



Retailer Energy Efficiency Scheme Regulatory Performance Report 2020



Key REES outcomes in 2020

- ▶ The overall annual REES targets were achieved and all obliged retailers met their individual targets.
- ▶ Approximately 2.2 million GJ of deemed energy savings were delivered to 30,400 households and businesses.
- ▶ Approximately 496,300 GJ of deemed energy savings and 2,900 energy audits were delivered to 14,500 priority group households (residential premises in which a person resides who is experiencing hardship or holds an eligible concession or health card).
- ▶ Approximately 75,300 energy efficiency activities were delivered and 585,800 energy efficient products were installed.

Key REES outcomes since 2009

- ▶ Approximately 19.2 million GJ of deemed energy savings have been delivered since the commencement of REES.
- ▶ Approximately five million GJ of deemed energy savings and 69,500 energy audits have been delivered to approximately 210,700 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.

The Commission administers the REES in accordance with the *Electricity (General) Regulations 2012* and the *Gas Regulations 2012*. The role of the Commission is to ensure obliged energy retailers and third-party providers comply with the requirements of REES and the REES Code.

This final REES report covers the performance of obliged retailers under REES in 2020, as well the Commission's observations on REES since its inception in 2009.

On 1 January 2021, the Retailer Energy Productivity Scheme (**REPS**) was introduced by the South Australian Government to replace REES. The objective of REPS is to improve energy productivity for households, businesses and the broader energy system, with a focus on low-income households. This is achieved through the setting of energy productivity targets to be met by obliged electricity and gas retailers.

Further information on REES and/or REPS, including the Commission's regulatory role in administering the schemes, can be found on the Commission's website at: www.escosa.sa.gov.au.

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 non-directional halogen lamp with a Light Emitting Diode (**LED**) lamp¹ in a residential premises is estimated to result in a 'deemed' savings factor of 0.81 gigajoule² (**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 energy savings measured in 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 energy credits currently held by retailers, which may be used under REPS, are not shown.

An energy credit is the difference between a retailer's actual achievement in a year and the retailers target (if the difference is positive). Activities do not become energy credits for REES purposes, and cannot be applied towards a future target, until the reporting year has closed and those activities have been accepted by the Commission as compliant.

The 'credits applied' amounts shown in the Figures 1, 2 and 3:

- ▶ where shown **below** the target line, refer to energy 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 energy 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 activities or energy credits for the purposes of REES.

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

REES outcomes from 2009 to 2020

Since 2009, the reported activities under REES have delivered:

- ▶ approximately 19.2 million GJ of deemed energy savings
- ▶ approximately 5 million GJ of deemed energy savings to 210,700 priority group households, and
- ▶ approximately 69,500 energy audits to priority group households.

Figures 1, 2 and 3 show that retailers have generally built up significant balances of energy credits over the years to allow them to meet their annual REES targets. Although excess energy credits as at 31 December 2020 are allowed to be carried over to REPS, the energy credit allowed to be carried over is limited to 20 percent of each retailer's 2020 REES Energy Efficiency Target.

¹ Assumed light output of at least 650 lumens with an efficacy of at least 100 lumens per watt

² 1 MWh energy consumption is equivalent to 3.6 GJ

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

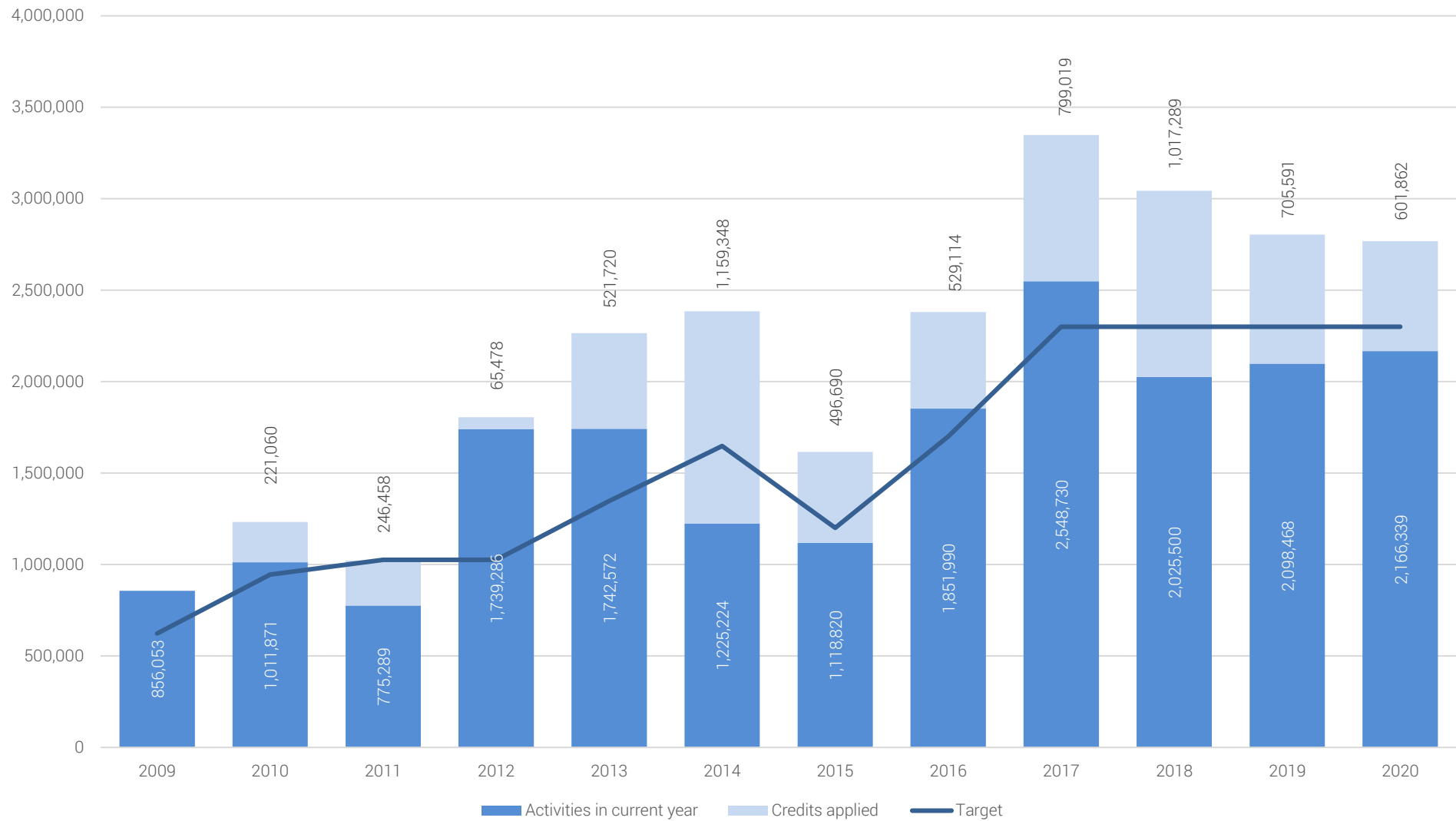
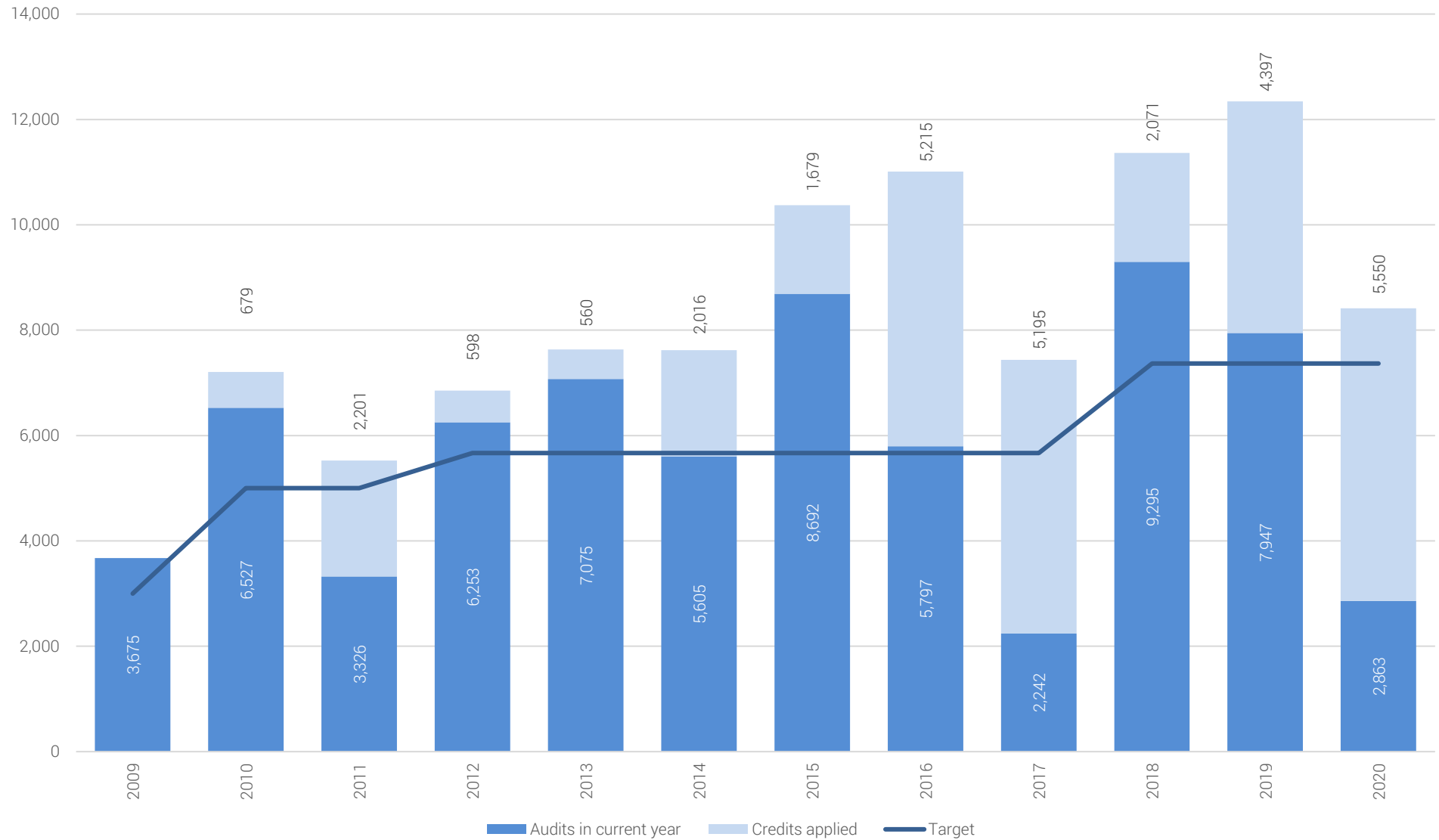


Figure 2: Priority group deemed energy savings (GJ) from energy efficiency activities - actual v target



Figure 3: Energy audits - actual v target



Obligated REES retailers' overall performance in 2020

REES requires energy retailers that exceed a prescribed threshold³ to be set annual targets for the delivery of energy efficiency activities to households and/or businesses.

Retailers with larger residential customer bases⁴ are also set targets to deliver a prescribed amount of energy efficiency activities and audits to priority group households.

The targets and achievements for 2020 are provided in Tables 1 and 2.

Table 1: REES targets and achievements in 2020

	2020 target	Accepted reports	Credits applied ⁵	Total 2020 achievement
Energy audits (number of audits)	7,367	2,863	5,550	8,413
Energy efficiency (GJ) ⁶	2,300,000	2,166,339	601,862	2,768,201
Priority group energy efficiency (GJ) ⁷	500,000 ⁸	496,345	128,845	625,190

Table 2: Obligated retailer target achievement in 2020

Obligated retailer	Energy Audit	Energy Efficiency	Priority Group Energy Efficiency
AGL	●	●	●
Alinta Energy	●	●	●
amaysim Energy	●	●	●
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 achieved

³ For 2019, the prescribed threshold is 27,000 MWh (for electricity) and 100,000 GJ (for gas).

⁴ For 2019, the prescribed residential customer base is 5,000 (for electricity) and 5,000 (for gas).

⁵ Applied energy credits are energy efficiency activities or energy audits accrued in excess of an obligated retailer's previous years' REES target which were applied to a 2019 target.

⁶ 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).

⁷ 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.

⁸ Subset of Energy Efficiency Target.

REES 2020 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.⁹

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.¹⁰

Energy efficiency activities

In 2020, 75,300 energy efficiency activities¹¹ were delivered, resulting in approximately 2.2 million GJ of deemed energy savings. Approximately 585,800 energy efficient products were installed in 2020.

The breakdown of the products installed in 2020, by location¹², are shown below in Table 3.

Table 3: Breakdown of products by location in 2020

Category	Metro / Adelaide	Regional	Remote
Residential lighting	313,733	74,441	46,884
Commercial lighting	50,245	19,189	12,957
Insulation	22,613	369	165
Shower heads	15,812	4,051	2,779
Standby power controllers	15,065	3,393	738
Water heaters	1,388	798	130
Retire Fridge/Freezer	1,022	6	-
Total	419,878	102,247	63,653

⁹ The information presented in this section fulfils the Commission's reporting requirements outlined in the Ministerial Protocol.

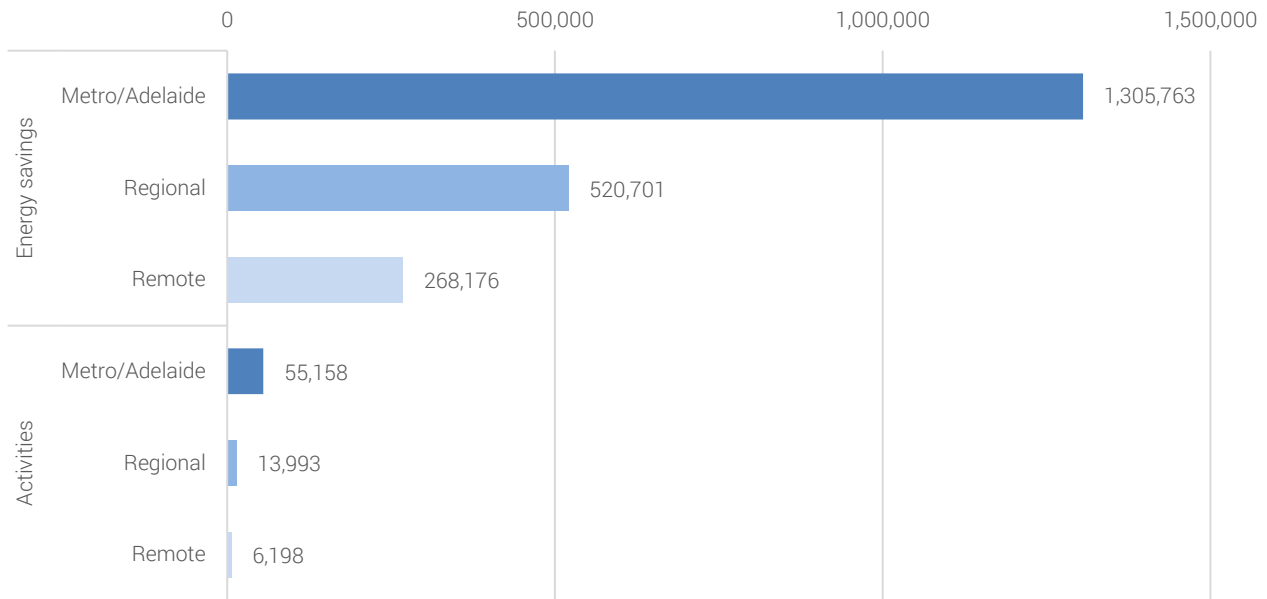
¹⁰ In some cases activities reported by retailers were rejected by the Commission in its compliance checking process, e.g. due to duplication of activities at a single premises. Consequently reported activities in this report refer to those activities reported in a given year that were accepted as compliant by the Commission and excludes any applied energy credits.

¹¹ 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.

¹² The postcodes that make up Metro/Adelaide, Regional and Remote can be found in the REES time series, available at: <https://www.escosa.sa.gov.au/industry/rees/regulatory-reporting>.

Figure 4 shows the majority of activities and deemed energy savings were achieved in the Metro/Adelaide region in 2020.

Figure 4: Breakdown of activities and deemed energy savings (GJ) by location in 2020



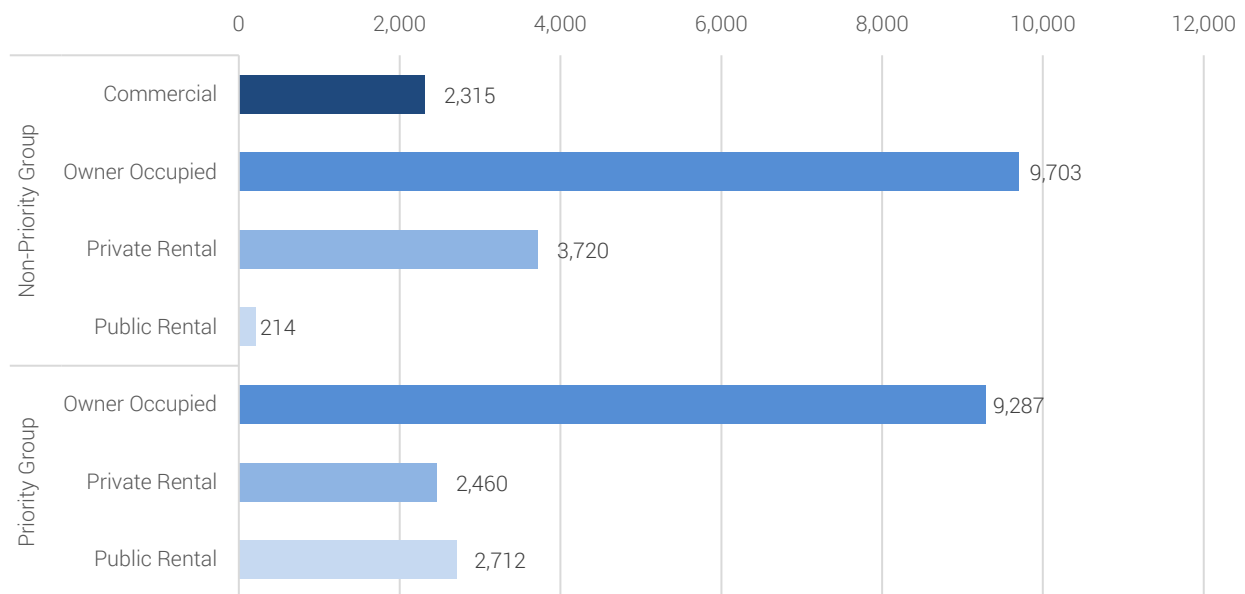
Benefitting households by nature of tenure

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 30,400 REES beneficiaries in 2020, priority group households made up approximately 48 percent of those beneficiaries and received deemed energy savings of approximately 496,300 GJ.

Figure 5 shows the majority of activities and deemed energy savings were delivered to owner-occupied households in 2020.

Figure 5: Breakdown of benefitting households and businesses by nature of tenure in 2020



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 2020, there were 2,300 REES commercial beneficiaries. Those businesses achieved a total of approximately 1.1 million GJ of deemed energy savings or approximately 488 GJ of deemed energy savings per business.

Approximately 4,800 REES commercial activities were provided in 2020. Commercial lighting made up approximately 99 percent of those activities, with the remainder made up by commercial showerhead activities.

The top five industry groups, by Australian and New Zealand Standard Industrial Classification (ANZSIC) codes, shown in Table 4, made up approximately 68 percent of the total number of benefitting businesses in 2020.

Table 4: Breakdown of benefitting industry groups by ANZSIC codes in 2020

ANZSIC code	No. of benefitting businesses
A - Agriculture, Forestry and Fishing	503
C - Manufacturing	345
S - Other Services	287
G - Retail Trade	235
H - Accommodation & Food Services	193
F - Wholesale Trade	176
E - Construction	127
I - Transport Postal & Warehousing	94
R - Arts & Recreation Services	87
M - Professional, Scientific & Technical Services	61
Q - Health Care & Social Assistance	48
L - Rental, Hiring & Real Estate Services	34
Others	31
P - Education & Training	29
N - Administrative & Support Services	22
K - Financial & Insurance Services	16
D - Electricity, Gas, Water and Waste Services	12
O - Public Administration and Safety	8
J - Information Media and Telecommunications	5
B - Mining	2
Total	2,315

Commercial lighting, shown in Table 5, made up 99 percent of both commercial activities and deemed energy savings in 2020. The greatest number of those activities (48 percent) and deemed energy savings (56 percent) were delivered to businesses located in the Metro/Adelaide region.

Table 5: Breakdown of the REES commercial activities in 2020

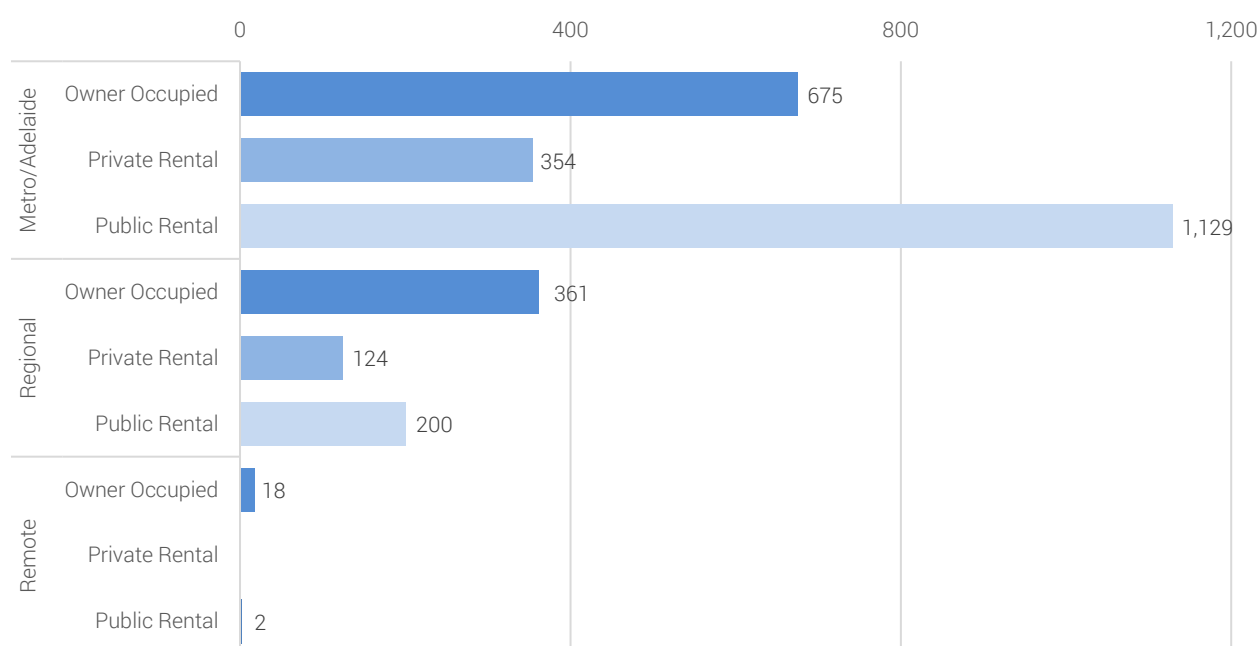
Activity	Region	No. of activities	Deemed energy savings (GJ)
Commercial lighting	Metro/Adelaide	2,284	611,481
	Regional	1,436	303,642
	Remote	1,048	178,526
Showerheads	Metro/Adelaide	2	2,358
	Regional	18	5,478
	Remote	11	1,971
Total		4,799	1,103,456

Energy audits

All energy audits under REES are required to be delivered to priority group households. Approximately 2,860 energy audits were delivered to those households in 2020, representing a 64 percent decrease compared to the 7,950 energy audits delivered in 2019. The significant decline is mainly driven by the fact that retailers had built up a substantial buffer of energy audit credits in previous years and had utilised those credits to meet their energy audit targets in 2020. Further, any REES energy audit credits that were not utilised as at 31 December 2020 cannot be utilised as a credit in subsequent years under REPS.¹³

Public rental households (particularly those located in the Metro/Adelaide region), shown in Figure 6, made up approximately 46 percent of the energy audits delivered in 2020.

Figure 6: Breakdown of energy audits by location and nature of household tenure in 2020



¹³ There are no energy audit targets under REPS.

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 467,200 premises have received either an energy efficiency activity or energy audit.¹⁴

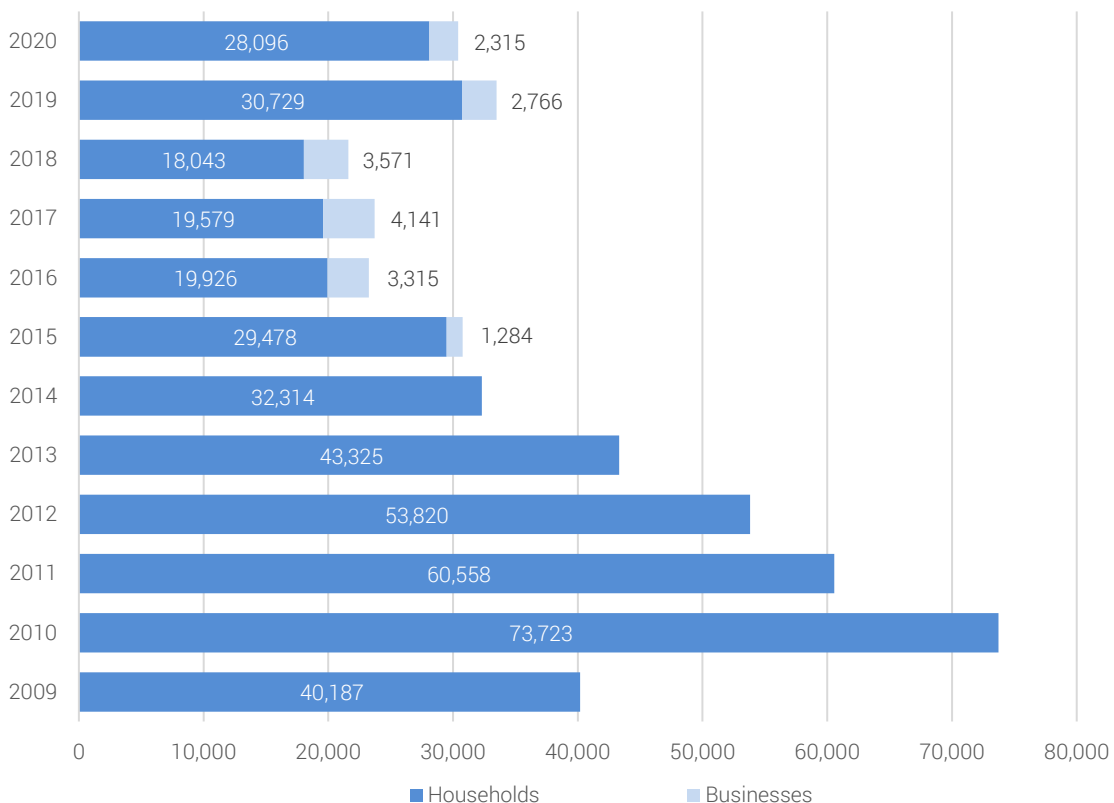
Figure 7 shows the total number of benefitting households and businesses steadily declined from 2010 to 2018. This trend was mainly driven by two factors:

- ▶ 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.

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

- ▶ reduction in the amount of credits available to be carried over from previous years to meet the targets in 2019 and 2020, and
- ▶ 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



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

Breakdown of benefitting households and businesses

Figure 8 shows that approximately 210,700 priority group households have benefitted from the introduction of REES in 2009. The other beneficiaries (approximately 256,500) 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 and 2020 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

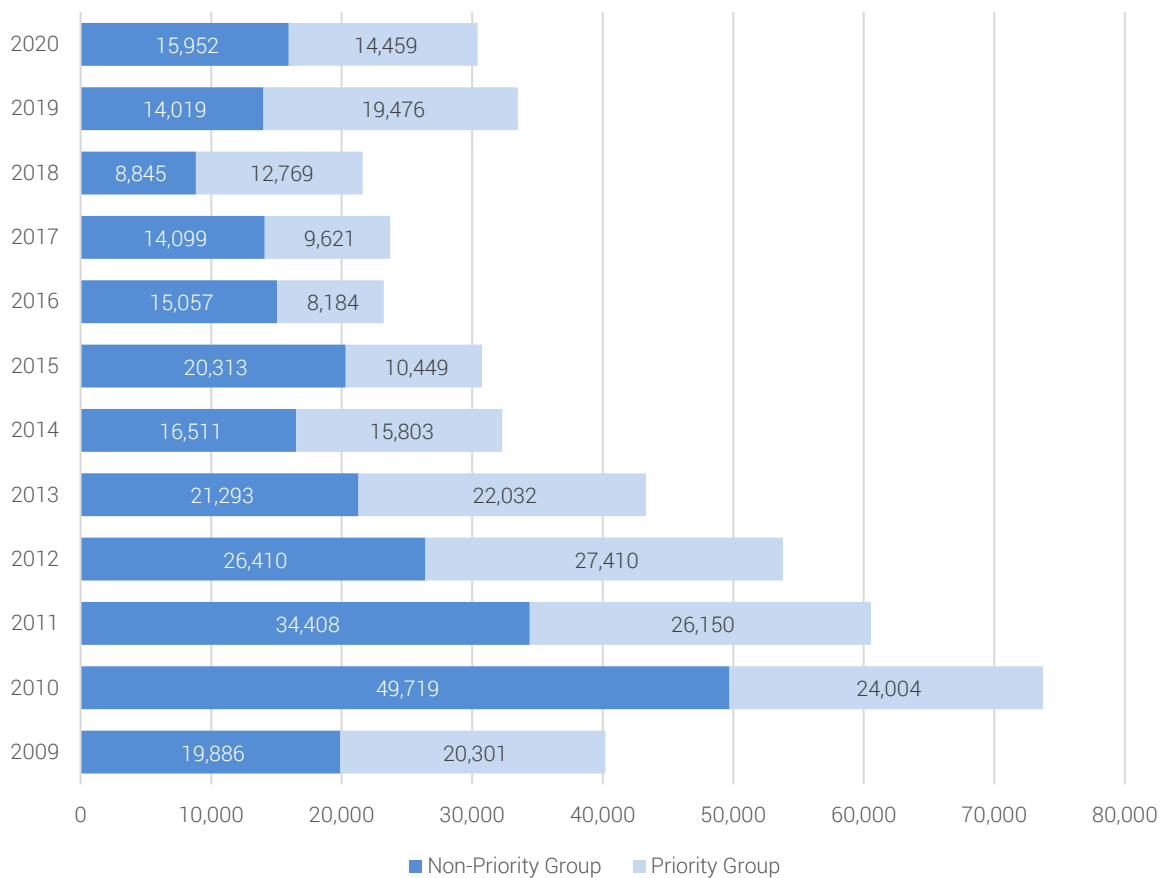


Table 6: Breakdown of benefitting households and businesses, by nature of tenure

	Owner-occupied	Private rental	Public rental	Commercial
2020	18,990	6,180	2,926	2,315
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	311,473	92,460	45,845	17,392

Compliance outcomes

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, based on issues that were identified and considered possibly medium to high risk throughout the 2020.

In 2020, those desktop audits revealed minimal non-compliant energy efficiency activity and audit data. The Commission acknowledges the efforts made by energy retailers under REES to maintain ongoing compliance with scheme requirements.

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: <https://www.escosa.sa.gov.au/industry/rees/regulatory-reporting>.

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 www.escosa.sa.gov.au.

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