ACT Government
Environment and Planning

Energy Efficiency Improvement Scheme 2015 Stakeholder Forum

Report on results

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Executive summary

The *Energy Efficiency (Cost of Living) Improvement Act 2012* establishes the Energy Efficiency Improvement Scheme (EEIS), administered by the Environment and Planning Directorate (EPD). An EEIS Stakeholder Forum for energy retailers, activity providers and others was held on 3 September 2015, one month after the EEIS was extended to the end of 2020. Forum goals were to:

- share information about what the EEIS has delivered so far
- share opportunities for retailers and new abatement providers to deliver activities that deliver greenhouse gas emission abatement
- invite stakeholders to help shape the EEIS's future by contributing ideas in workshops.

The forum was successful in achieving its goals, with evaluations of the event showing a high degree of satisfaction with elements. Average ratings recorded on the evaluation form were above four out of five on all measures and comments confirmed positive responses to the venue, attendance, organisation, sessions, outcomes and the initiative generally.

Stakeholders consider that the best things about the EEIS include its simplicity, accessibility, opportunities, focus, receptiveness, effectiveness, holistic impact and positive relationship with renewable energy policy and financial benefits. Issues to be improved include administrative burdens, high level of regulation, small market with few opportunities for small to medium enterprises, insufficient incentives and lack of clarity around involvement with other schemes.

Key messages from stakeholders for the EEIS are to keep it going, keep it simple, leverage from and integrate with other schemes, and maintain industry engagement.

Key issues emerging from the workshops are summarised below.

Activities

- There is strong support for the proposal to adopt the five-year average abatement values. This will keep the scheme simple and support long-term business planning.
- Commercial lighting is the most commonly called-for new activity to add.
- Other high priority activities include:
    - more space and water heating activities
    - more appliance activities
    - project-specific methodologies
    - insulation
    - other activities that already exist in other schemes.
- Activities that are available in other jurisdictions are envisaged as being available in the ACT, even if they are not ACT activities. The ACT would need to have an instrument which lists activities to be included and excluded.

Approving providers from other schemes

- There is strong support for maximising harmonisation with other schemes.
- Stakeholders agreed there was little benefit of duplicating registration processes and compliance frameworks already set up in Victoria and New South Wales (NSW).
- Streamlined, low-cost registration of abatement providers working in other schemes should be matched by a system for approving providers who operate only in the ACT, potentially through aggregators.
- Simple caveats are needed for jurisdiction-specific requirements, and these could be adopted universally. For instance, not just 'needs to be a licensed electrician', but 'needs to be a licensed electrician in the relevant jurisdiction'.
- Specific training in relevant EEIS requirements will be needed before becoming an approved provider in the ACT.

Approving abatement from certificates generated in other schemes

- A system needs to be developed to enable certificates generated in the ACT to be traded between approved providers and ACT retailers.
- Tier 2 retailers are most interested in purchasing certificates which are already approved, such as by ESS and VEET certificate registries.

Financing the system

- Administrative fees already charged in Victorian and NSW systems could contribute to the administrative costs of the harmonised system. For instance, fees already charged to register abatement certificates in NSW may be sufficient for registering and communicating abatement delivered in ACT.

Managing risk

- Risk allocation is a key issue. The system needs to address issues of when abatement is confirmed, who audits the abatement and how it is funded.
- In the case of insulation, there are existing training and quality assurance systems already in place that could be drawn on for the risk management framework.

Background

In August 2015 the ACT Legislative Assembly approved a Bill to extend the EEIS until 31 December 2020. The Extension was supported by a Review and a Regulatory Impact Statement which showed that significant economic benefits would flow from the extension. Arrangements for the extension included a communications strategy that called for direct stakeholder consultation as the primary option for delivering information about EEIS development. The strategy calls directly for stakeholder meetings and workshops. The EEIS Stakeholder Forum held on 3 September 2015 was the key workshop for 2015, following directly after the EEIS extension.

The objectives of the EEIS communications strategy with regard to the scheme extension are to:

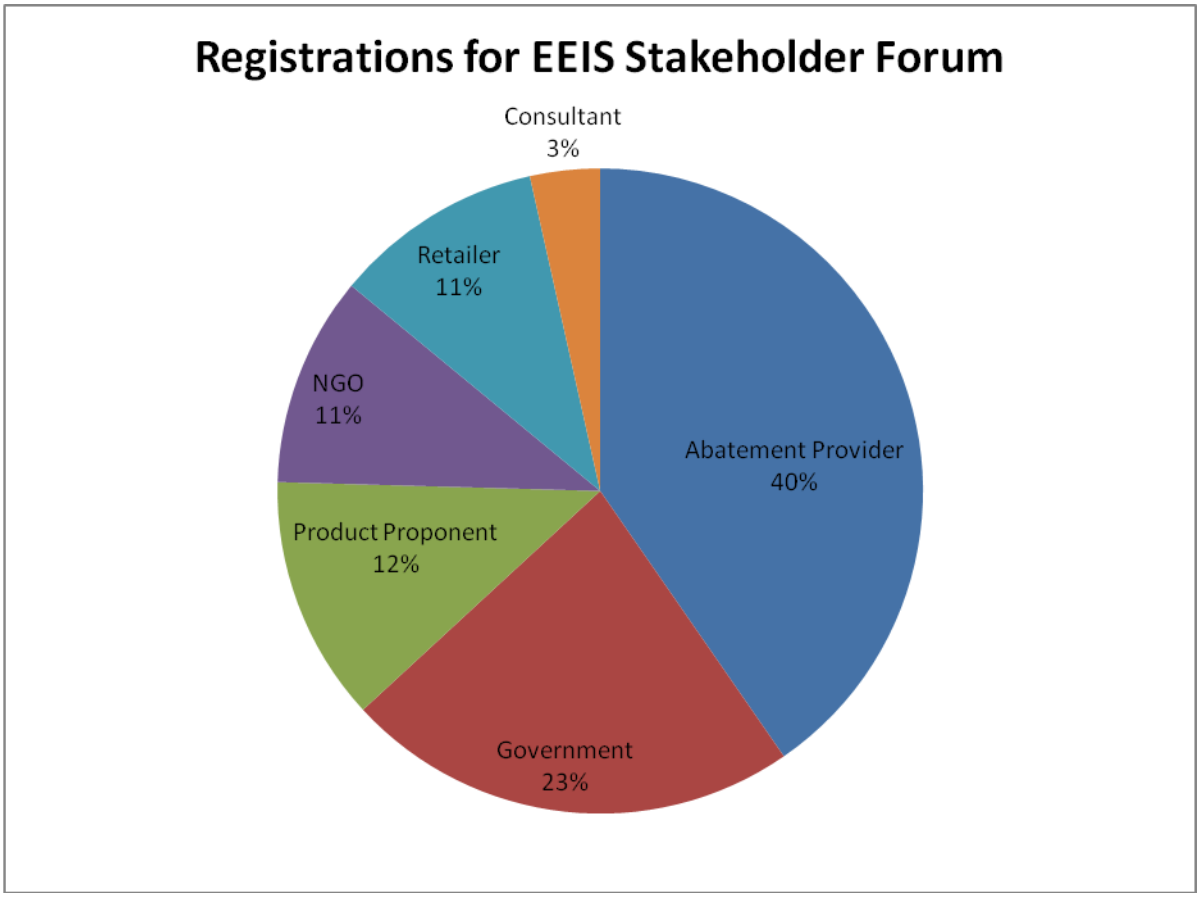
- raise awareness and understanding of the Government's intentions regarding the future of the EEIS
- raise awareness and understanding that the proposed changes are linked directly to the feedback received through detailed stakeholder engagement and recommendations resulting from independent assessment of the operation of the EEIS to date
- highlight demonstrated and future benefits of the EEIS and gain the support and buy-in of stakeholders regarding proposed changes to the EEIS.

The forum invitation is Appendix 1. A concerted effort was made to include as many stakeholders as possible at the event. The following actions were implemented:

- The event was held in conjunction with the Actsmart Business Sustainability Expo as a way to entice people to attend both.
- Invitations were sent to a contact list of 180 stakeholders listed in the EEIS contacts database.
- Invitations were also sent to stakeholders in the NSW and Victorian energy efficiency scheme databases. There were about 200 recipients in each state's contacts databases.

Registrations for the forum were received from 57 stakeholders. The proportion of these from each of six stakeholder groups is shown in the pie chart below.

Figure 1 Registrations for EEIS Stakeholder Forum



Forum participants received a package of information. This included the Regulatory Impact Assessment: Setting Key Scheme Parameters to 2020 and the discussion draft of the Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination 2015 (No 2). The key changes from the current scheme are as follows:

- Abatement values are set at the mean of modelled abatement values over the five years of the scheme. The mean value has been adopted because it avoids the need to adjust abatement values each year as ACT approaches its 90% renewable energy target. This maximises industry certainty in business planning to deliver EEIS activities. It also avoids a potential challenge of abatement values being impractically low in the latter years of the scheme.
- All abatement values are significantly lower than in the current Instrument for activities involving electricity. This is because more renewable energy in the ACT electricity supply reduces the greenhouse gas emissions saved by each activity.
- Activities that involved switching from electric to gas heating have been deleted. This is because gas heating will have more greenhouse gas emissions than efficient electric heating as the ACT approaches the 90% renewable energy target. As a result, modelling revealed negative abatement values associated with switching to gas.

- Four new activities are included; three involving high efficiency space air-to-air heat pumps and one introducing electric boosted solar hot water.
- A restriction has been removed which disallowed abatement for efficient electric heating systems in areas with reticulated gas.

A summary of the activities and abatement values was also distributed. This is included in Appendix 4.

Presentations

The forum program is Appendix 2. The following presentations were given:

- Introduction from the Administrator:
    - EEIS overview
    - Energy efficiency and emission reduction achievements to date
    - Working with related initiatives – ACTSmart and renewable energy
- Changes to the EEIS:
    - Continuing the 'ambition' for energy savings
    - The new energy savings target and other metrics
    - Introducing new activities – commercial lighting, etc.
    - Streamlining systems with other jurisdictions so that new providers can enter the EEIS
    - What the modelling tells us about the best business opportunities
- Lessons from other jurisdictions:
    - How harmonisation can provide new business opportunities with minimal administrative burdens
    - Synergies of the ACT Scheme with NSW and other energy efficiency schemes
- Improving ACT energy efficiency:
    - Update on activities rolled out so far
    - Future opportunities to participate in the scheme
    - 5-year action plan.

Appendix 5 contains key slides from the presentation.

Figure 2 Forum presentation

Workshops

A series of one-hour workshops were held as part of the forum. Participants chose which workshop to attend and one EEIS Team member was at each workshop. A summary of the discussions at each workshop session is below.

Topic 1: Eligible activities

This workshop aimed to consider the set of EEIS eligible activities and suggest other priority activities to be considered for inclusion.

Key messages from this workshop, combined with feedback about potential eligible activities were:

- Commercial lighting is the most commonly called-for new activity to add.
- Other high priority activities include:
    - more space and water heating activities
    - more appliance activities
    - project-specific methodologies
    - insulation
    - others that already exist in other schemes.
- Activities that are available in other jurisdictions are envisaged as being available in the ACT, even if they are not ACT activities. ACT would need to have an instrument which lists activities to be included and excluded.

This topic attracted over 20 participants focused on feedback around the current list of activities and the question of which new activities should be the next highest priorities for the EEIS. The workshop notes box below indicates the topics discussed and range of activities identified for inclusion (not in priority order).

Feedback on current list of activities

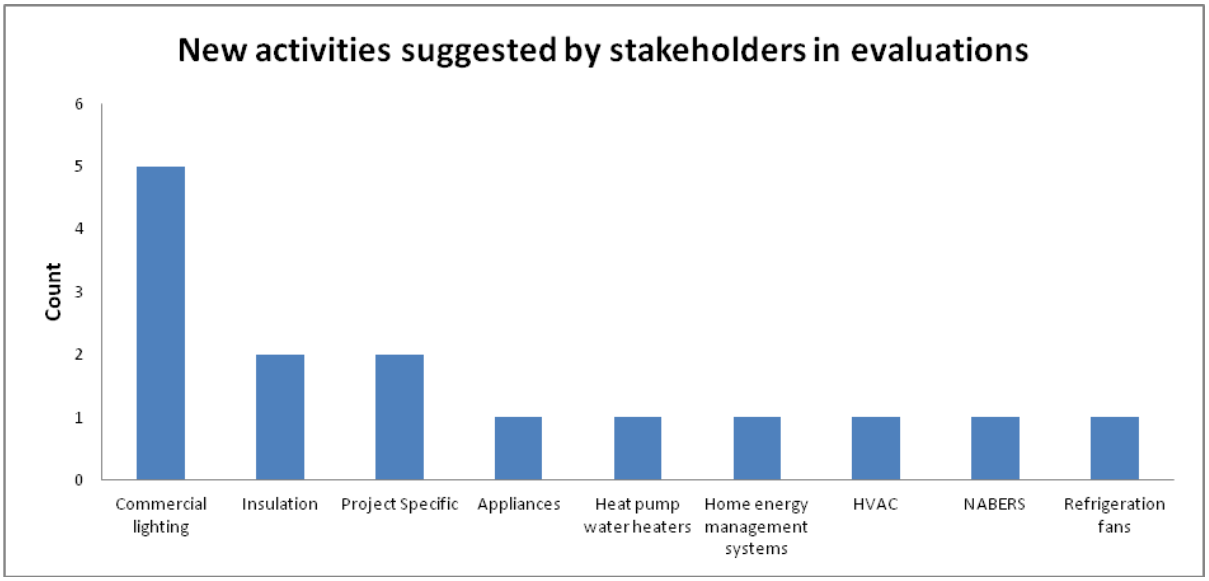
- Stakeholders were interested in the size of the ACT market i.e. how many businesses and households in the ACT?
- A stakeholder mentioned that a few regulations in the ACT were different to other jurisdictions which increased costs to implement some activities, such as plumbers are required to install low flow shower-heads and a building certifier is required for chimney sealing activities.
- Lighting – the "Note" before the abatement value tables in the NI doesn't use any abatement values from the tables making it confusing to understand. It would be better if it did.
- There is no need for the 'lighting' activity to distinguish residential from commercial lighting activities. The lighting activities should be eligible in residential and non-residential premises Consider removing this distinction in the NI.
- Restriction to pre-1996 fridges and freezers should be removed as no longer a requirement.
- It would be useful to develop a pathway to convert energy savings from activities in other jurisdictional schemes to ACT abatement.

Suggested activities for inclusion

- Commercial lighting
- Hot water heat pumps
    - Need to review the definitions
    - Housing ACT
- Insulation
- High efficiency whitegoods
    - Certificate creation incentive
- Washing machines
- Dishwashers
- Any energy rating
- Education
- Commercial heating, ventilation and air conditioning
- Project impact assessment method
- High efficiency motors/compressors
- Refrigeration fans
- In-home displays

An evaluation question asked which activities should be added into the scheme next; responses are shown in Figure 3. This gives a partial indication of the priority order for the activities. The high number of times that commercial lighting was mentioned suggests this activity is a particular priority. There was a very strong sense this activity should be brought in quickly by using the methods already available in other schemes.

Figure 3 New activities suggested by stakeholders in evaluations



Topic 2: Tier 2 retailers

This workshop aimed to discuss the Tier 2 experience with the EEIS, including obligations and reporting, and consider how to make the most of new opportunities in the EEIS extension.

Key messages from this workshop included:

- Risk allocation is a key issue – when is abatement confirmed, who audits the abatement and how is it funded? Tier 2 retailers in ACT will want to purchase abatement that is already approved. Existing certificate registration processes provide some solutions.

The box below shows the detailed notes from the workshop.

- Delineation of responsibility
    - Retailers need assurance from the Administrator that abatement is compliant.
    - New certificate type in NSW Energy Efficiency Scheme and Victorian Energy Efficiency Target Scheme will likely be needed (if using those schemes).
    - Should have a Register rather than a spreadsheet approach for ACT-only providers.
    - Separate cap for bundling certificates when in NSW for ACT abatement (since there's a cap on bundling before submitting certificates; don't want to 'skew' the two sorts of caps).
- Section 17(A)1 of the Act – Approved providers can't be both an approved provider selling to multiple retailers **and** contracted to one retailer. Important for approved providers to note.
- Check with the EEIS Team that if acquiring abatement, retailers do not need a compliance plan. Only approved providers need those.
- How do retailers acquire abatement?

- Previously the Administrator needed to approve abatement.
- Need to clarify where compliance and liability start and end for both retailers and approved providers.
- A clear framework is needed.

Topic 3: Working across jurisdictions

This workshop aimed to share experiences and suggestions about delivering abatement in more than one jurisdiction. Participants were asked how can EEIS best connect with the other schemes?

The key messages from this workshop were:

- There is strong support for maximising harmonisation with other schemes.
- Speedy, low-cost registration of abatement providers working in other schemes should be matched by a system for approving providers operating only in the ACT.
- Simple caveats are needed for jurisdiction-specific requirements, and these could be adopted universally; for instance, not just 'needs to be a licensed electrician', but 'needs to be a licensed electrician in the relevant jurisdiction'.
- Specific training in relevant EEIS requirements will be needed before becoming an approved provider in the ACT.

The box below shows the detailed notes from this workshop.

- Need to resolve the following issues:
  - What administrative arrangements will apply? Should aim for speedy, low-cost registration of abatement providers already approved in other schemes, matched by a system for approving providers who operate only in the ACT.
  - What activities will be included? In particular, there will be some mismatches; for instance fluorescent tube changes are okay in VEET, but not in NSW. This suggests that even if the EEIS allows activities that are approved in other jurisdictions but not ACT, a list of those from other jurisdictions will still need to be included.
  - What will be the costs?
- It may work to publish general statements for local compliance. For instance, in South Australia, a requirement for a 'licensed electrician' does not specify whether the electrician needs to be licensed in that jurisdiction. It would be better for general statements like this to be crafted for more clarity. For example, the general requirement could be 'an electrician licensed in the relevant jurisdiction'.
- Need to clarify who is responsible:
  - for approving providers
  - for audit and compliance
  - for confirming abatement transfers and cancellation
  - for running the administrative system, etc.
- Would the ACT government be open to running its own reverse auction process or other process for ensuring that Tier 2 money is spent on activities?

Topic 4: Registering abatement providers

This workshop aimed to share insights about registering as a provider in other jurisdictions. What works best and what are the challenges? Participants were asked how they envisage registering in the ACT if already delivering abatement in other jurisdictions.

The key messages from this workshop were as follows:

- A system needs to be developed to enable certificates generated in the ACT to be traded between approved providers and ACT retailers.
- Stakeholders discussed the South Australian model, which could be an alternative interim option prior to full scheme integration.
- Stakeholders agreed there was little benefit of duplicating registration processes and compliance frameworks already set up in Victoria and NSW.
- Registered providers would prefer to operate under current systems administered by the NSW Independent Pricing & Regulatory Tribunal (IPART) and the Victorian Essential Services Commission (ESC), as it would be more cost effective to streamline auditing and business processes.
- Local ACT businesses could use Accredited Certificate Providers (aggregators) already registered in the NSW Energy Efficiency Scheme or Victorian Energy Efficiency Target Scheme.
- Administrative fees could be charged.

Topic 5: Keeping it safe

No-one wants accidents or unhappy customers. This workshop was an opportunity to share ideas about how to ensure the EEIS stays trouble-free, while inviting new operators to deliver activities and achieve abatement in the ACT.

The key message from this workshop was:

- In the case of insulation, there are existing training and quality assurance systems already in place which could be drawn on for the risk management framework.

The workshop focused on insulation matters, as shown in the workshop notes box below.

- Insulation
    - Insulation Council of Australia and New Zealand (ICANZ) now has an accreditation scheme in place.
    - ICANZ now has a training program in place.
- Regulation needs three points clarified:
    - What's the training?
    - What's the quality assurance?
    - Who's conducting the training?
- Skills required are different for:

    - Installing from scratch and
    - Installing a top up of insulation (i.e. from R1).
- ICANZ
    - Offers top up in training program.
    - Standards also cover top up.
    - How would ICANZ scheme work with a government quality assurance process?
    - ICANZ offered training to EEIS and Regulation.
    - ICANZ offered the possibility of trained installers to audit other installers.
    - Geocoded photos of job.
    - New build market is covered by Building Code of Australia.
    - Top up is not currently covered by regulation.
    - ICANZ has a deregistration process.
    - ICANZ has an insurance scheme and process.
    - The system could work with a high level of auditing at start-up, then reduced auditing if all is okay.
- Could an Authorised Provider audit an installer?
- Maybe the ACT could pilot an insulation scheme.
- The ACT Regulator includes the following (all in the one directorate):
    - Electrical
    - Building
    - Worksafe
- EEIS is the energy-efficiency regulator.
- ICANZ's registered training organisation could run the training course for the ACT Government people. Possibly in October if it suited all participants; otherwise early in 2016.

Topic 6: Calculating and trading abatement

This workshop addressed the question of why a heater installed in the ACT delivers less abatement than a heater elsewhere. Participants discussed and suggested how the system can provide equal value.

- There is strong support for the proposal to adopt the five-year average abatement values. This will keep the scheme simple and support long-term business planning.
- A system needs to be developed to enable certificates generated in the ACT to be traded between approved providers and ACT retailers.
- Tier 2 retailers are most interested in purchasing certificates which are already approved.
- Administrative fees already charged in Victorian and NSW systems could contribute to the administrative costs of the harmonised system. For instance, fees already charged to register abatement certificates in NSW may be sufficient for registering and communicating abatement delivered in ACT.

Figure 4 Workshop 4 in progress

This was a large workshop group including Tier 1 and Tier 2 retailers and many potential abatement providers. Notes from the workshop are in the box below.

- How is abatement to be created as a clear, trackable property right?
- The clause in the Act says that the Administrator "approves abatement":
    - It seems clear there needs to be a certificate of some sort, but the ACT has such a small option that it doesn't make sense to have a stand-alone certificate system.
    - There is no spot market for certificates in the ACT. Bilateral contracts are a continuing feature of the ACT system.
    - The best option appears to be using the scheme retailers in other areas.
    - It seems clear that an ACT address needs to be acquitted against the ACT scheme.
- IPART enables property rights.
- Note that the training is separate from the registration:
    - Training in the ACT scheme will still be needed even if a provider is accredited via another scheme.
    - There needs to be a set of rules that apply to the ACT; for instance where an electrician is needed they must be licensed in the ACT.
- Arrangements for administrative costs:
    - ACT may pay IPART to approve certificates generated in the ACT. This could be done through an ongoing certificate registration fee, which already exists. It is currently 70c per certificate but may rise to 80c per certificate.
    - ACT could add additional fees if needed.
- ACT would need to have an instrument that lists activities to be included and excluded:
    - This could be similar to how we exclude companies reporting to the National Energy Reporting (NGER) System. One check in the ACT evidenced pack would be "not register in NGER".
    - Guidance from the Administrator needs to be clear and prescriptive.
- It is worthwhile noting the real administrative burden of the scheme will not be as large as it may seem. This knowledge can be used in developing a streamlined system for compliance and auditing.
    - In all schemes, 80% of the certificates come from just 15 providers, most of whom attended this forum.
    - Realistically, the big activity providers will be:
        - residential lights in a commercial setting
        - commercial lighting in a commercial setting

        - only a few others.
- Tier 2 retailers are most interested in purchasing certificates that are already approved.
    - Query about what is meant by “the Administrator must approve abatement”. Is that like the certificate surrender process?
    - Where will the conversion be done? In IPART/VEET? Or in EEIS?
    - When does approval of abatement acquisition take place?
        - In the annual reporting?
        - When the Administrator turns in the certificate?
        - Perhaps the Administrator acquires the certificate and then reports what is applied.
        - Whichever way, the Administrator of all involved schemes needs to be able to confirm certificate surrender. This will include noting vintage and expiry.
- Need to confirm compliance plan obligations:
    - Compliance plan obligation only applies to retailers if they are generating abatement themselves.
    - Otherwise, compliance plans apply to abatement providers – as per the Act.
- Question about when abatement gets converted to the ACT quantities.
    - This could be done using an Excel spreadsheet tool or online.
    - IPART could allocate the auditing.
    - Easiest to set it up in the NSW Greenhouse Gas Abatement Scheme registry – this is decades old, but is still used.

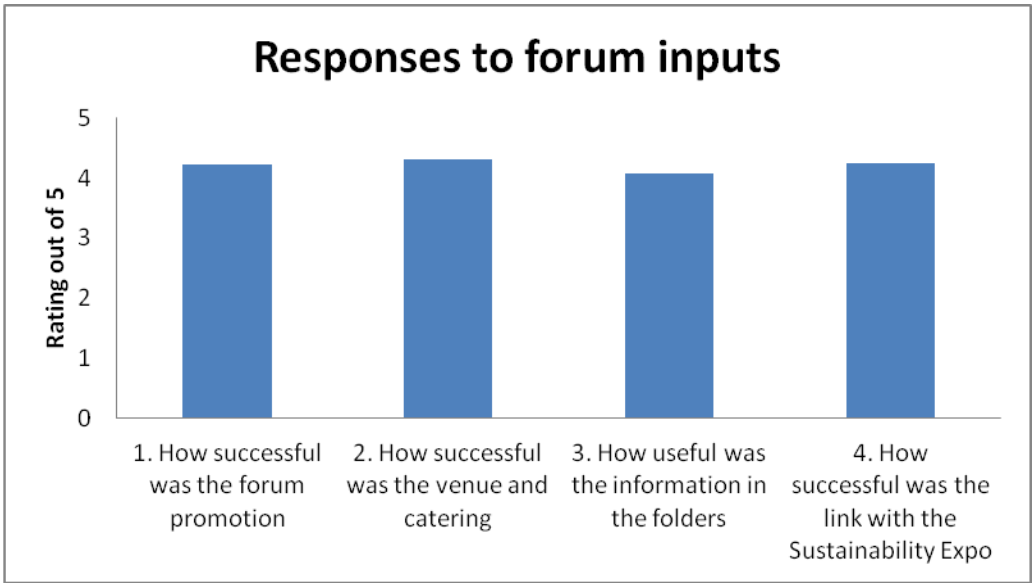
Evaluations and other feedback

An evaluation form was circulated during the event and completed by nine participants. A Survey Monkey online evaluation was circulated four working days later and completed by an additional four participants.

Response to forum inputs

The following quantitative responses were received in relation to the forum inputs. All scores are above 4 out of 5, suggesting a high level of success in the practical arrangements.

Figure 5 Responses to forum inputs



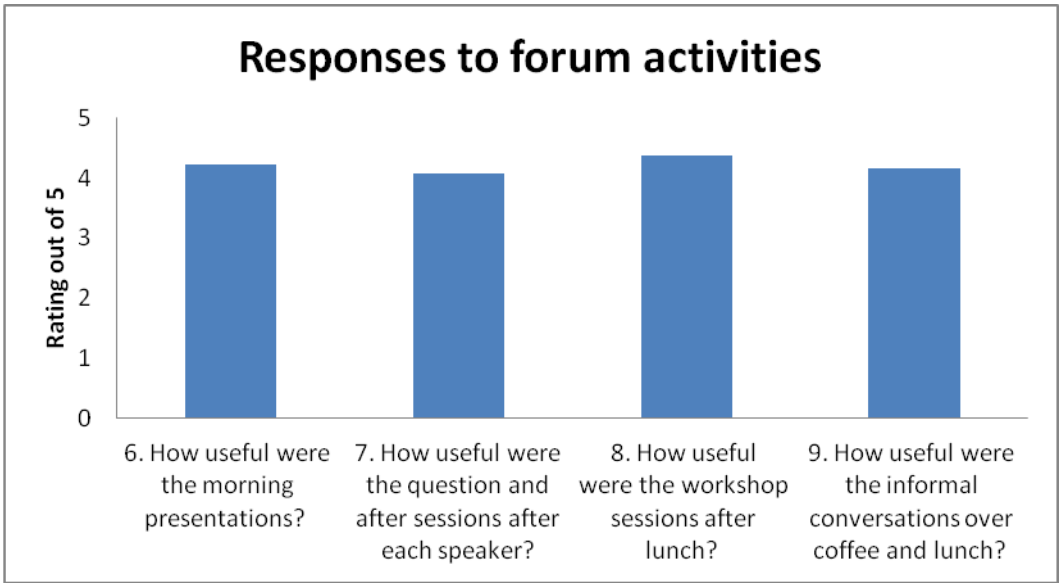
Comments about the forum inputs were as follows:

- Interaction locations
- Very good presentations
- Good attendance
- Didn't need the paper version of documents already provided electronically
- Would have liked to include the amendment bill
- Good venue
- Good range of attendees
- All good; well presented and well coordinated
- Well-run sessions
- Combination with the Expo worked well
- Good initiative
- Not much of interest there for myself but worthwhile for the general audience
- Two afternoon sessions in same room wasn't ideal
- Speakers were excellent
- Good information and facilitation
- Well done Antonia and the EEIS team!

Response to forum activities

The following quantitative responses were received in relation to the forum activities. All scores are above 4 out of 5, suggesting a high level of success with the activities and interactions. The most highly rated feature was the workshops, followed by the presentations.

Figure 6 Responses to forum activities



Comments on the forum activities were as follows:

- Very useful for me. Now have much better appreciation of analysis, requirements, linkages with other state schemes etc.
- Well organised.
- Outcomes from the day were clear.
- Suggest relevant associations should be invited – both the Energy Efficiency Council and the Energy Efficiency Certificate Creators Association.
- Location a bit out of the way. More people would have gone through the Expo if it was located in Civic, Woden or Belconnen centres.

Best things about the EEIS

Participants were asked what they considered to be the best things about the EEIS. Responses were as follows:

- Provides expanding opportunities for households
- Outcomes are providing leadership for others
- Opportunities available
- Has a holistic environmental impact
- Focus on energy users
- Review and commitment to harmonise welcome
- Engaged Administrator
- Receptive to taking best models/inputs from other schemes
- Effective approach to low income households
- Positive relationship with renewable policy

- Recycling of fluorescent requirements
- Simple
- Good financial benefits
- Accessible

EEIS issues that could be improved

Participants were asked about constraints and ways the EEIS could be improved. Responses were as follows:

- High level of approvals/prerequisites needs review
- Compliance across jurisdictions
- Clarity around involvement with other schemes
- Small market
- Highly regulated
- Not enough incentives, e.g. commercial lighting
- Constraint on creating certificate registry
- Reduce retailer compliance cost
- I think it has been a focus already, but find ways to engage more companies in the scheme
- Market-based approach through certificate and trading system
- Definition of Tier 1 and Tier 2 a little 'uneven playing field'
- More opportunities for small to medium enterprises
- Capacity to deliver abatement between jurisdictions
- Case studies and other accessible communications.

Key messages for EEIS

Participants were asked to articulate key messages for EEIS. Responses were as follows:

- Outcomes of EEIS and goals impressive
- Keep industry engagement on a regular basis
- Keep it simple,
- Don't reinvent the wheel
- Commitment/consistency
- Engagement with stakeholders
- Leverage other schemes (registry etc.)
- Think future, especially around smart meter infrastructure (it is coming). There is an opportunity for the EEIS to support consumers to gain some direct benefits from smart meters
- Don't try to reinvent too much bureaucracy – it is more efficient to tap into existing interstate systems

- Allowing entry to more players should reduce prices for the community
- Keep doing what you're doing. I work across all the schemes and believe the delivery of this scheme is the best. The results speak for themselves. EEIS is meeting its targets and the residential and commercial markets are all benefiting
- Keep it going
- Integrate with schemes in other places.

Appendix 1 Invitation

INVITATION

You are invited to the

Energy Efficiency Improvement Scheme Stakeholder Forum

Harnessing opportunities, extending outcomes

Where: AIS Arena, Marathon Room
When: 3 September 2015
Time: 9.00am-4.30pm

At the Forum, you will:

- Learn what the EEIS has delivered so far
- Find out about opportunities for retailers and new abatement providers
- Help to shape the Scheme's future by contributing your ideas in workshops

9:00-9:30	**Tea, coffee, meet and greet**	
9:30-12:00	**Presentations, Q&A's**	
	**Introduction from the Administrator** Scheme overview Energy efficiency and emission reduction achievements to date Working with related initiatives – ACTSmart and renewable energy	**Sean Rooney** *Executive Director* *Sustainability and Climate Change*
	**Changes to the Scheme** Continuing the 'ambition' for energy savings The new energy savings target and other metrics Introducing new activities – commercial lighting etc Streamlining systems with other jurisdictions so that new providers can enter the Scheme What the modeling tells us about the best business opportunities Size of the ACT market	**Jon Sibley** *Director* *Energy and Waste Policy* **Megan Ward** *Energy Policy Officer*
		
	**Lessons from other jurisdictions** How harmonisation can provide new business opportunities with minimal administrative burdens Synergies of the ACT Scheme with NSW and other energy efficiency schemes	**Liam Ryan** *Principal Policy Officer, NSW Energy Saving Scheme*
	**Improving ACT Energy Efficiency** Update on activities rolled out so far Future opportunities to participate in the scheme 5-year action plan	**Antonia Harmer** *Manager* *ACT Energy Efficiency Improvement Scheme*

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12:00-1:30	LUNCH BREAK and FREE entry to the Actsmart Business Sustainability Expo 2015 **www.actsmart.act.gov.au**
	**An address by** **ACT Minister for the Environment, Simon Corbell (from 1pm)**
1:30-3:30	**Workshop session (see below)**
3:30-3:45	**Afternoon tea break**
3:45-4:30	**Report back and discussion**

Workshop session - a chance for us all to explore new opportunities for businesses to participate in the scheme. We also welcome your suggestions for further improving the scheme to open up new business opportunities in energy efficiency. The EEIS team and others will be available to scribe, facilitate and provide expert advice throughout the workshop, but what you talk about is up to you.

Here are some ideas. Tell us the topics you are interested in when you RSVP and let us know what else you want to discuss.

- ☐ Eligible activities
- ☐ Registering abatement providers
- ☐ Connecting retailers with abatement providers
- ☐ Working across jurisdictions
- ☐ What's new for Tier 2?
- ☐ Obligations and reporting requirements
- ☐ Keeping it safe
- ☐ Industry perspectives on providing abatement
- ☐ _____
- ☐ _____
- ☐ _____

Registrations essential by 27 August 2015.

Forum venue is **Marathon Room, Arena, Australian Institute of Sport Leverrier Crescent, Bruce ACT**

Email: EPD-EEIS@act.gov.au

Phone: 02 6207 8022

Name/s _____

Organisation _____

Email _____ Phone _____

Dietary requirements _____

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Appendix 2 Program

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Energy Efficiency Improvement Scheme Stakeholder Forum

Energy Efficiency Improvement Scheme Stakeholder Forum
Harnessing opportunities, extending outcomes

Where: AIS, Gold Room – Note change of venue.
Gold Room is in the conference centre, 4E on the attached map.

When: 3 September 2015

Time: 9.00am-4.30pm

FORUM GOALS:

- Learn what the EEIS has delivered so far
- Find out about opportunities for retailers and new abatement providers
- Help to shape the Scheme's future by contributing your ideas in workshops

PROGRAM

9:00 - 9:30am	**Tea, coffee, meet and greet**	
9:30 - 12:00pm	**Presentations, Q&As**	
9:30 - 9:45am	**Introduction from the Administrator** Scheme overview Energy efficiency and emission reduction achievements to date Working with related initiatives – climate change, Actsmart and renewable energy	 **Sean Rooney** *Executive Director Sustainability and Climate Change*
9:45 - 10:30am	**Changes to the Scheme** The ACT renewable energy target Stakeholder feedback and changes to the legislation Continuing the ambition for energy savings The new energy savings target and other metrics Streamlining systems with other jurisdictions What the modelling tells us about future directions for activities	 **Jon Sibley** *Director Energy and Waste Policy*  **Megan Ward** *Senior Energy Policy Officer Energy and Waste Policy*
10:30 - 11:00am	**Morning Tea**	
11:00 - 11:30am	**Working with other jurisdictions** How harmonisation can align activities, provide new business opportunities and improve consistency while minimising red tape Synergies of the ACT Scheme with NSW and other energy efficiency schemes	 **Liam Ryan** *Principal Policy Officer, NSW Energy Saving Scheme*

ACT Government
Environment and Planning

Energy Efficiency Improvement Scheme Stakeholder Forum

PROGRAM

11:30 - 12:00pm	**Improving ACT Energy Efficiency** Update on activities rolled out Introducing new activities – efficient electric heating, commercial lighting Future opportunities to participate in the scheme Five year action plan

Antonia Harmer
Manager
ACT Energy Efficiency Improvement Scheme

12:00 - 1:30pm	LUNCH BREAK and FREE entry to the Actsmart Business Sustainability Expo 2015 **www.actsmart.act.gov.au**
	These workshops are an opportunity to help shape the future of the ACT Energy Efficiency Improvement Scheme.
1:30 - 2:25pm	**Concurrent Workshops A** **Topic 1: Eligible Activities –** Consider the draft set of EEIS eligible activities and suggest other business and residential activities that could be added next. **Topic 2: Tier 2 retailers –** Discuss the Tier 2 experience with the EEIS Team including obligations and reporting, and consider how to make the most of new opportunities in the EEIS extension. **Topic 3: Working across jurisdictions –** Share experiences and suggestions about working on other energy efficiency schemes. How can EEIS best align with the other schemes? **Topic 4: Your ideas -** What else do you want to discuss? Suggest other workshop topics and be ready to assist in leading discussions. One or more topics could be run in each concurrent workshop session.
2:30 - 3:25pm	**Concurrent Workshops B** **Topic 5: Registering abatement providers –** Share insights about registering as a provider in other jurisdictions. What works best and what are the challenges? How do you envisage the registration process working in the ACT? **Topic 6: Keeping it safe –** No-one wants accidents or unhappy customers. Share ideas about compliance and how to minimise risks while inviting new providers to deliver activities and achieve abatement in the ACT. **Topic 7: Calculating and trading abatement –** Approval of abatement factor acquisition and Compliance plan obligations when retailers acquire abatement from approved abatement provider. **Topic 8: Your ideas -** What else do you want to discuss? Suggest other workshop topics and be ready to assist in leading discussions. One or more topics could be run in each concurrent workshop session.
3:30 - 3:45pm	**Afternoon tea break**
3:45 - 4:25pm	**Report back and discussion** Each workshop group to share insights and recommendations.
4:25pm	**Evaluation** A chance for you to tell us what you thought of the Forum and make other suggestions for the way forward.
4:30pm	**Close**

Appendix 3 Evaluation

Energy Efficiency Improvement Scheme Stakeholder Forum

Evaluation

Please hand this form into the workshop evaluation tray on departure

EEIS Stakeholder Forum Evaluation

Inputs	Tick one				
Did you find aspects of the forum successful?	Bad	Poor	OK	Good	Excellent
Forum promotion					
Venue and catering					
Information in the folders					
Link with the Sustainability Expo					
Comments:					

Activities	Tick one				
Did you find activities of the forum useful?	Bad	Poor	OK	Good	Excellent
Morning presentations					
Question and answer sessions					
Workshop sessions					
Informal conversations over coffee and lunch					
Comments:					

EEIS Stakeholder Forum Evaluation

Eligible activities	
Suggest eligible activities	Reason
1.	
2.	
3.	

Benefits and opportunities
The best things about the EEIS
1.
2.
3.

Constraints and improvements
EEIS issues that could be improved
1.
2.
3.

Outputs
My key messages for EEIS
1.
2.
3.

Name (optional, but this helps us to respond to individual comments)

Please hand this form into the workshop evaluation tray on departure

Appendix 4 Handout

ACT Government
Environment and Planning

Summary of eligible activities and abatement in the *Discussion Draft Energy Efficiency (Cost of Living) Improvement (Eligible Activities Determination 2015 (No 2)* distributed to stakeholders on 3 September 2015.

Discussion draft activities and abatement to apply from 1 January 2016

#	Activity	Abatement	pp
Schedule 1. Residential building envelope activities			
1.1 Building sealing activities			
1a	an unsealed door frame in an external wall	0.1684	2-4
1b	an unsealed door frame in a part of an internal wall that divides a conditioned zone or zones from an unconditioned zone or zones	0.1684	2-4
1c	each unsealed edge of an external door	0.1684	2-4
1d	each unsealed edge of a door in a part of an internal wall that divides a conditioned zone or zones from an unconditioned zone or zones	0.1684	2-4
1e	an unsealed window frame in an external wall	0.0122	2-4
1f	each unsealed edge of an openable window	0.0122	2-4
1.2 Exhaust fan sealing activities			
1a	Replace an unsealed ceiling or wall exhaust fan with a self-sealing exhaust fan	0.4171	5-6
1b	Sealing an existing exhaust fan	0.4171	5-6
1.3 Ventilation opening sealing activities			
1a	Sealing ventilation openings in an external wall	0.1054	7-9
1b	install damper or flap to chimney or flue of an open solid fuel burning appliance	2.3451	7-9
1.4 Install a thermally efficient window			
a	Not less than 4.0 and not more than 4.9 stars	0.1665	10-11
b	Not less than 5.0 and not more than 5.9 stars	0.2081	10-11
c	6.0 stars or greater	0.2497	10-11
1.5 Retrofit thermally efficient glazing			
a	Additional pane of glass or acrylic	0.1070	12-13
b	Window film	0.0486	12-13
1.6 Install thermally efficient window coverings			
	installing window coverings and pelmets to a window in an external wall of a conditioned zone	0.1813	14-15
1.7 Install window pelmets			
	installing a box pelmet to a window in an external wall of a conditioned zone	0.1163	16-17

Schedule 2. Space heating and cooling activities				
2.1 Replacing a ducted gas space heater with a high efficiency ducted gas space heater				
	Star rating	5-5.49	5.5 or greater	
a	Rated heating capacity 10kW to 18 kW	8.27	10.34	18-19
b	Rated heating capacity 18.1 to 28kW	10.47	13.08	18-19
c	Rated heating capacity Greater than 28 kW	13.09	16.36	18-19
2.2 Install a high efficiency ducted gas heater in a new residential premises				
	Star rating	5-5.49	5.5 or greater	
a	Rated heating capacity 10kW to 18 kW	4.03	5.03	20-21
b	Rated heating capacity 18.1 to 28kW	4.31	5.39	20-21
c	Rated heating capacity Greater than 28 kW	5.86	7.33	20-21

2.3 Install a ducted air-to-air heat pump to replace existing ducted air-to-air heat pump						
	Coefficient of Performance	**3.5-3.99**	**4-4.49**	**4.5-4.99**	**5+**	

EEIS Discussion draft activities and abatement summary, 2016 onwards. Ph. 6207 8022. EPD-EEIS@act.gov.au

a	Small (10kW to 18 kW)	0.63	1.66	2.45	3.09	22-23
b	Medium (18.1 to 28kW)	0.80	2.10	3.11	3.92	22-23
c	Large (>28 kW)	1.00	2.63	3.90	4.91	22-23
2.4 Install a ducted air-to-air heat pump to replace existing central electric resistance heater						
	Coefficient of Performance	**3.5-3.99**	**4-4.49**	**4.5-4.99**	**5+**	
a	Small (10kW to 18 kW)	19.91	21.02	21.89	22.58	24-25
b	Medium (18.1 to 28kW)	25.24	26.65	27.75	28.62	24-25
c	Large (>28 kW)	31.77	33.51	34.86	35.94	24-25
2.5 Install high efficiency space air-to-air heat pump (type of heater replaced not specified)						
	Coefficient of Performance	**3.5-3.99**	**4-4.49**	**4.5-4.99**	**5+**	
a	Small (2-3kW)	4.65	4.83	4.96	5.07	26-27
b	Medium (3.1-6.0kW)	8.85	9.18	9.44	9.64	26-27
c	Large (>6 kW)	11.09	11.50	11.82	12.07	26-27
2.6 Install insulated gas heating ductwork						
a	Rated output heating capacity 10kW to 18 kW				12.51	28-29
b	Rated output heating capacity 18kW to 88 kW				15.85	28-29
c	Rated output heating capacity greater than 28 kW				19.84	28-29

Schedule 3. Hot water service activities			
3.1 Decommission and replace electric resistance water heater			
3.1.2	Small (25.2 MJ/day or 120 Litres/day)	4.428	30-32
3.1.2	Large (42 MJ/day or 200 Litres/day)	7.16	30-32
3.2 Decommission a gas or liquefied petroleum gas water heater and install a gas or liquefied petroleum gas boosted solar water heater			
a	Small (25.2 MJ/day or 120 Litres/day)	7.80	33-34
b	Large (42 MJ/day or 200 Litres/day)	11.37	33-34
3.3 Replace an existing shower fixture outlet with low flow shower fixture outlet			
	Remove and replace shower fixture outlet or outlets with 9L/m flow rate	0.6976	35-36
3.4 Hot water tap improvements			
a	Aerator	0.1124	37-38
b	Flow restrictor	0.1239	37-38

Schedule 4. Lighting activities

4.1 Residential lighting activities

4.1.1 Activity abatement values for low energy general lighting service lamps to compact fluorescent lamps, pp 39-49

	Activity Abatement Value (tCO_2-e)											
Lumens output	lumens < 350			350 ≤ lumens <650			650 ≤ lumens ≤ 850			lumens > 850		
Efficacy	40 l/W	48 l/W	58 l/W	45 l/W	54 l/W	65 l/W	52 l/W	62 l/W	75 l/W	55 l/W	66 l/W	79 l/W
8,000 to 9,999 hrs	0.041	0.044	0.047	0.041	0.044	0.047	0.041	0.044	0.047	0.041	0.044	0.047
10,000 to 11,999 hrs	0.052	0.055	0.058	0.052	0.055	0.058	0.052	0.055	0.058	0.052	0.055	0.058
12,000 to 14,999 hrs	0.062	0.066	0.070	0.062	0.066	0.070	0.062	0.066	0.070	0.062	0.066	0.070
15,000 to 19,999 hrs	0.076	0.083	0.087	0.076	0.083	0.087	0.076	0.083	0.087	0.076	0.083	0.087
20,000 hrs+	0.102	0.112	0.117	0.102	0.112	0.117	0.102	0.112	0.117	0.102	0.112	0.117

4.1.2 Activity abatement values for low energy general lighting service lamps to LED lamps, pp 39-49												
	Activity Abatement Value (tCO_2-e)											
Lumens output	lumens < 350			350 ≤ lumens <650			650 ≤ lumens ≤ 850			lumens > 850		
Efficacy	40 l/W	48 l/W	58 l/W	45 l/W	54 l/W	65 l/W	52 l/W	62 l/W	75 l/W	55 l/W	66 l/W	79 l/W
15,000 to 19,999 hrs	0.065	0.071	0.075	0.065	0.071	0.075	0.065	0.071	0.075	0.065	0.071	0.075
20,000 hrs to 24,999 hrs	0.088	0.096	0.100	0.088	0.096	0.100	0.088	0.096	0.100	0.088	0.096	0.100
25,000 hrs +	0.110	0.121	0.125	0.110	0.121	0.125	0.110	0.121	0.125	0.110	0.121	0.125

4.1.3 Activity abatement values for low energy reflector lamps in sub-category 1 (Flood/ Security Lamps), pp39-49			
	Activity Abatement Value (tCO_2-e)		
Efficacy	25 l/W	30 l/W	36 l/W
15,000 to 19,999 hrs	0.084	0.086	0.089
20,000 hrs to 24,999 hrs	0.111	0.116	0.120
25,000 hrs +	0.139	0.144	0.150

4.1.4 Activity abatement values for low energy reflector lamps in sub-category 2, where the existing equipment must be Tungsten Halogen Lamp, pp39-49			
	Activity Abatement Value (tCO_2-e)		
Efficacy	25 l/W	30 l/W	36 l/W
15,000 to 19,999 hrs	0.084	0.086	0.089
20,000 hrs to 24,999 hrs	0.111	0.116	0.120
25,000 hrs +	0.139	0.144	0.150

4.1.5 Activity abatement values for low energy lamps in place of an existing 12 volt halogen lamp where the replacement equipment must be a 12V LED lamp, pp 39-49					
	Activity Abatement Value (tCO_2-e)				
	Lumens ≥ 350				
Efficacy	30 l/W	36 l/W	43 l/W	52 l/W	62 l/W
15,000 to 19,999 hrs	0.061	0.070	0.077	0.082	0.086
20,000 hrs to 24,999 hrs	0.082	0.093	0.102	0.109	0.116
25,000 hrs +	0.102	0.117	0.128	0.136	0.145

4.1.6 Activity abatement values where the existing equipment must be a recessed luminaire fitting that uses either a 12V halogen lamp of at least 35 watts, pp 39-49					
	Activity Abatement Value (tCO_2-e)				
	Lumens ≥ 350				
Efficacy	**40 l/W**	**48 l/W**	**58 l/W**	**69 l/W**	**83 l/W**
20,000 hrs to 24,999 hrs	0.099	0.106	0.111	0.116	0.119
25,000 hrs +	0.123	0.132	0.139	0.145	0.149

Schedule 5. Appliance activities				
5.1 Decommissioning and disposal of pre-1996 refrigerator or freezer				
	1-door refrigerator or freezer		0.5926	50-51
	2-door refrigerator or freezer		1.0603	2-4
5.2 Purchase of high efficiency refrigerator or freezer				
a	single door refrigerator	(0.9126×[200+ 4.0 ×(Vff)^0.67] - CEC)×0.0.00224		52-54
b	two door refrigerator	(0.6954×[150+ 8.8×(Vff + [1.60×Vfr)] ^0.67] - CEC)×0.00224		52-54
c	chest freezer	(0.6329×[150+ 7.5×(1.60×Vfr)^0.67] - CEC)×0.00266		52-54
d	upright freezer	(0.7700×[150+ 7.5×(1.60×Vfr)^0.67] - CEC)×0.00266		52-54
Where— (a) Vfr is the volume in litres of the freezer compartment; and (b) CEC is the comparative energy consumption specified on energy rating label as defined by AS/NZS 4474.2.				
5.4 Installation of high efficiency electric clothes dryer				
	Installing one HE electric clothes dryer	(48·08 × Rated Capacity – CEC)×0.003206		57-58
Where— (a) Rated Capacity is measured in kilograms and defined by AS/NZS 2442.1 (b) CEC is the comparative energy consumption and is measured in kilowatt hours per year (kWh/y) specified on the energy rating label as defined by AS/NZS 2442.2.				
5.5 Install a standby power controller				
a	In an information technology environment		0.16	59-62
b	In an audio visual environment		0.16	59-62
5.6 Purchase a high efficient television				
	A high efficiency television	(0.512×[SA×0.1825 + 127.5] - CEC)×0.001494		63-64
Where— (a) SA is the area of the screen in square centimetres as defined in AS/NZS 62087.2.2; and (b) CEC is the comparative energy consumption in kWh/y specified on the energy rating label as defined by AS/NZS 62087.2.2.				
5.7 Install a high efficiency swimming pool pump				
	Minimum star rating of 6	(1622 – PAEC)×0.001228		65-66
Where PAEC is the projected annual energy consumption in kWh/y listed on the energy rating label.				

Appendix 5 Key slides from presentations

A full set of slides will be posted on-line at the EEIS website. The following is an excerpt of key slides. An accessible version of this presentation is online at www.environment.act.gov.au/__data/assets/pdf_file/0003/772383/EEIS- Stakeholder-forum-presentations-accessible.pdf

Energy Efficiency Improvement Scheme Aims

- Encourage the efficient use of electricity and gas;
- Reduce greenhouse gas emissions associated with stationary energy use in the Territory;
- Reduce household and business energy costs; and
- Increase opportunities for vulnerable households to lower energy use and costs.

Energy Efficiency Improvement Scheme

- Established under the *Energy Efficiency (Cost of Living) Improvement Act 2012*
- Places a requirement on 'Tier 1' electricity retailers to undertake activities to achieve an energy savings target

  - Measured in CO_2-e
  - Also a priority household sub-target (20%)
  - Smaller 'Tier 2' Retailers can pay a contribution fee or undertake activities

Extension of the scheme

EEIS reviewed in 2014

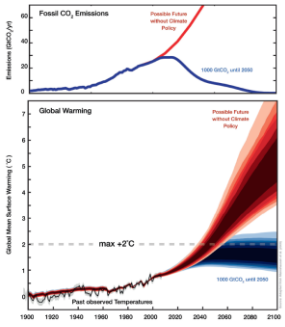
Amendment bill to extend the scheme to 2020 was passed on 4 August 2015.

Key changes in the future include:

- increase the notice time given to retailers when increasing future compliance year targets;
- harmonisation and recognition of abatement created in the ACT under other interstate schemes;
- allow 'approved abatement providers' to undertake EEIS activities and create abatement that may be purchased by retailers.

Policy Background

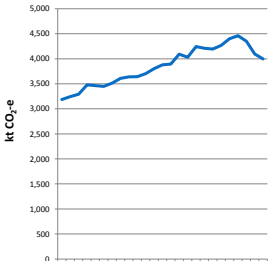
- Limiting global warming to ~2°C requires limiting aggregate global CO_2-e emissions to 1000 Gt from 2000 to 2050
- This is an allowance of around 2 to 3 tonnes per human per annum to 2050
- IPCC recommended advanced economies cut emissions by **40% by 2020**
- **Carbon neutral by 2060**



Source: Australian Academy of Science

ACT Greenhouse Gas Inventory

- **Emissions per person in ACT now lower than in 1990 (per person peak emissions target achieved)**
- ACT emissions **fell by 8%** between 2011-12 and 2013-14.
- Majority of emissions savings come from **electricity sector**
  - Increasing building and appliance efficiency
  - Increasing renewable electricity
- ACT Greenhouse Gas Inventory will now be released 3 months after the



Complementary Actsmart programs

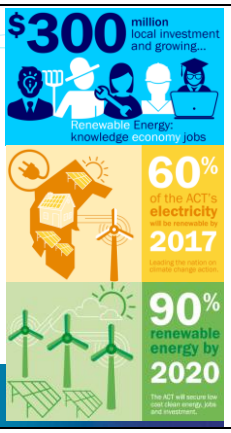
The ActSmart Business programs assist businesses and event organisers to put efficiency measures in place to reduce energy, water and waste.

ActSmart Household programs help residents save money, reduce emissions and live sustainably.

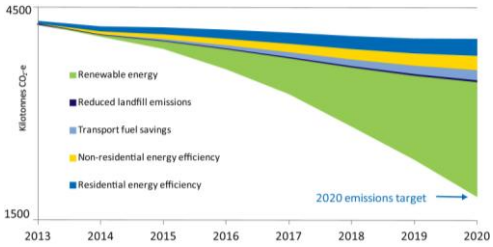
ActSmart Schools program supports implementation of sustainable management practices into everyday operations focusing in the areas of water, waste, energy, biodiversity and curriculum.

Take Home Messages

- ACT is a national/international leader
- Our leadership is delivering results across the triple bottom line in the ACT
- Collaboration and innovation delivers
- Evidence – Action – Results (and repeat)
- All in this together



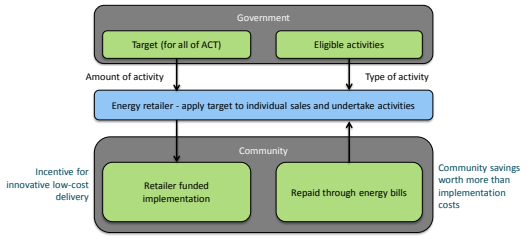
Meeting the 2020 GHG reduction target



Why energy efficiency?

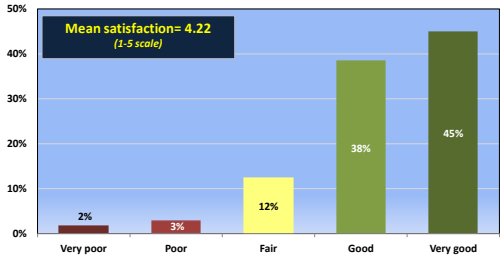
- Helps people reduce their energy use or get more out of the energy they do use.
- Provides a buffer against higher energy prices in the future.
- Delays the need to invest in new infrastructure to meet higher energy demands as the Territory's population grows.
- Reduces the investment required in new renewables.

How the EEIS works



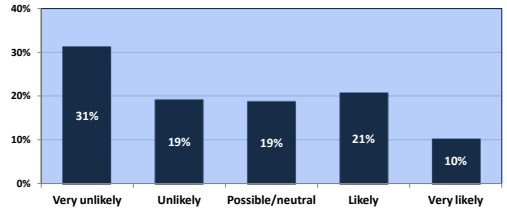
Overall household participant satisfaction

How would you rate your overall experience ? (n=516)



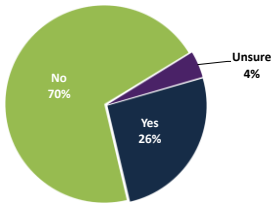
Contributing to Additional Energy Efficiency?

If these products were not available to you through the scheme, how likely is it that you would have purchased them anyway within the next 12 months? (n=516)



Encouraging Further Energy Efficiency?

Did the energy saving products you received lead you to undertake extra energy saving activities? (n=516)



Household Bill Savings

Activity 2013 + Quarter 1 2014	Fuel	Estimated household energy savings (MWh/GJ)	NPV cost savings $/ participating household
Affixing door seals	Electricity	0.4	63.62
	Gas	0.47	82.34
Lighting upgrades	Electricity	2.81	1,020.19
Installing Standby Power Controllers	Electricity	0.79	814.13
Fridge and Freezer removal	Electricity	0.75	866.50
		Total	**1,613.76**

Versus costs to households of:
- $28 on average per household in 2013-14
- $37 on average per household in 2014-15

ACT renewables

Mugga Lane Solar Park (13 MW)

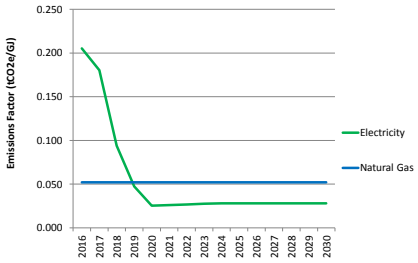
OneSun Capital Solar Farm (10 MW)

Ararat Wind Farm, Vic (80.5 MW)

Coonooer Bridge Wind Farm, Vic (19.4 MW)

Hornsdale Wind Farm, SA (100 MW)

Impact on ACT Electricity Emissions Factor



Practical impact

Saving 1MWh electricity in the ACT in:

- 2013 : 0.79 t CO_2-e
- 2016 : 0.74 t CO_2-e
- 2020 : 0.09 t CO_2-e

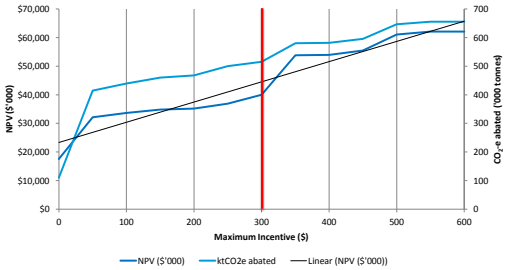
Lifetime savings from changing 1 light in:

- 2013: 0.4 t CO_2-e
- 2016: 0.31 t CO_2-e
- 2020: 0.04 t CO_2-e

Is the GHG metric still appropriate?

- Simplest method, understood by industry
- Balances Government's objectives:
  - Reducing emissions
  - Saving electricity and gas
  - Cost savings in households and businesses
- Can reflect increasing GHG benefit of saving gas/going electric
- Ability to determine included activities and targeted NPV of scheme provides opportunity to consider costs and benefits associated with activities

Modelled outcomes



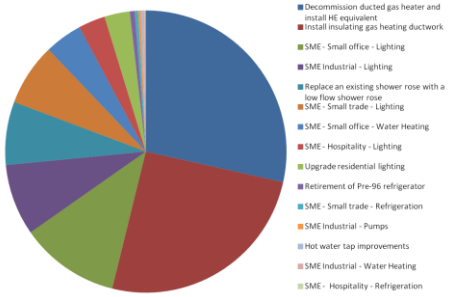
Comparing 2015 and 2016 - 2020

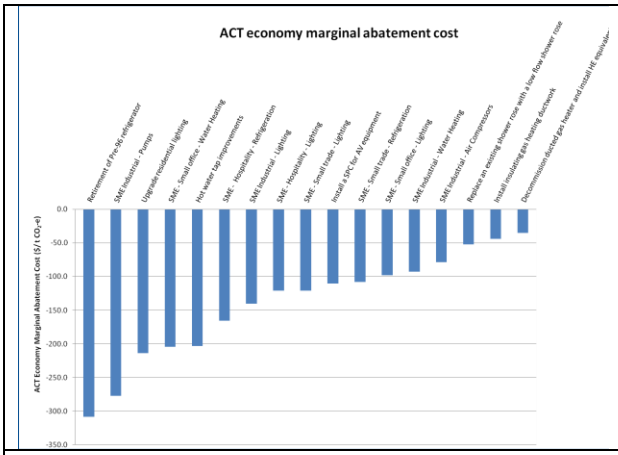
	Energy Savings Target	NPV ($M/yr)	Lifetime CO_2-e (kT/ year)	Electricity Saved (MWh/yr)	Gas Saved (GJ/yr)	Average Bill Pass-through ($/MWh)	Cost to Tier 1 Retailer ($M/yr)	Tier 2 Contributions ($M/yr)
2015	*14%*	*$14*	*296*	*353,210*	*929,553*	*$4.90*	*$10.9*	*$4.4*
2016-2020	8.6%	$8	103	280,249	1,162,517	$3.95	$8.2	$3.8

Key parameters

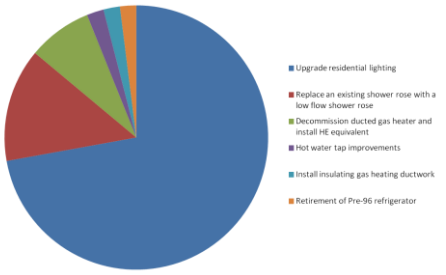
Instrument	New Value	Period
Energy Savings Target	8.6% (each year)	2016 to 2020
Priority Household Target	20% (each year)	2016
Emissions Multiplier	0.4	2016 to 2020
Energy Savings Contribution (Tier 2 Retailer)	$116/tonne CO_2-e	2016 to 2020
Shortfall Penalty (non-compliant Retailers)	$300/tonne CO_2-e	2016 to 2020

Modelled abatement





Residential – Number of Units Installed



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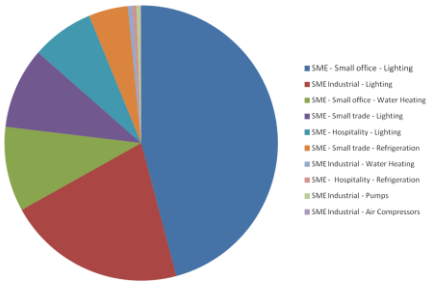
SME – number of instances



ACT Government
Environment and Planning

action matters

Liam Ryan
Principal Policy Officer, NSW Office of Environment and Heritage

EEIS Stakeholder forum
Interstate collaboration on energy efficiency

Office of Environment & Heritage

action matters

About the NSW Energy Savings Scheme

- Annual energy savings targets on energy retailers
- Accredited businesses create certificates for energy savings & trade with energy retailers
- Largest NSW energy efficiency program
- Since 2009, the scheme has supported projects that will save 12,000 GWh of electricity and $1.7 billion off bills over the next decade

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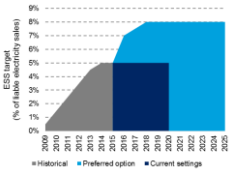
action matters

Upcoming reforms to the NSW Energy Savings Scheme

- NSW Government has announced expansion to gas from 2016 and extension to 2025
- Final position on reforms expected soon
- Commitment to annual updates to the ESS Rule starting with a call for ideas in Q1 each year
- Current focus of updates to Rule is on expanding to gas



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Why collaborate on energy efficiency?

- **Consistent administrative processes** can reduce costs for service providers and retailers operating across jurisdictions.
- **Collaboration on methods** can expand energy savings opportunities and make them cheaper for everyone through economies of scale.
- **Stakeholders** have consistently encouraged greater harmonisation across jurisdictions.

"A robust national market for energy efficiency could help NSW energy consumers save money on bills. The NSW government will work with other jurisdictions to harmonise energy efficiency trading schemes."

NSW Energy Efficiency Action Plan, page 6

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Collaboration in the past

- ACT based its eligible activities on the Victorian scheme
- NSW expanded residential activities, aligned compliance timeframes and recognised products accepted in Vic
- Victoria introduced commercial lighting and aligned administrative processes
- South Australia using NSW commercial lighting tool and has aligned activity requirements with best practice across jurisdictions

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Current collaboration priorities

- ACT is working to establish systems to recognise activities from other jurisdictions
- NSW is expanding its scheme to gas, and investigating reforms to residential retrofit activities
- Victoria is investigating new methods for commercial and industrial activities

Unique opportunity for NSW and the ACT

- The ACT Minister now has the power to approve an 'interstate scheme' and allow activities from another jurisdiction to be eligible.
- The NSW Minister has the power to approve a 'corresponding scheme' and enable the ESS to credit savings in another jurisdiction.
- So we have a legislative framework **but…** We still need to identify how this could work in practice.

Lessons from GGAS for NSW and the ACT

- The NSW Greenhouse Gas Reduction Scheme (GGAS) ran from 2003 to 2012
- The ESS is built on GGAS including many of IPART's administrative systems
- GGAS covered both the ACT and NSW
- Retailers and service providers used the same framework across jurisdictions
- So the scheme administrator, energy retailers and service providers all have experience with an integrated scheme.

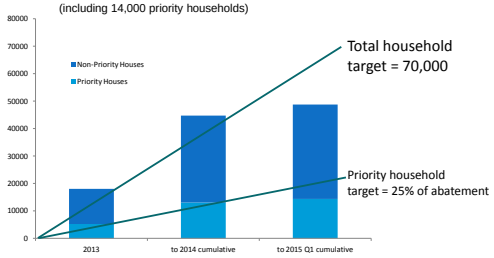
GGAS

Summary

- **The NSW Energy Savings Scheme is a success** and the NSW Government has committed to enhancing it.
- **The NSW Government supports interstate collaboration** on energy efficiency schemes with the goal of a national energy efficiency market.
- All jurisdictions with energy efficiency schemes are **working together** to better align eligible activities and administrative processes.
- **NSW and ACT have a unique opportunity** to reduce costs for service providers and retailers and help consumers save money on bills.

Targets and results 2013 - 2015

Over 53,000 households have participated in the scheme to date (including 14,000 priority households)



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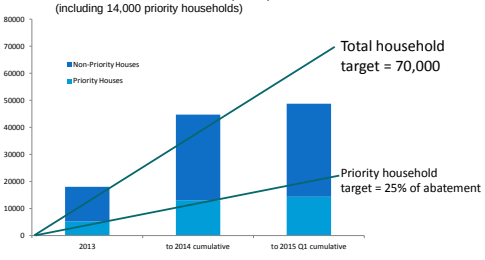

Achievements

- ✓ Energy savings in over 53,000 Canberra households
- ✓ 14,000 of these were priority households
- ✓ $1,600 average lifetime savings, or $318 per year
- ✓ 570,000 energy savings items, including over 90,000 LEDs installed
- ✓ 470,000 tCO2-e saved
- ✓ 465,000 incandescent light globes replaced,
- ✓ 10 tonnes of old, inefficient lights recycled
- ✓ 43,000 door seals installed
- ✓ 85,000 standby power controllers installed
- ✓ 1,500 old, inefficient refrigerators and freezers degassed & recycled.
- ✓ 35 FTE private sector jobs created, including 11 electricians.

Harmonisation and Jurisdictional comparison

ACT - EEIS	NSW - ESS	Victoria - VEET	South Australia - REES
Not certificate based	Certificate based	Certificate based	Not certificate based
Household focus, extended to SMEs. 20% priority household target	Business and industry focus - Now expanding to residential	Household and business	Household and business 35% low-income household target
Pre-deemed abatement	Range of abatement measurement methodologies	Pre-deemed abatement	Pre-deemed abatement
Extended to 2020	Running to 2025	Extended to 2030	Running to 2020

Eligible Activities

A list of activities eligible under the Scheme is determined by the Minister

Most activities are based on VEET measures

- Activities are grouped in to 5 areas:
  - Residential building envelope activities
    - E.g. building sealing, thermally efficient windows
  - Residential space heating and cooling activities
    - E.g. Replacing an electric/gas heater with high efficiency ducted gas heating
  - Residential hot water service activities
    - E.g. replacing an electric resistance water heater, improving fixture outlets
  - Residential lighting activities
  - Residential appliance activities
    - E.g. installing standby power controllers, purchase of high efficiency appliances

Prior to undertaking activities

Complete **Compliance Plan**	• Lodge with Administrator prior to undertaking any activities

If undertaking activities

Develop and complete **Activity Record forms** and **Activity Certifications**	• Keep on record and provide to Administrator as requested
Complete **Periodic Activity Report**	• Provide to Administrator within 15 working days after each quarter

Following the end of a compliance year

Complete **Compliance Period Report**	• Provide to the Administrator within 3 months of the end of a compliance period

Proposed New Eligible Activities

Four new activities are included:

- electric boosted solar hot water system
- three high efficiency space air-to-air heat pumps

A restriction has been removed which disallowed abatement for efficient electric heating systems in areas with reticulated gas.

Refer to summary

Image sources: Kreizhuh at en.wikipedia, https://upload.wikimedia.org/wikipedia/commons/e/e0/Solar_hot_water_service.JPG

Worked example

Image from: 401kcalculator.org

- Annual Electricity Sales (ES) = **100,000 MWh**
- Energy Savings Target (EST) = 8.6%
- Emissions Multiplier (EM) = 0.4
- Retailer Energy Savings Obligation (RESO) = EST x ES x EM
  = 0.086 x 100,000 x 0.4
  = **3,440 tonnes of CO_2-e**
- Energy Savings Contribution (ESC) = $116 x RESO
- Energy Savings Contribution = **$399,040**

Worked example continued

- Energy Savings Contribution
  = $399,040
- Tier 2 retailers have the option of delivering abatement instead of paying the Energy Savings Contribution.
- For every tonne of abatement delivered, the Energy Savings Contribution reduces by $116

How this might work.....

Six hypothetical calculations for achieving an Energy Savings Target of 3,440 tonnes of CO_2-e

Activity	Abatement	# Widgets for 3,440 tCO_2e
1.2.1b Seal an existing exhaust fan	0.4171	8247
1.6 Install window pelmets and window coverings	0.1813	18,974
2.1b Replace a ducted gas space heater with a high efficiency ducted gas space heater. 18.1-28kW, 5.5 stars	13.08	263
2.5b Install high efficiency space air-to-air heat pump. Medium, 5+ stars	9.64	357
3.1.2 Decommission and replace large electric resistance water heater with electric boosted solar hot water system	7.16	480
3.3 Replace an existing shower fixture outlet with a low flow shower fixture outlet	0.6976	4,931