

## Underfloor Insulation

### Proposed changes:

- Reducing the required minimum R-value required for underfloor insulation from R2.5 to R1.5
- Removing conductive insulation products from being an eligible VEET product
- Separating the insulation of **enclosed** and **unenclosed subfloors** into two different activities.

Current abatement factor	Proposed abatement factors	
0.073	Enclosed subfloor	0.05 (Schedule 12A)
	Unenclosed subfloor	0.099 (Schedule 12B)

### Observations:

- Abatement refers to e.g. 0.099 certificates (VEECs) per square metre installed
- Underfloor Insulation is an extremely low volume activity
- Still no incentive proposed for Ceiling Insulation where there would be a much higher demand
- The RERS Scorecard also captures enclosed and unenclosed subfloors

## Weather Sealing

### Overall Observations:

- There are 7 weather sealing categories
- Individually the VEECs allocated do not provide significant incentives in most cases
- However taken as part of a whole home draught proofing job they do add up and will provide a good overall discount
- Weather sealing lends itself to being bundled with Insulation customer offers

### Weather Sealing – External Doors

#### Proposed changes:

- Complete draught sealing of an external door
- Products must be capable of lasting for at least ten years of normal use

Air sealing measure	Unit	Current Abatement factor	Proposed Abatement factor
Weather sealing external door (15A)	Per door weather sealed	0.371	0.605

### Observations:

- Complete sealing means all around the door rather than just bottom door strip as previous

Weather Sealing – External Window			
<b>Proposed changes:</b>			
<ul style="list-style-type: none"> <li>• Permanent seal</li> <li>• Products must be capable of lasting for at least ten years of normal use</li> </ul>			
Air sealing measure	Unit	Current Abatement Factor	Proposed Abatement Factor
Weather sealing - external window (15B)	Per m <sup>2</sup> of window weather sealed	0.025	0.027

**Observations:**

- Extremely low incentive – minimal increase

Weather Sealing – Replacing Existing Exhaust Fan with Self-Sealing Exhaust Fan			
<b>Proposed changes:</b>			
<ul style="list-style-type: none"> <li>• Products must be capable of lasting for at least ten years of normal use</li> <li>• Product must expel air either to the outside or into the roof space of the premises</li> </ul>			
Air sealing measure	Unit	Current Abatement Factor	Proposed Abatement Factor
Replacing existing exhaust fan with self-sealing exhaust fan (15C)	Per exhaust fan	0.911	0.928

**Observations:**

- Minimal increase in incentive

Weather Sealing – Installing a cover with self-closing damper on existing exhaust fan			
<b>Proposed changes:</b>			
<ul style="list-style-type: none"> <li>• Products must be capable of lasting for at least ten years of normal use</li> <li>• Installed according to manufacturer's instructions</li> </ul>			
Air Sealing Measure	Unit	Current Abatement Factor	Proposed Abatement Factor
Installing a cover with self-closing damper on existing exhaust fan (15D)	Per exhaust fan	0.911	1.798

**Observations:**

- Based on exhaust cover products such as Draught Stoppa's
- Fairly good incentive

Weather Sealing – Wall Vents			
<b>Proposed changes:</b>			
<ul style="list-style-type: none"> <li>• Products must be capable of lasting for at least ten years of normal use</li> <li>• Products be made of a robust non-shrinking permanent sealing material</li> </ul>			
Air Sealing Measure	Unit	Current Abatement Factor	Proposed Abatement Factor
Sealing wall vents (15E)	Per wall vent	0.231	0.236

**Observations:**

- Aesthetics a big consideration especially where decorative vents or ceiling roses
- Fairly good incentive given potential number of vents per home

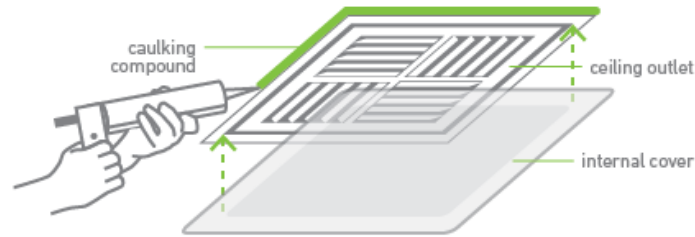
Weather Sealing – Installing chimney damper to open fireplace – permanent and temporary				
<b>Proposed changes:</b>				
<ul style="list-style-type: none"> <li>• 15F for permanent chimney installations (10 year lifetime)</li> <li>• 15G for chimney installations that are temporary or seasonal (5 year lifetime)</li> <li>• 15G be accompanied with appropriate signage when installed that indicates that a product has been installed in the chimney or flue as well as with instructions for removal</li> </ul>				
Air Sealing Measure	Unit	Current Abatement Factor	Proposed Abatement Factor 15F	Proposed Abatement Factor 15G
Installing chimney damper to open fireplace	Per chimney damper	5.130	5.234	2.617

**Observations:**

- 15G refers to products such as Chimney Balloons
- Incentive is large as a proportion of product and install costs
- Point 3 covers compliance and safety
- Compliance risks are a big consideration for these products

## Weather sealing – Ducted evaporative cooling covers

### Proposed new schedule



### EVAPORATIVE COOLING OUTLET

- › Seal ceiling outlet in winter with a fitted cover
- › Seal edge with Caulking Compound to create a tight seal

Air Sealing Measure	Unit	Proposed Abatement Factor
Ducted evaporative cooling covers (15H)	Per cover	0.238

#### Observations:

- PC's new service provider is an importer and installer of this kind of product (undergoing VEET product accreditation)
- Fairly good incentive given potential large number of cooling vents per home
- Covers designed to be able to be removed and easily refitted according to the season
- Sealing edge with caulking is potentially time consuming and undermines ability to install on and off seasonally
- Many products come with inbuilt seal removing the need for caulking
- Our service provider will be highlighting this in the submissions

## High Efficiency Televisions

### Proposed changes:

- minimum eligibility criteria used for televisions in VEET proposed to change to reflect improvements in TV efficiency since 2010

Current Eligibility	Proposed Eligibility
Minimum 5.5 Stars	Minimum 7 Stars
Comparative Energy Consumption on the Energy Rating Label of not more than 450 kWh/year	Comparative Energy Consumption on the Energy Rating Label of not more than 300 kWh/year

#### Observations:

- Not a core PC product offering
- May be possible to utilize as part of development a future 'Appliances' product offering/ Major Retailer partnership

## New Project Based Activity Methods

### Observations:

- Three types of Activity Method
- Based upon overall energy consumption reduction rather than purely deemed product replacements and installations
- Beyond individual residential scale – mainly suitable for commercial or large housing sites
- I was not present for these so basic details below, and a lot more detail here [VEET Consultation Day presentation slides](#)

### New Project Based Activity Method: Treatment and Control

#### Proposed:

- Providing energy savings goods or services to a large group of sites
- Energy savings are calculated by comparing the energy consumption of these sites to the energy consumption of a group which did not receive the goods or services
- Using a statistical test to determine if energy savings have occurred

#### Treatment & Control method

- The treatment is the provision of energy efficiency goods or services - For example:
  - Household energy audits
  - Letters or reports about energy consumption
  - Energy saving advice
  - Discounts or vouchers for the purchase of new energy efficient equipment
- The group which does not receive the treatment is called the control group
- The treatment group and the control group are both randomly selected from a larger group of similar sites (called a population)
- An example of a population might be the residential customers of a specific energy retailer living in a certain area

#### Three sub-methods

- **Sub-method 1:** comparison between the daily household energy consumption of the treatment and that of the control group
- **Sub-method 2:** comparison between the change in daily household energy consumption of the treatment and that of the control group
- **Sub-method 3:** regression analysis to separate the effect of the treatment from other changes in energy consumption

### Observations:

- Rather complex and large scale with extended timelines, not a core PC offering
- Lends itself to Consultancy Services
- Projects of this kind require several engaged stakeholders
- Treatments may use new products of a type covered by different incentive schemes
- Uplift can result in double counting with:
  - Other VEET schedules
  - Commonwealth Emissions Reduction Fund
  - Commonwealth Renewable Energy Target
- Certificates can be claimed under the VEET or other prescribed greenhouse gas schemes – but not both – no double dipping

### New Project Based Activity Method: Measurement and Verification

#### Proposed:

The M&V method is designed to be technology neutral – it will credit any upgrade that results in greenhouse gas savings from electricity or gas consumption, except:

- Upgrades required by legislation
- Projects that have already occurred
- New projects
- Projects that claim Renewable Energy Certificates\*
- Projects across multiple locations\*

#### How it Works:

$$\text{Savings} = \text{Baseline energy consumption} - \text{Energy consumption after the upgrade}$$

The baseline is the energy that would have been used if the upgrade had never happened – it's not as simple as looking at old records

- You need to create a **baseline energy model**

After the upgrade, you need to know either how much energy is used, or be able to predict how much energy will be used

- You might also need an **operating energy model**

#### Observations:

- A commercial energy efficiency offering
- Based upon overall energy consumption reduction rather than purely deemed product replacements and installations

### New Project Based Activity Method: Benchmark Rating

#### Proposed:

- Uses NABERS ratings to calculate energy savings for buildings
- Benchmark rating means a comparison of a buildings energy performance with other buildings of the same type
- Energy savings are calculated by comparing a baseline rating taken from before energy efficiency works to an annual rating each year after works are completed

#### The benchmark rating method:

$$\text{Savings} = \text{Baseline energy} - \text{Reporting energy}$$

- Reporting Energy is taken from the rating report for the year energy savings are being calculated
- Baseline Energy is the calculation of what the energy consumption would have been at the building without the project.
- Method only covers existing buildings
- The ESC can approve other benchmark rating schemes that meet certain requirements, including:
  - The rating is based on measured energy usage (not simulations)
  - The scheme has a published methodology for all inputs
  - The scheme has a reverse calculator
  - Ratings are subject to independent audit

- The method credits all improvements in energy efficiency which occur in the building
- This includes activities which are not part of the project
- A factor is included in the method which assumes all buildings improve in energy efficiency by 3% per year

**Project Plan**

- Accredited Persons would be required to submit a project plan before the treatment starts
- The proposed requirements include:
  - A description of the project activities
  - Details of the baseline benchmark rating
  - A risk management plan

**Observations:**

- A commercial energy efficiency offering
- Based upon overall energy consumption reduction rather than purely deemed product replacements and installations