Victorian Energy Upgrades

AGL Response

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1. Do you agree with moving the technical requirements from the *Victorian Energy Efficiency Regulations 2008* to the *Victorian Energy Upgrades Specifications 2018*, and the process by which that document can be updated by the department?

- Yes

We agree with the Energy Efficiency Council (EEC) submission on this point.

2. Do you agree with introducing flexibility into the proposed Regulations so that emerging technologies and products can be quickly integrated into the Victorian Energy Upgrades program?

- Yes

3. Do you agree with providing all activities in the proposed Regulations with a 'fresh start' in terms of the number of times an activity can occur at a premise?

- Yes, absolutely

4. Do you agree with the transitional arrangements included in Part 4 of the proposed Regulations?

- Not applicable to me

5. Do you agree with increasing shortfall penalty rate from $46.72 to $50?

- Yes

6. Do you agree with removing the requirement for certain products to be listed on the product register kept by the Essential Services Commission?
Only if these products are listed elsewhere – Minimum Energy Performance Standards (MEPS) registers for certain appliances, the AEMO National Electricity Market Load Table for Unmetered Connection Points for public lighting products.

- Yes

7. Do you agree with the introduction of the new activity for high efficiency fan motors for ducted or partition fans in ventilation systems (proposed Part 33)?

- Not applicable to me

8. Do you agree with the introduction of the new activity for gas-fired steam boilers (proposed Part 37)?

- Not applicable to me

9. Do you agree with the introduction of the activity for gas-fired hot water boilers or gas-fired water heaters (proposed Part 38)?

- Not applicable to me

10. Do you agree with the introduction of the activity for gas/air ratio controls (proposed Part 39)?

- Not applicable to me

11. Do you agree with the introduction of the activity for gas-fired burners (proposed Part 40)?

◉ Not applicable to me

12. Do you agree with the introduction of the activity for economizers (proposed Part 41)?

◉ Not applicable to me

13. Do you agree with the removal of activities involving solar retrofits for water heaters (current Schedule 2 and 4)?

◉ Yes

14. Do you agree with the removal of the activity involving destroying pre-1996 refrigerators and freezers (current Schedule 19)?

◉ No

Disagree with the modelling for refrigerators. Even through the fridges are now 20 years old, there are still a significant number of pre-1996 units in use as they were built to last not as a replaceable commodity. First-hand experience is that these fridges are being moved into the garage, or they are being put out for roadside hard rubbish collection.

In the first case, they are adding to the state's GHG emission, as well as electricity bills. The number of VEECs allocated should significantly rise to incentivise householders to have these fridges destroyed and remove them from use as an alternative fridge.

In the second case, the fridges are being destroyed, but neither the gases nor the materials are being recycled. Once again, a bad environmental outcome.

Therefore, to take these fridges out of the garage, off the curb side and out of circulation, plus incentivising for their recycling, we suggest that the VEECs are increased for the removal and recycling of pre-1996 fridges. This could be on a 12-month trial basis to see if there is indeed take-up.

15. Do you agree with the removal of the activity involving standby power controllers (current Schedule 29)?

◉ No

Same rationale for questions 15 & 17.

Activities 29 &15, coupled with non-downlight bulb replacement, are often the only energy-reducing activities which can be undertaken in rental and/or low-income households. Whilst they may not save as much energy and GHG emissions as replacing inefficient space heating and cooling, for low income rental households (in particular) installing standby power controllers (often plugged in to inefficient appliances as these are the cheapest) and chimney balloons can make a different on their energy bills.

Therefore, to assist activities being undertaken in particularly low-income households, we suggest that the VEEC value is increased rather than the activities being removed,

perhaps with a caveat that these activities are only undertaken in rental / low-income properties.

16. Do you agree with the removal of the activity involving low flow trigger nozzles (current Schedule 35)?

- Not applicable to me

17. Do you agree with removal of flue/chimney balloons as eligible products for installation (current Schedule 15)?

- No

Please see reply to Q15.

18. Do you agree with removal of compact fluorescent lamps as eligible products for installation (current Schedule 21)?

- Yes

19. Do you agree with removal of gas clothes dryers as eligible products for installation (current Schedule 25)?

- Yes

20. Do you agree with the removal of T5 adaptors as eligible products for installation and decommissioning (current Schedule 34)?

- Yes

21. Do you agree with the proposed changes for water heating activities? In particular, do you have views on the requirement for heat pump water heaters to be modelled to heat pump zone 5 (current Schedule 1, proposed Part 1)?

- Yes & No

Value decreases

The aim of VEU is help Victorian homes and businesses cope better with cold weather in winter and warm summer temperatures and take control of their energy bills by upgrading from inefficient appliances[1]. They achieve this through access to discounts on energy-efficient products and services provided by the scheme.

By having effective discounts on product replacements, customers are incentivised to install products which they either otherwise could not afford or would not consider.

Solar water heating and heat pumps are proven technologies, but their installation rates, for better or worse, continue to be linked to state and federal incentive programs. And, unlike solar photovoltaic systems, the growth of the global market is not significant and has not led to a substantial drop in manufacturing costs or increasing innovation, meaning that incentive schemes remain important market drivers.

[1] https://www.victorianenergysaver.vic.gov.au/victorian-energy-upgrades, accessed 18 June 2018

Although the solar water heating installation rate in Victoria has been notionally steady since 2009, compared to the drop-off in 2017 in NSW and Queensland[2], we believe that the installation rate will decline if the VEEC values are dropped as proposed.

Since 2015 in SA, AGL has installed ~2,599 hot water systems under REES. 65% of these have been either solar electrical or solar gas, with the overwhelming majority being solar electric (no gas connection).

Likewise, in Victoria, solar electric hot water systems are the main hot water system installed, with total solar hot water installations since 2015 under VEU being 13,803 units.

However, in 2016 there were 2,112,699 in Victoria[3], so solar hot water systems still only accounted for around 1% of households in Victoria.

Therefore, to maintain the uptake of solar water heaters and heat pumps and continue to assist households in lowering their energy bills, we suggest that the current value of VEECs is maintained for both, with a possible multiplier for rental properties.

AGL also supports retaining the existing VEEC values for the efficient gas hot water activities.

Other consultation points

AGL does not have any comments on

- the zone modelling, or
- product size and lifetime changes

as these are outside our areas of expertise.

22. Do you agree with the proposed changes for space heating and cooling activities? In particular, the changes for room heating (current Schedule 9 & 10, proposed Part 9 & 10) and replacing a fixed electric room heater with a high efficiency room heater?

◉ Yes

23. Do you agree with the proposed eligibility changes for low flow shower roses (current Schedule 17, proposed Part 17)? In particular, decreasing the maximum flow rate allowed to 7.5L/min?

◉ No

We agree with revising the eligibility criteria to a minimum Wels star rating of 3 with a minimum flow rate of 7.5 l/min or lower. Under REES, AGL has installed nearly 21,000 low flow shower roses since 2015, of which nearly 100 per cent were <=7.5i/m.

However, we don't agree with the decrease in VEEC values.

In line with our response to questions 15 & 17, this activity is one of the few which can be undertaken in rental and/or low-income properties and can contribute to decreasing

[2] https://www.cleanenergycouncil.org.au/technologies/solar-water-heating.html
[3] http://www.censusdata.abs.gov.au/census_services/

energy and water bills for customers, the rate of decrease being most significant for lower income households.

Additionally, although Wels 3 star shower roses are available at Bunnings and other hardware stores, these appear to be 9l/min, not 7.5l/m. Thus, anyone buying shower roses (including landlords) will not be compliant with best practice water and energy savings.

Therefore, to assist householders to save on their energy and water bills, we propose that 6 VEEC level are retained for both regional and metropolitan Victoria, possibly with a multiplier for rental/low-income households.

24. Do you agree with the changes to incandescent lighting (current Schedule 21, proposed Part 21), including requiring a 60-degree beam angle for downlights installed in residential premises?

- No

This is too prescriptive and is likely to create unintended consequences and non-desirable outcomes in homes by installing lighting that isn't fit for purpose in certain circumstances.

25. Do you agree with the proposed splitting of non-residential lighting activities (current Schedule 34) into building-based (proposed Part 34), non-building based (proposed Part 35) and public lighting (proposed Part 27)?

- Yes

26. Do you agree with the proposed changes to asset lifetimes, revised lamp circuit power categories, and new space types for non-residential lighting activities (current Schedule 34)?

- Yes

27. Other comments

Australia is a small market and prices will only decrease and offerings increase if volume is achieved. This will only happen if the market is incentivised in a sustainable manner. By undertaking a transparent market intervention via the Victorian Energy Upgrades scheme, rather than relying on strict GHG emission reduction values, the Victorian government could help transform product supply and buyer purchase decisions.

An increase in VEEC allocations for high efficiency products which are currently not 'business as usual' purchase decisions, coupled with an education program for households, landlords, product retailers, tradespeople etc, could assist in reducing energy bills and GHG emissions faster, and stimulate increased market participation similar to the uptake of residential and commercial lighting upgrades.

Space heating & air conditioning

AGL supports the increase in certificates for efficient space heating and cooling, but believes it needs to be even higher to incentivise purchase (at least initially). Research

shows that many customers do not choose higher star appliances (particularly low-income families) as they are typically $1,000 - $3,000 more expensive to buy – depending on the size, type of heating/cooling device and efficiency. Additionally, staff in retail outlets (e.g. Harvey Norman, JB HiFi etc) are trained in sales not energy labels, and therefore do not necessarily advise the customer that buying a higher star appliance will decrease their energy bills and save them money over the life of the product. Many electrical companies will quote on what they stock, rather than what is best for the customer in terms of efficiency.

We believe that, to overcome the purchase barrier, the VEECs allocated to each activity should increase to overcome the financial barriers caused for many customers, depending on the stars and efficiency. This would increase the 'rebate' value for customers and make the more efficiency appliances more accessible for all households.

For instance, activity 9A(iii). 15 VEECs @ $15.50 = $$232.50. Rinnai product which achieves this specification is around $1299, before installation costs. Adding in the removal and decommissioning costs of the old system, plus installation and any new wiring costs, means that the total replacement cost will be over $2500. In this example only ~9% of the replacement cost is covered by the 15 VEECs proposed, probably not enough to incentivise purchase especially by those householders who are lower-income or do not understand the long-term reductions on their energy bills, nor by landlords or their agents.

To incentivise active marketing and supply of higher efficiency appliances, we propose that VEECs should contribute at least 20% of the total costs.

Once the specifications are decoupled from the legislation, it would also be possible to have an Energy Star Bonus on a sliding scale. For instance, start at 40% VEEC contribution to incentivise certain products, reducing to 10% in year five. If the uptake were too high, then the percentage could be modified with a 28-day consultation etc. (Scenario 9).

To enable low-income households and those in rental properties to access higher efficiency heating and cooling appliances, the following also could be implemented:

- Multiplier for low-income households, as well as larger multiplier for regional areas.
- VEU-targeted Landlord promotion to encourage efficient appliance heating & cooling upgrades in rental properties.
- An education program for buying energy efficient air conditioners and heaters could be developed. Currently, such systems tend to be sold on price, not star rating, and retailers tend to have a limited range of higher efficiency products.

Refrigerators, Freezers, clothes dryers

AGL agrees with using the relevant MEPS register for product approval verification.

However, we do not agree with lowering the VEEC allocation based on the lower baseline for energy consumption. We believe that the VEECs allocated should be increased to incentivise the uptake of higher star products, noting that only 502 VEECs have been created to date for Activity 22 and 318 for Activity 25.

Double Glazing

Double glazing is very effective for reducing temperature fluctuations in a home.

However, the VEEC allocation based on GHG savings is too low to incentivise homeowners to pay the extra or most builders to recommend double glazing.

For instance, Trend window TND_01_14, 20m2, metropolitan area = 20 VEECs ($310). This doesn't even equate to 9% of the installed cost.

Therefore, AGL suggests that VEU consider incentivising the uptake of double glazing (activities 13 and 14) by significantly increasing the number of certificates allocated to each area.