

Retailer Energy Efficiency Scheme -Regulatory Performance Report 2019

Key REES highlights in 2019

REES

- ► The overall annual REES targets were achieved and all obliged retailers met their individual targets.
- Approximately 2.1 million GJ of deemed energy savings were delivered to 33,500 households and businesses.
- Approximately 541,000 GJ of deemed energy savings were delivered to 19,500 priority group households (residential premises in which a person resides who is experiencing hardship or holds an eligible concession or health card).
- Approximately 83,500 energy efficiency activities were delivered and 554,000 energy efficient products were installed.

Key REES highlights since 2009

- Approximately 17 million GJ of deemed energy savings have been delivered.
- Approximately four million GJ of deemed energy savings and 67,000 energy audits have been delivered to approximately 196,000 priority group households.

The Retailer Energy Efficiency Scheme (**REES**) is a South Australian Government (**Government**) energy efficiency scheme that provides incentives for South Australian households and businesses to save energy. It does this through establishing energy efficiency and audit targets to be met by electricity and gas retailers.

As the administrator of REES, the Essential Services Commission (**Commission**) has functions and powers as are necessary to give effect to REES in South Australia. This includes reporting to the South Australian Minister for Energy and Mining annually on the operation of REES, and from time to time on any other matter relevant to REES.

This report covers the performance of obliged retailers under REES in 2019, as well the Commission's observations on REES since its inception in 2009.

The South Australian Department for Energy and Mining completed a review of REES culminating in a REES Review Report that was tabled in Parliament on 5 February 2020. The Report recommended that REES will continue beyond its legislated expiry date of 31 December 2020. Information on the review and the Review Report can be accessed on the Department for Energy and Mining's website.¹

Further information on REES including the Commission's regulatory role in administering REES can be found on the Commission's website at: <u>https://www.escosa.sa.gov.au/industry/rees/regulatory-reporting</u>.

Refer:

http://www.energymining.sa.gov.au/energy_and_technical_regulation/energy_efficiency/retailer_energy_efficiency_scheme/2019_rev_ iew_of_the_retailer_energy_efficiency_scheme.

REES targets and achievements

This section sets out achievements against the targets for energy audits, overall energy efficiency and priority group energy efficiency.

Those matters are based on deemed values under the scheme. For example, the replacement of a nondirectional halogen lamp with a Light Emitting Diode (LED) lamp² in a residential premises is estimated to result in a 'deemed' savings factor of 0.81 GJ over an assumed lifetime of 10,000 hours. However, the actual savings per year will be dependent on a number of variables such as actual usage and the physical condition of the LED lamp. It is important to understand the results and the deemed savings presented in this report in that context.

To allow for comparison:

- ▶ 2009-2014 REES achievement figures have been converted from tonnes of carbon dioxide equivalent to GJ
- the 'credits applied' amounts shown below relate to energy efficiency activities undertaken in previous years that have been applied towards a target, and
- unapplied credits currently held by retailers, which may be used in future years, are not shown.

Further information on the regulatory framework, including REES targets and achievements can be found on the Commission's website at: <u>https://www.escosa.sa.gov.au/industry/rees/regulatory-reporting</u>.

REES outcomes from 2009 to 2019

Since 2009, the reported activities under REES have revealed:

- ▶ approximately 17 million GJ³ of deemed energy savings
- approximately 4 million GJ of deemed energy savings to 196,000 priority group households, and
- approximately 67,000 energy audits to priority group households.

Figures 1, 2 and 3 show that retailers have generally built up significant balances of credits over the years to allow them to meet their annual REES targets.

A credit is created when a retailer submits a compliant activity report to the Commission; an activity does not become a credit for REES purposes, and cannot be applied towards a target, until it has been reported to and accepted by the Commission as a compliant activity.

The 'credits applied' amounts shown in the Figures:

- where shown below the target line, refer to credits created (reported to and accepted by the Commission) in a prior year and applied in satisfaction of the relevant year's targets, or
- where shown above the target line, refer to credits created (reported to and accepted by the Commission) in the relevant year (which may be applied towards future targets at the discretion of the retailer).

Activities undertaken by retailers for which a report has been neither submitted to nor accepted by the Commission are not credits for the purposes of REES (albeit that a retailer may choose to submit a record for approval at a later time, thereby creating a credit).

² Assumed light output of at least 650 lumens with an efficacy of at least 100 lumens per watt.

³ 1 MWh energy consumption is equivalent to 3.6 GJ.

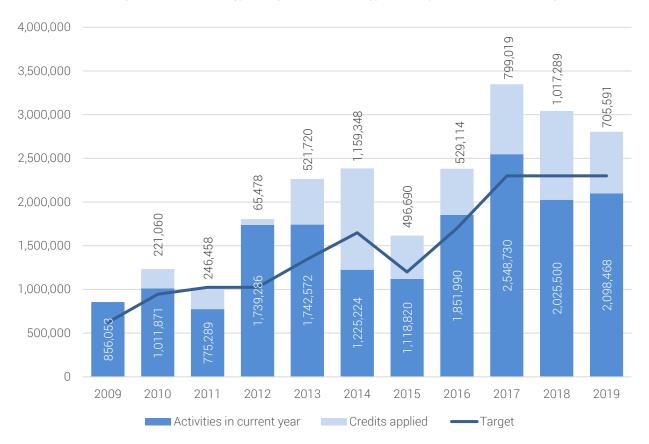
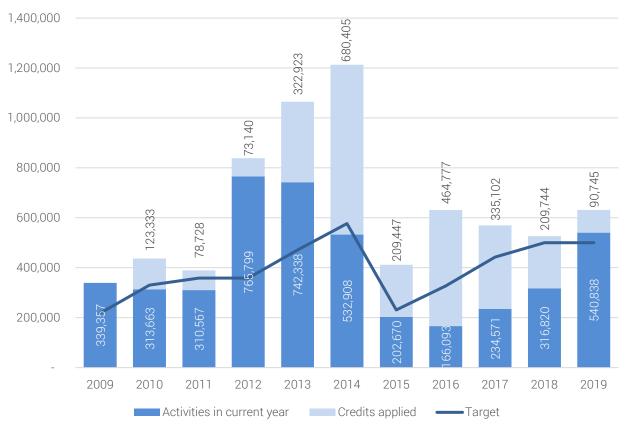
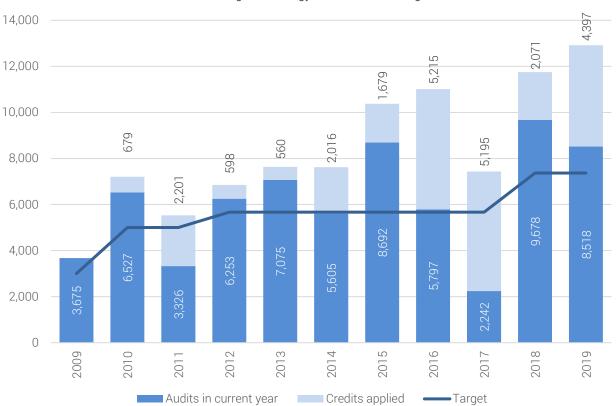


Figure 1: Deemed energy savings (GJ) from energy efficiency activities - actual v target

Figure 2: Priority group deemed energy savings (GJ) from energy efficiency activities - actual v target





Obliged REES retailers' overall performance in 2019

REES requires energy retailers that exceed a prescribed threshold⁴ to be set annual targets for the delivery of energy efficiency activities to households and/or businesses.

Retailers with larger residential customer bases⁵ are also set targets to deliver a prescribed amount of energy efficiency activities and audits to priority group households.

The targets and achievements for 2019 are provided in Tables 1 and 2.

Table 1: REES targets and	achievements in 2019
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	2019 target	Accepted reports	Credits applied ⁶	Total 2019 achievement
Energy audits (number of audits)	7,367	8,518	4,397	12,915
Energy efficiency (GJ) ⁷	2,300,000	2,098,468	705,591	2,804,059
Priority group energy efficiency (GJ) ⁸	500,000 ⁹	540,838	90,745	631,583

⁴ For 2019, the prescribed threshold is 27,000 MWh (for electricity) and 100,000 GJ (for gas).

⁹ Subset of Energy Efficiency Target

Figure 3: Energy audits - actual v target

⁵ For 2019, the prescribed customer base is 5,000 (for electricity) and 5,000 (for gas).

⁶ Applied credits are energy efficiency activities or energy audits accrued in excess of an obliged retailer's previous years' REES target which were applied to a 2019 target.

⁷ Energy efficiency activity savings for an activity in a year are deemed, in the sense that they reflect the assumed full lifetime saving value (not just the value for the particular year).

⁸ Priority group households include those where a person resides who holds a recognised concession card, participates in an energy retailer's customer hardship program or has a referral from a registered member of South Australian Financial Counsellors Association SAFCA.

Obliged retailer	Energy Audit	Energy Efficiency	Priority Group Energy Efficiency
AGL			
Alinta Energy			
amaysim Energy	N/A		N/A
EnergyAustralia			
Lumo Energy			
M2 Energy			
Momentum Energy	N/A		N/A
Origin Energy			
Powerdirect			
Simply Energy			
Tango Energy	N/A		N/A
Note: = target achieved	= target not achiev	ed	

Table 2: Obliged retailer target achievement in 2019

REES 2019 outcomes

This section analyses the distribution of energy efficiency activities and energy audits delivered, and the type of households and businesses that received energy efficiency activities and energy audits.¹⁰

Figures provided in this section relate to actual reported energy efficiency activities and energy audits for the relevant year and do not include any credits applied from previous years.¹¹

Energy efficiency activities

In 2019, 83,500 energy efficiency activities¹² were delivered, resulting in approximately 2.1 million GJ of deemed energy savings. Approximately 554,000 energy efficient products were installed in 2019.

The breakdown of the products installed in 2019, by location¹³, are shown below in Table 3.

¹⁰ The information presented in this section fulfils the Commission's reporting requirements outlined in the Ministerial Protocol.

¹¹ In some cases activities reported by retailers were rejected by the Commission in its compliance checking process, e.g. due to duplicated activities at a single premises. Consequently reported activities in this report refer to those activities reported in a given year that were accepted as compliant by the Commission and excludes any applied credits.

¹² Under clause 28 of the Electricity (General) Regulations 2012, the term 'activity' means the implementation of an activity at an individual premises. For example, the installation of two showerheads in a single premises on a particular day is considered to be one activity, but installing one showerhead and five light globes is considered two activities.

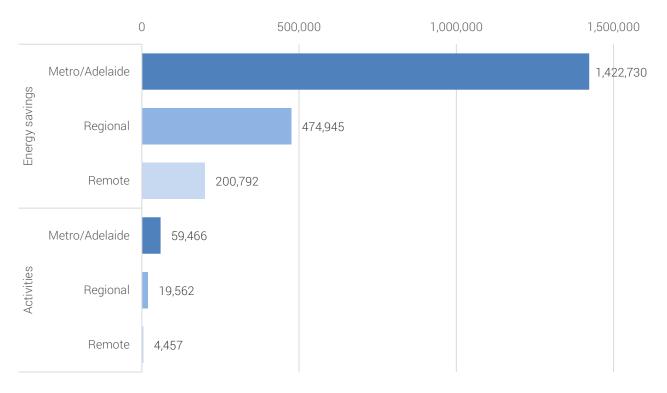
¹³ The postcodes that make up Metro/Adelaide, Regional and Remote can be found in the REES time series, available at: <u>https://www.escosa.sa.gov.au/industry/rees/regulatory-reporting</u>.

Category	Metro / Adelaide	Regional	Remote
Residential lighting	279,975	86,607	23,019
Commercial lighting	69,460	21,918	12,769
Standby power controllers	16,469	5,827	1,073
Shower heads	14,983	5,560	1,544
Insulation	10,466	390	185
Water heaters	1,309	514	88
Retire Fridge/Freezer	1,734	54	-
Draught proofing	13	-	-
Total	394,409	120,870	38,678

Table 3: Breakdown of products by location in 2019

Figure 4 shows the majority of activities and deemed energy savings were achieved in the Metro/Adelaide region in 2019.





Benefitting households by nature of tenure

Primary obliged retailers are set a Priority Group Energy Efficiency Target as a proportion of their general Energy Efficiency Target, based on their number of South Australian residential customers.

Of the 33,500 REES beneficiaries in 2019, priority group households made up approximately 58 percent of those beneficiaries and received deemed energy savings of approximately 541,000 GJ.

Figure 5 shows the majority of activities and deemed energy savings were delivered to owner-occupied households in 2019.

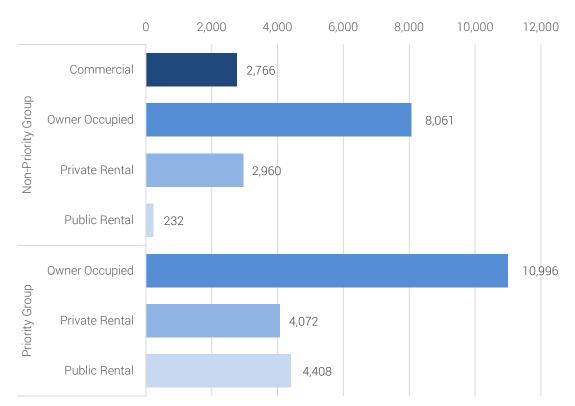


Figure 5: Breakdown of benefitting households and businesses by nature of tenure in 2019

Benefitting businesses by nature of tenure

REES was expanded in 2015 to allow activities to be delivered in commercial premises. To date, only commercial showerheads and commercial lighting activities have been delivered.

In 2019, there were 2,766 REES commercial beneficiaries. Those businesses achieved a total of approximately 1.1 million GJ of deemed energy savings or approximately 408 GJ of deemed energy savings per business.

A total of 4,811 REES commercial activities were provided in 2019. Commercial lighting made up approximately 99 percent of those activities, with the remainder made up by commercial showerhead activities.

Table 4 shows the top five benefitting businesses, by Australian and New Zealand Standard Industrial Classification (ANZSIC) codes, made up approximately 69 percent of the total number of benefitting businesses in 2019.

ANZSIC code	No. of benefitting businesses
G - Retail Trade	544
C - Manufacturing	441
A - Agriculture, Forestry and Fishing	327
H - Accomodation & Food Services	307
S - Other Services	296
F - Wholesale Trade	210
E - Construction	134
I - Transport Postal & Warehousing	134
M - Professional, Scientific & Technical Services	88
Q - Health Care & Social Assistance	57
L - Rental, Hiring & Real Estate Services	43
R - Arts & Recreation Services	41
P - Education & Training	29
N - Administrative & Support Services	28
D – Electricity, Gas, Water and Waste Services	23
K - Financial & Insurance Services	17
0 – Public Administration and Safety	16
Others	15
J – Information Media and Telecommunications	9
B - Mining	7
Total	2,766

Table 4: Breakdown of benefitting businesses by ANZSIC codes in 2019

Table 5 shows that commercial lighting made up 99 percent of both commercial activities and deemed energy savings in 2019.

The majority of those activities (61 percent) and deemed energy savings (65 percent) were delivered to businesses located in the Metro/Adelaide region.

Activity	Region	No. of activities	Deemed energy savings (GJ)
Commercial lighting	Metro/Adelaide	2,905	727,429
	Regional	1,062	248,234
	Remote	830	149,753
Showerheads	Metro/Adelaide	9	2,158
	Regional	3	1,033
	Remote	2	392
Total	1	4,811	1,128,998

Table 5: Breakdown of the REES commercial activities in 2019

Energy audits

There were 8,518 energy audits delivered to households in 2019. All energy audits are required to be delivered in priority group households.

Figure 6 shows 45 percent of energy audits were delivered to owner-occupied households in 2019, particularly those located in the Metro/Adelaide region.

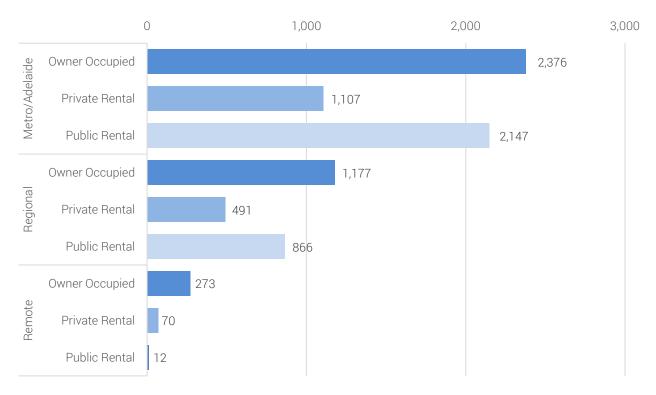


Figure 6: Breakdown of energy audits by location and nature of household tenure in 2019

Estimated penetration of REES

The information in this section estimates the number of households and businesses benefitting under REES, including a breakdown by household types and nature of household tenure.

Benefitting households and businesses

Since REES commenced in 2009, approximately 437,000 premises have received either an energy efficiency activity or energy audit.¹⁴

Figure 7 shows the total number of benefitting households and businesses steadily declined from 2010 to 2018. This trend was mainly driven by two factors:

- multiple activities being increasingly undertaken at the same premises as opposed to individual activities undertaken at separate premises, and
- an increase in the number of commercial activities being undertaken due to the higher deemed values, compared to residential activities.

¹⁴ Some households may have received benefits from both energy audits and energy efficiency activities but are only counted once.

However, the overall number of benefitting premises increased by 55 percent in 2019. This is mainly for two reasons:

- reduction in the amount of credits available to be carried over from previous years to meet 2019 targets, and
- a 70 percent increase in the number of benefitting households as retailers deliberately shifted their focus away from commercial activities towards undertaking more residential activities to meet priority group targets (in general, the average GJ value for a residential premises is lower than for a commercial premises, which means that retailers have to visit more premises to achieve the same GJ quantity than if they solely visited commercial properties).

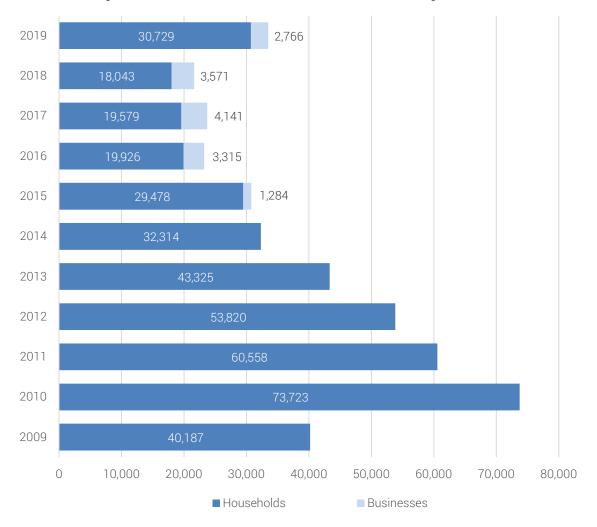


Figure 7: Total number of households and businesses benefitting under the REES

Breakdown of benefitting households and businesses

Figure 8 shows that approximately 196,000 priority group households have benefitted from the introduction of REES in 2009. The other beneficiaries (approximately 241,000) were made up of businesses and non-priority group households.

Since 2010, there has been a general downward trend in the overall number of benefitting households and businesses. As previously noted, retailers deliberately shifted towards undertaking more residential activities in 2019 to ensure that they met priority group targets, due to fewer credits being carried over from previous years to meet 2019 targets. Consequently, more non-priority group households were also captured from this shift in focus.

Table 6 shows the breakdown of benefitting households and businesses by tenure, with the majority of the REES activities (approximately 67 percent) being undertaken in owner-occupied premises.

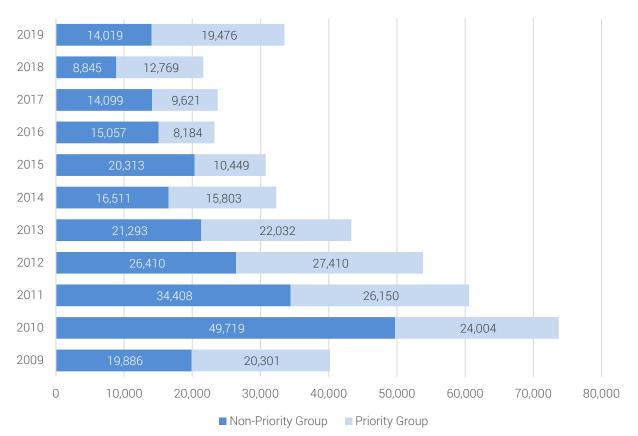


Figure 8: Breakdown of benefitting households and businesses, by priority group

Table 6: Breakdown of benefitting households and businesses, by nature of tenure

	Owner-occupied	Private rental	Public rental	Commercial
2019	19,057	7,032	4,640	2,766
2018	11,676	3,607	2,760	3,571
2017	14,415	3,299	1,865	4,141
2016	13,138	4,665	2,123	3,315
2015	20,247	6,486	2,745	1,284
2014	20,907	7,888	3,519	N/A
2013	31,693	7,233	4,399	N/A
2012	37,897	10,974	4,949	N/A
2011	43,650	12,903	4,005	N/A
2010	49,944	15,900	7,879	N/A
2009	29,859	6,293	4,035	N/A
Total	292,483	86,280	42,919	15,077

How compliant were obliged retailers with their regulatory obligations?

To promote data quality, the REES system has built-in checks to promote the collection of accurate data. At the simplest level, the system's automated compliance testing restricts entry to valid data types and specific ranges of numerical data.

To provide further data quality assurance, the Commission also conducts planned audits of REES transactions reported by retailers as well as all third party contractors during the course and at the conclusion of the year. For example, it undertakes data reasonableness checks and data audits on areas identified as having a higher risk of non-compliance.

In 2019, those desktop audits revealed minimal non-compliant energy efficiency activity and audit data.

EnergyAustralia's 2018 shortfall

In 2018, EnergyAustralia did not achieve its priority group target issued by the Commission in respect of its electricity retail licence. In response, the Commission utilised its enforcement powers and:

- carried over the shortfall amount to EnergyAustralia's 2019 electricity priority group energy efficiency target¹⁵
- ▶ issued a Warning Notice¹⁶, and
- accepted a statutory written assurance provided to the Commission by EnergyAustralia¹⁷.

Therefore, a key REES focus for the Commission in 2019 was to ensure EnergyAustralia:

- met the 2018 shortfall amount in 2019 in addition to meeting all other allocated targets, and
- met the requirements of the Commission's Warning Notice, including publicly advising electricity customers by way of a prominent notice acknowledging the shortfall and how electricity customers may be eligible as a priority group household to receive REES energy efficiency activities

The Commission has assessed EnergyAustralia as having met all its targets for the 2019 REES reporting year, which included the electricity priority group target shortfall carried over from 2018. Further, the Commission is satisfied that all the requirements of the Warning Notice have been complied with.

Further Information

Further information on the REES regulatory framework and the complete time series performance data for REES can be found on the Commission's website at: <u>https://www.escosa.sa.gov.au/industry/rees/regulatory-reporting</u>.

The Essential Services Commission is an independent statutory authority with functions in a range of essential services including water, sewerage, electricity, gas, rail and maritime services, and also has a general advisory function on economic matters. For more information, visit <u>www.escosa.sa.gov.au</u>.

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¹⁵ The shortfall amount of 14,688 GJ was added to EnergyAustralia's 2019 Electricity Priority Group Energy Efficiency Target by an Adjustment Notice issued on 3 July 2019

¹⁶ The Warning Notice was issued on 3 July 2019 under Section 63A of the *Electricity Act 1996*

¹⁷ Assurance notice was provided on 23 August 2019, available at: <u>https://www.escosa.sa.gov.au/projects-and-publications/projects/rees/compliance-action-energyaustralia/rees-compliance-action-energyaustralia.</u>