qualifications (electrical licence, and plumbing licence and/or refrigerant handling licence, if required) to confirm installers have the relevant qualifications needed to install refrigeration fan motors.
Eligible environments and installation limits	Business /non-residential premises – no limits

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Non-prescribed Certificate of Electrical Safety detailing the nature and type of work done. • VBA Compliance Certificate (if required by law) and the details and licence number of a licensed refrigeration technician if the installation included the handling of refrigerant • Invoice/ proof of purchase listing all products (brand and model) installed. • 'Fit-for-purpose' declaration that the work conducted meets the requirements of the VEET Act and the VEET Regulations, and is fit-for-purpose. The declaration should also be acknowledged and signed-off by the energy consumer.

4.4. Activity 36: Water efficient pre-rinse spray valve

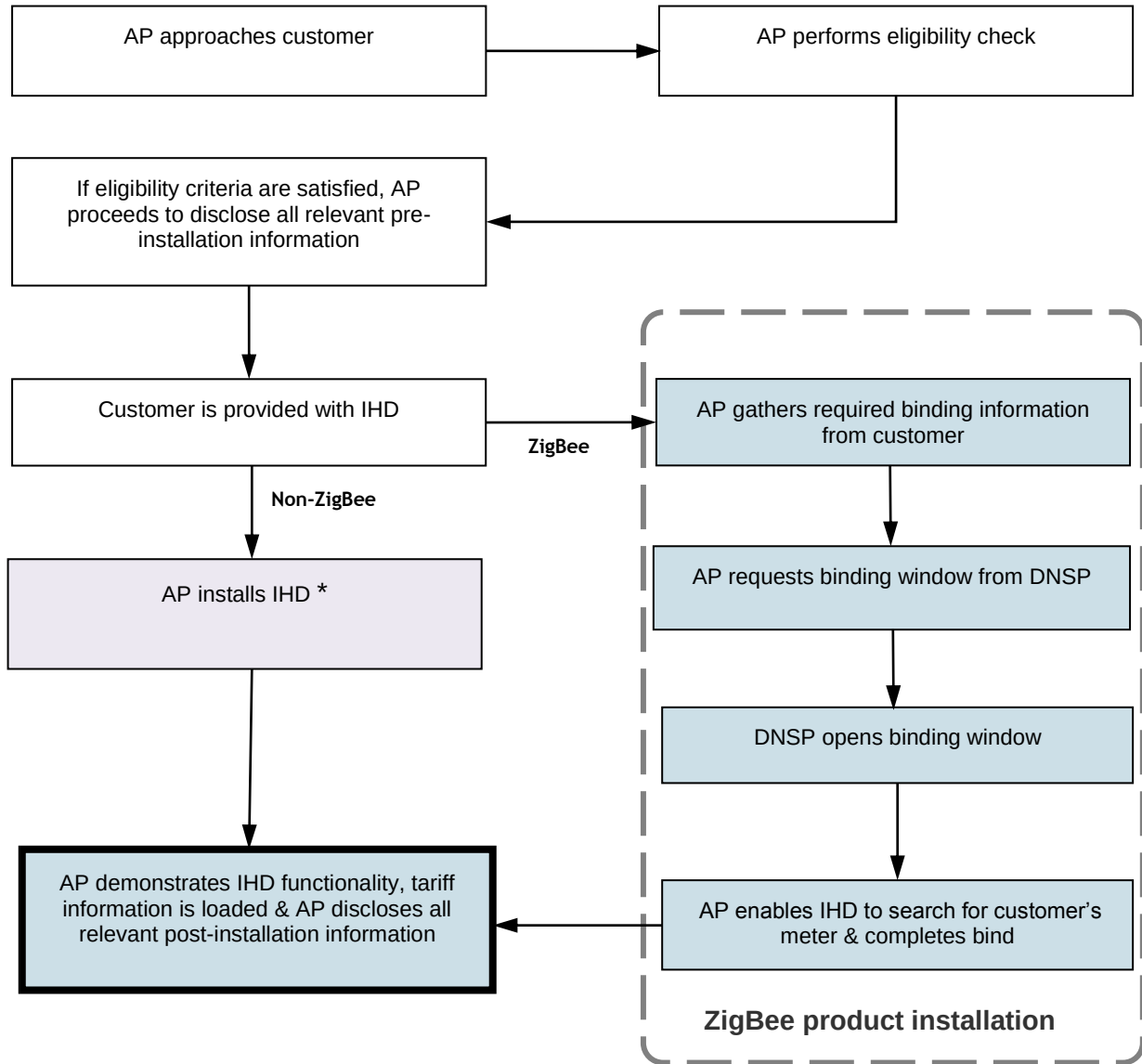
Activity 36A(i): Pre-rinse spray valve replacing a pre-rinse spray valve

Requirements	Description
Activity	Installer must: • install a product which meets the product criteria below • decommission a pre-rinse spray valve that is not rated as having a 4 star or higher water efficiency (when assessed or labelled in accordance with AS/NZS 6400).
Product criteria	A pre-rinse spray valve that is: • described as “tap equipment” in the Water Efficiency Labelling and Standards Determination 2013 (No. 2) made under the Water Efficiency Labelling and Standards Act 2005 (Cth) • installed in accordance with AS/NZS 3500 and the Plumbing Regulations 2008 • listed on our Register of Products by the time VEECs are created.
Training/licensing	Installers must be appropriately trained to install the product.
Eligible environments and installation limits	• Business/non-residential premises – no limits. • The Plumbing Industry Commission (PIC) recommends that a backflow prevention device is present at premises where a pre-rinse spray valve is installed. Installers should consult the PIC for further information.
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/proof of purchase listing the installed product brand and model. • Decommissioning evidence for all removed pre-rinse spray valves. This includes reconciliations, recycling receipts, count forms and stocktakes. • VBA Compliance Certificate, if required.

Activity 36A(ii): Installing a pre-rinse spray valve

Requirements	Description
Activity	Installers must: • install a product which meets product criteria below • ensure that there is an existing fitting for a pre-rinse spray valve on which no existing spray valve is installed.
Product criteria	Installing a pre-rinse spray valve that is: • described as “tap equipment” in the Water Efficiency Labelling and Standards Determination 2013 (No. 2) made under the Water Efficiency Labelling and Standards Act 2005 (Cth) • installed in accordance with AS/NZS 3500 and the Plumbing Regulations 2008 • listed on our Register of Products by the time VEECs are created.
Training/licensing	Installers must be appropriately trained to install the product.
Eligible environments and installation limits	• Business premises/non-residential premises – no limits • The Plumbing Industry Commission recommends that a backflow prevention device is present at premises where a pre-rinse spray valve/trigger nozzle is installed. Installers should consult the PIC for further information.
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and energy consumer. • Invoice/proof of purchase listing all products (brand and model) installed. • VBA Compliance Certificate if required.

Appendix A: In Home Display Installation Process



*Non-ZigBee IHD units are required to be physically installed on premises by the AP. If the device is a clamp-on-type, it must be installed by a qualified and licensed electrician.

Document Version History

The RM reference for this document is: C/18/24090

Version	Amendments made	Date published
1.0	First release	10 December 2018