

# Review of the Energy Efficiency Improvement Scheme

## Part 6 – Cost-benefit analysis

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ACT Environment Planning Sustainable Development Directorate

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# 1 KEY MESSAGES

- The Cost-Benefit Analysis (CBA) compared a range of possible future policy design scenarios, each targeting a different policy objective. These were:
  - Business as usual (the counterfactual)
  - Focus on Energy bill savings,
  - Focus on Low cost of abatement,
  - Focus on High emission reductions,
  - Focus on Balancing bill savings, emission reductions, and
  - Discontinue the EEIS.
- Each scenario would be delivered through a combination of policy levers; which include items such as the choice of scheme metric, obligated parties, application of sub-targets and multipliers and eligible households and businesses.
- For most of the scenarios analysed, there cannot be a definite answer on whether the greater “whole of economy” benefits would be able to be achieved, should the scenario be implemented, without detailed economic modelling: increasing savings by increasing the targets is always possible, but retailers are then likely to incur higher costs that will then be passed on to end-customers.
- In most cases, the trade-off facing the government is whether to maintain (or increase) the energy saving targets or keep a focus on energy bills. This is a value judgment about the scheme’s primary policy objective that needs to be investigated further and carefully considered in the broader context of the ACT’s policy set-up. An overarching long-term recommendation is to be clear on this primary objective and design the EEIS accordingly.
- As the EEIS is essentially a scheme applying a levy on energy consumption and using this levy to implement energy efficiency activities, the benefit of the scheme lies in the effectiveness and appropriateness of the redistribution. The limit to leveraging more funds to achieve greater benefits has been tested in other schemes, such as the Danish and the UK schemes, where the level of ambition had to be wound back because of regression issues. The greatest concern about increasing the pass-through costs is that it may impact low-income households who are the least able to take independent action to manage their energy efficiency and reduce their bills.
- The equity question is central to stakeholders’ concerns, as well as the question of energy poverty. Addressing this as a priority requires either significant adjustments to market mechanisms (making them less efficient) or setting up separate programs and mechanisms to deal with energy poverty and other equity issues.

## 2 INTRODUCTION

### 2.1 Objective

The objective of the Cost-Benefit Analysis (CBA) is to identify the comparative benefits and costs associated with possible alternative formulations of the EEIS as it currently stands. These are expressed as a set of possible future scenarios, each targeting a different primary policy objective. The scenarios are:

- Business as usual (the counterfactual),
- Targeted energy bill savings,
- Lowest cost of energy efficiency improvements,
- Highest greenhouse gas emission reductions,
- Balancing multiple objectives: emission reductions, energy and bill savings, and;
- Discontinue the EEIS.

### 2.2 Approach to cost-benefit analysis

A cost-benefit analysis can be undertaken with various levels of detail and depth. Considering the timeframe and the scope of the project, that EPSDD required a high level, mostly qualitative evaluation of costs and benefits associated with various options for extending the scheme beyond 2020, to inform decision and policy making. Given the high-level nature of the CBA and the fact that detailed economic modelling was not part of the scope, economy-wide benefits and costs are identified rather than quantified in the analysis presented in Section 4.

The scenarios are presented with an evaluation of the associated stakeholder costs and benefits, the overall implications with regard to the change of policy compared with the business as usual scenario, and high-level conclusions. Note that only differential costs and benefits need to be considered for a partial CBA that evaluates the difference between a counterfactual and a hypothetical scheme set-up. Where assumptions had to be made, they are clearly identified.

The key stakeholders included in the CBA are:

- The ACT government
- The obligated parties (retailers), distinguishing, where relevant between Tier 1 and Tier 2 retailers
- Participants (beneficiaries) in the scheme, with a commentary on possible equity / fairness issues between participants
- Energy (electricity) customers, who are supporting the scheme by bearing pass-through costs.

Each scenario would be delivered through a combination of scheme design elements (or policy levers); which include items such as the choice of scheme metric, obligated parties, application of sub-targets and multipliers and eligible households and businesses. Many of these scheme design elements are common across multiple scenarios. Section 4 identifies these scheme policy levers and discusses the options available with regards to the EEIS for each.

### 2.3 Limitations

The CBA is based on our consultants' own analysis and the information gathered through the project and is valid at a specific point in time and within the boundaries of the assessment.

It must be emphasised again that the CBA is purely qualitative, and that additional modelling would be required to confirm that the anticipated balance and costs and benefits are correct: it was not in the scope of this review to do so.

The ensuing recommendations proposed should be read in this context and should be considered by the ACT government in the context of all other government policy development work undertaken.

### 3 OUTLINE OF CBA SCENARIOS

Scenarios to be evaluated through the CBA are presented and analysed in Table 1 below. The policy levers that would be applied for each scenario are listed in the first column of Table 1.

Note that:

- The counterfactual is considered the “business as usual” scenario, which presents some drawbacks, given the changes in the policy environment since the beginning of the schemes, in particular the decision to source 100% renewable energy electricity for the Territory.
- The other scenarios to be examined were defined in collaboration with the ESPDD, based on the information received and analyses carried out during the rest of the project, in particular in the SWOT section of this report. These scenarios represent possible scheme designs that would support different Territory-wide policy objectives.
- The costs and benefits of scenarios considered are evaluated against the counterfactual. However, in departure to a classic CBA structure, a summary of benefits and costs of retaining the current scheme design is presented against the counterfactual, in order to present a complete picture of the options, although the counterfactual is typically only used as a reference point.
- All scenarios are considered to be implemented post-2020. This is because profound changes to the scheme require careful modelling (which was not part of the scope of this work), consultation with relevant stakeholders and implementation planning with enough notice to ensure business continuity and other issues are appropriately managed, so that potential perverse outcomes can be avoided.
- It has also been assumed that the EEIS remained a non-certificate EEO. The opportunity to convert to a certificate scheme (or a hybrid scheme) is examined in other questions and has not been deemed a likely prospect in the context of a small market such as the ACT dominated by one Tier 1 retailer.

Suggestions for more profound and long-term amendments to the scheme that emerged from the work undertaken as part of the review are presented in Part 1 – Executive Summary and Part 5 – SWOT and will require more consideration by the EPSDD before further explored, if deemed of interest.

**Table 1. CBA scenarios (post 2020)**

| Business as usual – Counterfactual   |                              |  |  |   |   |
|--|------------------------------|--|--|---|---|
| Scheme design elements   | Stakeholder                  | Benefits   | Costs / Risks  | Implications  | Conclusions   |
| <ul style="list-style-type: none"> <li>• Scheme metric remains set on greenhouse gas emissions</li> <li>• ACT grid electricity emission factor is considered to be zero post 2020</li> <li>• PHT formulation is retained</li> <li>• Scheme continues to exclude NGRS reporters.</li> <li>• Only electricity retailers are obligated parties</li> </ul> | ACT government               | <ul style="list-style-type: none"> <li>• Low cost</li> <li>• Supports reduction in gas consumption</li> </ul>  | <ul style="list-style-type: none"> <li>• No incentive to keep electricity consumption from increasing</li> <li>• Could create issues about transition off gas beyond capacity to maintain 100% renewable electricity target</li> </ul>   | <ul style="list-style-type: none"> <li>• Electricity use increase would lead to increased costs for the ACT government in sourcing additional volume of renewable electricity (and increase regressive impact for electricity customers).</li> <li>• Challenges in explaining the logic of a scheme that obliges electricity retailers to deliver gas savings, but no efficient electrical activities.</li> <li>• Likely smaller pool of beneficiaries and potential equity issues between beneficiaries and energy users</li> <li>• Scheme incentives diverge significantly from energy bill savings.</li> </ul> | <p>Should the metric remain on GHG, the following changes to the scheme would be required:</p> <ul style="list-style-type: none"> <li>• Extend the obligation to gas retailers, in the context of a comprehensive gas transition plan – note that gas retailers have not been consulted as part of this project.</li> <li>• Manage regressive impacts on low income households by offering higher bill assistance or devising other mechanisms</li> </ul> <p>Alternatively, the GHG metric could refer to the NEM average emission factor instead of a zero emission factor, but this would create tensions between the Territory’s net zero policy announcement and the scheme design.</p> <p>Overall, the status quo appears problematic and this option is not recommended by the consulting team.</p> |
|  | Retailers                    | <ul style="list-style-type: none"> <li>• Electricity retailers have an incentive to push energy user to transition to full electricity households or businesses</li> </ul> | <ul style="list-style-type: none"> <li>• Gas only activities will limit the ability to offer activities to the greatest number of customers and / or to select lowest cost activities</li> </ul>   |   |   |
|  | Participants (beneficiaries) | <ul style="list-style-type: none"> <li>• Gas users benefit through transitions to electricity and reduction in gas bills</li> </ul>  | <ul style="list-style-type: none"> <li>• No incentives to replace inefficient electrical equipment and appliances</li> <li>• Could lead to fewer beneficiaries benefitting from large upgrades</li> <li>• Low-income households may not be able to afford co-contributions for larger upgrades (or be hampered by split incentives)</li> </ul> |   |   |
|  | Energy users                 | <ul style="list-style-type: none"> <li>• Those energy users with a gas and electricity connection may overall benefit if participating (see above)</li> </ul>              | <ul style="list-style-type: none"> <li>• Many genuine energy savings are not supported</li> <li>• Electricity energy users pay for gas-related upgrades (gas savings or switch to electricity)</li> <li>• Electricity-only energy users do not benefit and experience regressive impacts, thus creating an equity issue.</li> </ul>            |   |   |

| Targeted energy bill savings  |                              |   |   |   |  |
|---|------------------------------|---|---|---|--|
| Scheme design elements  | Stakeholder                  | Benefits  | Costs / risks   | Implications  | Conclusions  |
| <ul style="list-style-type: none"> <li>• Scheme metric is set on energy savings.</li> <li>• The PHT is retained.</li> <li>• A rental target is introduced.</li> <li>• A small business target is introduced.</li> <li>• A not-for-profit organisation target is introduced.</li> <li>• Energy Savings Contributions fund non-EEIS priority household energy saving programs.</li> <li>• Premises are restricted from receiving more than one major energy efficiency item.</li> <li>• A sub-target is applied to increase proportion of participating households and businesses.</li> </ul> | ACT government               | <ul style="list-style-type: none"> <li>• Scheme supporting energy savings (hence the RET implementation) that also deliver bill savings</li> <li>• Better ability to achieve social objective of tackling energy poverty</li> <li>• Likely higher and more meaningful savings per household (but lower savings overall due to lower number of beneficiaries)</li> </ul> | <ul style="list-style-type: none"> <li>• Additional work required to define appropriate activities for priority households</li> <li>• Likely to achieve lower volume of energy savings (as sub-targets mean additional constraints for retailers) so less support to other policy objectives and need to determine the basis for sub-target setting</li> <li>• May need to assist retailers in accessing participants (referrals, etc.)</li> <li>• Need to take more responsibility for priority household energy savings program.</li> </ul> | <p>The main likely implication is that the focus on more meaningful activities and higher ambition for priority energy users will require a lowering of the target to be acceptable to retailers.</p> <p>If a proportion of the target is still available for non-priority households, it is likely that activities for priority / non-priority households will need to be different and managed separately.</p> <p>Some specific aspects may still present for low-income households, and will need to be managed, in particular the inability to afford co-contributions, when required.</p> <p>If the EEIS moves to focus even more on priority households, and Energy Savings Contributions are allocated to specific programs to priority household fund upgrades (for example), Actsmart’s field of action may be reduced or may need to be redefined.</p> <p>There would still be a need to consider whether ACT housing stock of dwellings should be eligible: to demonstrate leadership, this should arguably be funded from the public purse.</p> | <p>In the context of increasing energy prices (gas and electricity) and concern expressed by many stakeholders about energy poverty, a focus on priority households and on relevant activities delivered to those that need assistance the most is a valid policy option.</p> <p>Acceptance of the change by retailers (Tier 1 retailer in particular) would likely be subject to a – potentially significant – lowering of the target.</p> <p>As an additional consideration, if the focus is primarily on priority households, it could be envisaged that actors such as the Brotherhood of St Lawrence or St Vincent’s become activities providers and that retailers buy credits off them (effectively transforming the scheme into a certificate-based scheme).</p> |
|   | Retailers                    | <ul style="list-style-type: none"> <li>• Opportunity to “bundle” activities as a package of actions making a difference to priority households’ energy bills</li> <li>• Possible reduction in customers in hardship</li> <li>• Good opportunity to communicate on positive social impact of activities</li> </ul>   | <ul style="list-style-type: none"> <li>• Higher transaction cost (harder to access customers)</li> <li>• Higher activity cost (deeper activities) <ul style="list-style-type: none"> <li>⇒ Will likely require lowering target or accepting higher pass-through costs</li> </ul> </li> <li>• Less opportunities to offer activities to all energy customers</li> </ul>  |   |  |
|   | Participants (beneficiaries) | <ul style="list-style-type: none"> <li>• Scheme benefits accrue to a higher proportion of premises</li> <li>• Activities more likely to be in line with needs of priority households</li> <li>• Significant bill savings and (likely) greater thermal comfort</li> </ul>  | <ul style="list-style-type: none"> <li>• With a greater focus on priority households, there is a greater risk that activities could lead to a rebound effect (as people recover some disposable income)</li> </ul>  |   |  |
|   | Energy users                 |   | <ul style="list-style-type: none"> <li>• Less beneficiaries outside of the priority categories (but likely to be well accepted)</li> </ul>  |   |  |

| Lowest cost of energy efficiency improvements  |                              |  |   |  |  |
|--|------------------------------|--|---|--|--|
| Scheme design elements   | Stakeholder                  | Benefits   | Costs / risks   | Implications   | Conclusions  |
| <ul style="list-style-type: none"> <li>• Scheme metric is set on energy savings.</li> <li>• The Tier 1 threshold is lowered so that other large retailers are also obliged to deliver savings.</li> <li>• No sub-targets, including PHT removal.</li> <li>• Scheme is expanded to NGRS reporters.</li> <li>• Energy Savings Contribution fund non-EEIS priority household energy saving programs.</li> </ul> | ACT government               | <ul style="list-style-type: none"> <li>• Clear policy focus on supporting energy efficiency, whatever the barrier</li> <li>• Supports the 100% RET by limiting electricity demand increase</li> <li>• Lowest-cost activities (achieving scale)</li> <li>• Possibility to consider increasing the target (for the same overall costs), based on the rationale that larger users offer large, cost-effective opportunities (as demonstrated by the literature review)</li> </ul> | <ul style="list-style-type: none"> <li>• Higher potential for “free-ridership” (where participants wait for a government subsidy to implement energy efficiency measures)</li> <li>• Risk that activities delivered might be concentrated on big companies and cause discontent amongst other stakeholders (especially consumers’ advocates)</li> <li>• Need to take responsibility for priority household energy savings program.</li> </ul> | <p>The major issue is equity:</p> <ul style="list-style-type: none"> <li>• Removing the PHT would likely lead to few or no EEIS activities being directed to priority households, as they are harder to reach participants.</li> <li>• Reduced savings to small and medium businesses are also likely, as larger customers are likely to present more attractive opportunities.</li> <li>• Potentially, there may be a need to define or contract different types of activities, if needs of larger reporters are different to other participants’ (or use the Project Impact Assessment with Measurement and Verification, metered baseline, aggregated metered baseline, or NABERS baseline methods)</li> <li>• Without direct access to energy customers, it will be hard for government to match Tier 1 retailers reach in delivering cost effective energy savings to priority households.</li> </ul> | <p>This option is not recommended without implementing appropriate safeguards.</p> <p>Given the importance of the energy poverty topic and legitimate concerns from most stakeholders, the poverty alleviation goal would need to be covered adequately. This is likely to require budget allocation beyond the Energy Savings Contribution funds.</p> |
|  | Retailers                    | <ul style="list-style-type: none"> <li>• Easiest program to manage, greater choice of activities</li> <li>• Lower-cost activities (scale)</li> <li>• Marketing benefit / larger users</li> </ul>   | <ul style="list-style-type: none"> <li>• Tier 2 retailers becoming Tier 1 due to threshold changes are likely to strongly object the change</li> </ul>  |  |  |
|  | Participants (beneficiaries) | <ul style="list-style-type: none"> <li>• Large companies benefit</li> <li>• Selected activities offered across the board to all customers</li> </ul>   | <ul style="list-style-type: none"> <li>• Risk of “free-ridership” is increased</li> <li>• Removal of PHT is likely to result in activities moving away from the hardest to access customers, likely to be, in majority, priority household</li> <li>• Including NGRS reporters may mean that less SMEs will be able to take part in the EEIS.</li> </ul>  |  |  |
|  | Energy users                 | <ul style="list-style-type: none"> <li>• Lowest cost of abatement results in lowest pass-through costs, unless the overall target is increased</li> </ul>  | <ul style="list-style-type: none"> <li>• Major equity issue, as every electricity user is paying for upgrades that benefit participants that may not face financial barriers</li> </ul>   |  |  |

| Highest greenhouse gas emission reductions  |                              |  |  |   |   |
|---|------------------------------|--|--|---|---|
| Scheme design elements  | Stakeholder                  | Benefits   | Costs  | Implications  | Conclusions   |
| <ul style="list-style-type: none"> <li>Gas retailers become obligated parties under the scheme</li> <li>Either:               <ul style="list-style-type: none"> <li>Scheme metric is set on greenhouse gas emissions, or</li> <li>A sub-target is introduced for greenhouse gas emissions.</li> </ul> </li> <li>Either:               <ul style="list-style-type: none"> <li>High priority activities are mandated, or</li> <li>Multipliers are applied to high priority activities.</li> </ul> </li> <li>The PHT is retained</li> </ul> | ACT government               | <ul style="list-style-type: none"> <li>Greater reach through gas retailers, and potential for increasing the target</li> <li>Greater control over activities mandated and ability to direct resources towards more meaningful activities</li> </ul>                        | <ul style="list-style-type: none"> <li>Increased complexity in the activities selection and specification</li> <li>Higher complexity in the management of the GHG sub-target</li> <li>Negotiation with retailers</li> <li>Higher administration / compliance costs</li> </ul>                    | <ul style="list-style-type: none"> <li>There is likely to be a tension between the government's objectives and the retailers' willingness to accept high priority activities that may only be resolved in a reduction of the target.</li> <li>If the sub-target for GHG emission is applied to existing activities, this will only marginally impact the scheme (but this will need to be modelled).</li> <li>Multipliers would need to be carefully considered, and the added complexity balanced with the expected benefits.</li> </ul> | <p>The trade-off in achieving greater emission reductions may be an overall higher cost of the scheme, spread over gas and electricity retailers.</p> <p>Given the importance of the energy poverty topic and legitimate concerns from most stakeholders, the poverty alleviation goal would need to be covered by other programs and policies with appropriate budgetary allocation.</p> <p>There could also be a need to ensure that electricity use increase is contained through other means to avoid cost escalations in renewable electricity sourcing.</p> |
|   | Retailers                    | <ul style="list-style-type: none"> <li>Potential for reducing the target for electricity retailers as the gas retailer target will compensate for this.</li> <li>Potential for marketing uplift, as better targeted activities are delivered to their customers</li> </ul> | <ul style="list-style-type: none"> <li>Less ability to select lowest cost activities</li> <li>Will likely require lowering target or risk higher pass-through costs</li> </ul>   |   |   |
|   | Participants (beneficiaries) | <ul style="list-style-type: none"> <li>Better targeted activities, likely leading to higher energy and bill savings</li> </ul>   | <ul style="list-style-type: none"> <li>Depending on the activities, there can still be equity issues within each category, especially depending on co-contributions defined for each activity</li> </ul>   |   |   |
|   | Energy users                 | <ul style="list-style-type: none"> <li>Cost of the scheme is spread between gas and energy users</li> </ul>  | <ul style="list-style-type: none"> <li>Costs to both gas and electricity energy users may lead to greater overall cost</li> <li>Higher pass-through costs (if the target is kept at the same level but overall cost of delivery increases due to the increase in scheme's complexity)</li> </ul> |   |   |

**Balancing multiple objectives: emission reductions, energy and bill savings**

| Scheme design elements  | Stakeholder                  | Benefits  | Costs  | Implications  | Conclusions  |
|---|------------------------------|---|--|---|--|
| <ul style="list-style-type: none"> <li>The retailer energy savings obligation is extended to gas retailers.</li> <li>Scheme metric is set on energy savings.</li> <li>A sub-target is introduced for greenhouse gas emissions.</li> <li>Multipliers for activities that reduce greenhouse gas emissions and save energy.</li> <li>NGERs reporters are included, but in a sub-market set-up, except government offices (Territory and federal)</li> <li>The PHT sub-target is retained</li> <li>A rental target is introduced.</li> <li>A small business target is introduced.</li> <li>Energy management systems are incentivised.</li> <li>Premises are restricted from receiving more than one major energy efficiency item.</li> <li>A sub-target is applied to increase proportion of participating households and businesses.</li> </ul> | ACT government               | <ul style="list-style-type: none"> <li>Greater ability to achieve multiple objectives and greater control</li> <li>Greater reach through gas retailers</li> </ul>   | <ul style="list-style-type: none"> <li>Higher administration costs: complexity, negotiation, compliance checks</li> <li>Lower efficiency of smaller markets</li> <li>Government will have to decide on what basis sub-targets are allocated</li> </ul>   | <p>Maintaining a balance between each objective automatically means that each objective would need to be less ambitious than with single-objective schemes.</p> <p>Segmenting the market into sub-targets reduces economic efficiency, especially in a market as small as the ACT.</p> <p>There would be considerable complexity in defining and administering the scheme, due to the multiple partitioning of the market. This may not be considered as acceptable by retailers. It would be important not to alter multipliers or sub-targets too frequently as this would further erode scheme efficiency.</p> | <p>On one hand, this option is attractive because it allows bigger businesses (currently excluded from the scheme) to participate, and potentially a chance to significantly increase the target.</p> <p>On the other hand, creating two completely separate sub-schemes would significantly diminish funding available for the “smaller user” scheme.</p> <p>The question of affordability for low income households will need to be addressed, as the cost of the scheme (and hence the pass-through) is likely to be higher overall.</p> <p>Alternatively, creating a mechanism to allocate part of the “levy” from the “large” scheme to smaller users may be complex and trigger significant opposition from large users and potentially retailers (especially if the target is significantly increased).</p> <p>We believe this option would therefore be very difficult to put into practice and complex to manage.</p> |
|   | Retailers                    | <ul style="list-style-type: none"> <li>Potential for better targeting of their clients’ needs (hence marketing uplift)</li> <li>Ability to access all types of customers, including large users</li> </ul>  | <ul style="list-style-type: none"> <li>Likely higher compliance costs (reporting against multiple targets)</li> <li>Higher recruitment / targeting costs</li> <li>There is the risk of higher pass-through costs</li> </ul>  |   |  |
|   | Participants (beneficiaries) | <ul style="list-style-type: none"> <li>Better spread across categories of beneficiaries</li> <li>Potential for better targeting specific needs for different groups of participants (as each segment may be managed separately)</li> <li>Scheme benefits accrue to a higher proportion of premises</li> </ul> | <ul style="list-style-type: none"> <li>Depending on the activities, there can still be equity issues within each category (as some participants are easier to access than others)</li> </ul>   |   |  |
|   | Energy users                 | <ul style="list-style-type: none"> <li>Cost of the scheme is spread between gas and energy users</li> <li>Government energy users are excluded from the scheme to avoid private customers subsidising government actions</li> </ul>   | <ul style="list-style-type: none"> <li>Costs to both gas and electricity energy users may lead to greater overall cost</li> <li>Higher pass-through costs (if the target is kept at the same level but overall cost of delivery increases due to the increase in scheme’s complexity)</li> </ul> |   |  |

| Discontinue the EEIS   |                              |  |   |  |   |
|------------------------|------------------------------|--|---|--|---|
| Scheme design elements | Stakeholder                  | Benefits   | Costs   | Implications   | Conclusions   |
| EEIS ceases            | ACT government               |  | <ul style="list-style-type: none"> <li>• End of financially self-sustaining scheme, end of ESC from Tier 2 retailers</li> <li>• Need to define alternative energy efficiency policy to support 100% RET and fight against energy poverty, likely to require direct budgetary outlay, through Actsmart or other types of programs</li> </ul> | This would require replacing the EEIS with instruments to manage energy poverty and energy efficiency and would likely lead to significant budgetary outlay. | Although some stakeholders call for direct investment from government on energy poverty in particular, the change in policy would be dramatic and would be a departure to the policy pursued by neighbouring jurisdictions. |
|                        | Retailers                    | <ul style="list-style-type: none"> <li>• No more compliance costs / constraints</li> </ul> | <ul style="list-style-type: none"> <li>• End of corresponding marketing opportunities (unless some programs are maintained)</li> </ul>  |  |   |
|                        | Participants (beneficiaries) | <ul style="list-style-type: none"> <li>• Depends on replacement programs</li> </ul>        | <ul style="list-style-type: none"> <li>• No assistance for energy efficiency upgrades – depending on the replacement programs</li> </ul>  |  |   |
|                        | Energy users                 | <ul style="list-style-type: none"> <li>• No pass-through costs</li> </ul>                  |   |  |   |

## 4 SCHEME DESIGN ELEMENTS APPLIED TO SCENARIOS

As described previously, the set of scenarios presented above each rely on a package of scheme design elements or policy levers. The individual elements that can be deployed towards potential scenarios are described individually here.

| Scheme design elements  | Comment   |
|---|---|
| <b>Scheme metric and emission reduction sub-targets</b>   |   |
| Scheme metric is set on greenhouse gas emissions  | <ul style="list-style-type: none"> <li>The scheme's design remains as it is with a greenhouse gas metric.</li> <li>Because of the ACT's 100% Renewable Electricity Target (RET) positive abatement will be restricted to activities that reduce gas.</li> <li>This is at odds with electricity customers only supporting gas-related energy savings.</li> </ul>   |
| Scheme metric is set on energy savings  | <ul style="list-style-type: none"> <li>The scheme's design is amended so that the primary metric is energy savings (as per the SA REES scheme that changed the metric recently).</li> <li>All activities that reduce energy use will have positive abatement, based on their conversion into GJ.</li> <li>The relative value of current activities will shift significantly from 2021 and the scheme will support both gas and electricity savings, not solely a transition away from gas.</li> </ul>   |
| <b>Obligated parties coverage</b>   |   |
| The retailer energy savings obligation is extended to gas retailers                               | <ul style="list-style-type: none"> <li>The scheme is expanded to gas retailers so that both electricity and gas retailers are obliged to support energy savings.</li> <li>The Victorian Energy Upgrade (VEU) scheme is used as a model.</li> <li>The Tier 1 and Tier 2 thresholds may need adjustment.</li> </ul>   |
| The Tier 1 threshold is lowered so that other large retailers are also obliged to deliver savings | <ul style="list-style-type: none"> <li>The threshold obliging energy retailers to deliver approved activities is lowered so that the current Tier 1 retailer is not the only obligated retailer.</li> <li>The risk is that new Tier 1 retailers could be at a significant disadvantage compared to the current Tier 1 retailer due to the significant difference in market share.</li> </ul>  |
| <b>Eligible beneficiaries</b>   |   |
| Scheme continues to exclude NGERS reporters   | <ul style="list-style-type: none"> <li>The scheme continues to direct all savings to households and small-to-medium businesses.</li> </ul>  |
| Scheme is expanded to NGERS reporters (including or excluding government reporters)               | <ul style="list-style-type: none"> <li>In addition to households and small businesses, large companies (NGERS reporters) become eligible under the scheme.</li> <li>This would increase scheme cost effectiveness but likely reduce the number of households and small-to-medium businesses who benefit.</li> <li>Government entities (Territory and federal) could be included or excluded. Including them in the scheme would effectively see energy user subsidise Territory and federal government's upgrade work, leading to a major equity issue and potential reputational damage for government.</li> </ul> |
| Premises are restricted from receiving more than one major energy efficiency item.                | <ul style="list-style-type: none"> <li>A restriction could be applied so that households and businesses can only receive major EEIS upgrades once.</li> <li>This would help to address the distributional weakness whereby all electricity users pay for EEIS but less than half have benefited.</li> </ul>   |

| Scheme design elements   | Comment   |
|--|---|
| The market is partitioned between “big” and “small” users  | <ul style="list-style-type: none"> <li>The market could be partitioned into two sub-markets with different targets and activities carried out for big businesses (NGERS) on one hand and small users on the other hand (SMEs and households).</li> <li>There could still be some cross-subsidisation between the two schemes but an algorithm would have to be developed.</li> </ul>    |
| <b>Scheme beneficiaries’ sub-targets</b><br>Note that all sub-targets would reduce the scheme cost effectiveness. The more sub-targets, the less efficient the scheme will become. |   |
| No sub-targets   | <ul style="list-style-type: none"> <li>No sub-targets are included, to maximise scheme economic efficiency.</li> </ul>  |
| The PHT sub-target is retained   | <ul style="list-style-type: none"> <li>The PHT continues to be calculated as a proportion of overall savings.</li> <li>PHT target is re-set each year following evaluation and consultation.</li> </ul>   |
| A rental target is introduced  | <ul style="list-style-type: none"> <li>Similar to the PHT, a sub-target is introduced to ensure that a proportion of residential or total savings is delivered in rental properties.</li> <li>The rental target is re-set at least once every two years following evaluation and consultation.</li> </ul>   |
| A small business target is introduced  | <ul style="list-style-type: none"> <li>Similar to the PHT, a sub-target is introduced for small businesses and a proportion of business savings must be delivered to small commercial energy users.</li> <li>The small business target is re-set at least once every two years following evaluation and consultation.</li> </ul>  |
| A not-for-profit organisation target is introduced   | <ul style="list-style-type: none"> <li>Similar to the PHT, a sub-target is introduced for not-for-profit organisations and a proportion of business activity savings must be delivered to organisations with the least ability to pay for energy upgrades.</li> <li>The not-for-profit target is re-set at least once every two years following evaluation and consultation.</li> </ul> |
| A sub-target is introduced for greenhouse gas emissions  | <ul style="list-style-type: none"> <li>Despite a shift to an energy metric, Tier 1 retailers are obliged to achieve a certain level of greenhouse gas emissions (hence prioritising gas related saving activities).</li> <li>Activity Abatement Values would separately specify energy and greenhouse gas savings.</li> </ul>   |
| A sub-target is applied to increase proportion of participating households and businesses.   | <ul style="list-style-type: none"> <li>A target requires that retailers to deliver activities to a large number of premises.</li> <li>This would help to address the distributional weakness whereby all electricity users pay for EEIS but less than half have benefited.</li> </ul>   |
| <b>Multipliers and other incentives</b><br>Note that any multiplier would reduce the scheme cost effectiveness. The more multipliers, the less efficient the scheme will become.   |   |
| High priority activities are mandated  | <ul style="list-style-type: none"> <li>High priority activities such as insulation, demand management systems or others are required to be delivered by Tier 1 retailers, to better target participants’ needs.</li> <li>Activities supporting a transition plan away from gas could be mandated through this process.</li> </ul>   |

| Scheme design elements   | Comment   |
|--|---|
| Multipliers are applied to high priority activities                                  | <ul style="list-style-type: none"> <li>• Activities that meet other energy policy goals such as peak demand management or health benefits are incentivised with additional multipliers.</li> <li>• Examples include insulation activities, gas-to-electric heaters with demand-response capacity, high energy productivity activities.</li> <li>• Activities supporting a transition plan away from gas could also be allocated a higher multiplier.</li> </ul> |
| Energy Savings Contributions fund non-EEIS priority household energy saving programs | <ul style="list-style-type: none"> <li>• The government runs priority household programs as an alternative to a PHT applying to the Tier 1 retailer.</li> </ul>   |
| Energy management systems are incentivised, possibly in the form of multipliers      | <ul style="list-style-type: none"> <li>• Activities that support energy management, through links to energy storage or peak demand management receive additional incentives, either as multipliers applied to the Abatement Value or through other mechanisms.</li> </ul>   |