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Consultation submission

Energy Savings Scheme consultation

AIRAH submission

Prepared by:

The Australian Institute of Refrigeration Air Conditioning and Heating

AIRAH Strategic aim #1 – *Claim the sustainability space*

AIRAH Strategic aim #3 – *Inform regulation and policy decisions*

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About AIRAH

AIRAH is the recognised voice of the Australian air conditioning, refrigeration and heating industry. We aim to minimise the environmental footprint of our vital sector through communication, education and encouraging best practice.

AIRAH – Strategic Aims

Claim the sustainability space

Through its conferences, publications, manuals and training, AIRAH will educate and motivate the HVAC&R industry and related fields about achieving sustainability. Our aim is to be the HVAC&R organisation whose values are aligned with sustainability in a practical sense

Close the skills gaps

At a time of rapid change of new technology and standards and a shifting regulatory landscape, AIRAH will provide appropriate and relevant professional development for HVAC&R industry personnel, and work alongside government and others to ensure the voids, where they exist in formal training, are filled.

Inform regulation and policy decisions

As the key industry organisation representing HVAC&R in Australia, it is essential AIRAH collaborate with government at both the state and federal levels. The Institute's skills and specialist knowledge can better inform the decisions that affect society in general and the HVAC&R industry in particular.

Build and engage membership

AIRAH will become the institute of choice for HVAC&R professionals in Australia. This means ensuring that formal connection with AIRAH provides benefits – actual and intangible – that are valuable, worthwhile and attractive to our members throughout their professional lives.

Disclaimer

Energy Savings Scheme consultation – Submission form

Submission by the Australian Institute of Refrigeration Air Conditioning and Heating.

Submissions should be sent to: ess@dwe.nsw.gov.au. The final date for submissions is 11/12/2013

Q1	Can high quality, comprehensive home energy efficiency assessments and retrofits by skilled tradespeople be delivered for less than $150 out-of-pocket under the ESS?	
Q2	The Government has proposed an expanded range of residential retrofit activities to be included in the attached draft ESS Rule. Are there any additional activities you think should be included?	The scheme is to be congratulated for increasing the number of retrofit activities available to home owners, by including a number of new energy savings options. This will increase the technical savings potential achievable by the scheme. A number of other cost-effective technology options can also be included such as indirect evaporative coolers and air ventilators, inter alia. A recent monitoring study by CSIRO has shown the importance of good ventilation strategies to achieve desired energy savings, particularly in well sealed homes. While this is a good start, the aim of the scheme should be to create flexible approaches that allow even more technologies to be included on a level playing field basis. A wide range of other airconditioning technology solutions would likely emerge as a result. To ensure maximum industry innovation and cost effective savings, the scheme should provide flexibility for industry to have their products independently reviewed with documented processes for then incorporating them into the scheme. A potential problem identified in some other similar schemes is that a calculation tool locks in a limited number of specific solutions and creates a barrier for other new entrant products and services to enter because their performance is not represented in the tool. Regular (annual) updates of the tool must be locked in and provision for incorporating new products is recommended

Q3	Do the eligibility requirements, equipment requirements, and implementation requirements specified for Home Energy Efficiency Retrofits in Schedules D and E of the draft ESS Rule adequately ensure high quality performance and energy savings? If not, please propose alternative requirements and explain how they would better achieve these objectives.	Energy assessors should be accredited. Evidence with other schemes (eg NatHERS) is that problems occur where accreditation is not required. Accreditation also provides an additional lever for operational management of the overall scheme.
Q4	Would the proposed requirements appropriately address the risks associated with installing ceiling insulation? How could this approach be further strengthened? What alternative approaches might better manage risks associated with insulation?	
Q5	Are there any additional high efficiency appliances that could be included in the ESS?	
Q6	Is assigning the role of Energy Saver for high efficiency appliances to the appliance retailer the best way to make ESC creation for high efficiency appliances viable and is the proposed proof of sale method appropriate? If not what might be a better solution?	The scheme is to be congratulated for looking to avoid putting the administrative burden of ESC creation on one-off purchasers of energy saving products and services While the retailer is an improved solution, AIRAH believes that an even better solution would be to assign the role of energy saver to the appliance manufacturer or importer. This assigns the administrative burden to the party that transacts the greatest volume of energy saving product, and thereby creates greatest efficiencies. The manufacturer generally also has the greatest technical capability for performing the work. And the reduced number of Energy Savers will reduce administrative burden for the Scheme Administrator.
Q7	Would the simplified eligibility criteria and Default Savings Factors encourage retirement of old fridges and freezers?	

Q8	Could a similar incentive to the retirement of old fridges and freezers be introduced for the permanent removal and disposal of old and inefficient air-conditioners and save significant amounts of energy?	The AIRAH facilitated PRIME initiative for low-emission HVAC&R identified that a air-conditioner buy back scheme could be used to provide significant reductions in both direct and indirect emissions (and peak demand) from the residential air conditioning sector. The efficiency of the technology has improved considerably and if an incentive scheme was used in accordance with the star rating program, a simple design/installation guide, a metal recycling and refrigerant recovery protocol and possibly integration with existing demand management response programs there is considerable scope for large savings in direct (refrigerant leakage) and indirect (energy use) emissions from this sector.
Q9	Does the proposed Aggregated Metered Baseline Method achieve the desired balance between rigour and scope for competition and innovation? If not, how could it be improved?	
Q10	Are there simpler or better ways to avoid double counting of savings from other activities and programs under the Aggregated Metered Baseline Method?	
Q11	What expertise or qualifications would be required by an independent accredited statistician under the Aggregated Metered Baseline Method to ensure that the experimental design and methods used to calculate energy savings are accurate and high quality?	
Q12	How could opt-in programs be designed so that energy savings can be reliably measured under the Aggregated Metered Baseline Method?	

Q13	Are there other reasons for the historical low uptake of projects under the PIA Method? Would the suggested changes sufficiently address these issues?	It is difficult to see how the addition of Metering and Verification (M&V) to the Project Impact Assessment (PIA) method would increase uptake. While M&V is a sensible addition, in order to increase the reliability of the claimed ESCs, it would seem to add additional cost burden, uncertainty and disincentive for the Energy Saver. Even with the IPMVP, M&V for airconditioning applications can be complex and require some judgement. It is further noted that the Rule, in attempting to be general, seems somewhat theoretical in its approach. To attract airconditioning energy saving projects, AIRAH suggests that further airconditioning application specific guidance should be provided. This will simplify the process, reduce cost and increase certainty for potential Energy Savers.
Q14	Would the draft Rule clearly set out the requirements under the proposed PIA with M&V Method? Would it allow ACPs to better estimate the costs of accrediting and implementing projects?	
Q15	Would the proposed PIA with M&V Method align well with IPMVP, or is there a better standard approach that could be followed?	
Q16	Would the proposed PIA with M&V Method allow flexibility for ACPs and their clients to choose cost-effective approaches to estimating energy savings, or how could it be made more flexible?	
Q17	Would the proposed PIA with M&V Method ensure that high quality energy savings are realised?	

Q18	The proposed PIA with M&V Method includes detailed instructions on how to calculate savings in Methods 7A.1 to 7A.6. What are the advantages and disadvantages of detailing these calculation steps in guidance documents rather than in the Rule?	
Q19	Is sampling a cost-effective way of ensuring accurate M&V in small projects that are applied across multiple sites under the proposed PIA with M&V Method?	
Q20	If you do not support the removal of luminaire retrofits, what evidence is there that luminaire retrofits are free from all issues with performance, customer satisfaction, permanence, safety and the potential to void warranties of existing equipment?	
Q21	Under the proposed changes to the Commercial Lighting Energy Savings Formula are there any additional building types for which the NSW Government should provide annual operating hours different from the default of 3,000 hours per annum? What evidence is there for other values?	
Q22	How can the ESS cost-effectively ensure that lighting upgrades meet the recommended illuminance maintenance and uniformity specifications in accordance with AS/NZS 1680.1 over the lifetime of a project? Is there a better way of ensuring that lighting retrofits meet the needs of the end-user than using the Standard?	

Q23	Are there any issues with matching eligibility with VEET but providing different incentives in the ESS for Deemed Energy Savings for business equipment?	
Q24	Are there any other standardised equipment used by businesses that could be included in the ESS under the Deemed Energy Savings Method?	The Deemed Energy Savings approach is one of the most attractive approaches for industry, and should be used where at all possible. Potential exists for a range of other airconditioning solutions to be included under the deemed energy savings method. It is noted that Australian Standard AS5389 "Solar cooling and heating systems—Calculation of energy consumption" utilises a generic Component Testing System Simulation (CTSS) calculation methodology that could be adapted to provide a rigorous and flexible calculation approach for a wide range of products. The AS5389 uses a similar approach to AS4234 which has been successfully used for calculation of RECS under the RET legislation. It is recommended that this approach be considered in future amendments to the Rule, in order to provide industry with the ability to innovate and develop new products with greater confidence of eligibility under the Deemed Energy Savings approach.
Q25	Are there any cases where energy savings factors for small businesses should be different from the value for households when considering extending the use of the Home Energy Efficiency Retrofits Method to small businesses?	
Q26	Is the proposed approach to the NABERS Baseline Method simple, effective and flexible?	The proposed approach seems simple, effective, and flexible for building already engaged with the NABERS program and AIRAH strongly supports the recognition of the role that ongoing building tuning and systems management has in reducing energy consumption and agree that ESS should incorporate this.

Q27	How can ESS incentives be best targeted under NABERS to help transform the commercial building market?	One approach to incentivise entry into the NABERS program would be to offer discounted assessments and advice to current NABERS non-participants, e.g. the Grade B and C buildings that are not currently incentivised by CBD or green leasing. Target buildings that are currently outside of the scheme. If NABERS entry costs are seen (for some non-office sectors) as a barrier perhaps these could be waived (by NABERS) or refunded (by ESS) if the building reaches a minimum rating? It is often the first step on the NABERS journey that is the most difficult.
Q28	The proposed Power Factor Correction Energy Savings Formula assumes that 70% of upstream network losses, as represented by the Distribution Loss Factor are "technical" losses that can be reduced by reducing line current. Can this assumption be improved?	
Q29	Are the proposed simplifications of Original Energy Savers optimal for each method?	
Q30	Is there any need to provide different transitional arrangements for the changes proposed in this consultation paper?	
Q31	Does allowing top-up ESC creation for previous PIA Method projects lead to additional energy savings?	

Q32	Under the current ESS Rule, electricity networks are allowed to create ESCs for savings from reducing distribution losses. Would such projects also meet regulatory requirements such as the Regulatory Investment Test – Distribution (RIT-D), and, if so, how might this be taken into account in calculating additional savings under the ESS?	
Q33	Are there any end-use categories that should be added to Table A17?	
Q34	Does the proposed annual timetable provide sufficient opportunities and realistic timeframes for stakeholders to participate in developing the ESS?	