



Retailer Energy Productivity Scheme Annual Report 2021



Key REPS outcomes in 2021

- ▶ The overall annual REPS targets were achieved and all obliged retailers met their individual targets.
- ▶ Approximately 2.4 million GJ of deemed energy savings were delivered to 31,813 households and businesses.
- ▶ Approximately 538,989 GJ of deemed energy savings from 22,903 activities were delivered to priority group households (for example, residential premises in which a person resides who is experiencing hardship or holds an eligible concession or health card).
- ▶ The average cost of activities delivered in 2021 was \$14.42.
- ▶ There appears to be limited indicators of barriers to competition in activity delivery. Cost and reputation have been the primary considerations for the majority retailers in engaging activity providers.

The Retailer Energy Productivity Scheme (**REPS**) is a South Australian Government (**Government**) energy productivity scheme that provides incentives for South Australian households and businesses. The objective of the REPS is to improve energy productivity for households, businesses and the broader energy system, with a focus on low-income households. It does this through establishing energy productivity targets to be met by electricity and gas retailers through the delivery of energy productivity activities to South Australian households and businesses.

There is a diverse range of approved energy productivity activities, from the installation of LED lamps to project impact assessment of a commercial or industrial site¹. Retailers provide incentives for households or businesses to undertake certain activities which may include a discount on services, free products or products up to a certain value, a cash rebate or vouchers, however some activities may require a minimum co-payment.

The REPS was introduced on 1 January 2021 by the South Australian Government to replace the Retailer Energy Efficiency Scheme (**REES**).

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

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

Further information on the 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/industry/reps/overview/reps.

¹ The full list of current REPS activities can be viewed on the Commission website - <https://www.escosa.sa.gov.au/industry/reps/activities/reps-activities>

REPS targets and achievement

This section sets out achievements against the targets for overall annual energy productivity, priority group households and residential households.

Those targets are measured in gigajoules² (GJ) which are met by delivering activities determined by the Minister. For example, the replacement of a non-directional halogen lamp with a Light Emitting Diode (LED) lamp³ in a residential premises is estimated to result in a 'deemed' productivity 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.

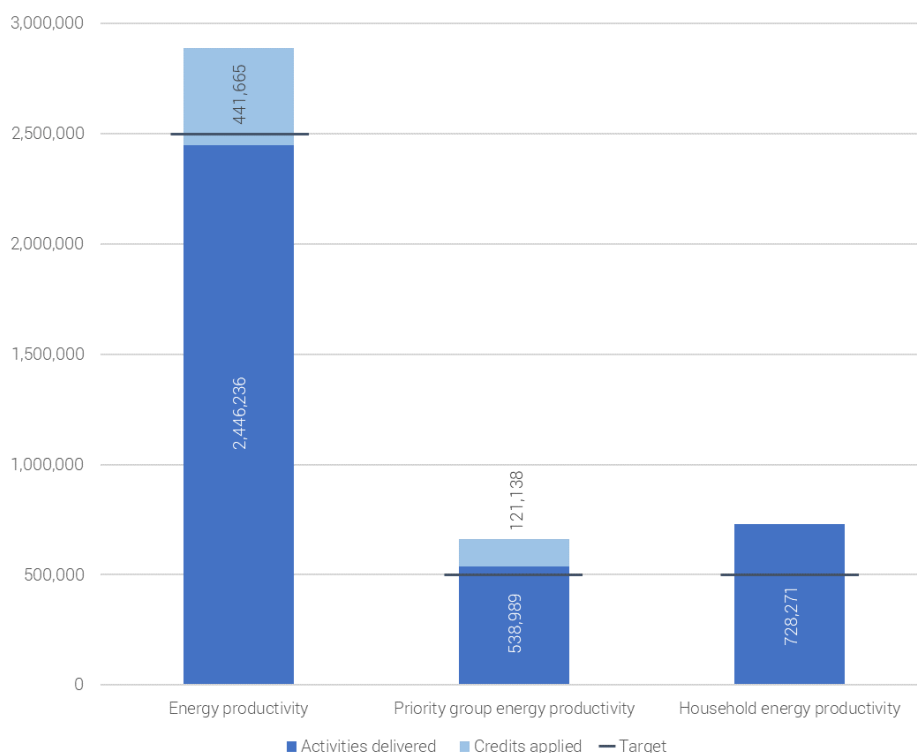
An energy credit is the difference between a retailer's actual achievement in a year and the retailer's target (if the difference is positive). Activities do not become energy credits for purposes of the REPS, and cannot be applied towards a future target, until the reporting year has closed and those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

The 'credits applied' amounts shown in Figure 1:

- ▶ 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).

Further information on the regulatory framework, including REPS targets, energy credits and achievements can be found on the Commission's website.

Figure 1: Deemed energy savings (GJ) from energy productivity activities - actual v target⁴ - 2021



² 1 MWh energy consumption is equivalent to 3.6 GJ

³ Assumed light output of at least 650 lumens with an efficacy of at least 100 lumens per watt

⁴ Note that in Figure 1, the household energy productivity target achievement only includes activities delivered to households not defined as priority group to avoid double counting.

As illustrated in Figure 1, each group reached its 2021 productivity target. However, the Energy Productivity Target would not have been met without credits from 2020 being applied. Table 1 shows the actual data illustrated in Figure 1.

Table 1: REPS targets and achievements (GJ)

Target type	2021 targets	Accepted reports	Credits applied ⁵	Total 2021 achievement
Energy productivity	2,500,000	2,446,236	441,665	2,887,901
Priority group energy productivity	500,000	538,989	121,138	660,126
Household productivity	500,000	728,271	0	728,271

Table 2 shows each individual retailer achievements against their apportioned REPS targets in 2021.

Table 2: Obligated retailer target achievement⁶

Obligated Retailer	Energy productivity	Priority group energy productivity	Household energy productivity
AGL SA	●	●	●
Alinta Energy	●	●	●
Click Energy	●	●	●
EnergyAustralia	●	●	●
Flow Power	●	N/A	N/A
Iberdrola Australia	●	N/A	N/A
Lumo Energy	●	●	●
M2 Energy	●	N/A	N/A
Macquarie	●	N/A	N/A
Momentum Energy	●	N/A	N/A
Origin Energy	●	●	●
Powerdirect	●	●	●
Red Energy	●	●	●
Shell Energy	●	N/A	N/A
Simply Energy	●	●	●
Tango Energy	●	N/A	N/A
Weston Energy	●	N/A	N/A
Zen Energy	●	N/A	N/A

Note: ● = target achieved ● = target not achieved

⁵ Retailers with an obligation under the REPS in 2021 were permitted by the Minister to bring forward credits (in gigajoules) accrued under REES up to 20 percent of their 2021 energy productivity targets. As there were no household targets in 2021, no household credits were accrued.

⁶ The Regulations stipulate that a target is considered achieved if 90% of the target has been met. Despite this, where there is shortfall of 10% or less, that shortfall amount must be applied to that retailer's target in the following year.

REPS 2021 outcomes

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

The figures provided in this section relate to actual reported energy productivity activities for 2021 and do not include any credits applied from the previous REES.

Figure 2 and 3 show the breakdown of activity by customer type. Commercial activities accounted for 48 percent of all deemed energy savings. However, they only accounted for 6 percent of activities delivered. This indicates commercial activities provide more deemed saving per activity than other activities. At the other end of the scale Priority Group household activities accounted for 72 percent of all activities, but only 22 percent of all deemed energy savings.

Figure 2: Number of activities delivered by customer type

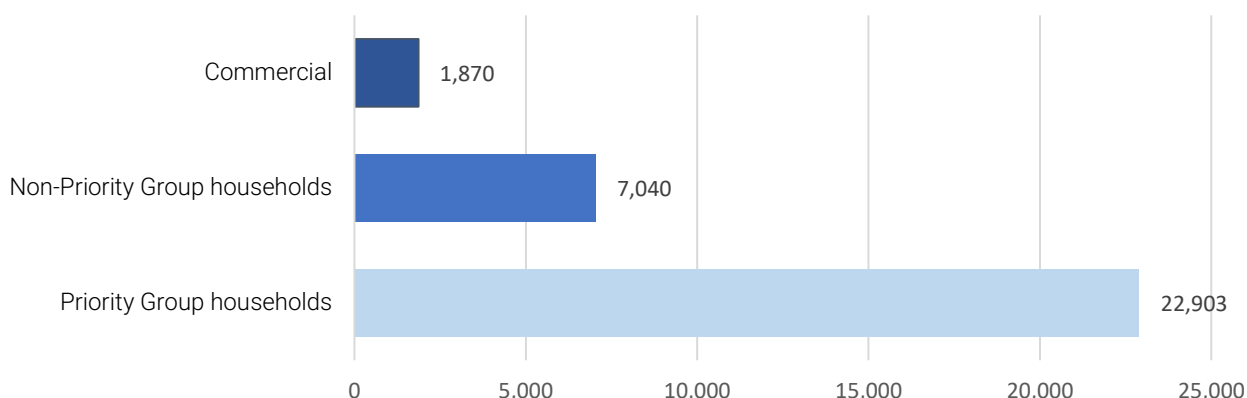


Figure 3: Deemed energy savings (GJ) by customer type

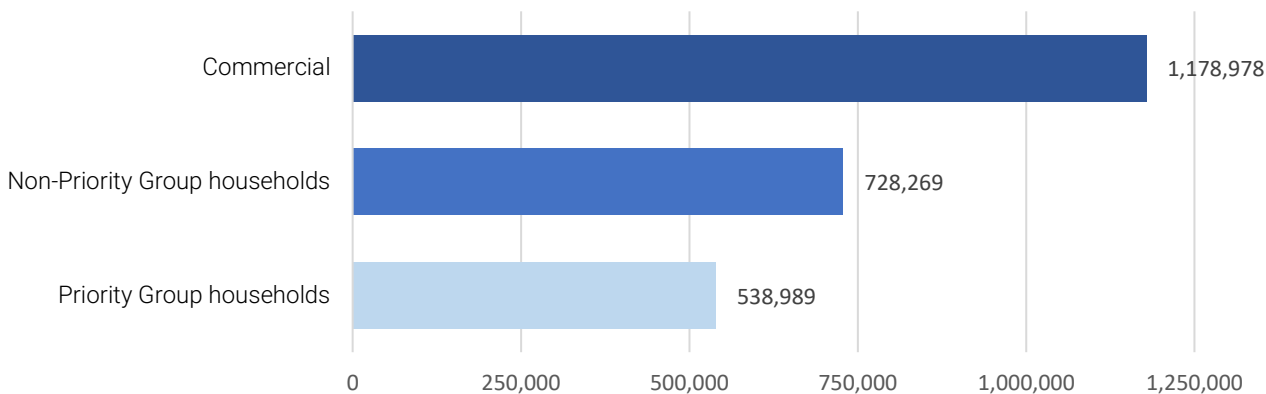


Figure 4 and 5 show the breakdown of activity by region. Metropolitan activities accounted for 77 percent of savings and 81 percent of all activities. The other regions accounted for 17 percent of savings and 16 percent of activities (Regional) and 5 percent of savings and 3 percent of activities (Remote).

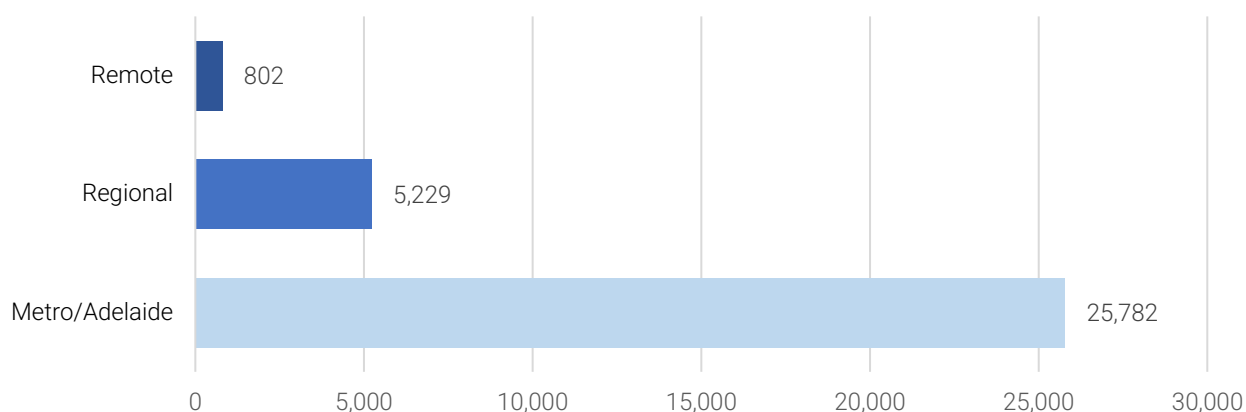
Figure 4: Activities delivered by region (Metro, Regional & Remote⁷)

Figure 5: Deemed savings by region (Metro, Regional & Remote)

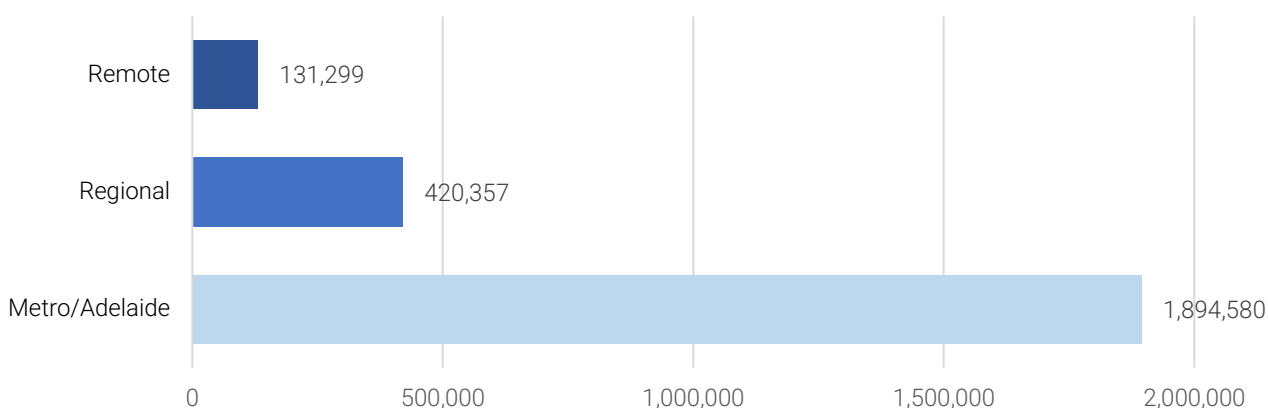


Figure 6 and 7 show REPS activity by tenure type and co-payment.

There were 1,870 REPS activities delivered to commercial premises, achieving a total of approximately 1.2 million GJ of deemed energy savings. Where reported, there were only five commercial activities without co-payments.⁸

Owner-occupied housing contributed to the majority of residential activities (60 percent of total residential activities). Private rental comprised 26 percent of residential activities and public rental 14 percent.

Of residential activities, 26 percent were made with co-payments (where reported). Owner-occupied had the highest rate of reported co-payments, which occurred in 36 percent of activities. Public rental activities had the lowest rate of reported co-payments, occurring in only three percent of activities. For private rentals, 17 percent were reported to occur with co-payments.

⁷ The metro, regional, and remote regions were determined using the Australian Bureau of Statistics' Remoteness Areas which are defined on the basis of relative access to services.

⁸ A co-payment is required to be paid to the installer by the recipient of REPS activities for the goods and services provided, with the payment being a minimum of \$33 (including GST). The co-payment is only required once per premises however recipients of certain activities and priority group households are not required to make a co-payment.

Figure 6: Activities delivered by tenure type

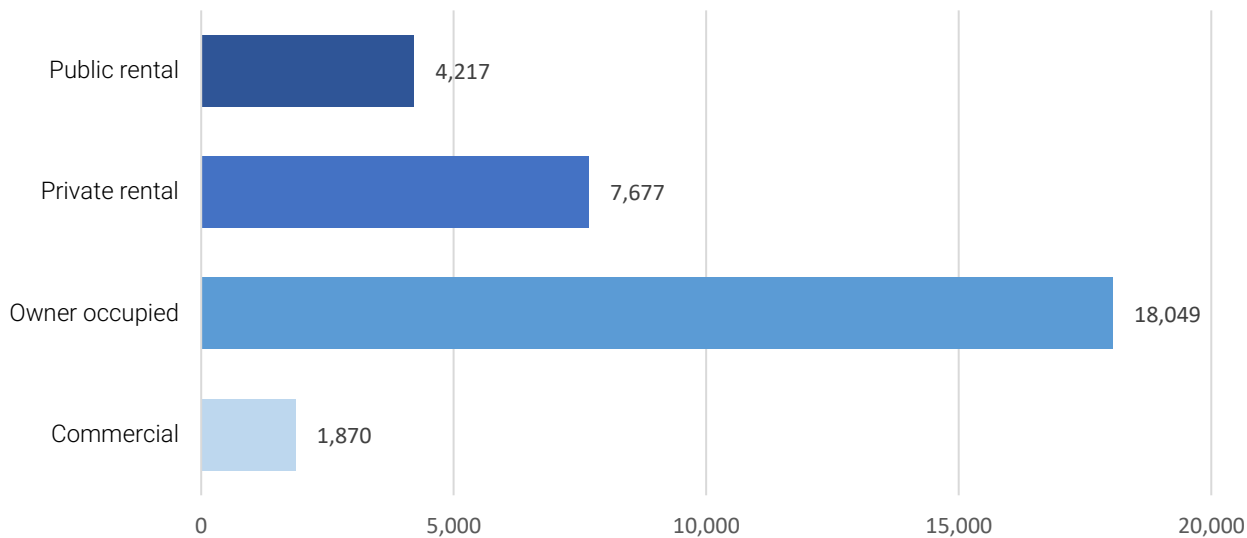


Figure 7: Deemed savings by tenure type

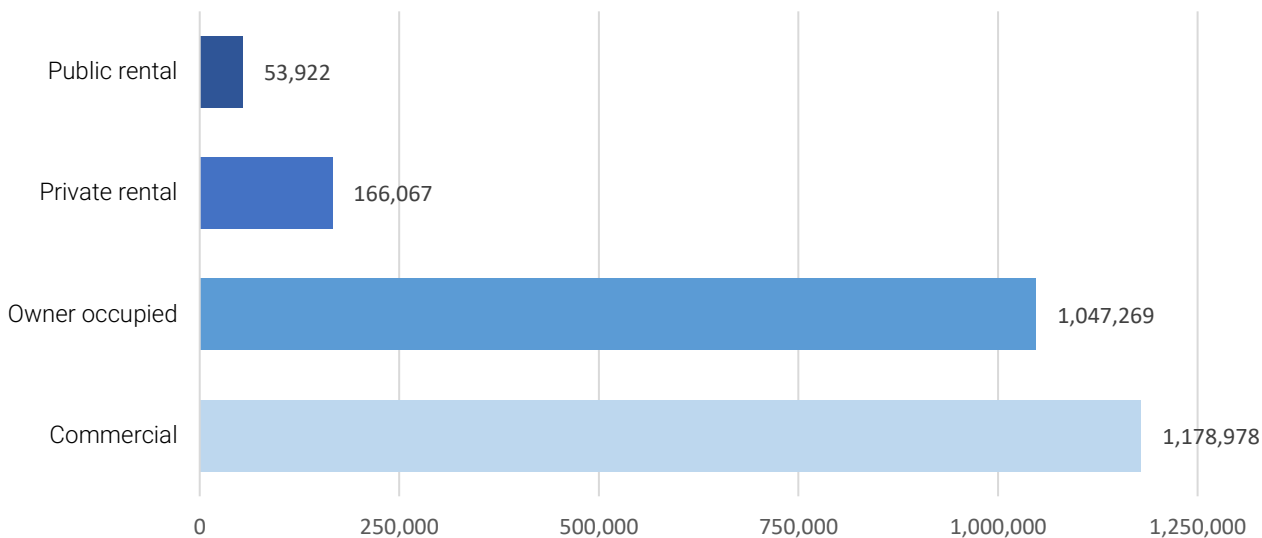


Table 3 shows REPS activities as a percentage of the total activities delivered and the percentage of total deemed savings delivered in 2021. Eighty six percent of deemed savings were delivered through commercial lighting upgrades (45%), installation of efficient new reverse cycle air conditioners (non-ducted) (26%) and replacement or upgrading water heaters (15%).

Retailers delivered 15 of the 29 activities available in 2021 and only one activity delivered of the nine activities not previously available under the REES. Of the 14 activities delivered in 2021 that were previously available under the REES, five had never been delivered under the REES.

Table 3: Activity types delivered in 2021

Activity ⁹	Activities delivered	Percentage of total activities	Deemed savings (GJ)	Percentage of total deemed
Building sealing	26	0%	212	0%
Ceiling insulation	383	1%	68,400	3%
Ceiling insulation top up	12	0%	2,234	0%
Commercial lighting	1,659	5%	1,112,154	45%
Connect battery to virtual power plant	9	0%	879	0%
Purchase clothes drier	279	1%	13,536	1%
Purchase freezer	10	0%	131	0%
Purchase fridge or fridge freezer	179	1%	3,738	0%
Refrigerated display cabinet	4	0%	1,034	0%
Remove secondary fridge or freezer	968	3%	25,429	1%
Residential lighting	12,120	38%	111,339	5%
Reverse cycle A/C (non-ducted)	2,794	9%	627,341	26%
Shower head	6,624	21%	98,691	4%
Standby power controller (TV)	3,774	12%	23,406	1%
Water heater	2,972	9%	357,712	15%
Total	31,813	100%	2,446,236	100%

Cost to deliver the REPS in 2021

To ensure commercial confidentiality of the pricing data submitted by the retailers, the report aggregates retailers and activity prices. Additionally, where activities have been delivered by only two or fewer retailers for the year, the prices of that activity have been excluded from the report to protect confidentiality.

Table 4: Cost (\$, excl GST) per GJ by activity (delivered)

Activity	Minimum	Maximum	Average
Ceiling insulation	12.65	17.92	14.72
Ceiling insulation top up	11.17	15.52	13.41
Commercial lighting	8.50	16.00	11.50
Residential lighting	12.00	16.66	14.33
Reverse cycle A/C (non-ducted)	11.00	16.76	14.30
Shower head	11.17	17.33	13.26
Standby power controller (TV)	12.00	17.16	15.28
Water heater	9.95	16.60	13.00

Table 4 shows cost per GJ (excluding GST) of each delivered activity. The costs vary between activity types, reflecting differences in the associated costs in delivering these activities (for example, technical efforts etc). Some activities are only delivered by a small number of activity providers. This may be due to various market conditions or because of the skills and licensing required to deliver those activities eg. installation of air-

⁹ REPS activities are defined by the Minister by gazette notice. The full list of the current REPS activities and their descriptions can be found on Department for Energy and Mining's website - <https://www.energymining.sa.gov.au/industry/energy-efficiency-and-productivity/retailer-energy-productivity-scheme-reps/reps-activity-specifications>

conditioning systems. Where there were cost outliers, some retailers had explained this was affected by initial set up costs and future activities should become cheaper.

Commercial lighting had an average cost of \$11.50 and delivered 45 percent of deemed savings in 2021.

Table 5 shows cost per GJ (excluding GST) of each activity not delivered and are based on either quotes or internal calculations. Costs ranged \$0 to \$36, though the majority fell within the range of \$10 to \$25. The average estimated cost of activities not delivered was \$15.61.

Some activity types included in Table 4 are also included in Table 5 as that activity had been delivered by some retailers in 2021 and not delivered by other retailers (reported as either a quoted or calculated cost).

Table 5: Cost per GJ (\$, excl GST) by activity (not delivered)

Activity	Minimum	Maximum	Average
Building sealing	12.00	14.75	13.38
Ceiling insulation	13.00	15.40	14.34
Ceiling insulation top up	12.25	15.27	13.90
Clothes drier	13.00	23.00	17.22
Commercial and industrial demand savings	10.20	10.20	10.20
Commercial lighting	9.95	9.95	9.95
Connect A/C to DR Aggregator	10.20	13.50	11.85
Connect battery to virtual power plant	12.00	25.00	18.33
Connect electric vehicle charger to DR Aggregator	23.71	23.71	23.71
Connect Heat pump water heater to DR Aggregator	12.80	13.50	13.03
Connect pool pump to DR Aggregator	12.00	12.80	12.53
Purchase Freezer	13.00	21.00	17.90
Purchase Fridge or fridge freezer	13.00	21.00	17.12
High efficiency pool pump	12.80	19.71	15.03
NABERS building demand savings	10.20	12.80	11.93
Refrigerated display cabinet	10.20	15.00	12.82
Remove secondary fridge or freezer	13.00	23.60	16.31
Residential down lights	12.80	36.00	21.14
Residential floodlights	13.00	14.75	14.14
Residential lighting	11.20	20.00	15.04
Reverse cycle A/C (ducted or multi-split)	12.50	21.71	15.75
Reverse cycle A/C (non-ducted)	10.50	16.50	13.89
Shower head	10.20	29.20	16.10
Standby power controller (IT)	13.30	29.20	17.20
Standby power controller (TV)	12.80	29.20	16.75
Switch to time of use tariff	11.25	29.20	20.23
Switch water heater to solar sponge/off-peak tariff	11.25	11.25	11.25
Water heater	11.25	18.50	13.97

Competition in activity delivery

The Minister has requested that the Commission's annual REPS report cover competition in activity delivery and any identified barriers to competition and the delivery of eligible activities. A key recommendation from the REES Review Report was to include transparency measures to promote greater competition.¹⁰

Data indicates that three of the eight REPS activity providers delivered approximately 84 percent of submitted activities in 2021 (measured in GJ). This is consistent with the market share observed for the previous four years in the REES, noting that market share for all individual providers has fluctuated from year to year.

Given the concentration in activity delivery, retailers were required to report on barriers to competition and the processes used to secure contracts. Retailers reported that activity providers were not required to demonstrate any initial capital investment or certifications to participate in the selection process. While new entrants were considered, most retailers have opted to engage providers who were active in 2020 under the REES and many retailers opted to continue with providers that they had ongoing relationships with. A number of retailers also conducted risk-based assessments in determining the capacity and reliability of providers to deliver the quantity of activities required to meet the retailer's targets.

Concentration of activity among a small number of providers may reflect reputations for quality and reliability. However, there are alternate providers in the market and there has also been new entry and exit of providers over time, with two providers entering the market and two exiting since 2019. New entrants and existing providers with a smaller market share may over time demonstrate a reputation for quality and reliability that can add to competitive pressures in the market.

Overall, there appears to be limited indicators of barriers to competition in activity delivery. Cost and reputation have been the primary considerations for the majority of retailers in engaging activity providers.

Compliance outcomes

Obligated energy retailers are required to submit a Compliance Plan to the Commission each year. All retailers had a Compliance Plan in place for 2021 that complied with the requirements of the REPS Code.

To promote data quality, the REPS 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 REPS transactions reported during the course and at the conclusion of the year, based on issues that were identified and considered possibly medium to high risk throughout 2021.

Activities relating to the installation of water heaters in rental properties and the installation of air-conditioners were a compliance focus during the year due to consumer complaints received. The Commission assisted the resolution of these complaints and conducted a targeted investigation of activities that were lodged, to verify compliance with the REPS requirements. As a result, a number of activities were rejected as they did not meet the requirements of the scheme. Communication was sent to all obligated retailers advising them of the requirements for the installation of water heaters in properties that are either private rental or public housing. The Commission is continuing to monitor these types of activities on an ongoing basis.

To close out the 2021 REPS year, desktop audits were undertaken on a sample of data submitted. A small amount of non-compliant energy productivity activity data was identified, and retailers were given the opportunity to respond to identified non-compliances. The Commission was satisfied with the response by retailers and no activities were rejected for non-compliance in this review. The Commission acknowledges the efforts made by energy retailers under the REPS to maintain ongoing compliance with scheme requirements.

Further information

Further information on the REPS regulatory framework and the complete time series performance data for REPS can be found on the Commission's website at: www.escosa.sa.gov.au/industry/reps/overview/reps.

¹⁰ https://www.energymining.sa.gov.au/_data/assets/pdf_file/0018/670023/2019_REES_Review_Report.pdf