

Energy Efficiency Improvement Scheme

Regulatory Impact Statement

Prepared in accordance with Chapter 5 of the *Legislation Act 2001*

August 2019



Adding New and Updating Existing Activities

Disallowable Instrument **DI2019-194**

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1. Executive Summary

The *Energy Efficiency (Cost of Living) Improvement Act 2012* (the Act) establishes the Energy Efficiency Improvement Scheme (EEIS). EEIS objectives are to encourage the efficient use of energy, reduce greenhouse gas emissions, reduce household and business energy use and costs, and increase opportunities for priority households to reduce energy use and costs.

This Regulatory Impact Statement (RIS) analyses the financial and non-financial impacts of updates to EEIS instruments which introduce new eligible activities including;

- Ceiling and underfloor insulation in residential premises,
- Space conditioning upgrades in business settings,
- Central ducted to multiple split system space conditioning units in both residential and business premises, and
- Improvements and streamlining of other activity determinations.

These updates are achieved through amendments to three existing instruments, including:

- *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination 2017*, (the Activities Determination).
- *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Code of Practice 2017*, (the Activities Code of Practice) and
- *Energy Efficiency (Cost of Living) Improvement (Record Keeping and Reporting) Code of Practice 2017* (the Record Keeping Code of Practice).

EEIS works by requiring electricity retailers to deliver eligible activities that reduce emissions and provide for energy bill savings. These instruments expand and update eligible activities to support energy retailer opportunities and harmonisation with similar energy efficiency obligation schemes in other jurisdictions. This RIS analyses the impacts of these updates.

2. Background

EEIS supports the ACT Government's Climate Change Strategy which identifies reducing energy use in existing homes as one of the most cost-effective ways for the ACT to achieve its emissions reduction targets and reduce the impact of rising electricity and gas prices over the long-term¹. Since the scheme extension, the *Climate Change and Greenhouse Gas Reduction Act 2010* (the CCGGR Act) has been updated with new targets of 100 per cent renewable electricity by 2020 and zero net greenhouse gas emissions by 2045. The Parliamentary Agreement for the 9th Legislative Assembly for the ACT (Parliamentary Agreement) contains a commitment to "continue all necessary policy and contractual steps

¹ https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.act-yoursay.files/6915/1305/0361/2017_ACT_Climate_Change_Strategy.pdf

to achieve 100% renewable electricity by 2020". EEIS is a key mechanism for delivering on the ACT renewable energy and emission reduction targets.

The Act establishes a Territory-wide Energy Savings Target (EST) which is a statutory obligation for individual electricity retailers based on their electricity sales in the ACT. The EST has been set at 8.6 per cent from 2016 until the end of 2020 to provide for business certainty and to maintain the level of ambition of EEIS for the life of the scheme.

The Act requires tier 1 retailers to achieve their EST by delivering eligible activities which include installing energy efficient light globes, draught seals, efficient space heating and cooling systems, water heaters and other items that save energy and reduce greenhouse gas emissions while maintaining quality of life. Smaller, tier 2 retailers can either deliver eligible activities or pay an Energy Savings Contribution. ActewAGL Retail (ActewAGL) is currently the only tier 1 retailer. Eligible activities are determined by the Minister under Section 10 of the Act, through the notifiable instrument, the Eligible Activities Determination.

Section 8 of the Act requires tier 1 retailers to achieve a priority household target (PHT) for the total reduction in greenhouse gas emissions in priority households for each compliance period. The classes of priority households are designed to target Canberra's lower income households. Low income households are most affected by energy price rises, but least able to invest in efficient items and thus reduce their energy demand. The PHT ensures that a proportion of EEIS savings are delivered in these priority households.

The PHT is expressed as a percentage of the Retailer Energy Savings Obligation (RESO) and tier 1 retailers are obliged to achieve that proportion of their energy savings obligation in priority households. As the only tier 1 retailer, ActewAGL is the only entity with the PHT obligation. The Regulatory Impact Statement which set scheme parameters from 2015 until 2020 proposed that the PHT be subject to annual review². The PHT was set at 25 per cent from 2013-2015, 20 per cent from 2016 – 2019 and 30 percent in 2020. Higher priority household targets take into account the ACT government's Energy Efficiency Improvements in Public Housing program which is providing the co-payment for EEIS heating and hot water upgrades in 2,200 ACT public houses.

Finally, it is worth noting that all EEIS targets have been met during each compliance period since the scheme commenced in 2013. EEIS has delivered savings to over 73,000 premises and avoided over 478,000 tonnes of carbon dioxide equivalent emissions (tCO₂e). Over 18,600 priority households have received EEIS activities. Lifetime energy bill savings from EEIS are estimated at over \$360 million.

² *Energy Efficiency Improvement Scheme: Setting Key Scheme Parameters to 2020 – Regulatory Impact Statement*. May 2015. URL: http://www.environment.act.gov.au/_data/assets/pdf_file/0006/735990/Attachment-C-Regulatory-Impact-Statement-EEIS-Parameters-to-2020-FINAL.pdf p.20

3. The authorising law

The Act was passed by the Legislative Assembly on 3 May 2012. EEIS was initially legislated to run until 31 December 2015 but after a 2014 review, the Legislative Assembly passed the *Energy Efficiency (Cost of Living) Improvement Amendment Act 2015* which amended the Act to continue the EEIS to 31 December 2020. After a 2018 review, the ACT government has agreed to further extend EEIS until the end of 2030. This extension means that it remains a priority to continually expand and improve the eligible activities available for retailers to deliver energy and emissions savings.

Section 6 establishes the objects of the Act. They are to:

- (a) encourage the efficient use of energy; and
- (b) reduce greenhouse gas emissions associated with stationary energy use in the Territory; and
- (c) reduce household and business energy use and costs; and
- (d) increase opportunities for priority households to reduce energy use and costs.

This Regulatory Impact Statement (RIS) is prepared in accordance with Part 5.2 of the *Legislation Act 2001*.

The Eligible Activities Code of Practice and the Record Keeping Code of Practice disallowable instruments are established under Section 25 of the Act which enables the administrator to approve codes of practice for a range of specified purposes including quality, health, safety and environmental requirements applying to eligible activities, record keeping and reporting requirements by way of disallowable instruments. These two EEIS codes of practice are being amended to add new EEIS eligible activities and to update several existing activities.

Section 10 of the Act enables the Minister to determine eligible activities that are intended to reduce the consumption of energy by way of a notifiable instrument. The *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination* (Eligible Activities Determination) is the notifiable instrument used to determine eligible activities and ascribe activity abatement values. Although a RIS is not needed to amend a notifiable instrument, this RIS analyses the impacts of the Eligible Activities Determination because it is a key element of the integrated legislative update.

4. Rationale for these changes - Problems being addressed, policy objectives and options for achieving them

The following changes are required to improve the EEIS scheme and broaden the pool of opportunity for retailers to meet their annual energy saving target:

- Adding new EEIS activities in response to stakeholder requests.
- Increasing harmonisation of EEIS with recent updates and changes in other interstate EEO Schemes.
- Improving existing activities to respond to new developments and new evidence.

The integrated legislative update analysed in this RIS targets each of these opportunities with a separate policy objective, and amendments to different parts of the existing instruments. The subsections below discuss the opportunities for improvement being addressed, why government action is needed and the potential risks involved. They also state the objectives of the legislative update and the other options that were considered before drafting.

4.1 Ventilation opening sealing activity codes of practice

4.1.1 Problems being tackled

The EEIS currently has a ventilation opening sealing activity, but codes of practice are not yet in place. The Activities Code of Practice is being amended to clarify how the ventilation opening sealing activity would be delivered by retailers.

4.1.2 Objectives

The objective is to ensure that retailers and approved providers will undertake ventilation opening sealing activities safely and effectively on its own or in combination with other building sealing activities.

4.1.3 Risks

Risks of any building sealing activity, including condensation and risks of carbon monoxide poisoning if there is a flueless gas appliance or could be a flueless gas appliance apply to this activity. Hence these are addressed by the code of practice that requiring the installer to manage risk of condensation, communicate these risks to the occupants of the house, and check for whether or not there are flueless gas appliances or whether there could be gas flueless appliances in the future. These risks were detailed in the *stakeholder consultation paper on proposed new residential insulation and ventilation opening sealing activities*³.

If the activity is undertaken in association with other eligible activities or other work in the premises the installer must make sure that the combination of the work does not result in air changes and ventilation that does not comply with the minimum standards. Structural and other problems can occur due to regular condensation that forms in a well-sealed and insulated building if inadequate ventilation is not available to allow the moist air to escape. This is more likely to occur in houses that are new or extensively renovated or if a retailer is simultaneously implementing EEIS insulation, building sealing, exhaust fan seal activities in addition to this ventilation opening sealing activity. The installer is trained in and needs to manage these risks.

4.1.4 Other options

The Act provides that the Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

³ https://www.environment.act.gov.au/_data/assets/pdf_file/0004/1310386/EEIS-Residential-Insulation-Activities-Consultation-Paper.pdf

4.1.5 Consultation

ACTEW AGL Retail, and a range of government, industry, research community and expert consultants have been consulted and support these new activities.

4.1.6 Assessments of benefits and costs

The costs associated with a high-quality and safe installation of ventilation sealing activities are in line with those of other EEIS activities in being necessary to prevent damage to property or risks to installers and participants. Benefits include greater opportunities for retailers and approved providers to deliver ventilation opening sealing activities, which can often be a cheap and effective way to reduce heat losses and heat gain. Other benefits is that adding this activity allows retailers and approved providers more choices to bundle energy efficient ventilation opening sealing with other building sealing and insulation activities in the future.

4.2 New ceiling and underfloor insulation activities

4.2.1 Problems being tackled

As part of ongoing efforts to expand the range of potential activities included in the Scheme, EEIS and the ACT Government have identified insulation as a priority.

Insulation has been identified by EEIS stakeholders as a priority because:

- a significant percentage of ACT houses built prior to minimum insulation standards in 1992 have no or insufficient ceiling insulation
- merging ceiling insulation and underfloor insulation activities are forecast to deliver significant energy bill savings over 25 years
- low income households, that pay a much higher proportion of their income on energy than higher income households, will benefit in particular
- studies show insulated houses have positive health outcomes for adults and children
- using less energy, particularly gas, will reduce greenhouse gas emissions

Insulation activities are a high priority for energy efficiency actions since significant percentage of ACT residential homes still have no or insufficient insulation and adding insulation is one of the most cost effective residential efficiency upgrades. According to the ABS, up to 25,000 ACT households have no ceiling insulation and 27,000 ACT homes have no underfloor insulation⁴.

A key challenge in developing insulation activities has been to deliver solutions that will be cost effective as well as safe to deliver. The new insulation activities are designed to be safe and effective and are closely aligned with similar programs in other jurisdictions, which were also developed with extensive consultation. To address cost effectiveness, EEIS has developed one activity that allows ceiling insulation upgrades in homes with either no insulation or insufficient insulation while offering the same level of abatement for both

⁴ ICANZ (2013) The Value of Insulation Based Residential Energy Savings – Pages 10-12 including Table 5 @ <http://icanz.org.au/wp-content/uploads/2013/04/The-Value-of-Insulation-Based-Residential-Energy-Savings-Measures.pdf>
Regulatory impact statement updating EEIS activities and streamline instruments

scenarios. This approach provides greater market certainty to retailers and eliminates the risk of people removing existing insufficient insulation to receive a higher abatement and rebate.

4.2.2 Objectives

The objective is to add new workable, safe and effective EEIS ceiling and underfloor residential insulation activities.

4.2.3 Risks

Potential risks of installing insulation have been addressed by undertaking targeted consultation over the past two years with industry experts, other jurisdictions and commissioning an independent Risk Management Report and incorporating its recommended risk treatments into the proposed new EEIS insulation activities.

Potential risks and risk treatment options of installing insulation were thoroughly mapped by independent experts, as reported in the stakeholder consultation paper on proposed new residential insulation and ventilation opening sealing activities⁵. The risk management framework for insulation activities implements safety recommendations from this consultation paper and the Home Insulation Program Royal Commission Reports⁶. For example, no foil products, accreditation and training of installers, turning off the power to the home before the installation and pre-electrical inspections by a licenced electrician and a percentage of households receiving post installation audits by an independent auditor to manage risks.

Unlike the Commonwealth Home Insulation Program, if electricity retailers decide to deliver the insulation activity, they will contract the work to experienced, reputable, local ACT licenced electricians, and qualified accredited insulation installers. This addresses the risk of inexperienced installers undertaking the activity in the ACT.

4.2.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

4.2.5 Consultation

Significant internal and external consultation has been completed in the design of proposed insulation activities. Internal consultation was undertaken with Climate Change and Sustainability Division, Building Policy, Access Canberra and Worksafe ACT regularly through the internal residential insulation activity working group.

External consultation was undertaken via several insulation expert workshops on the EEIS

⁵ https://www.environment.act.gov.au/_data/assets/pdf_file/0004/1310386/EEIS-Residential-Insulation-Activities-Consultation-Paper.pdf

⁶ <http://www.homeinsulationroyalcommission.gov.au/Pages/default.html>

involving representatives from peak insulation industry groups, insulation service companies, and retailers over a two year period. EEIS held three targeted technical expert workshops with stakeholders, in July 2017, Feb 2019 and July 2018 to ensure effective consultation with electricity retailers, insulation industry groups, reputable insulation service companies, and cross-jurisdictional representatives which are managing insulation programs.

The ACT government is also an active member of a cross-jurisdictional Insulation Steering Committee which is developing and evaluating insulation programs across Australia. EPSDD has used this forum to test the sufficiency and likely effectiveness of the approach proposed here and ensure inter-jurisdictional consistency of risk management codes of practice.

After this extensive internal and targeted expert consultation, the proposed activity, codes of practices and rationales for them, were consulted formally through the EEIS *stakeholder consultation paper on proposed new residential insulation and ventilation opening sealing activities*⁷. Workshops on the proposed insulation activities were also held at EEIS stakeholder forums in both 2018 and 2019. Through each of these processes, stakeholders were invited to provide feedback to EEIS, and every element of the activities has been well scrutinised. All stakeholders' recommended improvements have been adopted and consultation has also confirmed that EEIS stakeholders support the final proposed insulation activities presented here.

4.2.6 Assessments of benefits and costs

If these new insulation activities are delivered to ACT households, recipients will benefit from improved thermal comfort, health co-benefits and lower energy bills. Improving the residential building envelope's thermal efficiency through these EEIS insulation activities will also help households reduce the minimum heating capacity requirements, size and therefore the costs of any future residential heating system upgrades.

Costs of compliance with the safety aspects of the proposed new activities have been constantly considered during activity development. The proposed activities leverage strongly off the work of the Insulation Council of Australia and New Zealand⁸, as well as the Clean Energy Council Accredited Insulation Installer program⁹ which has provided training modules and accreditation systems to maximise safety and quality of insulation installation. There has also been careful scrutiny of the requirements for pre-installation inspections by licensed electricians, and post installation inspections by trained auditors. This work has delivered an activity designed to maximise safety at an affordable cost, in line with best practice approaches being applied in other jurisdictions.

⁷ https://www.environment.act.gov.au/_data/assets/pdf_file/0004/1310386/EEIS-Residential-Insulation-Activities-Consultation-Paper.pdf

⁸ <http://icanz.org.au/>

⁹ <https://www.insulationaccreditation.com.au/about.html>

4.3 Adding Options for Upgrading Centrally Ducted space heaters to Multiple Non-Ducted Reverse Cycle Air-Conditioning Systems

4.3.1 Problem being tackled

EEIS Activity 2.1 currently provides for upgrading inefficient central heating systems to efficient ducted electric reverse cycle air conditioners (RCACs). Central heating upgrades are still supported by this activity, but it is being expanded to also allow for central heater replacement with multiple systems since these are more efficient than central heating in most settings. This is partly because some of the heating and cooling output is lost in the ducting which moves air around large buildings, and partly because multiple smaller systems can be located and operated to heat and cool exactly when and where needed.

Another problem being tackled is that this activity was previously only available to residential premises. It is being expanded to also cover upgrades to business premises where similar pre-conditions apply.

4.3.2 Objective

The objective of adding options for upgrading central ducted space heaters to multiple non-ducted RCACs is to incentivise the most energy efficient option for upgrading existing ducted systems.

4.3.3 Risks

There are risks associated with removing ducted systems since energy efficiency will not be improved if ducts are left unsealed after ducted systems are replaced with multiple room-RCACs. It is also important to provide conservative activity abatement values which accurately reflect the energy and emissions savings associated with the upgrades.

A final administrative risk is worth noting, which is that the introduction of new heating activities may lead to changes to activity numbers which could create inconsistencies in reporting across years. While not relevant to EEIS retailers or participants, activity numbering provides the basis for record keeping within long term EEIS databases and so avoiding changes to activity numbers is an important risk to manage for long-term EEIS administration. To manage this risk, careful attention has been paid to activity numbering in space heating and cooling activity updates.

4.3.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

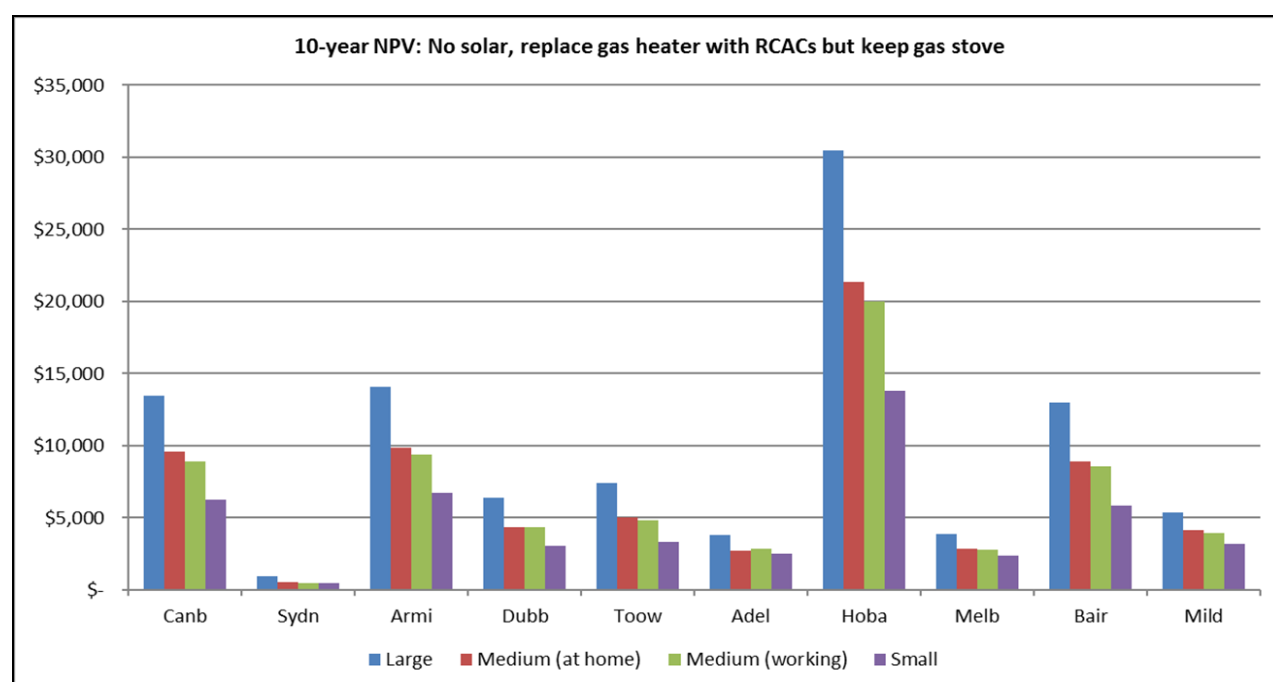
4.3.5 Consultation

These updates were consulted on internally and externally with retailers, approved providers, expert consultants. All stakeholders have been supportive of these changes. Internally, consultation involved all relevant staff within EPSDD, and also Access Canberra and Building Policy.

Public consultation included on-line publication of the *stakeholder consultation report on proposed new business heating and cooling activities*¹⁰, and workshops held at two EEIS public stakeholder forums. Consultation was also completed with energy retailers, representatives of the Australian Government Greenhouse and Energy Minimum Standards (GEMS) programs including Energy Efficient Equipment (E3) personnel and non-government bodies such as Australian Institute of Refrigeration, Air-Conditioning and Heating (AIRAH), Energy Efficiency Council (EEC), Energy Efficiency Certificate Creators Association (EECCA), and representatives of sub-national jurisdictional government energy efficiency obligation schemes.

4.3.6 Assessments of benefits and costs

The net present value of replacing a gas ducted heater with several reverse cycle split air-conditioning heat pumps is \$6500 to \$14,000 per Canberra household with benefits varying depending on house size. This is shown in the figure and table below.



Source: https://renew.org.au/wp-content/uploads/2018/08/Household_fuel_choice_in_the_NEM_Revised_June_2018.pdf.

Table 1 Energy costs for different heaters

¹⁰ https://www.environment.act.gov.au/_data/assets/pdf_file/0006/1234887/EEIS-Stakeholder-Engagement-Report-Proposed-Business-Heating-and-cooling-activities.pdf

Heater	Stars	Energy cost to meet load*
Central heaters		
1.Ducted gas heater	4.3	\$2,915
2.Ducted higher efficiency gas heater	6	\$2,528
3.Ducted variable speed electric split heat pump	2.5	\$1,116
Room heaters		
4.Gas flued wall heater	2.1	\$1,097
5.Gas flued wall heater	4.4	\$875
6.Non-ducted "electric" split heat pump	2.5	\$376
7.Non-ducted efficient "electric" split heat pump	5	\$287

Sources: Commonwealth Government - Calculations completed using Seasonal Energy Efficiency Ratio (SEER) standard with input from data tables, product specifications and results^[1].

There are also some costs associated with upgrading central ducted systems to multiple RCACs. One set of costs are for sealing air intakes and outlets and decommissioning other related components. The Activities Code of Practice requires effective sealing because otherwise the heat loss will be significant, and will undermine the estimated savings. The instruments provide different options for sealing decommissioned vents, and retailers delivering the activities will be able to choose which to deliver. For instance, the likely cost of plastering over a vent in each room for a 4-bedroom house would be \$400-500. The paint work would be around an additional \$100 for patch-painting over the repairs. The alternative option of sealing via using fit for purpose plastic seals to seal vents could add between \$250-750 per house.

There may also be costs associated with electrical upgrades and gas decommissioning, which will be required in some cases for compliance with the *Gas Safety Act 2000* and AS5601, and the *Electricity Safety Act 1971* and AS3000. In particular, electrical circuit and switchboard upgrades may be needed in some older ACT homes, when upgrading from central gas to a series of RCACs. This can cost between \$1200 and \$2000 depending on the size of the house and the size and electricity draw of the RCAC systems.

Finally, the instruments require decommissioning and recycling of removed equipment, including any refrigerated gases. Compliance with the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and the *Australian Refrigerant Handling Code of Practice 2007* is required where applicable.

^[1] * Assumes 18.304c per kWh for electricity and 2.8c per MJ for gas. The cost of running a gas heater includes some electricity for the fan unit. This is conservatively estimated at \$107 per year for ducted systems and \$11 for wall units, and has been included in the total. Costs associated with using the units for cooling are not included.

4.4 Introducing space heating and cooling activities for businesses

4.4.1 Problems being tackled

ACT Government's climate change strategy Action Plan 2 (AP2) Action 7 requires the EEIS to be extended to include more business activities. This is to address the problem that the electricity pass-through costs apply to both the businesses and residential sectors, making it inequitable for EEIS to only deliver savings in the residential space. EEIS has previously added commercial lighting and commercial refrigerated display cabinets to address this measure, and commercial lighting activities have now been delivered to over 2,000 businesses.

In the ACT, business space heating and cooling often makes up often the largest area of consumption of energy and thus makes a significant contribution to energy bills for many ACT businesses. EEIS stakeholders have identified business heating and cooling activities as being high priority, and could be implemented alongside the current programs installing RCACs in residents.

4.4.2 Objective

The objective is to incentivise the installation of efficient RCACs in small to medium business premises. To optimise the full suite of EEIS space heating and cooling activities, these new business heating and cooling activities are introduced through three EEIS activities as follows:

- Amendment to existing activity 2.3: Install a specified high efficiency electric room heater – residential and business
- New activity 2.5: Replace a central heating and cooling system in a business premises
- New activity 2.6: Replace room heating and cooling systems in a business premises

4.4.3 Risks

This is the first time an Australian EEO Scheme has developed a “deemed” small to medium business heating and cooling efficiency upgrade activity, and this raises the risks of incorrect calculation of activity abatement values as well as risks associated with installation, decommissioning and more. Deemed approaches are used for most EEIS activities, and work by applying valid assumptions to the energy and emissions impacts of existing equipment and energy efficient replacement items, so that average savings can be estimated. The accuracy of deemed abatement values relies on the accuracy of the assumptions that are applied, and care is taken to ensure that the assumptions are conservative and relevant to the ACT climate, building stock and other conditions.

A key risk associated with deemed abatement values for these activities stems from different heat loads that apply in typical commercial settings. For instance, restaurants that cook food generate a significant heat load compared with warehouses that present a stock of static items for sale. To address this risk, eligible businesses are broken into three

categories of high, low and other heat loads, using standard classifications from the Building Code of Australia.

Other risks are associated with the availability of efficient equipment to meet the eligibility criteria. High abatement values can only be justified when eligible activities are genuinely more efficient than systems being replaced, and the alternatives that would be delivered in the absence of EEIS. Specifications of efficient equipment is also challenging because large spaces demand larger systems, which are typically less efficient than smaller systems. Compounding these generic technological challenges is the context of Canberra's climate which includes both very cold winters and very hot summers compared with national averages. Most of the RCACs currently on the market are not optimised for both of these extreme conditions. To manage these risks, EEIS heating and cooling activities reference both technical specifications and product choices available in the Greenhouse and Energy Minimum Standards (GEMS) product database. This referencing has a co-benefit of encouraging companies to have their heaters tested for the GEMS database, which leads to an increase in the number of compliant products available on the market. For instance, eligible equipment is required to carry the following certification:

- An Air-Conditioning, Heating, and Refrigeration Institute (AHRI) certificate, being a certified test certificate from AHRI (www.ahrinet.org)
- A Eurovent certificate, being a certified test certificate from the European Association of Air Handling and Refrigerating Equipment Manufacturers. (www.eurovent-certification.com).

Where a product does not have an H₂ test result, it does need an air enthalpy test or a truncated calorimeter room test spanning three complete defrost cycles.¹¹ This reduces the costs of undertaking an H₂ test without compromising accuracy.

There is also the risk that building construction and layout may inhibit standard installations. To ensure that most business settings will be eligible, the business activities allow for installation without ducting upgrades if there is a lack of accessibility, including through conversion of central ducted systems to multiple room RCACs.

4.4.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for establish new activities.

4.4.5. Consultation

These updates were consulted on internally and externally with retailers, approved providers, expert consultants. All stakeholders have been supportive of these changes.

¹¹ A normal calorimeter room H₂ test dictates the test period be the average capacity of 6 hours of operation or 6 complete defrost cycles (whichever comes first). The average capacity doesn't change much after 3 complete defrost cycles, so here just 3 complete defrost cycles are required.

Internally, consultation involved all relevant staff within EPSDD, and also Access Canberra and Building Policy. Public consultation included on-line publication of the *stakeholder consultation report on proposed new business heating and cooling activities*¹², and workshops held at two EEIS public stakeholder forums.

4.4.6 Assessments of benefits and costs

Although energy use is highly variable across the commercial building sector, on average business heating and cooling systems consume up to 40 per cent of total energy usage. According to the Australian Institute of Refrigeration, Air Conditioning and Heating *“Between 2005 and 2015, building energy intensity has only improved by 2 per cent across the commercial sector. There is considerable scope for energy efficiency improvement.”*¹³

Modern reverse cycle heat pump systems are significantly more energy efficient than electric resistance and gas heating systems. Upgrading to efficient reverse cycle heat pump systems can thus enable significant energy efficiency improvement and bills savings. Nevertheless, these EEIS activities are likely to require a co-payment from the business. The Clean Energy Finance Corporation and partners is now providing financing for business HVAC upgrades. Financing options such as these could help SMEs further improve the cost benefit for participating in upgrading business HVAC systems via this new EEIS activity.

Finally, adding a mandatory requirement for the reverse cycle heat pumps used in these upgrades to be demand response enabled, helps future proof the scheme and ensures that these activities contribute to building greater demand response capability for the future.

4.5 Removing Activity 2.2 – Upgrading Inefficient Gas Ducted Heating to Efficient Gas Ducted Heating.

4.5.1 Problems being tackled

Maintaining Activity 2.2, upgrading inefficient central ducted gas systems to more efficient gas ducted systems is not consistent with the proposed ACT Government’s greenhouse gas interim and long-term emission reduction targets. Extensive EEIS stakeholder engagement, as part of the EEIS Review, virtually unanimously recommended that the EEIS should phase out Activity 2.2 because it was not consistent with ACT’s climate change mitigation ambition nor in line with the IPCC’s recommended greenhouse gas reduction targets. There are more energy efficient alternatives such as upgrading to central ducted reverse cycle heat pumps, ducted multi-split systems, or to a series of room split reverse cycle air-conditioning systems.

¹² https://www.environment.act.gov.au/_data/assets/pdf_file/0006/1234887/EEIS-Stakeholder-Engagement-Report-Proposed-Business-Heating-and-cooling-activities.pdf

¹³ Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH) (2017) Future of HVAC in a Net Zero World: An industry foresighting perspective on developments in the Australian HVAC market. AIRAH Regulatory impact statement updating EEIS activities and streamline instruments

When ducted gas heating systems were independently tested by the Commonwealth Government¹⁴ they were found to not be performing as efficiently as claimed. Other concerns raised by the Commonwealth Government's testing were that:

"All gas ducted system products do not specifically declare the electricity used to power the fan in a ducted gas system. Therefore consumers have no idea that their ducted gas heating system is increasing their electricity bill as well. Both ducted heaters tested drew a significant amount of electrical power when running the fans on high. Unit E 1,010 watts and Unit L 854 watts."

The peer reviewed professional HVAC literature finds that ducted gas systems can lose as much as 20% of primary energy via duct heat losses. Other efficiency losses can occur due to greater rates of heat loss via leakage in heated rooms due to high pressure issues and poor system performance due to lack of return air. For all these reasons, EEIS is removing Activity 2.2 and replacing it by extending Activity 2.1 to provide more upgrade options for residential premises with gas ducted heating systems.

4.5.2 Objectives

To remove Activity 2.2, so EEIS activities are still better aligned with the ACT's climate change goals.

4.5.3 Risks

The risks of this change are that this could add costs of delivering residential heating efficiency upgrades and costs to the EEIS scheme as a whole, because upgrading to ducted reverse cycle heat pumps is more expensive to upgrading to more efficient gas ducted systems. To address this risk, the option to upgrade from gas ducted heating systems to multiple room split reverse cycle air-conditioning has been added to provide a more cost effective alternative. Other risks of removing this activity is that it could disrupt retailers who are delivering Activity 2.2. To manage this risk, retailers were given over 10 months' notice to give them time to adapt and plan new alternative activities.

4.5.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

4.5.5 Consultation

The EEIS Review recommended removal any remaining gas upgrade activities from the scheme. Similar recommendations have been provided both through broader consultation on an ACT climate change strategy, and targeted commentary by EEIS stakeholders. There is a strong public and stakeholder expectation that EEIS should not incentivise gas activities and this supports the removal of Activity 2.2.

¹⁴ <http://energyrating.gov.au/document/research-report-gas-space-heaters-performance-testing-energy-labelling>
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ActewAGL has not supported the removal of this activity because it continues to be popular among EEIS participants, and has delivered a significant percentage of total abatement in recent years, including in priority households. The government considers that the long lead time provided for the transition together with the introduction of new, high abatement space heating and cooling activities, and the initiative to install EEIS activities in about 2,200 ACT government homes all ensure that there are viable alternatives for ActewAGL to deliver.

4.5.6 Assessments of benefits and costs

If EEIS left Activity 2.2 in the scheme, then there is a risk that ongoing upgrades under Activity 2.2 lock in higher greenhouse gas emissions than business as usual. EEIS's phone surveys have identified households who were going to invest in upgrading from gas ducted to all electric reverse cycle air conditioning room splits but invested instead in more efficient gas ducted systems because of the EEIS Activity 2.2 rebate and service. Increasingly ACT residential premises are choosing to upgrade from gas to all electric heating solutions. Between 2011 and 2014, the number of ACT residences using gas for winter heating fell from 60% to 45% because it is economically rationale for households to invest in gas to all electric winter heating solutions as shown in Table 1 above.

Potential whole of system costs from transitioning from gas to all electric heating systems requiring more electricity supply investment is being mitigated by requiring room space reverse cycle air-conditioners up to 15 kW heat capacity to be demand response enabled.

4.6 Introducing demand-response capability

4.6.1 Problem being tackled

As ACT population grows, and the territory approaches its 100% renewable energy target, work is needed to prevent overloading the electricity grid during times of peak demand. Demand-response (DR) technology provides an additional way to reduce peak electricity demand and put downward pressure on electricity prices to further help cut household and business energy costs. During times of peak energy use, preapproved appliances automatically turn off or, in the case of air conditioning and heating units, cycle on and off to conserve energy.

DR capability is already included in the space heating and cooling systems that are being delivered through EEIS, and the ACT government has sought to formalise a requirement to help drive DR capacity where it is cost effective to do so.

4.6.2 Objectives

The objective is to support the installation of products with demand response capability so that these activities contribute to building demand response capability in the ACT.

4.6.3 Risks

One risk in bringing in demand response is that it may reduce the range of compliant energy efficient appliances available that meet EEIS criteria for installed product requirements. This risk has been addressed by reviewing the equipment already being installed both through EEIS in the ACT and in other jurisdictions and confirming that a competitive group already comes equipped with compliant DR capability.

Another risk is that the specified installed product requirements for DR may add additional cost to installations, or be unusable because protocols are not yet in place to support DR deployment. Amendments were made to the proposal published in the *stakeholder consultation report on proposed new business heating and cooling activities* in order to manage these risks.

4.6.4 Consultation

The published proposal for DR requirements was that:

“The DR capability must be, in principle, physically able to be activated at the time of installation of the airconditioner i.e. no additional components shall be required to be installed prior to activation taking place.”¹⁵

Targeted consultation on the potential impact of this requirement on current and future installations revealed that the proposed wording would currently reduce the range of models available, reducing the capacity for competitive tendering of products for installation. In particular, while two of the current products being delivered meet the standard, a DR enabled communication device would still be required to be installed. This is because a manufacturer would not know what communication protocol is used by a future demand response aggregator needing to send a signal to the unit. Because of this, the DR requirements were reduced to require built-in DR capability, without the need for it to be physically able to be activated at the time of installation, with no additional components required.

4.6.5 Assessments of benefits and costs

As a result of consultation and analysis, the proposed requirement for DR presents and optimum trade-off benefits and costs. It avoids potential unnecessary costs of installing additional components that may not deliver the intended DR outcomes, while ensuring that installed units can be upgraded for DR capability once protocols are established.

4.7 Updating EEIS Activity 3.3 – Efficient Shower Roses

4.7.1 Problems being tackled

Sustainability Victoria’s *Energy Efficiency Upgrade Potential of Existing Victorian Houses* report in 2016 showed that efficient shower rose upgrades have one of the best cost-

¹⁵ https://www.environment.act.gov.au/_data/assets/pdf_file/0006/1234887/EEIS-Stakeholder-Engagement-Report-Proposed-Business-Heating-and-cooling-activities.pdf, p.41

benefits of all residential energy efficiency upgrades. Yet, EEIS Activity 3.3 has not been taken up by any EEIS retailers to date. Other schemes, such as Victorian Energy Upgrade (VEU), have increased their assumption of deemed lifetimes for efficient shower roses to 15 years. The EEIS Activity 3.3 previously assumed a 10 year product lifetime and is being amended to 15 years to harmonise with other jurisdictions, and this will also slightly improve the activity abatement values, and therefore increase the likelihood of take up of this activity.

In addition, it was previously a requirement that efficient shower roses be installed during installations of efficient hot water systems (Activities 3.1 and 3.2). This is no longer a requirement in Schedule 2, part 2.6 of the *Water and Sewerage Regulation 2001* and so it has been removed from EEIS.

4.7.2 Objectives

The objective is to update the activity abatement value to make the activity consistent with the equivalent activity in the VEU and ACT water regulations.

4.7.3 Risks

If this update was not made then there is a risk that EEIS would be under-valuing abatement and energy savings from Activity 3.3 and that the activity will continue to not be taken up.

4.7.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

4.7.5 Consultation

A session on these changes was held at the EEIS stakeholder forum in February 2019. All stakeholders supported the proposed change.

4.7.6 Assessments of benefits and costs

There are no additional costs associated with the changes. The main benefits are that the method now more accurately reflects the actual average product lifetimes and provides additional incentive for this activity to be taken up by retailers in the future.

4.8 Updating Activity 5.2 - Purchase of New Efficient Refrigerators and Freezers

4.8.1 Problems being tackled

The EEIS currently incentivises the purchasing of high efficiency refrigerators and freezers. The Victorian Energy Upgrade scheme has updated its equivalent activity necessitating this update to harmonise with Victoria's changes. Both the EEIS and VEU have undertaken this update due to energy efficiency improvements in the market and increasing size and volume of refrigerators and freezers. This changes here are needed to update baseline efficiency assumptions, minimum energy efficiency product eligibility requirements and the abatement formulae to ensure deeming is more accurate and also to allow larger sized models to be included. Also, there is currently some duplication between the registering of refrigeration and freezer products in the ESC product register and the GEMS register. So EEIS is proposing to harmonise with VEU to allowing freezer and fridge products to be eligible for EEIS if they are on the GEMS register, and no longer have to also be on the ESC product register.

4.8.2 Objectives

The purpose of this update is to:

- Increase the minimum star ratings required for a product to be eligible under the program due to an increase in average efficiency of refrigerators and freezers on the market. (Table 1 below)
- Increase the eligible product total volume range to enable more products to be eligible.
- No longer require product registration with the Victorian Essential Services Commission, so long as they are listed on the GEMS register to reduce compliance costs.

Table 1: Summary of old and new EEIS specifications for Activity 5.2 Purchase of New Efficient Refrigerators and Freezers

EEIS Activity	Group	Eligibility old stars	Eligibility new stars	Baseline old stars	Baseline new stars
5.2 (a) single door refrigerator	1	2	2.5	1.35	2.25
5.2(b) two door refrigerator	4	2.7	3.5	2.39	3.25
	5T	2.7	3.5	2.39	3.25
	5B	2.7	3.5	2.39	3.25
	5S	2.7	3.5	2.39	3.25
5.2(c) chest freezer	6C	3.3	3.5	2.75	3.27

5.2 (d) upright freezer	6U	2.5	3	2.00	2.82
	7	2.5	3	2.00	2.82

4.8.3 Risks

If this update is not done, then there are risks that the deemed abatement may be inaccurate. Also, if the activity excludes larger fridges and freezers, this could make the activity harder to implement in practice as some fridges would be excluded whilst others are not, potentially causing confusion.

These changes lower the deemed energy savings and abatement levels and so they reduce the EEIS incentive. It is an intended outcome from the GEMS program that as the minimum energy efficiency performance standards rise, the additionality associated with installing new, efficient equipment is reduced and that further reductions are also expected.

4.8.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

4.8.5 Consultation

A session on these changes was held at the EEIS stakeholder forum in February 2019. All stakeholders supported the proposed change.

4.8.6 Assessments of benefits and costs

There are no additional costs associated with the changes. However the changes do slightly reduce the additional energy savings and abatement being counted here from this activity, making it increasingly unlikely that the activity will be delivered.

4.9 Updating Activity 5.3 - Purchase of new electric clothes dryer activity

4.9.1 Problems being tackled

The VEU has updated its activities for purchasing new electric clothes dryer, and the equivalent EEIS activity needs to be upgraded to maintain harmonisation. Specifically, the VEU now adopts the GEMS register for determining the efficiency of these appliances, and has increased eligibility and baselines as follows:

- Increasing the eligibility threshold from 5 stars to 7 stars
- Increasing the baseline from 1.6 stars to 2.5 stars to reflect market changes.

4.9.2 Objectives

The objective of this update is to ensure the EEIS purchase of new electric clothes dryer activity is harmonised with the equivalent activity in the VEU.

4.9.3 Risks

There are no material risks here. This change is proposed for two reasons:

- Research conducted for the VEU confirmed that the market average for electric clothes dryers has increased from 1.6 stars to 2.5 stars since the activity was first introduced. The same shift is likely to also have occurred in the ACT.
- Research also shows the emergence of new heat pump models and that more than 15 per cent of models are 7 stars or above, so an increased star rating is well supported by the market.

4.9.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

4.9.5 Consultation

A session on these changes was held at the EEIS stakeholder forum in February 2019. All stakeholders supported the proposed change.

4.9.6 Assessments of benefits and costs

There are no additional costs associated with the changes. Benefits include ensuring that the activity incentivises purchase of heat pump dryers.

4.10. Removing Activity 5.4 - SPCs

4.10.1 Problems being tackled

EEIS has previously incentivised the installing of standby power controllers (SPCs). VEU removed SPCs in December 2018 as research had shown that SPCs now offer no additional energy savings. As VEU has evidenced these changes include:

- *“Since 2010, the European Commission has enforced a 1 Watt standby power requirement for range of products, the requirement has now been reduced to 0.5W. Worldwide, these standards have influenced energy efficiency policy and the standby consumption of products. For example, the standby power consumption of new televisions has fallen from 15W to 0.5W. This reduction means that additional energy savings provided by an SPC are minimal.*
- *The types of home entertainment and IT appliances connected in Victorian homes has changed since 2011. There has been a decrease in the ownership of DVD/Blu-ray players, desktop computers, mains powered game consoles and surround sound systems. Television ownership has also declined. Conversely, the proportion of households with laptop computers and mobile devices has increased, and as SPCs are less effective when connected to these types of devices. These changes have been mirrored in the non-residential sector.*
- *Energy use in IT network standby is increasingly likely to be targeted through network solutions such as wake-on-LAN programming, or innovations in product technology rather than SPCs.*
- *A telephone survey of 1,000 households conducted by the ESC found that 16 per cent of SPCs installed were removed after their installation and 25 per cent of SPCs had less than the required number of approved appliances connected.”*

The combination of changes in appliance stock, product standby characteristics, and household behaviour are sufficient to warrant the removal of this activity.

4.10.2 Objectives

To remove the SPC activity as it no longer offers additionality. To harmonise with the same changes to rules in other schemes such as VEU which also has removed its SPC activity.

4.10.3 Risks

If the EEIS continued to keep the SPC activity then retailers could still deliver it. This risks allowing deemed abatement and energy savings that, due to the changes outlined above, are not additional. This risks the retailer claiming abatement and energy savings that are not material, reducing the integrity of the EEIS deemed energy saving system.

4.10.4 Other options

The Act provides that the EEIS Eligible Activities Determination and the two codes of practice have the specific purpose of establishing or, in this case, removing EEIS activities. There are no other options available for updating activities.

4.10.5 Consultation

A session on these changes was held at the EEIS stakeholder forum in February 2019. All stakeholders supported the proposed change.

4.10.6 Assessments of benefits and costs

There are no costs of this removal, as SPCs are not currently being delivered in EEIS nor are being planned for delivery by any Tier 1 or Tier 2 retailers.

The benefit of this change is that it harmonises with other schemes and maintains the integrity of the EEIS's deeming methodology for activity lifetime abatement and energy savings.

4.11 Updating Activity 5.5 - Purchase of New Efficient Televisions

4.11.1 Problems being tackled

Thanks to improvements in television efficiency driven mainly by MEPS programs in Australia and internationally, the current market average TV energy efficiency in Australia is close to 5 stars. Therefore purchase of new efficient TV appliances have a modest energy saving potential. This modest energy saving potential equates to a relatively small rebate compared to the total cost of new televisions. So the EEIS rebate for this activity is unlikely to have a large market impact.

4.11.2 Objectives

To manage risks of declining additionality of the EEIS's purchase of new efficient television activity.

4.11.3 Risks

Maintaining this activity risks deemed abatement and energy savings being attributed to sales of new TVs where in practice the EEIS does not provide much additionality to market business as usual.

4.11.4 Other options

The Act provides that the EEIS Eligible Activities Determination and the two codes of practice have the specific purpose of establishing or, in this case, removing EEIS activities. There are no other options available for updating activities.

4.11.5 Consultation

A session on these changes was held at the EEIS stakeholder forum in February 2019. All stakeholders supported the proposed change.

4.11.6 Assessments of benefits and costs

There are no additional costs associated with the changes as the activity is not being delivered in EEIS.

4.12 Activity 5.6 - Updating Purchase of New Swimming Pool Pumps Activity

4.12.1 Problems being tackled

The Minimum Energy Performance Standards have been effective at lifting the energy efficiency of both existing swimming pool pump stock and the average energy efficiency of new swimming pool pumps purchased. The VUE activity for purchase of a new swimming pool pump has been updated to reflect these baseline improvements, and EEIS is no longer harmonised with other jurisdictions. Harmonisation will be improved by an EEIS activity update for:

- An increase in the maximum input power for an eligible high efficiency pool pump from 1500W to 2500W – this allows variable speed drive pumps of up to 2500W to qualify.
- An increase in the baseline efficiency from 2 stars to 3.5 stars
- An increase in the minimum star rating to qualify to be eligible for this EEIS activity from 3 stars to 7 stars.

4.12.2 Objectives

The objective is to update baseline and the level of minimum efficiency product requirements for the EEIS swimming pool pump activity to better support retailers and approved providers to install efficient swimming pool pumps above market average.

4.12.3 Risks

If this update was not made then there is a risk that the scheme would be providing abatement and energy savings that are not additional to the current market average. The increase in baseline and the increase in qualifying efficiency levels are reasonable based on the latest detailed market analysis which shows that most high efficiency models were 7 stars or above. Overall there are no major issues or risks with implementing this update within the ACT's Energy Efficiency Improvement Scheme.

4.12.4 Other options

The Act provides that the Eligible Activities Determination and the two codes of practice have the specific purpose of establishing EEIS activities and associated consumer protection obligations, quality, health, safety and environmental requirements. There are no other options available for updating activities.

4.12.5 Consultation

A session on these changes was held at the EEIS stakeholder forum in February 2019. All stakeholders supported the proposed change.

4.12.6 Assessments of benefits and costs

The new requirement here that any purchase of any new swimming pool pumps will now have a higher level of energy efficiency has minimal extra upfront costs as the market is shifting to higher efficiency pool pumps. Swimming pool pumps with variable speed drive pumps are able to achieve at least 6 stars, so the new qualification criteria ensures that all qualifying pumps are using variable speed drives. This enables higher energy efficiency savings over the lifetime use of the product increasing the cost saving benefit of this activity. This EEIS Activity also includes “demand response” capability requirements and provides another option for retailers to help build “demand response capability” in the ACT.

5. Consistency of the regulation with the authorising law

The Act allows the Minister to determine eligible activities and the administrator to approve codes of practice. All of the elements of the integrated legislative update are consistent with the relevant heads of power in the Act.

6. Mutual recognition and consistency with the policy objectives of another Territory law

The proposed instruments are not inconsistent with the policy objectives of another Territory law.

The proposed amendments increase harmonisation of regulatory regimes between the ACT and other jurisdictions and this has positive cross-border effect of improving consistency and reducing administrative costs for retailers and abatement providers participating in multiple energy efficiency schemes.

7. Human Rights

The determination does not affect any human right set out in the *Human Rights Act 2004*.

8. Assessment of the consistency of the proposed law with Scrutiny of Bills Committee principles

The terms of reference of the Standing Committee on Justice and Community Safety (Legislative Scrutiny Role) require it to consider whether (among other things):

- (a) any instrument of a legislative nature made under an Act which is subject to disallowance and/or disapproval by the Assembly (including a regulation, rule or by-law):
 - i. is in accord with the general objects of the Act under which it is made,
 - ii. unduly trespasses on rights previously established by law,
 - iii. makes rights, liberties and/or obligations unduly dependent upon non reviewable decisions, or
 - iv. contains matter which in the opinion of the Committee should properly be dealt with in an Act of the Legislative Assembly.

The position in relation to each term of reference is as follows.

(i) is in accord with the general objects of the Act under which it is made

The instruments are in accord with the objects of the *Energy Efficiency (Cost of Living) Improvement Act 2012* (the Act). The relevant disallowable instruments support the achievement of the objects of the Act, namely:

- (a) encourage the efficient use of energy;
- (b) reduce greenhouse gas emissions associated with stationary energy use in the Territory;
- (c) reduce household and business energy use and costs; and
- (d) increase opportunities for priority households to reduce energy use and costs.

(ii) unduly trespasses on rights previously established by law

The instruments do not unduly trespass on rights previously established by law. The instruments determine codes of practice for implementing the Energy Efficiency Improvement Scheme.

(iii) makes rights, liberties and/or obligations unduly dependent upon non reviewable decisions

The instruments do not make rights, liberties and/or obligations unduly dependent upon non-reviewable decisions. The new codes of practice simply include updates to take account of changes since the last codes of practice were made. Decisions which may be impacted by the codes of practice, such as determining retailer energy savings result, are reviewable, see Schedule 1 of the Act.

(iv) contains matter which in the opinion of the Committee should properly be dealt with in an Act of the Legislative Assembly

The matter contained in the codes of practice is appropriate to be dealt with in subordinate legislation and is in accordance with the Act.

In previous EEIS instrument updates, the Scrutiny of Bills Committee has drawn attention to the instruments on the basis that they disapply sections 47(5) and (6) of the Legislation Act

2001, which provide that any instrument that is applied as law in the ACT is taken to be a notifiable instrument. Consistent with EPSDD's previous advice to the Committee, the reason for disapplying the application of section 47(5) to these instruments is to avoid breaching copyright. The copyright in Australian Standards is owned by a non-government organisation, Standards Australia.

While it may be prohibitive for EEIS stakeholders to purchase all of the standards referred to in the instruments, there are several factors that minimise undue expense in the case of these standards. In particular, most interested parties will already have copies of the relevant standards, and copies of many standards are available at the National Library of Australia (NLA).

The committee has previously suggested two options for improving public access to the documents, but unfortunately, neither of these options provide a practical solution.

First, the committee suggested that the directorate might list specific standards that are available at the NLA. This would be problematic, as the instruments intentionally refer to "the relevant parts of ... standards ... as in force from time to time" so that any updates of the standards are automatically applied. As standards are updated, this would render inaccurate any advice provided about which standards are available in the NLA.

The committee's second suggestion was that the standards might be made available for viewing through the Access Canberra shopfront, as is the National Construction Code (NCC). This option is unfortunately unavailable due to copyright restrictions which do not apply to the NCC. That code is freely available online at www.abcb.gov.au/ncc-online/NCC. In contrast, the conditions of use for the ACT Government's access to Australian Standards provide that all copies of standards supplied are only for use within the organisation and may not be shared or distributed.

9. Conclusion

The RIS outlines the impacts of a set of legislative updates to EEIS instruments, updates existing eligible activities and adds new eligible activities to the EEIS.

The net results of these changes are to increase retailer opportunities to achieve energy savings targets under EEIS and to provide a wider range of energy efficient upgrades to ACT households and businesses while improving harmonisation with activities in other Australian energy efficiency obligation schemes.