



**MAC** Energy Efficiency Group

28<sup>th</sup> October 2019

Tina Maiese  
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Energy and Technical Regulation  
Department for Energy and Mining  
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Dear Tina,

**Re: REES Review – Directions Paper**

MAC Energy Efficiency Group (MAC) welcomes the opportunity to make a submission on the REES Directions Paper released on the 10<sup>th</sup> October, 2019.

MAC is an independent quality assurance business that provides energy efficiency compliance training, desktop and field audits under REES, VEET and the EEIS. MAC currently works with REES Obligated Energy Retailers and Activity Providers currently delivering activities under the REES. The team members of MAC have been involved with REES compliance since its inception in 2009.

Contained in this submission are detailed responses and considerations to the questions posed in the Directions Paper that MAC deems consequential in the ability of stakeholders to deliver on targets beyond 2020. MAC remains supporting of the REES and the positive impact it has had on the South Australian market generating substantial energy savings and as a flagship program for supporting hardship households.

If you have any questions regarding this submission, please contact me on 1300 020 381.

Regards,

Merrily Hunter  
Managing Director  
MAC Energy Efficiency Group



## Scheme Proposed Direction

- 3.1.1 An updated scheme will commence on 1 January 2021.
  - 3.1.2 The updated scheme will require three yearly target re-sets
  - 3.1.3 The updated scheme will be reviewed after six years
  - 3.1.4 The updated scheme will restrict credit carryovers from the current scheme to 10% of the 2020 target. The credit carryover from 2020 will be applied in 2021 only.
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MAC supports the expansion of the REES and the extension beyond 2020. Whilst we remain supportive of the existing target re-sets in three-year chapters, we recommend that these are extended for a further three-year term to run until 2029. This will provide greater certainty and harmonise with other State scheme commitments such as the ACT EEIS, which has recently been extended until 2030.

The proposed approach of restricting credit carryovers to 10% for obliged retailers doesn't allow for market flexibility. The REES has been successful in encouraging the take-up of a range of energy savings activities over the years and we have observed that different activities have different seasonality fluctuations, primarily residential activities peaking toward the end of each year.

In capping Retailer carryover to only 10% this could cause Activity Providers to terminate their staff in 2020, only to re-employ them in the following year. As we have observed with the 'capping' of the Solar Homes program in Victoria and the strain this creates on business operators, the loss of staff and the sustainability of the program are all affected.

We recommend that this carryover is increased to 25-30% to allow a greater transitional period for providers and a consideration for the peaks that various activities face under REES. Whilst we do not believe that 2020 will experience the same 'back heavy' target delivery seen in 2014, we do recommend that a cautious approach is taken when applying any target constraints.

It is worth noting that the excessive carryover flagged in the Directions paper that occurred in 2014 was related more to the transitional multiplier (from TCO<sub>2e</sub> to GJ energy savings) and the impending reduced abatement value for SPCs (and the excessive stock held by providers) than it had to do with aggressive certificate 'banking' by Energy Retailers.

3.2.1 The updated scheme objective will be 'To improve energy productivity for households, businesses and the broader energy system, with a focus on low-income households. This will reduce energy costs and greenhouse gas emissions, whilst improving human health'.

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MAC is supportive of the REES expanding its objective to focus not only on energy savings but energy productivity to achieve a more dynamic and responsive energy system in South Australia. We remain supportive of the continued focus on low-income households and the additional objective directed at human health both in the home and in the workplace.

3.3.1 The updated scheme will require that, in circumstances where activities delivered in regional areas fall below 15% of the overall target, regional obligations will apply for retailers in the year following the shortfall.

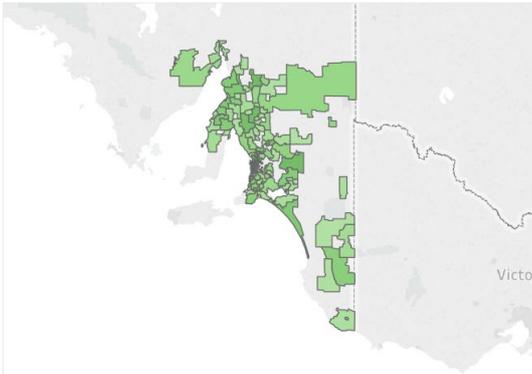
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To date, the REES has been successful in its delivery of energy savings in both the metropolitan and regional areas of South Australia without a Regional Target being set. The activities generated under REES naturally progress to regional and remote areas in South Australia when Metropolitan saturation

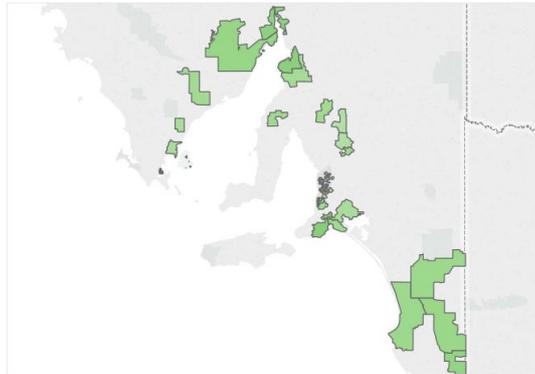
increases to a point that the cost of acquiring a metropolitan customer is on par with the cost of travel to a remote/regional area to deliver the same activity.

As you can see in the images below, these heatmaps show data from commercial and residential activities delivered by a large Activity Provider in South Australia. Year-on-Year, activity has spread out to regional locations, not due to abatement changes but acquisition cost increases in metro areas.

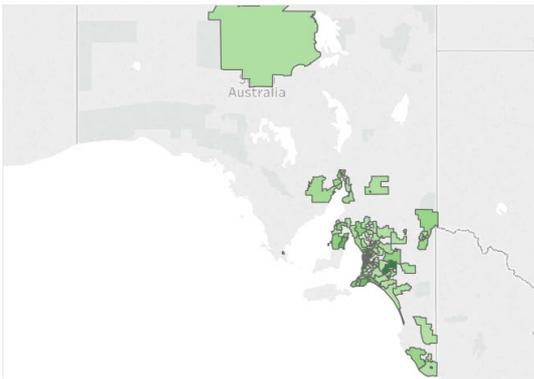
2018 Commercial Lighting Activities



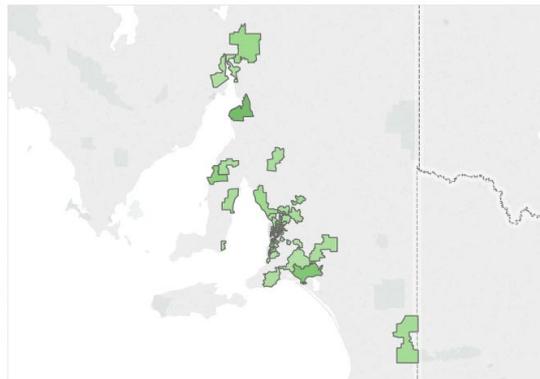
2019 Commercial Lighting Activities



2018 Residential Activities (PG)



2019 Residential Activities (PG)



MAC proposes that if the aim of the scheme is to maintain a high proportion of activities being delivered in remote and regional areas, this should be reflected in increased abatement values to assist in covering the costs associated with delivering activities in these areas.

In setting a regional target, the costs of administration and marketing the REES will increase for Retailers and in turn, SA residents, as opposed to letting market forces drive this organically. The greatest predictor of future performance is past performance.

3.4.1 The updated scheme will help to avoid future network costs by incentivising demand response activities as well as energy savings in the commercial and residential sectors.

3.4.2 The scheme will have an energy productivity target, expressed using a gigajoules (GJ) metric.

MAC is supportive of the scheme expanding its focus from just energy savings into demand response initiatives which reflects the changes in the South Australian energy market. Demand Response has had little traction in the energy market to-date, yet it is a critical step in adapting households and businesses to the new energy tariffs and peak periods.

This is a great opportunity to establish South Australia as a leader in the demand response sector and we are supportive of any initiative that supports load shifting to create a dynamic and integrated energy market.

An energy productivity target will encourage ‘whole of house’ upgrades and more outlying technologies such as the use of DR Electric Hot Water, Batteries, Smart Thermostats and DRED enabled white goods.

MAC recommends that the DEM consider including Battery Energy Storage Systems (BESS) into the REES Energy Productivity Target. Household batteries will be critical in the practice of load shifting and battery sizes will need to increase to cover the consumption requirements of household appliances.

The existing SA Home Battery Scheme only covers a portion of the cost of these units, putting it out of reach of many residents who are in financial hardship. An option could be to limit this activity to only Priority Group households which will provide financial assistance overcoming the cost gap and make the installation more appealing to landlords with Priority Group tenants.

We recommend that smart meters and ‘whole of home’ upgrades are incentivised with bonus abatement to ensure that maximum benefits are achieved and made available to those who need it most. MAC is happy to provide a retrofit proposal of what a ‘whole home’ upgrade could look like from a retrofit perspective, along with the expected costs and energy saving benefits of this design.

Whilst MAC is supportive of the proposed energy productivity target, there are concerns over the Regulator’s ability to administer a new metric in addition to the expansion of REES activities. We recommend that funding and resources are provided to ESCOSA to be able to develop the calculators, tools and training required to effectively administer this initiative.

3.5.1 The updated scheme will promote greater competition between third party activity providers.

3.5.2 The Government will consider alignment of the scheme activity rules with interstate schemes, where appropriate and ensuring continued high-quality outcomes for consumers.

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The ‘Open-Tender’ initiative has been outlined in the Directions Paper as one that will ‘reduce scheme costs’ however, the more Activity Providers used by a Retailer substantially increases the costs associated with contract governance, administration and compliance.

As outlined in this paper, an Obligated Retailer may be set multiple targets to achieve under the new REES post 2020. Retailers select their Activity Provider’s not just on price but also on their ability to deliver a substantial volume of certificates in a compliant, qualified and safe manner that is reflective of their own company values. Many Activity Providers that put forward proposals to Energy Retailers are not considered due to a variety of reasons such as: a lack of REES knowledge, low capacity to take on large volumes of certificates, poor compliance levels, single activity models and or not being local to South Australia.

Under REES, the Obligated Retailer is required to vouch for their Activity Provider’s work and if they are not confident in their operational capability, they will not be selected to work on their behalf. In other State schemes, the Activity Provider registers their own certificates on a Regulator managed Registry, and the Retailer can choose to purchase already audited and registered certificates, reducing their risk. REES does not have this function and therefore should leave the onus on selecting providers to the Retailers who need to verify the work and register the certificates under their own brand.

If the Department legislates that a Retailer must provide work opportunities to new providers each year, the costs will substantially increase for Retailers and premiums may be built into pass-through pricing to cover the costs of auditing, training and managing the GJ rejection rates of new providers.

If the cost of the scheme is the predominate reason for this proposal, an alternative approach would be to focus on developing South Australian centric calculators and tools to administer REES rather than

relying on other State schemes. Over the last three years, the costs of REES have increased substantially, not due to lack of competition amongst providers but directly due to the SA Government's reliance on other state scheme tools (ESS Calculator) and cutting the abatement of existing activities (Residential Downlights).

In establishing this policy, the costs per certificate from Activity Provider to Retailer may decrease, however the administration costs will increase for Retailers. This proposal pushes the obligation for auditing, training and administration to the Retailer rather than Activity Provider (who commonly employs smaller providers and manages the training and compliance associated with their work) which means the cost pass-through to SA customers will remain relatively the same as what it is today.

3.6.1 The updated scheme will incentivise upgrades in larger businesses by not including a 900GJ limit for commercial lighting upgrades

3.6.2 The updated scheme will allow commercial lighting upgrades to be delivered more than once per premises, where it can be demonstrated the lamps being replaced had not previously been replaced for the purposes of the scheme.

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MAC supports the removal of the 900GJ cap on commercial lighting and in allowing second visits to sites that have only received a partial upgrade.

The expansion of REES to allow commercial activities was a success in 2015-2017 in reducing scheme costs and driving lighting upgrades to small businesses. However, in late 2017, abatement rates were reduced due to the REES adopting air-conditioner values issued by NSW ESS, then in 2018 values declined again as a result of NSW introducing discount factors for metropolitan areas for their own scheme purposes. This has had a dramatic effect on commercial lighting activities in REES and these abatement changes have driven up costs and reduced participation of this sector due to the increased customer contribution requirement.

MAC recommends that in the process of expanding Commercial Lighting activities beyond the 900GJ cap, the Department allocates additional resources and tools specifically for administering REES activities to avoid the volatility and risk associated with the reliance of other State scheme tools. The dependency on NSW ESS tools to verify abatement rates in SA has caused adverse impacts on the market and introduced discount factors that are not reflective of the market conditions and the non-tradeable nature of REES.

NSW ESS has a tradeable framework which allows Activity Providers to have a price response when changes occur to abatement, REES is not flexible like this. Activity Providers are required to fulfill annual forward contracts at a fixed price. Any ongoing reliance on other State tools and lack of consultation with Activity Providers on impending changes will cause Activity Providers to have to price in 'risk premiums' to protect them against potential losses, which only increases the cost of REES.

MAC also recommends Commercial Lighting be split into two categories, one requiring full compliance with the National Construction Code (section J6) due to it being a full site renovation or refurbishment and one not requiring compliance to the NCC based on it being a lighting retrofit only. This would be in keeping with the VEU Commercial Lighting activity and recognise that the new National Construction Code released in 2019 was developed with building construction and design in mind. The Illumination Power Density (IPD) levels which mandates the maximum amount of artificial light that a space can have, has been substantially reduced in the new version of the Code to reflect new building designs being more sympathetic in their use of natural light. Older buildings have not been designed in this same manner yet they are the dominate class of site that is being retrofitted under REES.

This change means that a substantial number of commercial lighting retrofits that are currently required to comply with the National Construction Code IPD levels from 1<sup>st</sup> May 2020 will no longer comply and the customer will not be eligible to receive an upgrade under REES. Our early analysis has

shown that over 80% of sites that currently pass under the 2016 IPD requirement, fail under the 2019 version. MAC recommends that compliance with the NCC is adjusted to align with the building industry expectations where activities such as a light fitting change is treated in much the same way as internal painting, no permits are required to do the work nor is compliance with the National Construction Code required.

3.7.1 The updated scheme will incentivise upgrades in larger businesses by introducing new commercial and industrial activities, such as upgrades of fans, pumps and motors.

3.7.2 The updated scheme will incentivise upgrades in larger businesses by introducing new methods such as the NABERS Baseline Method, Power Factor Correction Method, and Project Impact Assessment Method.

3.7.3 The updated scheme will require customer co-payments for all commercial and industrial activities

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MAC supports the proposal to expand REES commercial activities to allow a 'whole of site' upgrade to take place and increase the variety of activities available to Activity Providers and Retailers to achieve targets and reduce the reliance on lighting upgrades.

This initiative will allow REES to move toward harmonising with other State schemes and will encourage businesses to take a more proactive approach to energy management. We recommend that if a co-contribution is being considered for all business customers, that this value remains at the current level of \$1.20GJ so that the scheme remains affordable for the SME sector.

MAC recommends that the Department closely considers the abatement values attributed to these new activities and whether multipliers should be factored in. Historically, they have had poor take-up rates in other states due to the high cost and low abatement generated.

MAC suggests that the Department consider how they intend to manage the auditing and administration of these new activities prior to implementing them (whether that be through the employment of experienced and qualified personnel to work at ESCOSA or to outsource to a suitably qualified organisation). The NABERS and PIAM-V methodology is quite different to deemed abatement activities that dominate REES and will require experienced administrators to troubleshoot, give AP's guidance and to carry out data/desktop auditing.

3.8.1. The updated scheme will introduce a residential target, alongside the priority group target.

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MAC supports the current objectives which set out to reduce both household and priority group energy use, with both sectors being critical to the overall success of the Scheme objectives. However, we recommend that the contributions and administrative rules are made the same on both targets for practical administration and non-discrimination purposes e.g. requiring one household to pay because they own and another not to because they rent.

If an Activity Provider requires a resident to prove that they are a rental household in order to access the REES for free this could be prone to abuse. Cost related to additional administration would be incurred by APs to prove that the tenant is indeed a 'tenant' and not a homeowner, and the sourcing of lease agreements as evidence will create additional barriers and lower uptake of the activities.

MAC recommends that contributions are removed for all residents participating in REES and suggest that the 'free-issue' activities in the scheme will be nearing saturation point. This encourages Activity Providers to offer deeper retrofits, where contributions occur organically rather than being legislated. In the 2018-2020 chapter of REES, we are not observing the same 'front heavy' approach to residential as we have in the previous 3 chapters of REES. This is primarily due to the reduced abatement values on downlight activities and the market in SA hitting a level of saturation for the 'free-issue' activities that have been available since 2009.

- 3.9.1 The updated scheme will have a priority group target.  
 3.9.2 The updated scheme will include rental households within the definition of 'priority group'.  
 3.9.3 The updated scheme rules will be reviewed for other opportunities to overcome the landlord/tenant split incentive problem

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MAC supports the ongoing priority group target under REES and the decision to not require a co-contribution for this demographic due to these households being more inclined to experience financial hardship related to rising energy costs.

Whilst MAC is supportive of the proposal to include rental households in the definition of Priority Group, we have concerns over the small range of activities that are available to those who may have already had 'free-issue' activities but do not have the available funds to contribute to a deeper retrofit. It is for this reason, we encourage the Department to re-consider their position on providing abatement multipliers for this demographic to assist in overcoming the gap payment on more larger energy saving activities.

MAC understands that the Department is concerned that any multiplier may undermine the integrity of energy savings reported under REES, so MAC suggest that they consider using a similar reporting tool to that which is used for Commercial Lighting where the capped GJ are reported in one column (up to 900GJ) and the Gross GJ (the total balance exceeded 900GJ) is reported in a different column. See example reporting table below.

ADDRESS	ACTIVITY	QTY	REES GJ	REES CREDITS (*2)	TOTAL
<b>1 SMITH STREET, SMITHFIELD</b>	L2A1:ELV LED Lamp only	20	8.6	17.2	25.8

MAC is supportive of the Department setting ambitious PGH targets to be achieved however they must be done so with consideration for the limited amount of activities currently available that do not require contributions and the limited abatement levels. If abatement levels cannot be adjusted or increased for this demographic, we recommend that the Penalty price of \$17.40GJ is reviewed and increased to reflect the market and the need for greater passthrough these customers.

MAC is supportive of the proposal by the Department to investigate opportunities to overcome the landlord/tenant split-incentive problem so that rental properties can access the energy saving benefits of deeper retrofits.

- 3.10.1 The updated scheme will introduce co-payment requirements for all residential activities, except for priority group households.  
 3.10.2 The updated scheme rules will incentivise deeper retrofits to priority group households  
 3.10.3 The updated scheme rules will incentivise residential activities that reduce peak demand or increase demand response capability  
 3.10.4 The updated scheme will look at options to assist customers with financing for deeper retrofits

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As mentioned previously, MAC recommends that contributions are removed for all residential properties to avoid issues related to abuse of the scheme rules, discrimination, additional administration and installer training (on cash-handling and ACL).

Whilst we are supportive of deeper retrofits, we are conscious of the lack of available funding that this demographic has to contribute to greater energy saving appliances or upgrades and therefore recommend a multiplier is re-considered by the Department to assist in overcoming the cost barrier.

The Directions Paper raised the issue of financing deeper retrofits by utilising existing community no-interest loan schemes. In our experience, we have worked with the NILS initiative for a number of

years and found that it is only appropriate in non-essential appliance upgrades due to the time associated with getting finance approvals. An example of this is where hot water installations are required. This is an essential service and one that residents will seek only when their existing unit fails.

The NILS initiative requires a lengthy financial counselling process to go through and substantial documentation (bank statements, employment records etc) before a loan will be processed. They also have a limited amount of resources available to hold counselling sessions and visit the customer's home. During this time the customer would be without hot water waiting for their loan to be approved.

The concept of using community loan schemes is sound but the practicality of applying them to deeper retrofits related to essential services is only viable if additional funding is provided to these community groups, as well as the development of a more streamlined 'express approval' channel in their program.

3.11.1 The updated scheme will no longer include residential audits and retailers will no longer be required to meet annual energy audit targets.

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MAC is supportive of the removal of residential energy audit targets.

We remain supportive of the scheme and the benefits that it provides to South Australian residents and businesses. If you wish to discuss any of the observations or recommendations provided in this submission, please feel free to contact us at [QA@maceegroup.com.au](mailto:QA@maceegroup.com.au) or 1300 020 381.