



# Policy and market analysis for the EEIS

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Environment, Planning and  
Sustainable Development  
Directorate, ACT Government

FINAL REPORT, 4 April 2022

# Policy and market analysis for the EEIS

## FINAL REPORT

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Client Environment, Planning and Sustainable Development  
Directorate, ACT Government

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# Executive Summary

## Report overview

This report details the findings of a short study into the current operation and performance of the ACT Energy Efficiency Improvement Scheme (EEIS). The study was commissioned in response to consumer and industry feedback received by the Department since the Independent Scheme review in 2018. To address this feedback, the ACT Government engaged Common Capital to conduct a targeted market and policy assessment. Specifically, we were asked to assess key questions within the below scope (a full set of questions is detailed in the Background to this Report):

1. What are the impacts of tier 1 retailer delivery of activities on the ACT water heater and air-conditioning markets, and for consumers?
2. Do delivered activities support the objects of the *Energy Efficiency (Cost of Living) Improvement Act*? What are the key barriers to, and what would be the impacts of, tier 2 retailer participation in the Scheme?

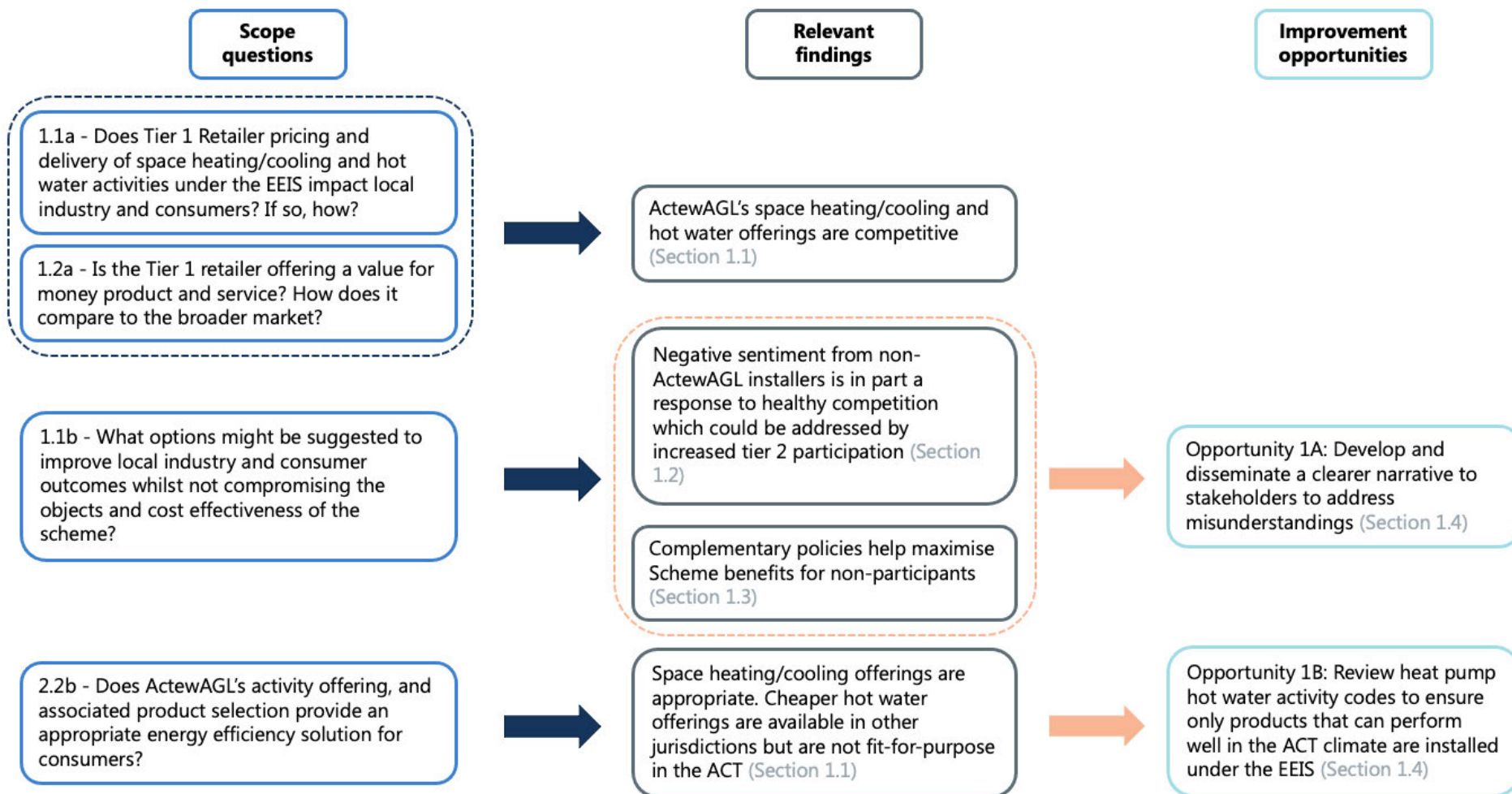
Overall, we found that the Scheme is performing well and operating as intended. We found that products delivered by ActewAGL under the Scheme were of a high quality and offered at a competitive market price. We found that some stakeholder concerns around Scheme performance were due to misperceptions around how a market-based scheme is supposed to operate.

We also found that some tier 2 retailer participation in the Scheme is likely in the near future. While this will expand the market reach of the Scheme and deliver increased energy savings in the ACT, it will also result in a significant loss in Energy Savings Contributions revenue for EPSDD and a significant increase in workload.

Our key findings and opportunities for EPSDD to consider are mapped out in the two diagrams below. More detailed descriptions of these findings and opportunities can be found in the final sections of this executive summary, as well as throughout Sections 1 and 2 of this report.

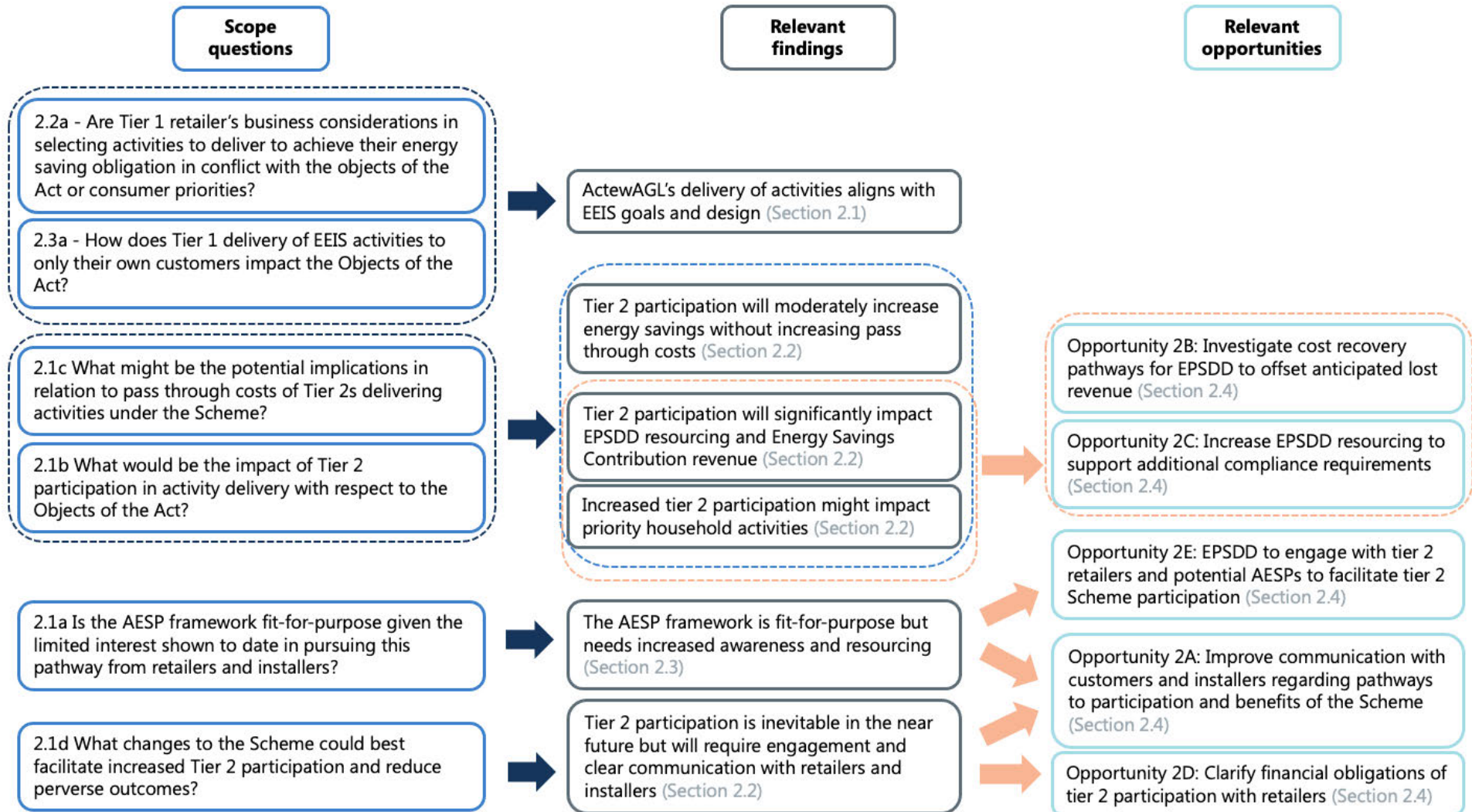
# Key findings and opportunities map – Report section 1

**What are the impacts of ActewAGL's activities on the ACT water heater and air-conditioning markets, and for consumers?**



## Key findings and opportunities map – Report section 2

Do delivered activities support the objects of the *Energy Efficiency (Cost of Living) Improvement Act*? What are the key barriers to, and what would be the impacts of, tier 2 participation in the Scheme?



## Key findings

The following list describes the key findings relevant to EPSDD's scope questions for Sections 1 and 2 of this report.

### **Section 1: The impacts of the EEIS on the market and consumers are on balance positive**

- **ActewAGL's space heating/cooling and hot water offerings are competitive (Section 1.1)** - A pricing review was completed on hot water and space heating/cooling activities in the ACT. Overall, the products offered by ActewAGL installers are of a high quality and the prices are in line with market rates.
- **Negative sentiment from non-ActewAGL installers is in part a response to healthy competition, which could be addressed by increased tier 2 participation (Section 1.2)** - There are some stakeholder concerns regarding levels of competition driven by the EEIS, however, this is a key feature of the Scheme's market-based design and is a desired outcome. Negative installer sentiment could be in part alleviated by increased tier 2 retailer participation as smaller installers would have the opportunity to subcontract to larger Accredited Energy Savings Providers (AESPs).
- **Complementary policies help maximise Scheme benefits for non-participants (Section 1.3)** - Energy efficiency obligation (EEO) schemes are most effective when part of a broader suite of policies. Complementary programs reduce Scheme spend by providing access to energy efficient upgrades in other forms. The ACT Government has a range of complementary programs to the EEIS which help support a range of energy efficiency and energy demand-side objectives.
- **Space heating/cooling offerings are appropriate. Cheaper hot water offerings are available in other jurisdictions but are not fit-for-purpose in the ACT (Section 1.1)** - New, cheaper offerings are available in other jurisdictions, but these are likely not fit-for-purpose in the ACT due to the low winter temperatures. If tier 2 retailers participate in the Scheme, they will likely use national installers who favour these cheaper products that they provide in other jurisdictions – this may jeopardise the integrity of the Scheme.

### **Section 2: The key challenges to tier 2 participation are stakeholder understanding, ESC revenue and Scheme resourcing**

- **ActewAGL's delivery of activities aligns with EEIS goals and design (Section 2.1)** - ActewAGL is delivering a range of eligible activities – meeting both their energy savings and priority household obligations. ActewAGL has decided to only deliver energy saving activities to its own customers. This is in keeping with the spirit and letter of the Act and the general operating principles of a market-based scheme – the EEIS is not a government program, it is a regulated market-based scheme.



- Tier 2 participation will moderately increase energy savings without increasing** [REDACTED] this would expand access to energy saving activities to non-ActewAGL customers. Access to this expanded market will also help to increase energy savings delivered under the scheme by up to 13% [REDACTED] Pass through costs would likely not increase with tier 2 participation.
- Tier 2 participation will significantly impact EPSDD resourcing and Energy Savings Contribution revenue (Section 2.2)** – The AESP process shifts the burden of compliance from the retailer onto the government. Currently, EPSDD is not adequately resourced to manage this increased compliance workload. Tier 2 participation would also significantly impact ESC revenue. [REDACTED]
- Increased tier 2 participation might impact priority household activities (Section 2.2)** – priority household activity delivery may be impacted due to both decreased ESC funding of other government programs and the absence of a priority household target for tier 2 retailers. Tier 2 retailers are unlikely to deliver to priority households if there is no obligation to do so.
- The AESP framework is fit-for-purpose but needs increased awareness and resourcing (Section 2.3)** – Theoretically, the AESP framework is fit-for-purpose. However, there has only been one applicant to the framework. With only one tier 1 retailer participating in the Scheme, and operating outside of the AESP framework, contractors have no incentive to become an AESP. In addition, many contractors and tier 2 retailers are unaware of, or misunderstand the AESP framework.
- Tier 2 participation is likely in the near future but will require engagement and clear communication with retailers and installers (Section 2.2)** – [REDACTED] However, there are two key barriers to participation – misperceptions around voluntary participation obligations regarding the shortfall penalty and lack of AESPs. [REDACTED] Based on our analysis, if a major tier 2 delivered similar activities to ActewAGL the market would be attractive enough for AESPs. However, this information isn't readily available and understood by prospective AESPs. Therefore, increased communication and engagement around the size of tier 2 obligations and number of credits per activity could help to attract AESP interest.

## Opportunities

The following opportunities have been identified to improve the performance and outcomes of the EEIS.

### **Improve communication with consumer and industry, to increase understanding of the direct and indirect benefits of the Scheme and complementary ACT programs**

- **Opportunity 1A: Develop and disseminate a clearer narrative to stakeholders to address misunderstandings** – clearly communicating the primary objectives of the EEIS and Scheme design will help both consumers and industry understand the dynamics of a market-based scheme (see Section 1.4).
- **Opportunity 2A: Improve communication with customers and installers regarding pathways to participation and benefits of the Scheme** – pathways include tier 2 participation and the Sustainable Household Scheme. Clear communication will be required to facilitate greater participation (see section 2.4).

### **Strengthen resourcing and funding sources to prepare for likely tier 2 participation, then engage with tier 2 retailers and potential AESPs to expand direct benefits to more ACT consumers and installers**

- **Opportunity 2B: Investigate cost recovery pathways for EPSDD to offset anticipated lost revenue** – should tier 2 retailers elect to participate in the Scheme, there will be a significant loss in ESC revenue which will have a sizeable impact on the operation of the team (see Section 2.4).
- **Opportunity 2C: Increase EPSDD resourcing to support additional compliance requirements** – if tier 2 retailers participate in the Scheme and installers become AESPs, the compliance burden will shift from retailers onto the EPSDD, which does not have the resources to support the increased workload (see Section 2.4).
- **Opportunity 2D: Clarify the financial obligations of participation with tier 2 retailers** - Make sure that tier 2 retailers understand that they can start to incrementally participate in the Scheme using the AESP framework. Clarify that they can continue to pay the ESC, not the shortfall penalty, if they fail to meet their delivery plan (see section 2.4)
- **Opportunity 2E: EPSDD to engage with tier 2 retailers and potential AESPs to facilitate tier 2 participation** – neither installer nor tier 2 retailer is currently aware of the other party's interest in participating in the Scheme, therefore bringing these two stakeholders together will help overcome this barrier (see section 2.4).



### Review activity codes for emerging products

- **Opportunity 1B: Review heat pump hot water activity codes to ensure only products that can perform well in the ACT climate are installed under the EEIS** – EPSDD should carry out its own compliance and approval process on new market offerings as there has been anecdotal feedback that some of these products have historically experienced performance issues in the ACT (see Section 1.4).

## Suggested opportunities implementation timeline

Opportunity 1A: Develop and disseminate a clearer narrative to stakeholders to address misunderstandings (Section 1.4)

Opportunity 2A: Improve communication with customers and installers regarding pathways to participation and benefits of the Scheme (Section 2.4)

Opportunity 1B: Review heat pump hot water activity codes to ensure only products that can perform well in the ACT climate are installed under the EEIS (Section 1.4)

Opportunity 2B: Investigate cost recovery pathways for EPSDD to offset anticipated lost revenue (Section 2.4)

Opportunity 2C: Increase EPSDD resourcing to support additional compliance requirements (Section 2.4)

Opportunity 2D: Clarify financial obligations of tier 2 participation with retailers (Section 2.4)

Opportunity 2E: EPSDD to engage with tier 2 retailers and potential AESPs to facilitate tier 2 Scheme participation (Section 2.4)

0-6 months

1-2 years

2-4 years

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# Background to this report

This report documents the findings and opportunities for consideration of a targeted market and policy assessment of the performance of the Energy Efficiency Improvement Scheme (EEIS).

The ACT has made a commitment to reach net zero emissions by 2045 [1]. The EEIS was established in 2012 as a part of delivering this commitment. The EEIS places an obligation on electricity retailers in the ACT to either deliver energy efficiency activities, or some retailers have the option to make a financial contribution. This contribution funds Scheme administration and ACT Government-led energy efficiency programs. Targets for retailers are set on a pro rata basis, based on their market share [2]. Retailers are penalised financially for failing to meet their targets, either through delivering activities or making a financial contribution. The EEIS is funded by the retailers, who can pass a portion of these costs through to their customers and subcontract the delivery of energy saving activities.

Electricity Retailers with annual electricity sales greater than 500,000 MWh and more than 5,000 customers are classified as tier 1 retailers. Tier 1 retailers are obligated to participate in the Scheme by delivering energy saving activities to households and businesses. Retailers that do not meet this benchmark are classified as tier 2 retailers and can elect to either participate directly in the Scheme or pay a penalty in the form of an Energy Savings Contribution (ESC). There is currently only one tier 1 retailer in the ACT.

## **This report is guided by key Scheme challenges**

The EEIS was established in 2012, with a subsequent Amendment Bill introduced in 2019 (following a comprehensive independent Scheme review). The EEIS has since been extended out to December 2030, with a new Scheme metric focusing on energy savings (MWh), rather than emissions reductions (tCO<sub>2</sub>). This report outlines the findings of a targeted Scheme analysis which has been performed post implementation of the amendments in the 2019 Bill. This was not a comprehensive review, but rather a “health check”, to understand the activities being delivered under the Scheme in the broader context of Scheme policy, legislation, and operations.

We were tasked with helping the EPSDD better understand the following key questions:

### **What are the impacts of ActewAGL’s activities on the ACT water heater and air-conditioning markets, and for consumers? Considering:**

- 1.1a - Does Tier 1 Retailer pricing and delivery of space heating/cooling and hot water activities under the EEIS impact local industry and consumers? If so, how?

- 1.2a - Is the Tier 1 retailer offering a value for money product and service? How does it compare to the broader market?
- 1.1b - What options might be suggested to improve local industry and consumer outcomes whilst not compromising the objects and cost effectiveness of the scheme? Please provide short-mid term solutions (i.e. changes to subordinate legislation) and long-term solutions (i.e. changes to the Energy Efficiency Improvement Act) if applicable.
- 2.2b – Does ActewAGL’s activity offering, and associated product selection provide and appropriate energy efficiency solution for consumers?

**Do delivered activities support the objects of the Energy Efficiency (Cost of Living) Improvement Act? What are the key barriers to, and what would be the impacts of, tier 2 retailer participation in the Scheme? Considering:**

- **2.1a** – Is the AESP framework fit-for-purpose given the limited interest shown to date in pursuing this pathway from retailers and installers?
- **2.1b** – What would be the impact of Tier 2 participation in activity delivery with respect to the Objects of the Act?
- **2.1c** – What might be the potential implications in relation to pass through costs of Tier 2s delivering activities under the Scheme?
- **2.1d** – What changes to the Scheme could best facilitate increased Tier 2 participation and reduce perverse outcomes?
- **2.2a** – Are Tier 1 retailer’s business considerations in selecting activities to deliver to achieve their energy saving obligation in conflict with the objects of the Act or consumer priorities?
- **2.2b** – Does the tier 1 retailer’s activity offering, and associated product selection, provide an appropriate energy efficiency solution for consumers?
- **2.3a** – How does Tier 1 delivery of EEIS activities to only their own customers impact the Objects of the Act?

**We were tasked with undertaking a targeted “health check” of the EEIS**

The ACT Government engaged Common Capital to review and assess the current operation of the EEIS to identify ways to reduce barriers and maximise the public benefit delivered by the Scheme. The outputs of this project are intended to inform the EEIS Administrator on potential future legislative updates and non-legislative policy strategies. We began by completing a detailed review of pricing and delivery of energy efficient space heating/cooling and hot water technologies in the ACT. This involved calling heating, ventilation, and air conditioning (HVAC) installers and plumbers in the ACT for

quotes on energy efficient upgrades. We gained permission from a contact in the ACT to use their 4-bedroom, single storey house in [redacted] for quotes. The number of calls made, and quotes received are shown in Table 2 below.


*Table 1: response rates for quotes requested from HVAC installers and plumbers*

Energy efficient product	Number of calls	Number of quotes received
<b>Hot water heat pump</b>	23	4
<b>Ducted reverse cycle air conditioner</b>	12	9

As shown in Table 2 above, we had a good response rate from HVAC installers, however plumbers were more difficult to gain quotes from. This was because HVAC installers tended to have call centres that provided quotes. Conversely, calls to plumbers often went directly to their personal voicemail and calls were not returned. Plumbers were also more hesitant to quote over the phone. Several plumbers stated that the hot water heat pump pricing depends on a number of variables that could only be assessed in person.

After gaining quotes from both ActewAGL and non-ActewAGL installers, we were able to benchmark the delivery of services by the Tier 1 retailer against the broader market. We then carried out interviews with a range of stakeholders to assess the market impacts of the EEIS on industry and consumers, in light of the Tier 1 retailer's pricing and delivery. A list of interviewees is provided in Table 3 below.

*Table 2: list of interviewees by stakeholder type*

Stakeholder type	Number of interviewees
Tier 1 retailer	1
Tier 2 retailer	
Scheme installer in the ACT	
Non-Scheme installer in the ACT	
Non-Scheme installer operating under other states' schemes	
<b>Total</b>	

Through the quoting process and interviews, we were able to identify common themes and perspectives across a range of stakeholders. We were then able to compare any competing views against the objects of the Act to critically assess the operation of the



EEIS. This allowed us to address the key concerns and questions outlined at the beginning of this section.

**There are some limitations to the data reported in this project**

This was not a comprehensive quantitative market analysis. However, every effort was made during our pricing review and interviews to collect reliable and meaningful data. We sought to engage a broad range of stakeholder perspectives through the interview process but were somewhat limited by interview numbers. We interviewed 6 installers in total and while they expressed a diverse range of views, they may not be entirely representative of the ACT installer market. Likewise, with our pricing review we were not able to perform a comprehensive comparison of quotes from all ACT installers. We attempted to obtain a typical sample. However, this exercise was not intended to be statistically significant. We would need an order of magnitude more interviews than were in scope for this project to be able to draw statistically significant findings on price, uptake and market share. However, some clear and consistent themes emerged from which we were able to qualitatively answer EPSDD's questions.

# 1. Market analysis

## Overview

This section considers the implications for local industry and consumers receiving energy saving upgrades under the EEIS from ActewAGL meeting its legislative obligations. In particular, we focus on the two current upgrade types:

- replacement of gas space heating and/or electric space heating and cooling with high efficiency, ducted, reverse cycle heating, ventilation and air-conditioning (HVAC)
- replacement of gas or electric water heating with high efficiency electric heat pump hot water systems.

The key findings detailed in this section are:

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<p>The undiscounted prices ActewAGL installers are quoting for both HVAC and hot water upgrades are in line with market rates and around 10% lower than market rates after ActewAGL subsidies are applied.</p>	<p><b>BUT</b> it appears that the vast majority of new upgrades, that are mostly undertaken by non-ActewAGL installers, would not have happened without ActewAGL's subsidies and promotion. EEIS upgrades are not happening at the expense of non-ActewAGL installer's existing sales and market share.</p>
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<p>Some installers who chose not to respond to ActewAGL's tender have said retrospectively that they would have bid if they had their time again and would like access to incentives if the EEIS was run as a government rebate program.</p>	<p><b>BUT</b> the EEIS is a marked-based scheme and the discounts are a commercial innovation between ActewAGL and the successful tender respondents, in accordance with the obligations and policy intent of the EEIS.</p>
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<p>At present, ActewAGL is only offering upgrades to its own customers under the EEIS</p>	<p><b>BUT</b> this is consistent with the spirit and letter of its obligations and places competitive pressure on other energy retailers to participate in the EEIS and offer upgrades to their own customers. The EEIS aims to benefit all ACT customers with avoided carbon emissions and lower energy prices by delivering energy savings. Additionally, complementary ACT Government programs provide pathways for non-ActewAGL customers</p>
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and installers to directly benefit from energy saving upgrades.

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In this section, you can find answers to the following research questions, as outlined in the EPSDD's project RFQ:

- **1.1a** - Does Tier 1 Retailer pricing and delivery of space heating/cooling and hot water activities under the EEIS impact local industry and consumers? If so, how?
- **1.2a** - Is the Tier 1 retailer offering a value for money product and service? How does it compare to the broader market?
- **1.1b** - What options might be suggested to improve local industry and consumer outcomes whilst not compromising the objects and cost effectiveness of the scheme? Please provide short-mid term solutions (i.e. changes to subordinate legislation) and long-term solutions (i.e. changes to the Energy Efficiency Improvement Act) if applicable.
- **2.2b** – Does ActewAGL's activity offering, and associated product selection provide an appropriate energy efficiency solution for consumers?

## 1.1. ActewAGL’s space heating/cooling and hot water offerings are competitive

Three installers are currently delivering HVAC and water heating energy saving activities on behalf of ActewAGL under the EEIS. We received quotes from these installers, as well as a range of refrigeration professionals and plumbers in the ACT. Overall, we found the products offered by ActewAGL installers were of a high quality and at prices similar to market rates. The price difference for ActewAGL and non-Actew AGL installers for both HVAC ducting and hot water heat pump systems are shown below. The prices below are offered to all customers in the ACT i.e. Scheme incentives have not been applied to ActewAGL installer prices.

### Hot water heat pump pricing and offerings

ActewAGL hot water heat pump offerings are priced at market rate and of a high quality. As shown below, the price discrepancy between ActewAGL and non-ActewAGL installer offerings is not significant

*Quoted average prices and price ranges for hot water heat pump installations in the ACT*

315L hot water heat pump installer	Price (undiscounted)	
	Range	Average
Non-ActewAGL installer	[Redacted]	[Redacted]
ActewAGL installer	[Redacted]	[Redacted]

Under the EEIS, ActewAGL provides \$500 off the upfront cost of a new hot water heat pump [3]. ActewAGL then provides \$250 in bill savings over three years [3]. For priority households, the incentive is increased to \$800 off the upfront cost and \$400 in bill savings [3].

### Cheaper hot water heat pump offerings are available in other jurisdictions but are not fit-for-purpose in the ACT

There are several new hot water heat pump products that have entered the market and are experiencing high uptake under other jurisdictions’ schemes. These units are typically much cheaper,

Anecdotal feedback

from interviews criticised newer market products as they have historically had issues with performance when exposed to the low temperatures experienced during ACT winters.

One interviewee had installed 30 hot water heat pumps from one of the newer brands five years ago but has since had to remove all of these units as they have failed to perform in the ACT climate. Several non-ActewAGL installers who were asked for a quote refused to install hot water heat pumps, citing their poor performance during ACT winters. Due to the lower price, these newer units are offered for free under one other state's scheme and for \$33 in another. These units perform well in these states due to less severe temperature fluctuations. If tier 2 retailers participate in the scheme, they are likely to use national installers who may have a preference for the lower cost products they are currently installing in other jurisdictions. Two interviewees raised performance concerns of these products in the colder temperatures experienced in the ACT. These products are not currently prohibited by the EEIS codes of practice. The current product offerings under the EEIS were praised by interviewees for being of a high quality and performing well in the ACT. Subsequently incorporating newer products that are not fit-for-purpose may jeopardise the integrity of the Scheme.

## Ducted reverse-cycle air conditioning pricing and offerings

ActewAGL ducted HVAC offerings are of a high quality and priced at market rate. As shown in Table 5 below, the price discrepancy between ActewAGL and non-ActewAGL installer offerings is not significant. Some non-ActewAGL installer offerings are cheaper than ActewAGL installers, while others were more expensive. ActewAGL installer quotes were typically in the middle of the market. The average quoted offering is a little lower than the average price quoted by non-ActewAGL installers – however this could be because there are only three ActewAGL installers.

Table 4: Quoted average prices and price ranges for ducted reverse-cycle air conditioning installations in the ACT

20kw ducted HVAC Installer	*Price (undiscounted)	
	Range	Average
<b>Non-ActewAGL installer</b>	[Redacted]	[Redacted]
<b>ActewAGL installer</b>	[Redacted]	[Redacted]

\*these prices are based on replacing an existing natural gas ducted system

Under the EEIS, ActewAGL provides \$1,000 off the upfront cost of a new ducted reverse-cycle air conditioning unit, when switching from a ducted gas unit [6]. ActewAGL then provides \$500 in bill savings over three years [6]. For priority households, this incentive is doubled, i.e. \$2,000 off the upfront cost and \$1,000 in bill savings [6].

When requesting quotes for split systems, both non-ActewAGL and ActewAGL installers quoted a range of \$3,000-\$3,500.

One point of difference between the quotes received from ActewAGL installers and non-ActewAGL installers was the cost to decommission an existing ducted gas unit.

Approximately half of non-ActewAGL installers contacted included decommissioning in their price, while the other half charged an additional [Redacted]. ActewAGL installers on the other hand, charged an additional [Redacted] in decommissioning costs. Non-ActewAGL and ActewAGL installers' prices are comparable when decommissioning costs are added.

The undiscounted prices ActewAGL installers are quoting for both HVAC and hot water upgrades are in line with typical market rates and around 10% below after the ActewAGL incentive is applied.

**ActewAGL installers were complimentary of ActewAGL, while non-ActewAGL installers questioned their pre-discounted prices**

During the quoting process, all three ActewAGL installers were very complimentary of ActewAGL. All three implied that the quality of installation would be higher due to strict



Scheme compliance and evidentiary requirements. In addition, none of these installers tried to upsell to larger units, in fact they all advised that a unit larger than 16kw was unnecessary and advised against it.

Many believed ActewAGL installers were increasing their baseline price and that there is subsequently little difference in price once Scheme incentives have been applied. When asked about incentives, other non-ActewAGL installers simply advised that they could not provide a similar incentive, but that customers could access an interest-free loan through the Sustainable Households Scheme. Under this Scheme, eligible homeowners can access interest-free loans of up to \$15,000 for energy efficient products [7].

#### Key takeaways

- ActewAGL's HVAC and hot water offerings are competitive
- Cheaper offerings are available in other jurisdictions, but these are not fit-for-purpose in the ACT
- Some non-ActewAGL installers have misperceptions of how the Scheme works and how it affects their business.

## 1.2. The positive impacts of the EEIS for non-ActewAGL installers outweigh the negative impacts

The EEIS and other complementary schemes are driving additional energy saving activities in the ACT

The volume of energy efficiency activities being delivered under the EEIS is very low when compared to the size of the market. From the limited quantitative data available to this study – EEIS upgrades equate to around 30% of total HVAC upgrades in the ACT and 13% of hot water heat pump upgrades.


Both ActewAGL and non-ActewAGL installers report that the water heater and HVAC markets have grown due to increased consumer demand, driven by ACT Government energy efficiency programs – including, but not limited to, the impact of the EEIS. Several of the installers interviewed suggested there was significant spillover from the EEIS occurring in the ACT hot water and HVAC markets. They believed their sales had increased due to better awareness achieved through scheme education and marketing.

They claimed that non-ActewAGL customers were calling up to get quotes, knowing that they weren't eligible for any incentives. It appears that many of these new upgrades would not have happened without ActewAGL's subsidies and promotional activity. While their sales have increased, non-ActewAGL contracted installers reported a higher cost of sales due to an increased request for quotes in response to ActewAGL marketing and discounts. Non-ActewAGL installers are therefore winning a lower percentage of quotes provided. For example, one installer has experienced an increased number of hot water heat pump sales but reported going from a 30-40% conversion rate on most quotes to 20-30%.

Assessing the additionality of the EEIS is outside the scope of this review. However, based on installer feedback it appears likely that the Scheme has resulted in additional hot water and HVAC installations beyond business as usual in the ACT.

## ActewAGL is not obligated to contract to all installers in the ACT

As a tier 1 retailer, ActewAGL has selected not to use the AESP framework to deliver energy saving activities. Tier 1 retailers can carry out their own procurement processes to select their preferred installers. ActewAGL sent out an open request-for-tender to the market. Following this process, they selected three installers to deliver energy saving activities on their behalf.



Like all market-based schemes, EEIS is designed to drive innovation and price competition through allowing tier 1 retailers to work out how they are best placed to deliver energy savings obligations based on their business capabilities and business processes. Increasing competition is implicitly built into the scheme design. Requiring tier 1 retailers

to subcontract to all ACT installers would increase scheme compliance costs significantly. This would effectively involve mandating a government rebate program on commercial organisations without the capabilities or objectives of government. It would also undermine the design goals of the EEIS to encourage innovation and competition. In contrast the current ACT policy framework includes these benefits of the EEIS, and complements them with a range of programs that provide additional pathways for installers and customers.

## Small installers do not have the resources required to participate in the EEIS

Most installers in the ACT are relatively small and do not have the resources to complete the administrative and compliance requirements of the Scheme. Installers do not realise that the administrative and compliance burden would likely outweigh the benefits of participating in the Scheme. When told about the administrative and compliance requirements, some installers suggested that they do not have the capacity to fulfill these requirements. Other installers advised that they would hire more staff to cover these additional requirements and that it is not a deterrent. Some installers were happy just being involved in the Sustainable Household Scheme and were not bothered by being unable to deliver activities under the EEIS. Communicating the Scheme's administrative and compliance requirements to installers would likely deter many installers from wanting to participate in the Scheme directly. Many would most likely prefer to be subcontracted by a larger company who would fulfill these requirements.

### Key takeaways

- The Scheme is operating effectively and as intended, and is likely to be highly additional
- There are some stakeholder concerns with regards to levels of competition and innovation driven by the EEIS
- Installers are not aware of the Scheme's compliance and administrative requirements

## 1.3. Complementary policies help maximise Scheme benefits for non-participants

Complementary programs and policies result in a better outcome for both Scheme participants and non-participants. Complementary programs reduce Scheme spend by providing access to energy efficient upgrades in other forms. Originally, ActewAGL was providing higher incentives for eligible activities. They have since decreased the incentive offered as enough consumers are completing upgrades with a lower incentive. This

provides more value for non-participants in the Scheme as the less money ActewAGL spends, the lower the pass-through costs are for all energy consumers. Subsequently, the wholesale price of energy may also decrease as the demand for energy decreases, due to energy efficient appliances using less energy.

Energy Efficiency Obligation (EEO) schemes are most effective when operating within a broader policy mix, which has been designed in response to local market conditions [8]. This policy mix should be designed to support the emergence of a sustainable energy efficiency industry that can deliver upgrades at scale [9]. Figure 1 below shows a framework for targeting energy efficiency policy tools, depending on where the target activity sits on the diffusion of innovations curve [10]. It is based on the findings of a 2020 Common Capital study into the effectiveness of financial incentive-based policy tools in driving energy efficiency upgrades [10].

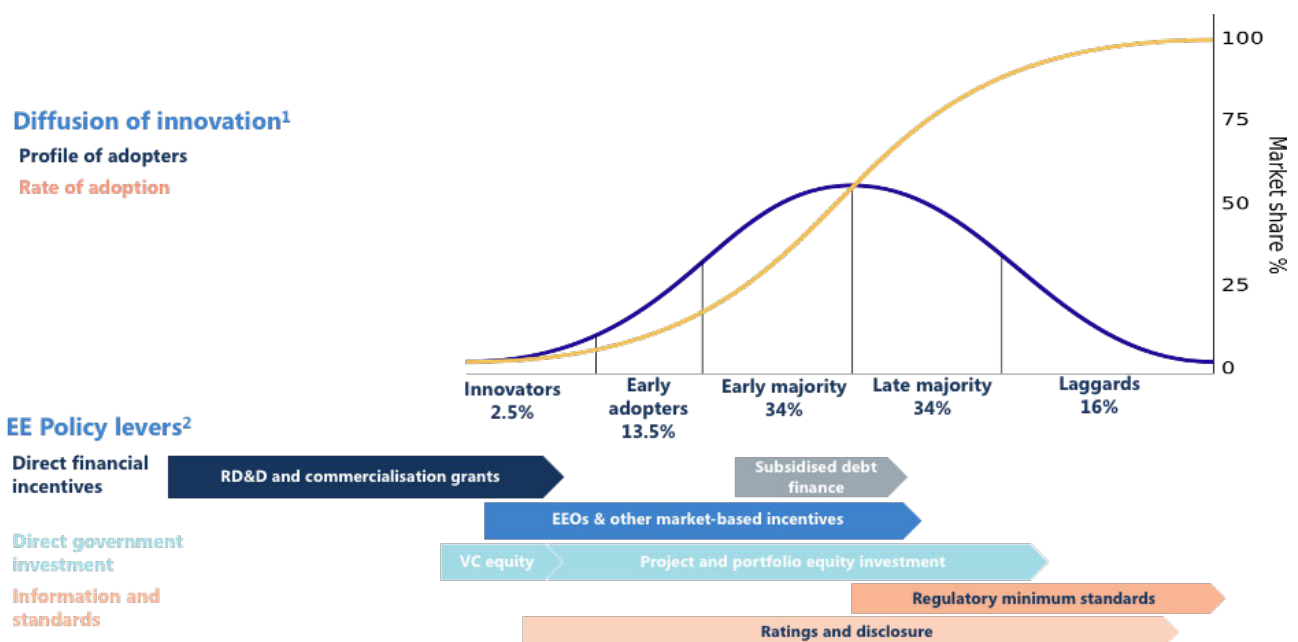


Figure 1: Adoption curve showing how policy tools interact to incentivise the uptake of energy efficiency practices in commercial buildings (source: <sup>1</sup>Rogers [11] and <sup>2</sup>Common Capital [10])

The yellow s-curve is a simplified depiction of the rate of market adoption over time for the successful diffusion of new innovations. The blue bell curve shows the percentage of market share that different customer categories represent. The most suitable policy types are plotted along the diffusion of innovations curve. As shown above, EEO schemes are most effective when targeted at technologies and practices in the innovator and early adopter stages to drive costs down and result in mass market adoption. Therefore, EEO schemes are useful for scaling the adoption of energy saving activities with demonstrated commercial feasibility, but low levels of adoption. As shown above, a mix of policy tools is required to support EEO schemes and maximise their benefits. The ACT Government has various complementary programs to the EEIS which help support a range of energy efficiency and energy demand-side objectives. These programs include the Sustainable

Households Scheme and ESC-funded programs that focus on priority households in the ACT.

#### **Key takeaways**

- EEO schemes are most effective when part of a broader policy mix
- There is a misunderstanding about how the Scheme operates and how it benefits all consumers
- Sustainable Households Scheme has resulted in lower Scheme spend by ActewAGL which has resulted in greater benefits for non-Scheme participants

## 1.4. Section 1 opportunities

The opportunities highlighted below are in response to the findings outlined in Section 1.

Opportunity: 1A	
Timeframe: short-term, achievable within current legislative powers and resources.	
Develop and disseminate a clearer narrative to stakeholders to address misunderstandings. Clearly communicating the primary objectives of the EEIS and Scheme design will help both consumers and industry understand the dynamics of a market-based scheme. Industry will see that competition is a desired result, and not an undesirable outcome. Consumers will also then understand that their retailers have access to the Scheme but have chosen not to participate, therefore they can use their consumer power to influence tier 2 retailers to participate in the Scheme.	
<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Cost effective</li> <li>• Should reduce number of complaints from both industry and consumers</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>• It may be difficult to directly target stakeholders</li> </ul>

Opportunity: 1B (see Section 1.1)	
Timeframe: short-term, small consultancy, likely requires very minor change to existing regulation ( <i>Energy Efficiency (Cost of Living) Improvement (Eligible Activities)</i> ).	
Review heat pump hot water activity codes to ensure only products that can perform well in the ACT climate are installed under the EEIS. There are several new lower cost products on the market that are being adopted at high rates in other jurisdictions. There has been anecdotal evidence that these products have historically experienced performance issues in the ACT. Hot water heat pumps have varying efficiencies depending on the climate they operate in. This means that not all nationally approved hot water heat pump products will necessarily be appropriately suited to the ACT. Given there is no climate zoning of these products in the national standards, and the different climate conditions in NSW and Victoria, these products are currently not prohibited from being installed under the EEIS. EPSDD should carry out its own compliance and approval process on new market offerings to maintain the integrity of the Scheme.	
<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Maintain the integrity of the EEIS by ensuring only high-quality products that will perform well are installed</li> <li>• Consumers will not need to replace hot water heat pump systems that perform poorly</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>• Additional costs for the EPSDD to carry out compliance on new market offerings</li> </ul>



# 2. Scheme performance

## Overview

This section assesses whether ActewAGL’s Scheme decision-making is in line with the objects of the Act and Scheme design. It also assesses the impact of tier 2 retailer participation in the Scheme, particularly on energy savings delivered by the Scheme, EPSDD resources, pass through costs, and priority households. Lastly, this section evaluates the AESP framework and its suitability for delivering the goals of the Scheme.

The key findings detailed in this section are:

ActewAGL’s delivery of activities aligns with EEIS goals and design	<b>BUT</b> there are inherent trade-offs between the four objects of the Act.
Tier 2 participation will moderately increase energy savings	<b>BUT</b> significantly impact EPSDD resourcing and ESC-funded programs.
The AESP framework is fit-for-purpose	<b>BUT</b> needs improved awareness as many installers and tier 2 retailers are unaware of, or misunderstand, the AESP framework. In addition, EPSDD does not have the resources to monitor compliance of AESPs

In this section, you can find answers to the following research questions, as outlined in EPSDD’s project RFQ:

- **2.1a** – Is the AESP framework fit-for-purpose given the limited interest shown to date in pursuing this pathway from retailers and installers?
- **2.1b** – What would be the impact of Tier 2 participation in activity delivery with respect to the Objects of the Act?
- **2.1c** – What might be the potential implications in relation to pass through costs of Tier 2s delivering activities under the Scheme?
- **2.1d** – What changes to the Scheme could best facilitate increased Tier 2 participation and reduce perverse outcomes?
- **2.2a** – Are Tier 1 retailer’s business considerations in selecting activities to deliver to achieve their energy saving obligation in conflict with the objects of the Act or consumer priorities?

- **2.2b** – Does the tier 1 retailer’s activity offering, and associated product selection, provide an appropriate energy efficiency solution for consumers?
- **2.3a** – How does Tier 1 delivery of EEIS activities to only their own customers impact the Objects of the Act?

## 2.1. ActewAGL's delivery of activities aligns with EEIS goals and design

There are inherent trade-offs between the objects of the Act

The four objects of the *Energy Efficiency (Cost of Living) Improvement Act* are shown in the figure below. While the objects are mostly complementary, individual activities delivered under the scheme won't necessarily meet all four objectives. For example, upgrading an electric water heater with a high efficiency heat pump will reduce household and business energy use and provide bill savings, but it won't reduce greenhouse gas emissions in the ACT where offsite renewable energy purchases account for 100% of the Territory's consumption. Decommissioning gas heaters and installing high efficiency ducted HVAC systems will provide the largest reduction in greenhouse gas emissions but will increase electricity use and deliver only moderate bill savings (gas is cheaper than electricity, but HVAC is much more efficient). This is also an activity that is likely inaccessible for priority households due to the high upfront installation costs.

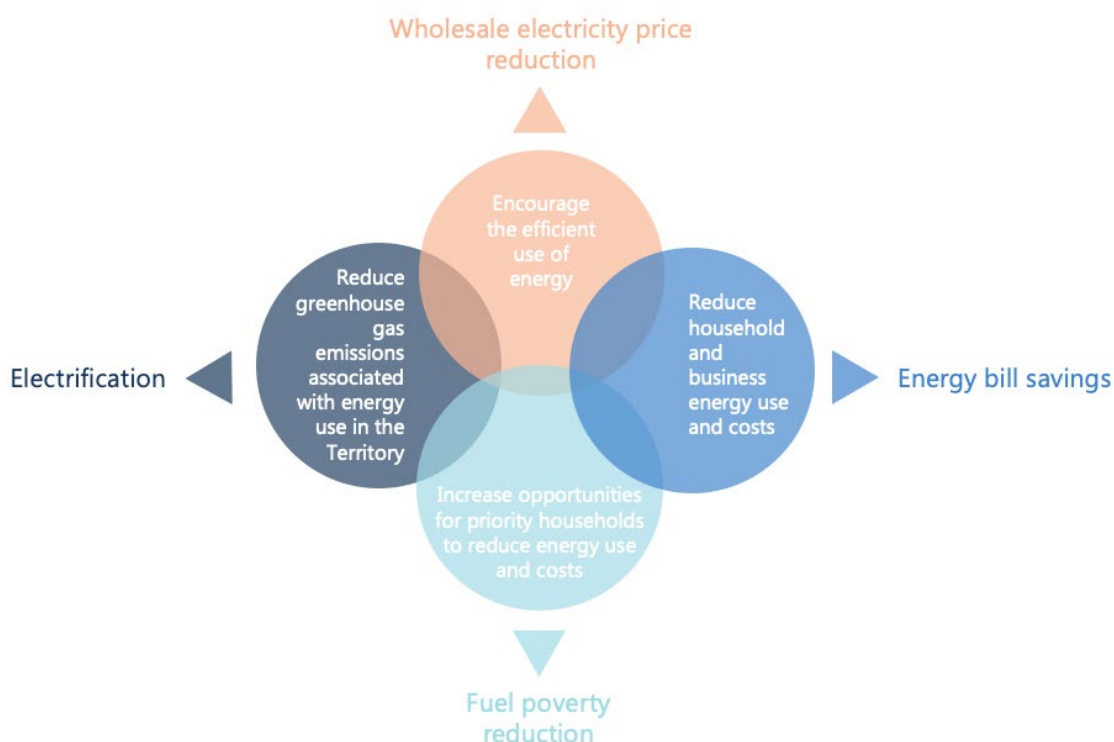


Figure 2: Objects of the Energy Efficiency (Cost of Living) Improvement Act 2012

### Extract of legislation

Below is an extract from the *Energy Efficiency (Cost of Living) Improvement Act 2012*, which governs the EEIS [12]. These clauses lay out the obligations placed on tier 1 retailers, including the portion of energy savings that must be delivered to priority households in the ACT.

#### **14 Achieving energy savings obligations**

- (1) A NERL retailer must achieve the retailer's energy savings obligation for a compliance period.
- (2) A tier 1 NERL retailer achieves the retailer's energy savings obligation for the compliance period if, in the period—
  - (a) the retailer—
    - (i) undertakes eligible activities that comply with a relevant approved code of practice; or
    - (ii) acquires approved energy savings factors that comply with a relevant approved code of practice; and
  - (b) the total of the energy savings factors for the eligible activities undertaken and acquired achieve the obligation.

#### **16 Achieving priority household obligations**

- (1) A tier 1 NERL retailer must achieve the retailer's priority household obligation for a compliance period.
- (2) A tier 1 NERL retailer achieves the retailer's priority household obligation for a compliance period if, in the period—
  - (a) the retailer—
    - (i) undertakes eligible activities in priority households that comply with a relevant approved code of practice; or
    - (ii) acquires approved energy savings factors in relation to priority households that comply with a relevant approved code of practice; and
  - (b) the total of the energy savings factors for the eligible activities undertaken and acquired achieve the obligation.

As a tier 1 retailer, ActewAGL's main obligation is to deliver enough energy saving activities to meet their energy saving target (12.5% of annual sales in 2022). The mix of eligible activities they deliver to meet this target is chosen at their discretion. They have an additional obligation to deliver a set percentage of energy savings to priority households (30% in 2021, increased to 40% in 2022). These are the only targets they must meet under the scheme.

It is up to the Government to ensure the type and mix of activities delivered under the scheme is in keeping with the objects of the Act. This is achieved through periodic reviews as part of broader Scheme reviews (the last of which was conducted in 2018) [13].

## ActewAGL is delivering a range of activities that support the objects of the Act

Despite having no obligation to do so, ActewAGL are delivering a variety of eligible energy saving activities.



As shown

in Figure 3 these priority household activities are dominated by split HVAC installs and gas water heater upgrades.



A full breakdown of this data is provided in Appendix 1. This extended data shows that there are several gaps in the current market. Almost all residential energy savings activities are being delivered to owner occupied dwellings or public housing. Essentially, the rental market is currently unserved. There are also no solar water heating activities being delivered. However, this seems consistent with installer feedback that there is minimal solar water heating installation occurring generally in the ACT.

Despite these minor gaps in the market, ActewAGL's current range of energy saving activities are supporting all the objects of the Act.

- **Reduce household and business energy use and costs** – through the delivery of energy savings activities to their customers.
- **Increase opportunities for priority households to reduce energy use and costs** – meeting their priority household obligation (30% for the 2020 compliance period).



- **Reduce greenhouse gas emissions associated with energy use in the ACT** – through electrification, e.g. gas to electric hot water installations and decommissioning gas heating, replacing with electric.
- **Encourage the efficient use of energy** – marketing the scheme to consumers and delivering bill savings through long term energy efficiency.

No single activity can meet all four of these objects. However, despite ActewAGL's scheme obligations being separate to the objects of the act, they are still managing to support all four objects. ActewAGL's operations are consistent with the intent of a market-based scheme. If the ACT Government's policy goals change and it wants to drive uptake of different activities or deliver activities to other priority groups under the Scheme, then the priority household definition could be expanded and/or additional sub targets introduced for specific activities. Consideration of whether either of these things should be pursued falls outside the scope of this project. However, if the government decides to explore these changes in the future a thorough assessment of any perverse outcomes and trade-offs will be required.

For example, expanding the scope or size of the priority household definition would likely not result in a greater diversity of priority groups being serviced. Schemes like the EEIS are very effective at overcoming informational barriers to energy efficiency by providing subsidies. However, removing an information barrier is irrelevant if your main barrier is price, or you are a renter who does not get a long-term benefit from the activity. Most priority households face various structural barriers which the EEIS alone cannot overcome. If the government wants to reach a more diverse group of vulnerable homes the Scheme must be complemented with other programs tailored to address the other barriers to energy efficiency e.g. split incentives, trust in institutions, social hardship etc.

## The delivery of activities to only ActewAGL customers is consistent with the Act

ActewAGL has now decided to only deliver energy saving activities to its own customers. This is in keeping with the spirit and letter of the Act and the general operating principles of a market-based scheme. Tier 1 retailers are under no obligation to deliver activities to the broader ACT market. They must simply meet both their energy savings and priority household obligations.

Providing incentives for energy efficiency upgrades and installations creates a point of difference in the market for ActewAGL. Opening up the program to customers outside of ActewAGL diminishes their market edge. By choosing to only service ActewAGL customers, a competitive market is created, whereby pressure is increased on tier 2 retailers to also participate in the scheme. This is exactly how a market-based scheme is supposed to operate. If tier 2 retailer customers want access to the scheme, they can either put pressure on their retailer to participate, or they can switch to a tier 1 retailer. Of

the tier 2 retailers we interviewed, none were aware of any feedback from customers suggesting that this was something they would consider. However, interestingly, several installers reported customers switching to ActewAGL to get the incentive and either staying with them long term or switching back to benefit from other incentives – e.g. better solar feed-in tariffs.

Delivery of activities to only ActewAGL customers also increases distributional equity. As the cost of implementation and the cost of incentives are ultimately born by ActewAGL customers, it is fair that any energy savings and eventual wholesale price reduction, should be delivered to that same customer group. Alternatively, if energy savings are delivered to consumers across the board, then ActewAGL customers would be shouldering the cost of non-ActewAGL customer incentives without benefiting from any subsequent reduction in wholesale energy price.

EPSDD have received complaints in the past from non-ActewAGL customers who are unable to access the Scheme. These customers assume that this is a government rebate program, rather than an incentive offered by retailers. While these complaints have seemingly dropped off more recently, there is still a need for consistent and clear communication with tier 2 retailer customers. The EEIS is not a government program, it is a regulated market-based scheme. The obligation is on the retailers to either participate directly or to pay a penalty. This message must be clear for customers, allowing them to contact their retailer directly to enquire about their involvement in the Scheme.

#### **Key takeaways**

- ActewAGL's delivery of activities under the Scheme is in accordance with their obligations under the Act
- They are delivering a wide range of eligible activities and meeting both their energy savings and priority household obligations
- Delivery of activities only to ActewAGL customers is consistent with the spirit of the Act. It also puts pressure on tier 2 retailers to participate.

## 2.2. Tier 2 participation will moderately increase energy savings without increasing pass through costs but significantly impact EPSDD resourcing

[REDACTED]

[REDACTED]

[REDACTED] This is because the administrative and compliance burdens, and operational risks associated with participating in the EEIS are very unappealing for most small retailers. Particularly in comparison to paying a relatively insignificant ESC [REDACTED] [REDACTED]). Even if energy saving activities could be delivered for a lower price than the ESC, the savings would be too trivial for most tier 2 retailers to consider participating in the Scheme. [REDACTED]

[REDACTED]

### **Scheme participation only makes sense if retailers make significant savings on their ESC payments**

ActewAGL's estimated pass-through cost for delivering activities under the EEIS is \$3.19 per MWh of total electricity sales for 2021-2022. [14] This corresponds to approximately \$25 per MWh of energy savings delivered. Again, based on our analysis of commercial-in-confidence data, [REDACTED] were able to deliver activities at a similar cost to ActewAGL, then the cost of participating in the scheme would be favourable to paying the ESC (see Appendix 2). This cost saving for [REDACTED] will increase as the total electricity sales of these retailers grow.

[REDACTED]

[REDACTED]

[REDACTED]

There is more visibility in pricing, with traders monitoring the spot market ensuring a good price for their consumers who are ultimately paying for the scheme. However, the current credit-based model didn't seem to be a participation barrier for all tier 2 retailers interviewed.

[REDACTED]

### There are two key barriers stalling participation

There is a **misperception around tier 2 obligations with respect to voluntary activity delivery.**

[REDACTED]

This is not the case. A review of the *Energy Efficiency (Cost of Living) Improvement Act* confirms that for tier 2 retailers, it's the energy savings from eligible activities and the ESC combined that must meet the obligation. There is no additional penalty. Increased communication between EPSDD and tier 2 retailers may be required to address this misperception if the goal is to encourage greater tier 2 participation.

The other barrier is the current **lack of Approved Energy Savings Providers (AESPs).** Currently, with only one tier 1 retailer participating in the Scheme and operating outside of the AESP framework, contractors have no incentive to pursue the AESP process. There is no EEIS market for them to access once approved. Potential AESPs would need to be assured that at least one of the tier 2 retailers will be participating in the Scheme and developing a large enough market of energy saving activities to warrant application for accreditation. AESPs want a guaranteed contract before they get accredited, but likewise, tier 2 retailers want to see there are accredited AESPs before they commit to participating in the Scheme. They also want AESPs that can work across jurisdictions and deliver activities at scale, which may mean larger businesses in other jurisdictions sub-contracting with local ACT providers. It seems that there may be an issue here whereby both parties are waiting for the other to act. As such, effective communication between these two parties (facilitated by EPSDD) will be crucial moving forward.

## Increased tier 2 participation will moderately increase energy saving activities and access

[REDACTED] were to participate in the Scheme, this would expand access to energy saving activities to non-ActewAGL customers. [REDACTED]

Access to this expanded market will also help to increase energy savings delivered under the Scheme [REDACTED]

## Increased tier 2 participation might impact priority household activities

Delivery of energy saving activities to priority households may be affected by increased tier 2 participation. Currently, priority household activities are being delivered by the Scheme in two ways:

- direct delivery by tier 1 retailers (to meet their 40% target)
- indirect delivery through ESC funding of other ACT Government priority household energy programs.

Tier 2 retailers voluntarily participating in the Scheme are unlikely to deliver to any priority households as they do not have the same 40% priority household target as tier 1 retailers. Based on stakeholder feedback, it seems that the priority household target is



near impossible to meet without additional support from other complementary ACT Government programs e.g. the Sustainable Household Program. The upfront costs of most energy saving activities are too high for most priority households, even with the discount from retailers. As discussed in Section 2.1, additional incentives or financing options are required for priority households to be able to pursue installations or upgrades.

[REDACTED]

Essentially, while tier 2 retailer participation would result in increased energy savings and greater carbon reduction, there may be a trade-off in terms of the number of priority households receiving upgrades under the Scheme.

## Pass through costs should not increase with tier 2 participation

Tier 2 retailers should be able to deliver energy saving activities for less than the cost of the ESC, suggesting that pass-through costs should either decrease or stay the same. ActewAGL has set a Scheme pass-through cost of \$3.19 per MWh for 2021-2022 – which equates to \$25 per MWh of energy savings [14]. The ESC is currently set at \$32 per MWh of energy savings. Hence, if tier 2 retailers can deliver activities at a similar cost to ActewAGL, pass-through costs should not increase.

ActewAGL's pass-through costs have decreased over time [14] [15], suggesting that the initial cost of participation for tier 2 retailers may be slightly higher than \$25 per MWh energy savings that ActewAGL are currently delivering. One tier 2 has previously investigated participation costs and concluded that in time and at scale, they would be able to deliver for marginally less than ESC. In the long-term, if they can deliver at the same cost as ActewAGL, then pass-through costs should be 22% lower than under the current ESC.

## New EPSDD resources and revenue streams will be required to support Tier 2 participation

EPSDD stands to lose a significant amount of revenue if tier 2 retailers start participating in the Scheme. Currently the ESC is funding priority household programs outside of the EEIS and is also covering EPSDD's scheme operational costs. [REDACTED]

[REDACTED]

[REDACTED]. With tier 2 participation likely, finding an alternative source of revenue and additional resources to manage the AESP framework must be a priority.

There were initial concerns that raising the ESC may cause some of the smaller tier 2 retailers to reconsider their presence in the ACT market. However, feedback provided by the [REDACTED] tier 2 retailers interviewed for this project did not support this concern.

#### Key takeaways

- There would be moderate cost savings for [REDACTED] retailers if they participated in the Scheme
- Tier 2 participation seems likely, but there are two key barriers – misperception around voluntary participation obligations and lack of AESPs
- Tier 2 participation would increase energy savings [REDACTED]
- Priority household activity delivery may be impacted – decreased ESC funding of other Government programs and no priority household target for tier 2 retailers
- EPSDD resourcing will be impacted – [REDACTED] lost in ESC revenue and increased workload managing AESP process.
  - Tier 2 retailer participation could provide modest benefits
- Moderate cost savings for tier 2 retailers but increased risk and complexity
- Provide a 20% increase in the number of homes that can access incentives
  - New EPSDD resources and revenue streams will be required to support likely tier 2 participation

## 2.3. The AESP framework is fit-for-purpose but needs improved awareness and resourcing

In theory, the AESP framework is fit-for-purpose. Under the EEIS, the Scheme Administrator can accredit a person or company as an Approved Energy Savings Provider (AESP). This means that person or entity is certified to



deliver energy saving activities under the EEIS and energy savings achieved through these activities can be sold to retailers to fulfill their obligations [16].

To be eligible for accreditation, applicants must also be able to prove that they have the resources and capabilities to deliver energy saving activities and state their intended method(s). In addition, applicants must already be accredited in at least one of the following schemes:

- NSW Energy Saving Scheme (ESS)
- Victorian Energy Upgrade (VEU) program
- Clean Energy Regulator (CER) Small-scale Renewable Energy Scheme (SRES).

Once applicants have met the eligibility requirements, they will then submit an application that will be reviewed by the Scheme Administrator. If approved, the applicant will be placed on the Register of AESPs. AESPs must then submit compliance plans and undergo the EEIS induction training. Only then are AESPs able to deliver energy saving activities. The various eligibility, compliance and administrative requirements establish a barrier for ACT businesses. This is a challenge as installers in the ACT are often smaller and do not operate nationally. Whilst the requirement to be accredited in another scheme outsources most of the risk and compliance costs to other states' Scheme Administrators, it increases the cost and administration for ACT businesses who have to apply to other schemes with no intention of operating in those jurisdictions.

Theoretically, the AESP framework is operating as intended, but outsourcing of compliance and risk to the tier 1 retailer has been necessary due to the current EPSDD resource constraints. However, the main challenge of the AESP process is a lack of awareness of the framework and understanding of how it works. This is discussed in the following section.

## Many contractors and tier 2 retailers are unaware of or misunderstand the AESP framework

None of the interviewees were aware of the AESP framework. Retailers were unaware of the purpose of this framework, while installers had no knowledge of its existence, eligibility requirements or accreditation process. [REDACTED]

### **Installers want assurance that there will be a significant market available to them before pursuing the AESP process**

The current lack of AESPs was described as a barrier to tier 2 retailer participation in Section 2.2. The flip side of this is that currently, with only one tier 1 retailer participating in the Scheme and operating outside of the AESP framework, contractors have no incentive to pursue the AESP process. However, with tier 2 participation now seemingly likely, we need to understand whether the HVAC and water heater markets created by tier

2 participation would be large enough to provide contractors with the assurance they require. Table 10 and Table 11 provide an estimate of the number of installations and corresponding market value of energy savings activities that would occur if [REDACTED] retailers opted into the Scheme. This represents a significant opportunity for ACT installers, as even if the retailers rely on out-of-state businesses, these businesses are likely to contract local installers.

Table 6: Potential water heater market for AESPs if [REDACTED] retailers participated in the scheme

	Total
Estimated number of installations*	[REDACTED]
Average price**	-
Total market value	[REDACTED]

Table 7: Potential HVAC market for AESPs if [REDACTED] retailers participated in the scheme

	Total
Estimated number of installations* (ducted)	[REDACTED]
Average price** (ducted)	-
Estimated number of installations* (split)	[REDACTED]
Average price** (split)	-
Total market value	[REDACTED]

\*\*Average price was calculated based on quotes received for water heaters and HVAC installations

One contractor interviewed for this project suggested that they would be willing to engage in the AESP process if they believed the market opportunity to be at least [REDACTED]. Based on these numbers, it seems the HVAC market should be sufficient for installers to engage in the AESP process. The water heater market would be a smaller opportunity and may not be sufficient for installers to engage.

However, as discussed in Section 1.2, additional opportunities are likely to arise in the form of spillover. Several of the installers interviewed suggested there was significant spillover from the EEIS occurring in the ACT hot water and HVAC markets. One HVAC installer not operating under the EEIS claimed that their sales had not been negatively affected by the Scheme. In fact, they believed their sales had increased due to better awareness achieved through scheme education and marketing. [REDACTED]

Essentially, the combination of the energy saving obligation market from tier 2 participation and spillover occurring through increased awareness and access to a previously unserved consumer market, should provide adequate incentive for installers.

## ACT EPSDD doesn't have the resources to manage increased compliance workload

As discussed in Section 2.2, tier 2 participation will create resourcing and revenue challenges for EPSDD. This is because tier 2 retailers suggest they will not run an individual tender process to contract their own installers as the tier 1 retailer has done in the past. Instead, they will rely on the AESP process. This process shifts the burden of compliance from the retailer onto the government. EPSDD is not currently adequately resourced to manage this increased compliance workload. With tier 2 participation seemingly imminent, this is a challenge that needs to be addressed swiftly.

Again, as discussed in Section 2.2, this is not only a challenge for resourcing, but also for revenue.

[Redacted text]

### Key takeaways

- AESP rules are suitable, however, there is low awareness of the process
- Installers are seeking assurance that there will be a sizeable market available if they commit to the process
- There are significant resourcing challenges for EPSDD to monitor compliance

## 2.4. Section 2 opportunities

The opportunities highlighted below are in response to the findings outlined in Section 2.

Opportunity: 2A (see section 2.2 and 2.3)	
Timeframe: Short-term, achievable within current legislative powers and resources.	
Improve communication with customers and installers regarding pathways to participation and benefits of the Scheme. The pathways to additional customer and installer participation are through tier 2 participation and the Sustainable Household Scheme. Clear communication will be required to facilitate greater participation.	
<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Installers will be able to access more customers, deliver more energy efficiency upgrades and greater energy savings through tier 2 participation</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>• EPSDD needs to find new resources and revenue streams to support increased customer and installer participation</li> </ul>

<ul style="list-style-type: none"> <li>The Sustainable Household Scheme complements the EEIS – allowing for broader consumer access and increased energy savings</li> </ul>	
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<b>Opportunity: 2B (see Section 2.2)</b>	
<p>Timeframe: Short-medium term (tier 2 participation is likely in next 2 years) – solutions will likely require substantial amendments to existing legislation or significant budget increase.</p>	
<p>Investigate cost recovery pathways for EPSDD to offset anticipated lost revenue. Should tier 2 retailers elect to participate in the Scheme, there will be a significant loss in ESC revenue. This will have a sizeable impact on the operation of the team.</p>	
<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>With cost recovery, tier 2 retailers can start participating in the Scheme, allowing non-ActewAGL customers to access energy savings activities and increasing the overall outcomes of the Scheme.</li> <li>Cost recovery is not a new concept for retailers. Many schemes in other jurisdictions operate this way.</li> </ul>	<p><b>Challenges:</b></p> <ul style="list-style-type: none"> <li>Cost recovery through an increase in ESC and an additional cost per MWh for tier 1 retailers and participating tier 2 retailers will marginally increase pass-through costs for both Scheme participants and non-participants.</li> <li>Cost recovery of lost revenue alone won't solve the additional EPSDD resourcing issue.</li> <li>Additional resourcing will also be required to conduct this investigation into cost recovery.</li> </ul>

<b>Opportunity: 2C (see Section 2.3)</b>	
<p>Timeframe: Short-medium term (tier 2 participation likely in next 2 years) – requires moderate budget increase to support delivery within existing legislative powers.</p>	
<p>Increase EPSDD resourcing to support additional compliance requirements. If tier 2 retailers decide to start participating in the Scheme and installers apply to become AESPs, the compliance burden will shift from retailers onto EPSDD. The team currently does not have the resources to support this increased compliance workload.</p>	
<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Number of AESPs can increase, facilitating tier 2 participation.</li> <li>Greater energy and emissions savings can be delivered in the ACT with increased tier 2 participation.</li> </ul>	<p><b>Challenges:</b></p> <ul style="list-style-type: none"> <li>Increasing EPSDD resources will be challenging with impending ESC revenue losses.</li> <li>The team is already under-resourced – tier 2 and AESP participation will exacerbate this further.</li> </ul>



<b>Opportunity: 2D (see Sections 2.2)</b>	
Timeframe: short-term, achievable within current legislative powers and resources.	
Clarify financial obligations of tier 2 participation with retailers. Make sure that tier 2 retailers understand that they can start to incrementally participate under the AESP framework and continue to pay the ESC not the shortfall penalty if they fail to meet their delivery plan	
<b>Benefits:</b> <ul style="list-style-type: none"> <li>• At least one of the larger tier 2 retailers will likely participate in the Scheme if this is clarified.</li> <li>• Customers of tier 2 retailers will be able to access incentives to energy efficiency products.</li> <li>• Installers who wish to deliver energy saving activities under the Scheme will have a potential avenue to pursue.</li> <li>• Increased tier 2 participation may help deliver the objects of the Act by reducing household and business energy use and costs through installing more energy efficient appliances.</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>• Clarification should be delayed until EPSDD has the additional resources and revenue required to manage tier 2 participation.</li> <li>• Additional resources will also be required to facilitate increased stakeholder engagement and improved communication.</li> </ul>

<b>Opportunity: 2E (see Sections 2.2 and 2.3)</b>	
Timeframe: medium-term to be done after the code review and resourcing and revenue increase.	
EPSDD to engage with tier 2 retailers and potential AESPs to facilitate tier 2 Scheme participation. Neither installer nor tier 2 retailer is currently aware of the other party's interest in participating in the Scheme. Bringing these two stakeholders together will help overcome an awareness barrier and open the pathway to communication which could improve Scheme outcomes.	
<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Customers of tier 2 retailers will be able to access incentives to energy efficiency products.</li> <li>• Installers who wish to deliver energy saving activities under the Scheme will have a potential avenue to pursue.</li> <li>• Increased tier 2 participation may help deliver the objects of the Act by reducing household and business</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>• EPSDD needs to find new resources and revenue streams to carry out compliance on AESP applications.</li> <li>• Additional resources will also be required to facilitate increased stakeholder engagement and improved communication.</li> <li>• Increased tier 2 participation will reduce funding for the ESC fund</li> </ul>

energy use and costs through installing more energy efficient appliances.

which may have an adverse effect on priority households.

# Key terms and references



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# Appendices

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## About Common Capital

We are a consulting and advisory firm committed to helping clients create value and manage risk from the transition to a zero-carbon economy. We help businesses, governments, philanthropists and researchers build and harness markets and accelerate the commercialisation and deployment of zero and negative carbon technologies.

Our consulting and advisory services include:

- Climate strategy, operational, and supply chain transition strategy
- Economics, market modelling, techno-economic analysis, carbon life-cycle assessment
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