

# RESIDENTIAL ENERGY EFFICIENCY SCHEME ANNUAL REPORT 2013

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Enquiries concerning this report should be addressed to:

Essential Services Commission of South Australia  
GPO Box 2605  
Adelaide SA 5001

Telephone: (08) 8463 4444  
Freecall: 1800 633 592 (SA and mobiles only)  
E-mail: [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au)  
Web: [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)

The Essential Services Commission of South Australia is the independent economic regulator of the electricity, gas, ports, rail and water industries in South Australia. The Commission's primary objective is the *protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services*. For more information, please visit [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au).

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## GLOSSARY

<b>CFL</b>	Compact Fluorescent Lamps
<b>Commission</b>	Essential Services Commission of South Australia, established under the ESC Act
<b>DMITRE</b>	Department for Manufacturing, Innovation, Trade, Resources and Energy
<b>EAT</b>	Energy Audit Target
<b>EEFI</b>	Energy Efficiency Fund Initiative
<b>EGGRT</b>	Electricity Greenhouse Gas Reduction Target
<b>ELEAT</b>	Electricity Licence Energy Audit Target
<b>Electricity Act</b>	<i>Electricity Act 1996</i>
<b>Electricity Regulations</b>	<i>Electricity (General) Regulations 2012</i>
<b>ESC Act</b>	<i>Essential Services Commission Act 2002</i>
<b>Gas Act</b>	<i>Gas Act 1997</i>
<b>Gas Regulations</b>	<i>Gas Regulations 2012</i>
<b>GLEAT</b>	Gas Licence Energy Audit Target
<b>GGGRT</b>	Gas Greenhouse Gas Reduction Target
<b>GGRT</b>	Greenhouse Gas Reduction Target
<b>Minister</b>	Minister for Mineral Resources and Energy
<b>Ministerial Protocol</b>	A REES Protocol set by the Minister for maintaining the list of Energy Efficiency Activities and Reporting Requirements. Available at <a href="http://www.escosa.sa.gov.au/library/081111-REES-ProtocolSetByMinisterForEnergy.pdf">http://www.escosa.sa.gov.au/library/081111-REES-ProtocolSetByMinisterForEnergy.pdf</a>
<b>NECF</b>	National Energy Customer Framework
<b>PGGGRT</b>	Priority Group Greenhouse Gas Reduction Target
<b>Priority Group Household</b>	Those households with eligibility for various Commonwealth and State Government Concessions, as defined in the <i>Electricity and Gas</i>

	<i>Regulations</i> and hardship customer as defined in the REES Code.
<b>REES</b>	Residential Energy Efficiency Scheme
<b>REES Code</b>	Residential Energy Efficiency Scheme Code
<b>REES-R</b>	Retailer File Validation System
<b>REES System</b>	REES Data Management System
<b>SPC</b>	Standby Power Controller
<b>tCO<sub>2</sub>-e</b>	Tonnes of Carbon Dioxide Equivalent
<b>the Regulations</b>	Parts 4 of the <i>Electricity (General) Regulations 2012</i> and <i>Gas Regulations 2012</i>
<b>VEET</b>	Victorian Energy Efficiency Target



# 1. EXECUTIVE SUMMARY

The Residential Energy Efficiency Scheme (REES) requires energy retailers to provide energy audits and energy efficiency activities to South Australian households in accordance with Ministerial targets.

The Minister’s overall targets and achievement of targets for REES in 2013 are set out in Table 1.1 below.

**Table 1.1 – 2013 REES Targets and Achievements**

	<b>2013 TARGET<sup>(1)</sup></b>	<b>2013 ACHIEVEMENT<sup>(2)</sup></b>
Energy audits (number of audits)	5,683	7,635
Greenhouse gas reduction (tCO <sub>2</sub> -e)	335,000	562,153
Priority group greenhouse gas reduction (tCO <sub>2</sub> -e)	117,250 <sup>(3)</sup>	264,200

Notes: (1) Activity and audit targets adjusted for 2012 shortfall carryover.

(2) Achievement includes applied credits accrued in previous year.

(3) 35% of greenhouse gas reduction.

The Minister’s REES targets were all met in 2013. Also, as detailed in Table 1.2 below, all retailers achieved their individual targets.

**Table 1.2 – 2013 Retailer Target Achievements**

<b>PERFORMANCE INDICATOR</b>	<b>ENERGY AUDITS</b>	<b>GREENHOUSE GAS REDUCTION</b>	<b>PRIORITY GROUP GREENHOUSE GAS REDUCTION</b>
 (Achieved)	AGL Alinta Energy EnergyAustralia Lumo Energy Origin Energy Powerdirect Simply Energy	AGL Alinta Energy EnergyAustralia Lumo Energy Origin Energy Powerdirect Simply Energy	AGL Alinta Energy EnergyAustralia Lumo Energy Origin Energy Powerdirect Simply Energy
 (Close ≥ 90%)	Nil	Nil	Nil
 (Failed)	Nil	Nil	Nil

The key observations about REES in 2013 are:

- A total of 7,075 energy audits were undertaken in 2013, 24% more than the 2013 target. Energy retailers applied an additional 560 energy audit credits (earned in prior years).
- The greenhouse gas reductions target was exceeded by 29% (before the application of previous years credits), and there was a similar level of energy efficiency activities undertaken compared to 2012. Many retailers have large credit balances to carry over to 2014 targets.

- 42.5% of total greenhouse gas emission reductions undertaken in 2013 were in priority group households, well exceeding the Ministerial target of 35%.
- Energy efficiency activities in 2013 were concentrated in the lower-cost activity categories, such as standby power controllers (**SPCs**), showerheads and light globes. SPCs accounted for nearly 70% of emissions reductions in 2013.
- There was a 17% drop in the number of benefitting premises in 2013, but a 20% increase in the average emissions savings delivered per household (from 7.6 tCO<sub>2</sub>-e in 2012 to 9.15 tCO<sub>2</sub>-e in 2013).

Based on the 2013 outcomes, the expectation is that retailers will be able to achieve their 2014 targets. Accordingly, there is the potential for activity levels to be markedly lower during 2014, especially for those retailers that have carried over large numbers of credits from 2013. The Government has announced that REES will continue for a further six years, until 2020.<sup>1</sup>

REES time series data from 2009 to 2013 is available in an Excel-based spreadsheet on the Commission's website.<sup>2</sup>

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<sup>1</sup> See Review Report of REES, October 2013 available at [http://www.sa.gov.au/data/assets/pdf\\_file/0004/36319/REES-Review-Report.pdf](http://www.sa.gov.au/data/assets/pdf_file/0004/36319/REES-Review-Report.pdf). DMITRE also recommends that retailers be able to carry over credits to 2015.

<sup>2</sup> This REES time series data is available on the Commission's website at <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-annual-reports.aspx>

## 2. INTRODUCTION

The Residential Energy Efficiency Scheme (**REES**) was established by the South Australian Government in 2008 and commenced on 1 January 2009. REES is given statutory effect through Parts 4 of the Electricity (General) Regulations 2012 and Gas Regulations 2012 (the **Regulations**).

REES requires energy retailers to provide energy audits and energy efficiency activities to South Australian households in accordance with Ministerial targets. All energy audits and 35% of greenhouse gas reductions are required to be delivered to priority group households (refer to section 2.2 for more detail).

### 2.1 Role of the Commission

The Minister for Mineral Resources and Energy (**Minister**) is responsible for setting the overall policy framework for REES, including fixing annual greenhouse gas reduction and energy audit targets. The Essential Services Commission of South Australia<sup>3</sup> (**Commission**) administers the scheme within the parameters defined by the Government's policy framework and in accordance with the Regulations and the provisions of the Essential Services Commission Act 2002 (**ESC Act**).

During 2013, each retailer with 5,000 or more South Australian residential electricity or gas customers was obliged to participate in REES as a direct obligation under section 63AB(1)(b) of the *Electricity Act 1996*.

The Commission has functions and powers necessary to give effect to REES including:

- ▲ administering REES;
- ▲ monitoring energy retailer compliance with REES; and
- ▲ reporting to the Minister annually in relation to the operation of REES, and from time to time in relation to any other matter with respect to REES.

The rules to be followed by retailers in meeting their obligations under REES are set out in the Residential Energy Efficiency Scheme Code (**REES Code**).<sup>4</sup>

In order to carry out its functions, the Commission has established internal systems, processes and controls; these are described in section 5 of this report.

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<sup>3</sup> The Commission is established under the Essential Services Commission Act 2002 (ESC Act), as the independent economic regulator of essential services in South Australia. The primary objective of the Commission is to protect the long term interests of South Australian consumers of specified essential services with regard to the price, quality and reliability of those services.

<sup>4</sup> Essential Services Commission of South Australia, Residential Energy Efficiency Scheme Code, REESC/06, February 2013 (as in force in 2013); available at [http://www.escosa.sa.gov.au/library/130131-REESCode-REESC\\_06.pdf](http://www.escosa.sa.gov.au/library/130131-REESCode-REESC_06.pdf).

## 2.2 *Purpose of this Report*

The Commission has prepared this 2013 Annual Report in accordance with its reporting obligations under the Regulations in order to advise the Minister on REES outcomes, to facilitate ongoing evaluation of REES and to inform future target setting.<sup>5</sup>

Information and supporting commentary to satisfy the requirements of the REES Ministerial Protocol and the Regulations is provided in this report and, to the best of the Commission's knowledge and belief, is accurate at the time of publication.

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<sup>5</sup> This obligation is in the form of a Ministerial Protocol which can be found on the Commission's website at <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-regulatory-documents.aspx>.

### 3. STRUCTURE OF THE SCHEME

Under REES, energy retailers with 5,000 or more South Australian residential electricity or gas customers are obliged to provide to South Australian households a specified number of energy audits and sufficient energy efficiency activities to meet a set greenhouse gas reduction target.<sup>6</sup> The Minister sets the annual overall REES targets.

The Commission determines the allocation of the annual targets amongst the obliged retailers. The allocation methodology is specified in the Regulations separately for energy audit and greenhouse gas reduction targets. The targets for obliged retailers are detailed on the Commission's website and in the REES data series.

**The value of each activity is deemed, in terms of greenhouse gas reduction, in the sense that REES activities undertaken are credited with the full value of future estimated energy savings at the time the activity is undertaken. Accordingly, the scheme's annual greenhouse gas reductions outcome does not mean that greenhouse savings at that level were actually achieved within that year.**

Retailers can elect to provide the energy efficiency activities and/or energy audits themselves or to engage the services of third-party contractors to provide the activities on their behalf. Obligated retailers have generally chosen to engage third party providers. The Commission has emphasised to retailers that, while the provision of energy efficiency activities and energy audits may be "outsourced", REES obligations continue to rest with obliged retailers, not with their contractors.

Further, it is for retailers to determine how, when, and to which customers energy efficiency activities and energy audits are offered in order to achieve REES targets. Retailers can also determine whether activities are provided free of charge to the recipient or whether recipients are asked to make a co-payment. Therefore, while many elements of REES are quite prescriptive, retailers have significant discretion as to how they achieve targets.

The second stage of REES commenced on 1 January 2012 and, under the Regulations, the scheme will operate until 31 December 2014.<sup>7</sup> On 29 November 2013, the Minister announced that the Government will extend the scheme to 2020 and expand it to allow energy retailers to meet targets by delivering energy efficiency activities to the business sector.<sup>8</sup>

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<sup>6</sup> Prior to the introduction of the National Energy Customer Framework (NECF) in South Australia (1 February 2013), this requirement was set out as a condition of retail licences. Under NECF, this is now a direct obligation under section 63AB(1)(b) of the Electricity Act 1996.

<sup>7</sup> In accordance with the Regulations, the Minister commenced a review of REES in 2012, see <http://www.sa.gov.au/topics/water-energy-and-environment/energy/rebates-concessions-and-incentives/residential-energy-efficiency-scheme-rees#title3>

<sup>8</sup> See [http://www.premier.sa.gov.au/images/news\\_releases/13\\_11Nov/reesextension.pdf](http://www.premier.sa.gov.au/images/news_releases/13_11Nov/reesextension.pdf)

### 3.1 Obligated Retailers for 2013

The following seven retailers were obligated retailers for 2013:

- AGL SA;
- Origin Energy;
- EnergyAustralia<sup>9</sup>;
- Simply Energy;
- Lumo Energy;
- Powerdirect (a wholly owned subsidiary of AGL); and
- Alinta Energy.

The first four of these retailers had REES obligations relating to both electricity and gas retailing, while the remaining three had REES obligations relating to electricity retailing only.

### 3.2 Priority Group Households

Consistent with the Government's stated policy objective of assisting low-income consumers, REES requires that all energy audits and a specified percentage of the greenhouse gas reductions target (in any year) must be provided to priority group households.

The Regulations define priority group households; the category generally covers those households in which a person with a recognised concession card resides. The Commission has power to determine additional categories of priority group customers. It has identified those participating in a licensed energy retailer's customer hardship program as an additional class of priority group household for the purposes of REES.

For 2013, the Minister set the priority group greenhouse gas reduction target at a rate of 35% of the greenhouse gas reduction target.

### 3.3 Energy Audits

The Minister establishes the specification for the conduct of energy audits.<sup>10</sup> Only those audits which meet the specification in full can be counted towards the fulfilment of an energy audit target.

Energy audits may only be provided to defined priority group households and are aimed at assessing current energy use practices, comparing these to energy efficient practices and identifying practical ways to enhance energy efficiency within the household.

### 3.4 Energy Efficiency Activities

The list of REES activities that applied for 2013 is detailed in the text box below.<sup>11</sup> The REES Code includes the detailed specification and deemed greenhouse gas emission reduction

<sup>9</sup> TRUenergy Pty Ltd prior to 14 November 2012.

<sup>10</sup> SA Government Gazette, 1 December 2011; available at [http://www.governmentgazette.sa.gov.au/2011/december/2011\\_081.pdf](http://www.governmentgazette.sa.gov.au/2011/december/2011_081.pdf) and 15 December 2011, [http://www.governmentgazette.sa.gov.au/2011/december/2011\\_084.pdf](http://www.governmentgazette.sa.gov.au/2011/december/2011_084.pdf) for REES Stage 2 requirements

<sup>11</sup> Following a call for new Energy Efficiency Activities in June 2012, the Commission added Installation of Enhanced Air Conditioning Ductwork System to the list of approved activities – effective from 3 January 2013.

(expressed in units of tCO<sub>2</sub>-e) for each of the allowed REES activities.<sup>12</sup> The REES Ministerial Protocol sets out the key principles which the Commission must have regard to when reviewing energy efficiency activities.<sup>13</sup>

Unlike energy audits, energy efficiency activities may be provided to any South Australian household. As is the case with energy audits, an energy efficiency activity may only count towards the satisfaction of a greenhouse gas reduction target, to the extent that the particular activity meets the specification for that energy efficiency activity.

### List of Approved REES Activities in 2013

Minimum specifications relevant to the conduct of each individual energy efficiency activity are also listed in detail in schedule 4 of the REES Code.<sup>14</sup> The list of approved activities operating during 2013 was:

- ▲ Showerheads - replace an inefficient showerhead with an efficient showerhead;
- ▲ Ceiling Insulation - install ceiling insulation where no insulation has previously been in place;
- ▲ Draught Proofing - install draught proofing products;
- ▲ Disposal of Secondary Refrigerators and Freezers - remove and destroy a secondary refrigerator or freezer;
- ▲ Install Compact Fluorescent Lamps (CFLs) - replace an incandescent or halogen lamp with a compact fluorescent lamp;
- ▲ Install Efficient Extra Low Voltage Down Lights – replace an existing lamp with a more efficient alternative;
- ▲ Upgrade Ductwork - install insulated ductwork of higher than standard to a ducted reverse cycle air conditioner or gas central heater;
- ▲ Upgrade Heating/Cooling System (Non-Ducted) – install upgraded reverse cycle air conditioner or gas room heater;
- ▲ Water Heaters - install or replace a water heater with a water heater of specified type;
- ▲ Install Standby Power Controllers – Audio Visual (AV) or Information Technology (IT)– install a standby power controller to automatically reduce standby power consumption of AV and IT equipment;
- ▲ High Efficiency Pool Pumps – Install upgraded high energy efficient pool pump; and
- ▲ Installation of Enhanced Air Conditioning Ductwork System – replacement of an existing flexible ductwork system for a reverse cycle air-conditioner with a new flexible ductwork system (including all fittings) – From 3 January 2013.

The deemed greenhouse gas reduction values which apply for each sub-activity within the broad classes described above are detailed in the REES Code.

<sup>12</sup> Essential Services Commission of South Australia, *REES Code (REESC/07)*; available at <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-regulatory-documents.aspx>.

<sup>13</sup> Available at <http://www.escosa.sa.gov.au/library/081111-REES-ProtocolSetByMinisterForEnergy.pdf>

<sup>14</sup> Refer REESC/06 as in force during the 2013 REES year.

## 4. REES TARGETS AND ACHIEVEMENTS IN 2013

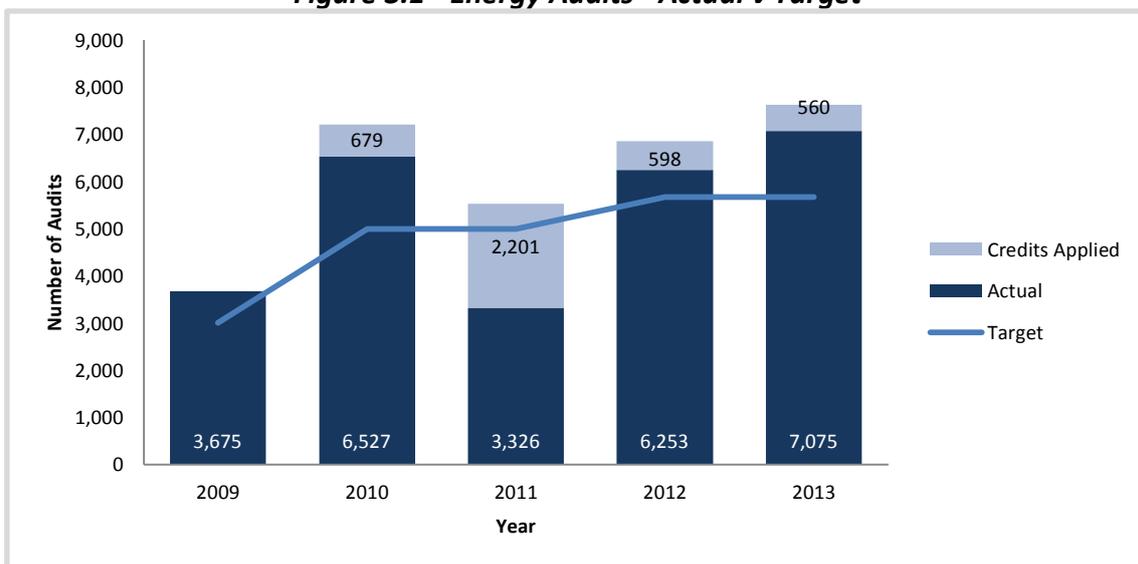
This section sets out achievement against the 2013 targets for energy audits, greenhouse gas reduction and priority group greenhouse gas reduction.<sup>15</sup>

### 4.1 2013 Targets and Achievements

In aggregate, all targets set by the Minister were achieved for 2013.<sup>16</sup> Some retailers applied credits from previous years' overachievement to assist in meeting individual targets for 2013.

Achievement against the REES targets for energy audits, greenhouse gas reduction and priority group greenhouse gas reduction for 2013 is set out in Figures 3.1-3.3 below.

**Figure 3.1 - Energy Audits - Actual v Target**



A total of 7,075 energy audits were undertaken in 2013 (see Figure 3.1), exceeding the target of 5,683 energy audits<sup>17</sup> by 24%. When applied credits are included, the energy audit target was exceeded by 34%. All retailers met their 2013 REES energy audit targets.

Figure 3.2 illustrates the deemed greenhouse gas reductions (tCO<sub>2</sub>-e) achieved in relation to the target for each year of REES. In 2013, retailers undertook a high volume of activity; as a result the overall target was exceeded by 29% (before the application of previous year's credits). When applied credits are included, the greenhouse gas reduction target was exceeded by 68%. All retailers met their 2013 energy efficiency activities greenhouse gas reduction targets. Some retailers have banked large numbers of credits to be used against future year targets.<sup>18</sup>

<sup>15</sup> For annual reports relating to previous REES years refer: <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-annual-reports.aspx>.

<sup>16</sup> Including carryover of shortfalls from 2012. The actual targets for a given year may be adjusted for carryover of unmet targets for some retailers in a prior year.

<sup>17</sup> Adjusted Ministerial target including carryover of shortfalls from 2012.

<sup>18</sup> Banked credits from any REES year are undifferentiated in terms of whether they apply to an electricity or gas target. It is not the Commission's role to assume how an obliged retailer may wish to apply any 'credits' earned in a given REES year to future years of the scheme. Nevertheless, the Commission encourages retailers to apply all credits in the following year of achievement as this shows an accurate estimate of their progress towards the next target.

**Figure 3.2 - Energy Efficiency Activities - Actual v Target (tCO<sub>2</sub>-e)**

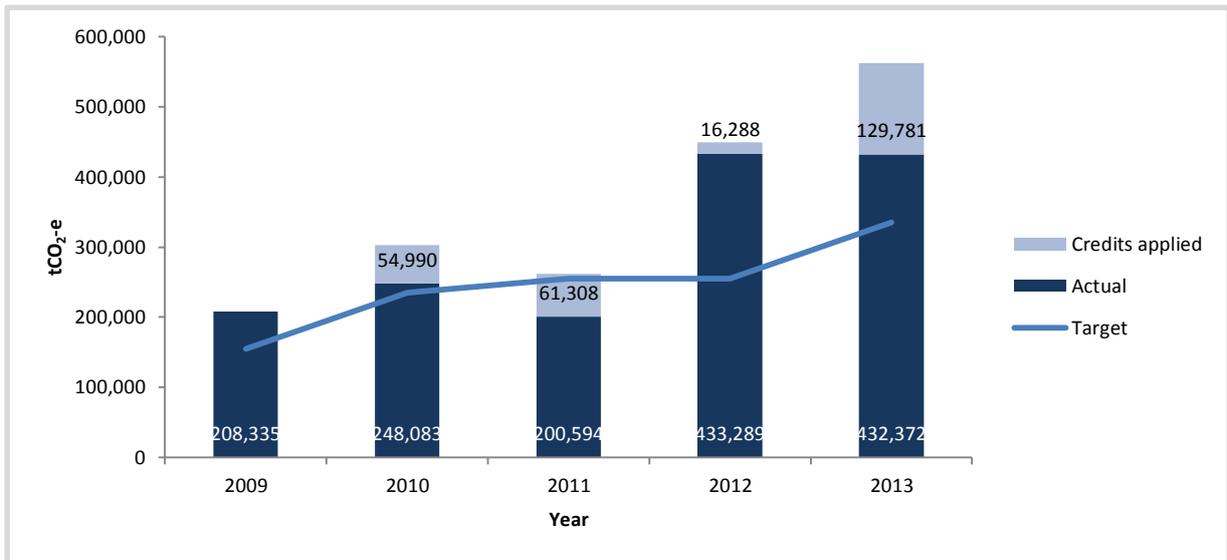
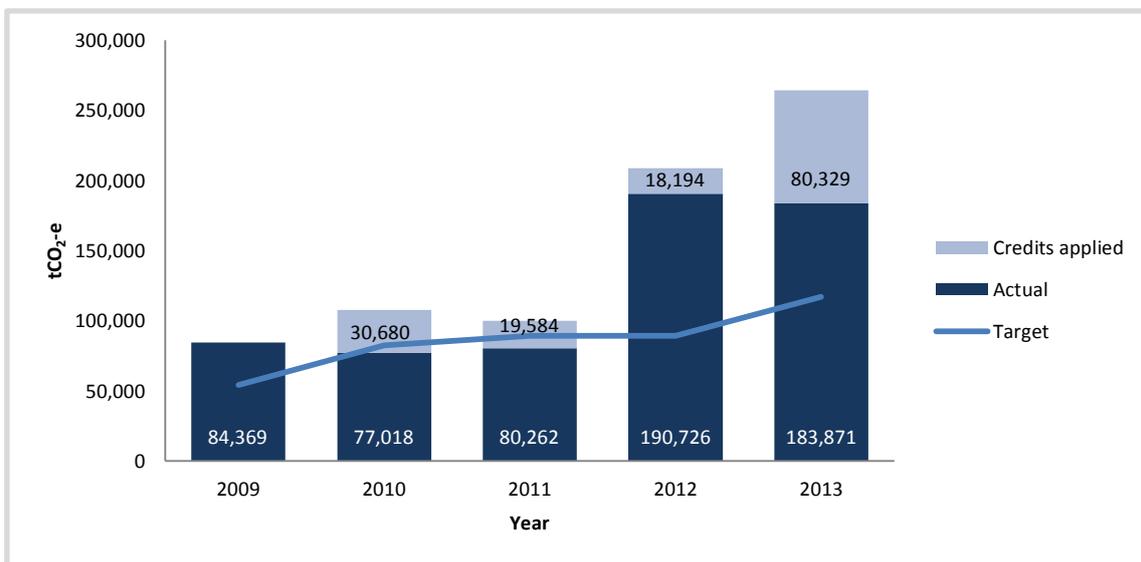


Figure 3.3 illustrates the tCO<sub>2</sub>-e achieved each year in relation to the priority group target. The priority group target was exceeded by 57% (before the application of previous year's credits). Of the total amount of greenhouse gas emission reduction undertaken during 2013 (432,372 tCO<sub>2</sub>-e), 42.5% was provided to priority group households. When applied credits are included, the priority group target was exceeded by 125%. All retailers met their priority group greenhouse gas reduction targets in 2013.

**Figure 3.3 - Priority Group Energy Efficiency Activities - Actual v Target (tCO<sub>2</sub>-e)**



Further details on the overall targets and achievements can be found in the REES time series data.

## 5. ANALYSIS OF OUTCOMES IN 2013

This section analyses the distribution of activities and audits undertaken in 2013, and the households benefitting from REES activities and audits.<sup>19</sup> Figures provided in this section of the report relate to actual reported activities and audits for the relevant REES year and do not include any credits applied from previous REES years.<sup>20</sup>

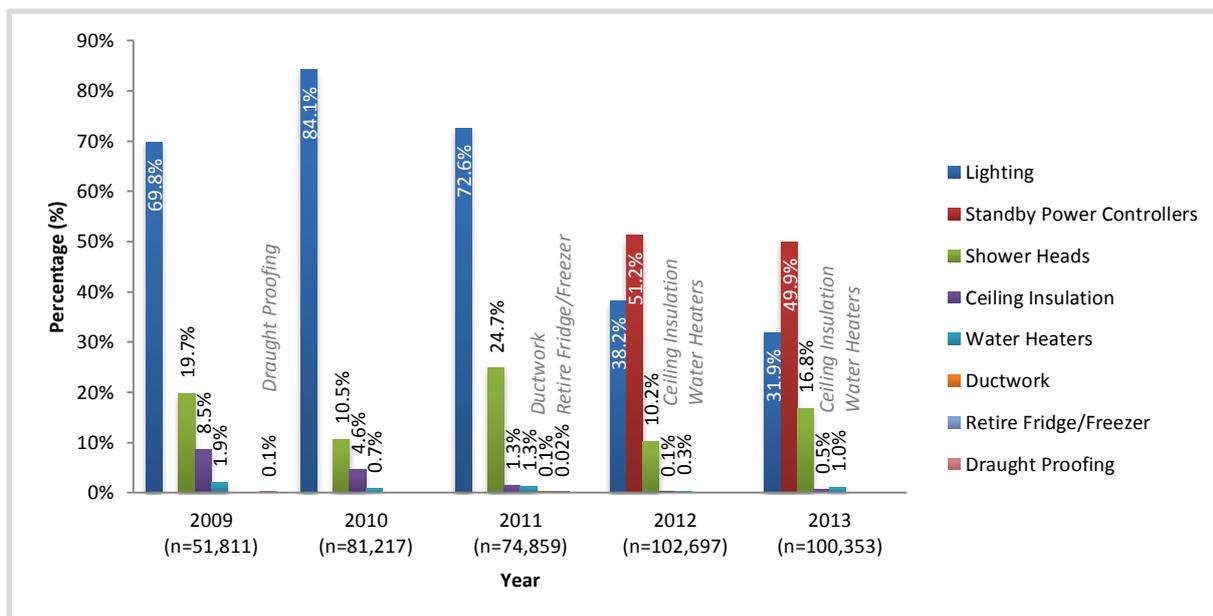
### 5.1 Energy Efficiency Activities

In 2013, 100,353 energy efficiency activities were delivered to South Australian households. For the purposes of this report, 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.

#### 5.1.1 Energy Efficiency Activities by Type

Of the 13 approved activities (outlined in section 2.4), seven were utilised during 2013.<sup>21</sup> Installation of standby power controllers was the major activity undertaken, representing 49.9% of activities (Figure 4.1).

**Figure 4.1 - Energy Efficiency Activities (Number and Type of Activities)**



The number of lighting activities remains high, representing 31.9% of activities undertaken in 2013, although the importance of lighting activities in achieving targets has diminished over time – noting that only CFLs have been undertaken from the available lighting activities.

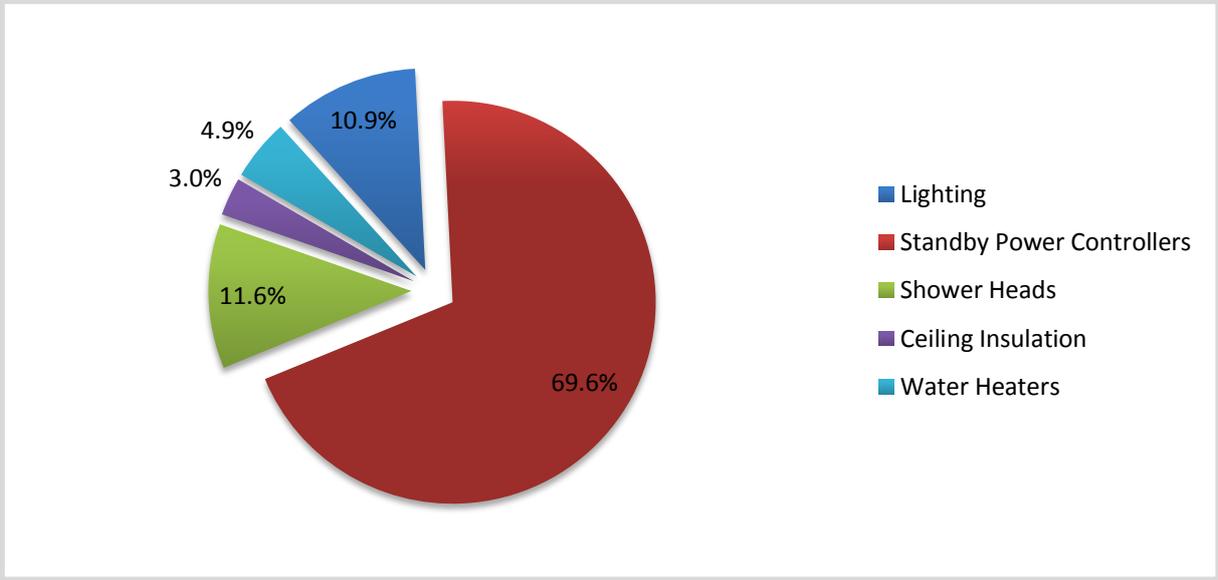
<sup>19</sup> The information presented in this section fulfils the Commission’s reporting requirements as outlined in the Ministerial Protocol.

<sup>20</sup> Note 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.

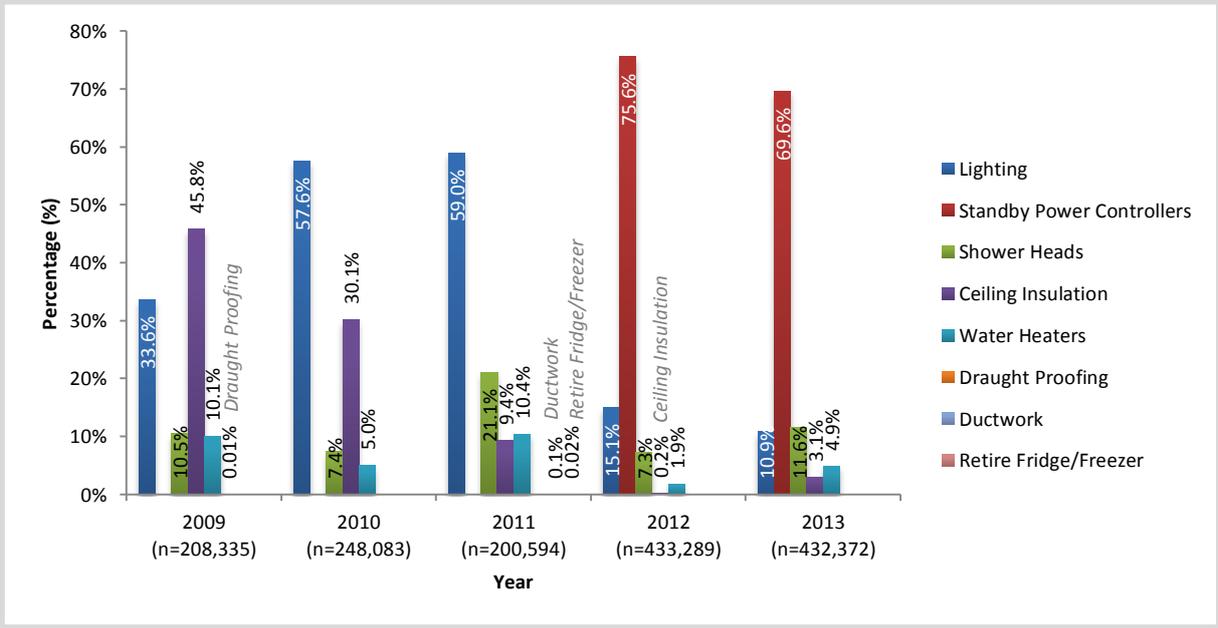
<sup>21</sup> These seven activities cover Standby Power Controllers (AV & IT), Lighting (CFL replacement pre- and post- 1 January 2012), Showerhead replacement, Water Heaters and Ceiling Insulation, i.e. SPCs and Lighting each contain two activities. Refer REES time series data for a detailed breakdown.

When considered in terms of deemed greenhouse gas emission reductions, installation of SPCs also had the largest contribution towards the target (69.6%). Showerheads activities increased in 2013, with the second largest contribution towards deemed greenhouse gas emission reductions at 11.6% (Figures 4.2a and 4.2b).

**Figure 4.2a - Energy Efficiency Activities 2013 (tCO<sub>2</sub>-e)**



**Figure 4.2b - Energy Efficiency Activities (tCO<sub>2</sub>-e)**



The Commission notes that the deeming value for SPCs was changed at the conclusion of 2013. That change, which lowered the applicable deeming values, was based on changes to the equivalent deeming values applied under the Victorian Energy Efficiency Target (VEET) scheme and is consistent with adopting a national approach. This change did not impact on 2013 results.

It should be noted that all SPCs installed under REES have been subjected to field trials to determine potential savings. Under the VEET scheme process, such field trial results are normalised to account for variation in the appliance use of trial participants compared to the average appliance penetration and usage in homes. A review of the key variables that informed the normalisation process (e.g. average number of SPCs installed in homes) led to the deeming value change. Consequently, the deemed value changes were made to reflect actual use of the devices, something that could only be confirmed with experience. As with the adoption of any new technology a proper process involves field testing, making best estimate of potential savings, checking savings being achieved in practice and then revising deemed values if required.

Whilst the original deeming value applied was adopted in the process of setting REES annual targets (and the out-turn number of SPCs delivered to customers was also consistent with the assumptions used in target setting), the change in deeming values does have some impacts on the scheme. In particular, the amount of emission reductions delivered to customers will have been less than the deemed amount (to the extent of the difference between the original deeming value estimated and the new best-estimates applying to SPCs from January 2014). Ultimately, the Commission set the original value based on the best information available to it from Victoria prior to 2012; the update to those best estimates highlights the importance of ensuring that deeming values are rigorously assessed.

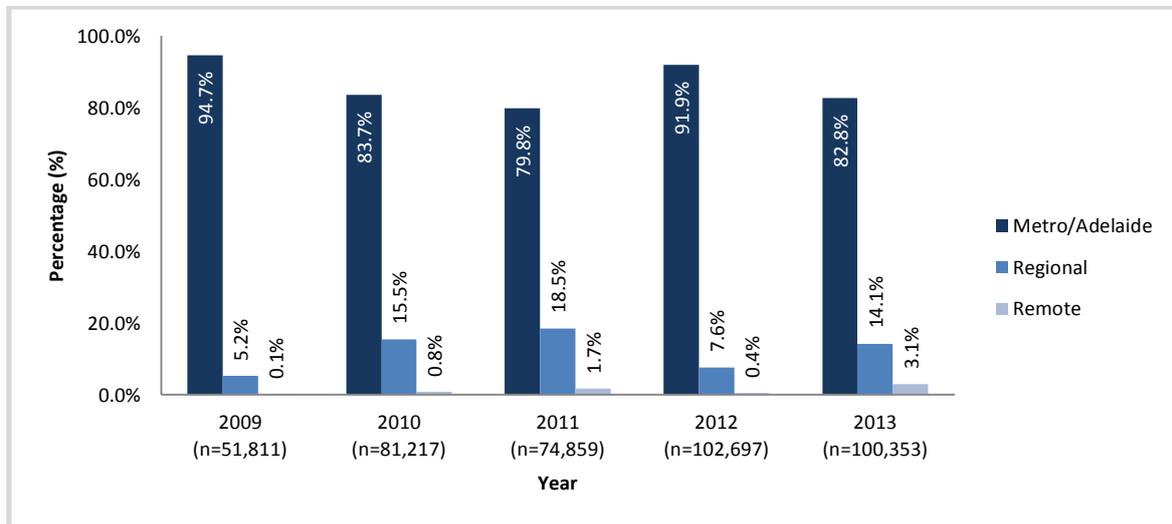
The average abatement in 2013 was 4.3 tCO<sub>2</sub>-e per activity compared to 2.6 tCO<sub>2</sub>-e in 2011, prior to the introduction of SPCs. The increase in tCO<sub>2</sub>-e abatement per activity is driven to a large extent by the uptake of SPCs in 2012 and 2013.

The REES time series data includes further details about the total number of activities undertaken and the number of devices/products installed in 2013 and in each REES year.

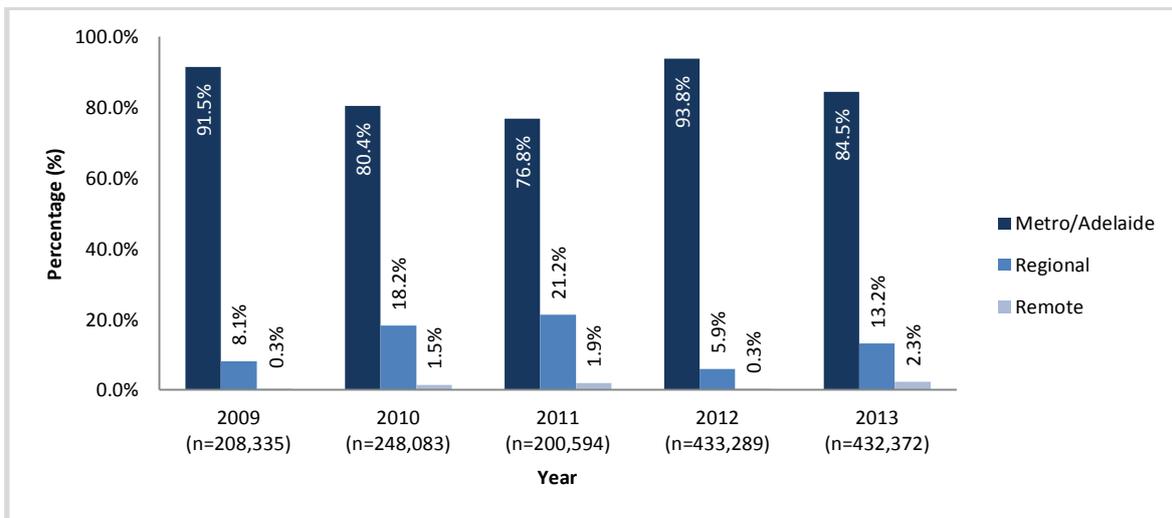
### 5.1.2 Energy Efficiency Activities by Household Location

Activity information received from obliged retailers has been categorised into three locations - metro/near Adelaide, regional and remote.<sup>22</sup> The number of activities undertaken in each of these categories is outlined in Figure 4.3.

**Figure 4.3 – Location of Energy Efficiency Activities (Number of Activities)**



**Figure 4.4 – Location of Energy Efficiency Activities (tCO<sub>2</sub>-e)**



The proportion of activities undertaken in the metro/near Adelaide area in 2013 was lower than in 2012. This change was largely driven by the introduction of SPCs as an approved activity in 2012. The Commission has observed that new activities tend to be rolled out in metropolitan areas first (as observed with SPCs in 2012), before servicing regional and remote areas, as some metropolitan areas become saturated with REES activities. As shown in Figures 4.3 and 4.4, a similar trend was witnessed between 2009 and 2011, when insulation and lighting products were the key REES activities being undertaken.

Energy efficiency activities performed data, segmented by postcode, is available in the time series data.

<sup>22</sup> Refer to the relevant REES gazettal - pp. 4964-4989 of the South Australian Government Gazette of 30 October 2008, which lists the postcodes applying to each region.

### 5.1.3 Energy Efficiency Activities by Household Type

**Figure 4.5 - Energy Efficiency Activities (tCO<sub>2</sub>-e) - Priority Group v Non-Priority Group Households**

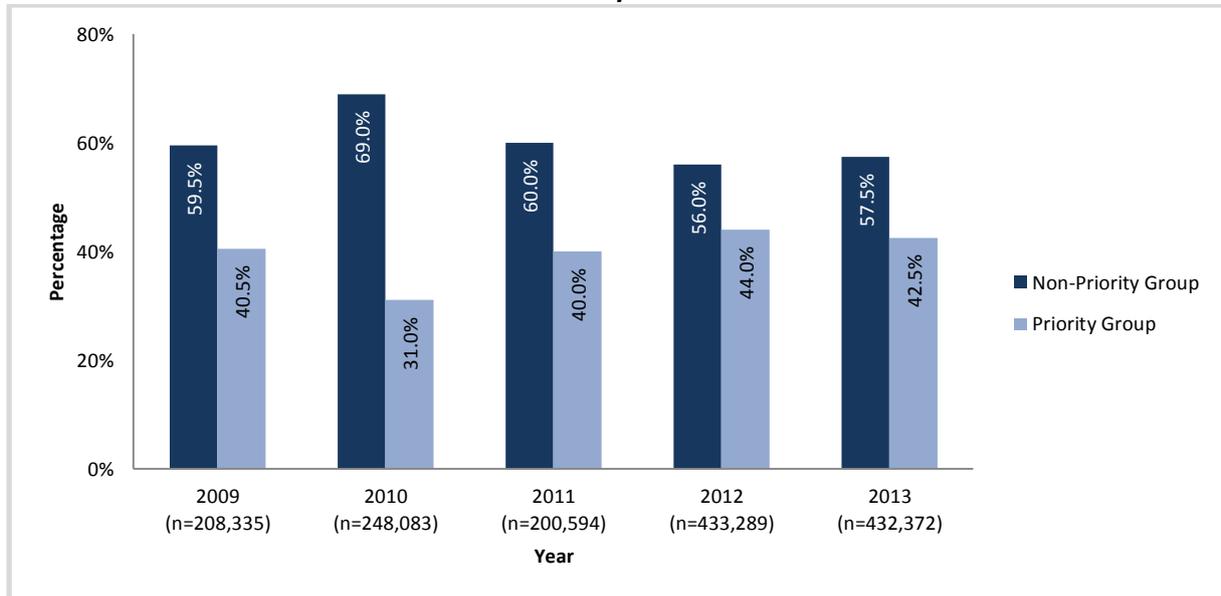
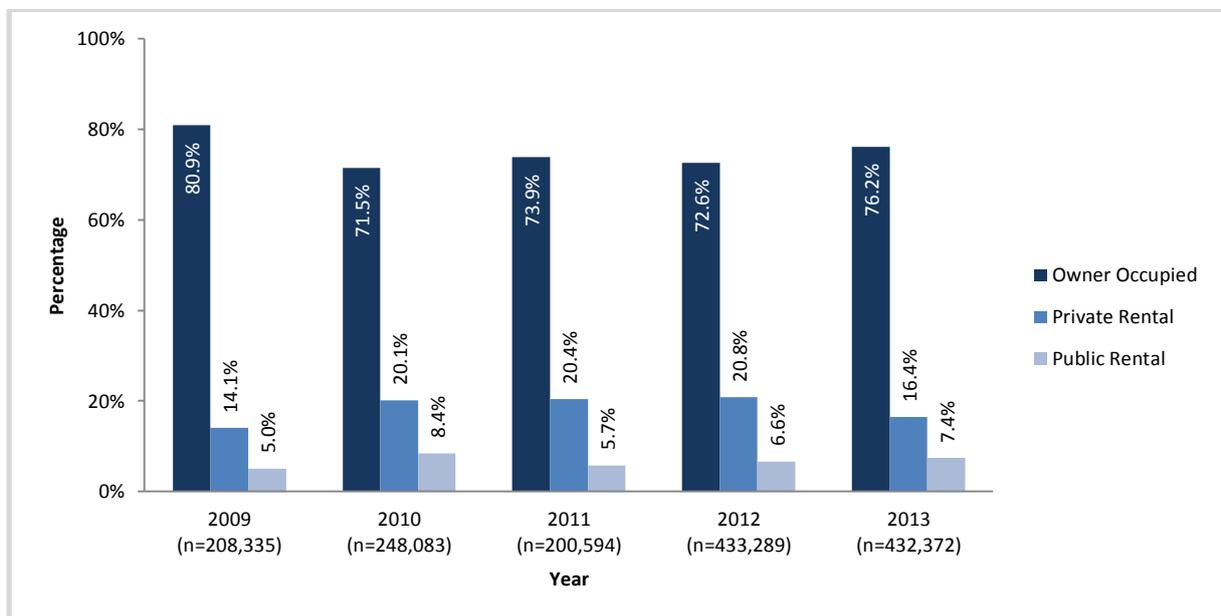


Figure 4.5 shows that 42.5% of greenhouse gas reductions occurred in priority group households in 2013, exceeding the Ministerial target of 35%. In terms of the number of REES activities undertaken, 48.2% were in priority group households.

**Figure 4.6 - Energy Efficiency Activities (tCO<sub>2</sub>-e) - Nature of Tenure**



76% of deemed greenhouse gas reductions were achieved in owner occupied households in 2013 (Figure 4.6). In terms of the number of REES activities undertaken, 75% were in owner occupied households, 17% were in private rentals and 8% were in public rentals. 68% of households in South Australia are owner occupied.<sup>23</sup> Therefore a slightly higher proportion of owner occupied households are benefitting from REES activities. For priority group

<sup>23</sup> Source ABS Census Data 2011: Quick Stats (refer [www.abs.gov.au](http://www.abs.gov.au)).

households, 69% of activities were undertaken in owner occupied households, whilst in non-priority group households 81% of activities occurred in owner occupied households.

The REES time series data provides a detailed breakdown of the nature of energy efficiency activities conducted by household tenure.

## 5.2 Energy Audits

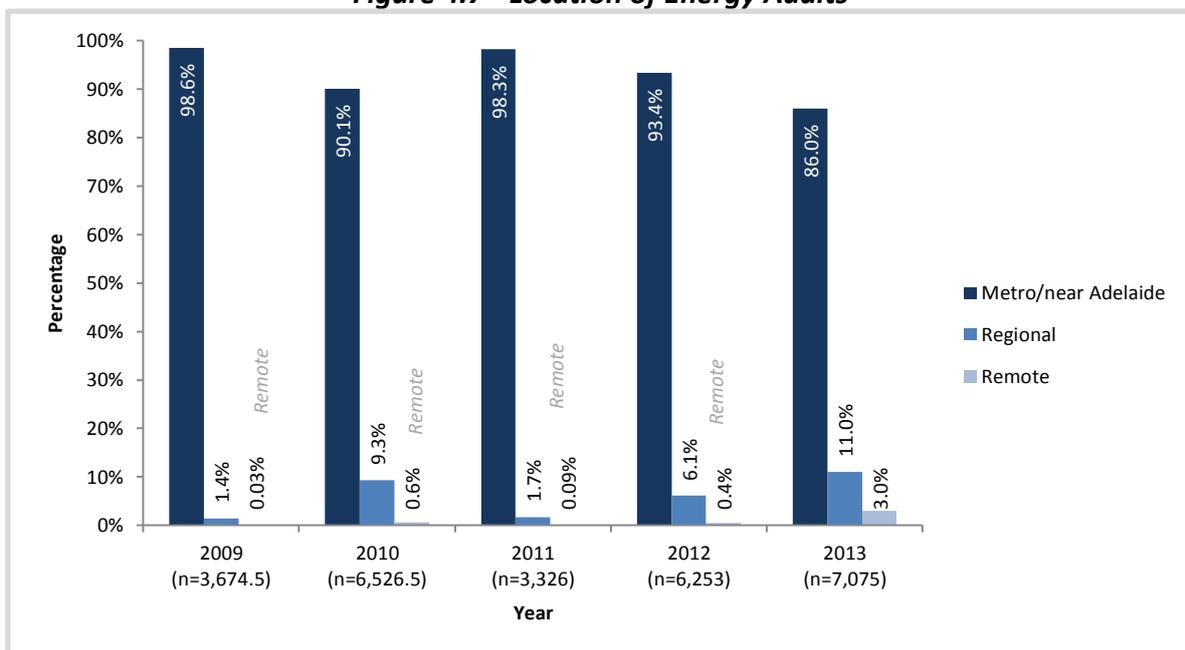
In 2013, 7,075 audits were undertaken. The Regulations require that only audits undertaken in priority group households count towards the energy audit target. Obligated retailers are generally required to conduct energy audits inside the home of the householder. However, in limited circumstances, such as remote premises, interview and phone audits are permitted. Each phone audit receives a reduced target value of 0.5 rather than 1.0. In 2013, no energy audits were conducted by phone or interview.

### 5.2.1 Energy Audits by Household Location

Figure 4.7 provides a picture of the level of audit activity in the metro/near Adelaide, regional and remote areas of South Australia.

In 2013, a majority (86%) of audits were performed in the metro/near Adelaide area. This is consistent with the household distribution of activities undertaken in 2013 (Figures 4.3 and 4.4). As with activities, there was an increase in regional and remote audits undertaken in 2013 compared to 2012.

**Figure 4.7 - Location of Energy Audits**

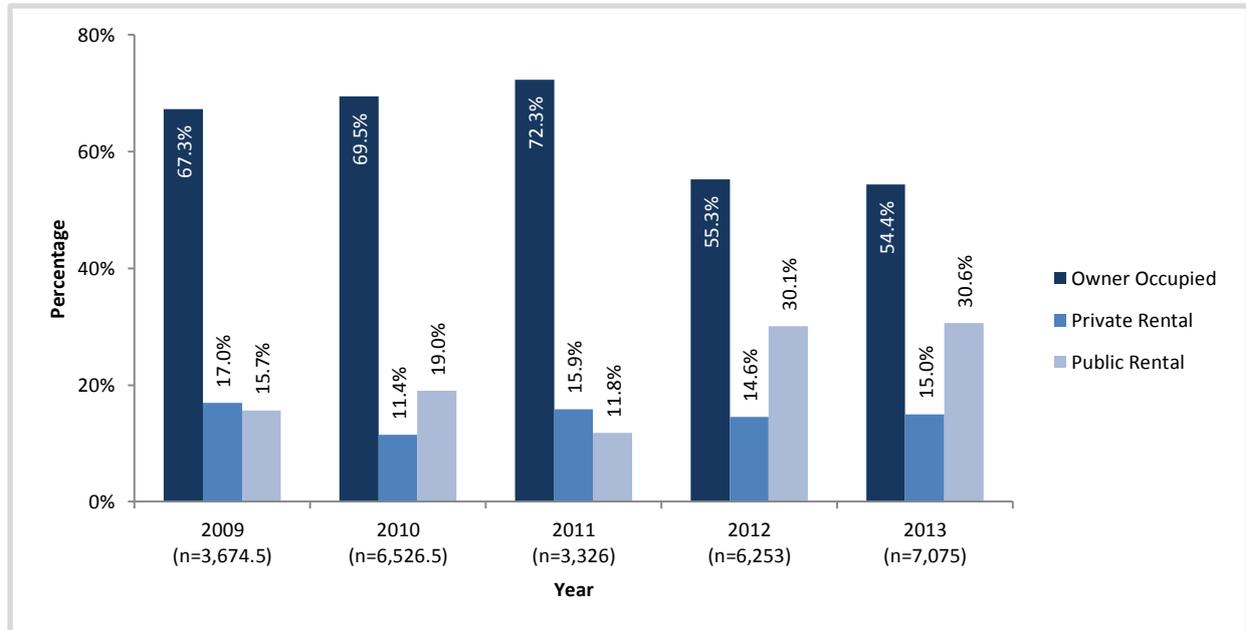


Energy audits performed data, segmented by postcode, is available in the time series data.

### 5.2.2 Energy Audits by Household Type

Of the 7,075 audits undertaken in 2013, 54.4% were conducted in owner occupied households. This is a similar proportion to last year. It is worth noting that a much larger proportion of audits were undertaken in public rental housing in 2012 and 2013 than in prior years.

**Figure 4.8 – Energy Audits - Nature of Tenure**



### 5.3 Benefitting Households

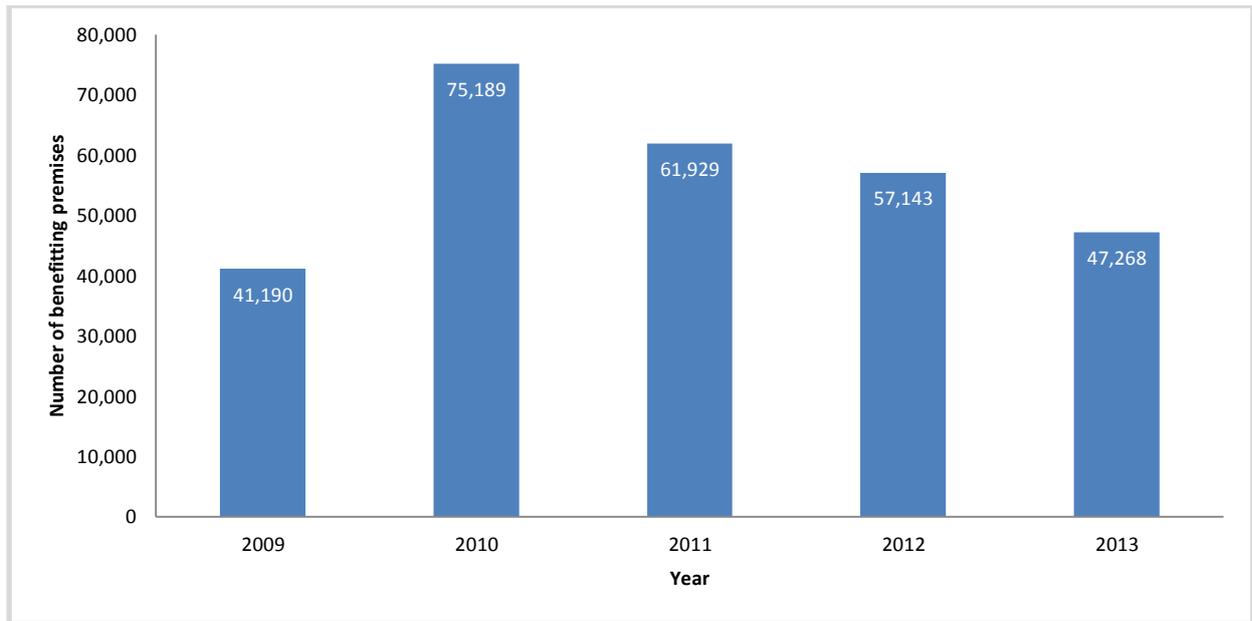
A benefitting household is one that receives either an energy audit or an energy efficiency activity during the year. In 2013, there were 47,268 households that benefitted from REES (Figure 4.9).<sup>24</sup> This was a 17% decrease compared to 2012.

However, there was a 20% increase in the average emissions savings delivered per household (from 7.6 tCO<sub>2</sub>-e per household in 2012 to 9.2 tCO<sub>2</sub>-e in 2013), with more activities being undertaken in each household. The Commission understands that there has been an increased focussed on delivering as many energy efficiency activities as practical in each household to achieve a higher level of savings per visit.

A total of 258,173 households have benefitted from REES between 2009 and 2013. The sum of the benefitting households (282,719) in Figure 4.9 does not correlate with the overall total (258,173), because a number of households received activities or an audit in more than one year (e.g. lighting in 2009, showerheads in 2012).

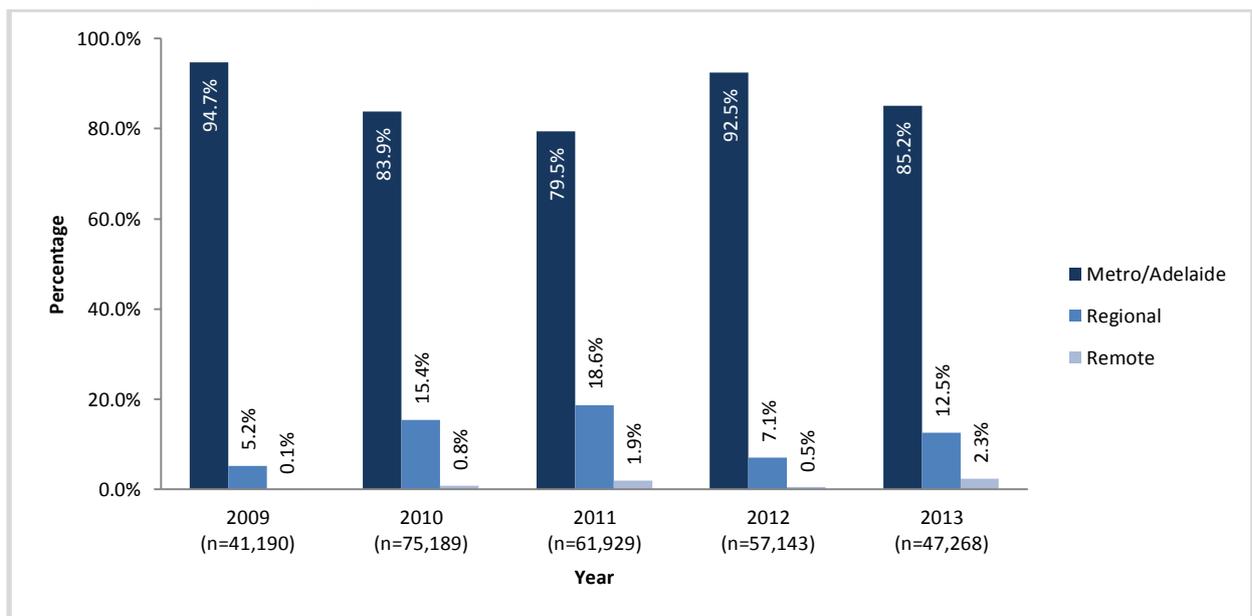
<sup>24</sup> Some households may have received benefits from both audits and activities but are only counted once.

**Figure 4.9 - Number of Benefitting Households within each year<sup>25</sup>**



### 5.3.1 Benefitting Households by Location

**Figure 4.10 - Location of Benefitting Households<sup>26</sup>**



The majority of households receiving benefits from REES in 2013 were located in the metro/near Adelaide region (Figure 4.10). In 2013, the proportion of benefiting households located in the regional and remote areas increased slightly. This is in line with the number of energy efficiency activities and audits conducted by location.

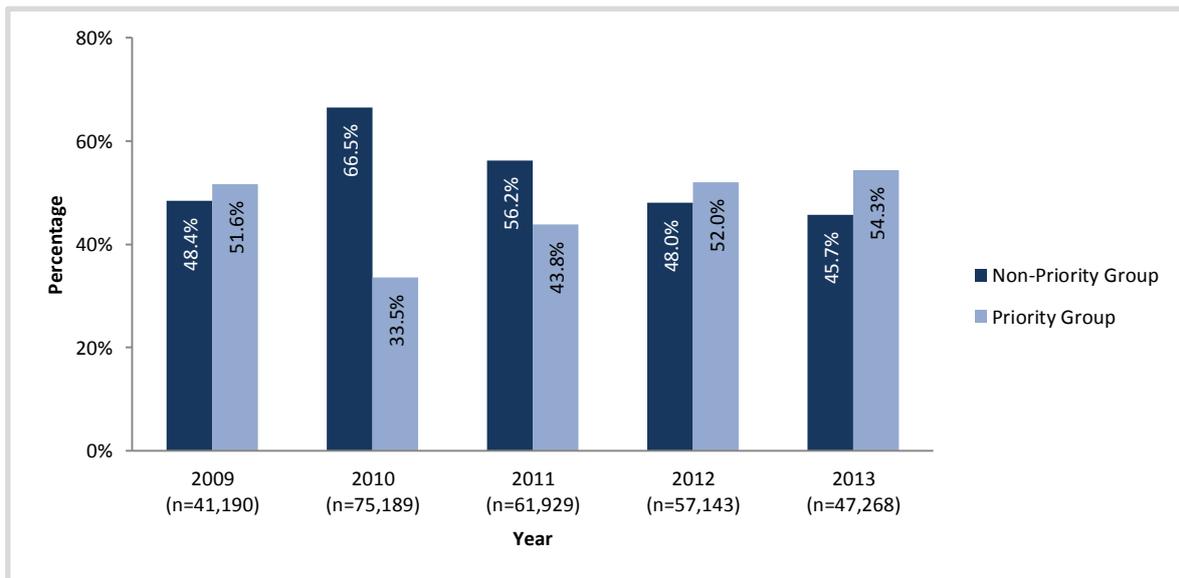
<sup>25</sup> Due to an upgrade of the Commission's reporting system, benefiting household numbers for 2009-2012 were recast. The updated numbers in Figure 4.9 are, on average, 3.1% higher than previously reported.

<sup>26</sup> Due to an upgrade of the Commission's reporting system, benefiting household numbers for 2009-2012 were recast. The updated proportions in Figure 4.10 reflect only very minor changes (up to 0.2 percentage points) to that reported in prior Annual Reports.

### 5.3.2 Benefitting Households by Household Type

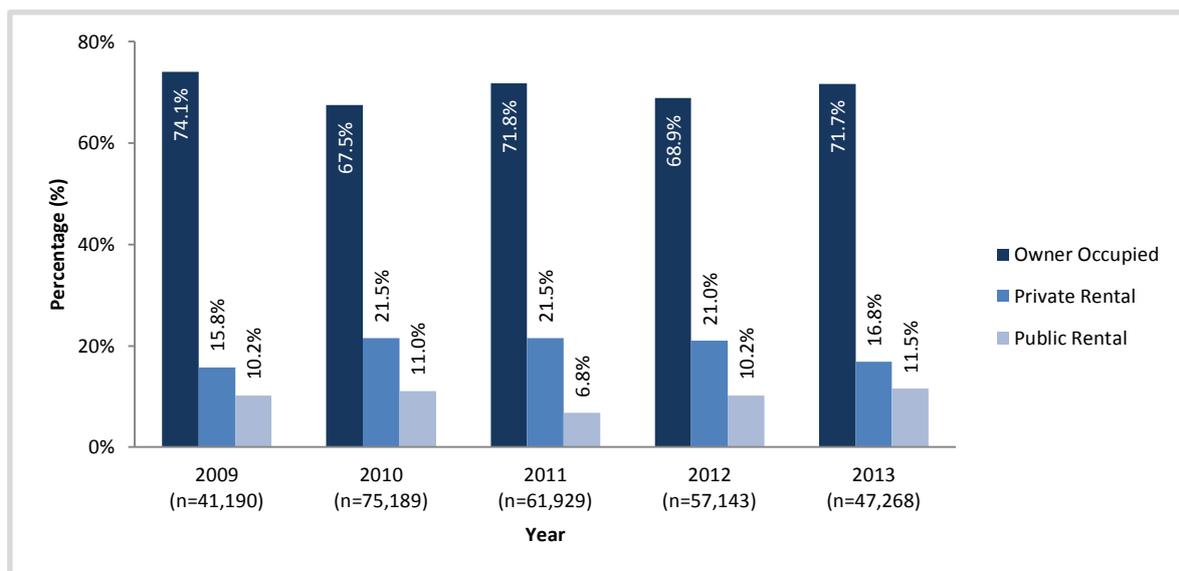
Priority group households represented 54.3% of the households benefitting from REES in 2013 (Figure 4.11). This is slightly higher than 2012, reflecting that a similar number of priority group energy efficiency activities were undertaken in both 2012 and 2013, but more energy audits were undertaken in 2013 (and all energy audits are undertaken in priority group households).

**Figure 4.11 - Benefitting Households - Priority Group v Non-Priority Group Households<sup>27</sup>**



The majority of benefitting households during 2013 were owner occupied (71.7%) compared to private rental (16.8%) and public rental (11.5%) (Figure 4.12). This is broadly reflective of the property ownership profile in South Australia.<sup>28</sup>

**Figure 4.12 - Benefitting Households - Nature of Tenure<sup>29</sup>**



<sup>27</sup> Due to an upgrade of the Commission's reporting system, benefitting household numbers for 2009-2012 were recast. The updated proportions in Figure 4.11 reflect only minor changes (up to 1.1 percentage points) to that reported in prior Annual Reports.

<sup>28</sup> Source ABS Census Data 2011: Quick Stats (refer [www.abs.gov.au](http://www.abs.gov.au)).

<sup>29</sup> Due to an upgrade of the Commission's reporting system, benefitting household numbers for 2009-2012 were recast. The updated proportions in Figure 4.12 reflect only minor changes (up to 1.5 percentage points) to that reported in prior Annual Reports.

## 6. ADMINISTRATION OF REES

As administrator, the Commission's main functions relating to REES include:

- ▲ regular reporting on REES progress and outcomes;
- ▲ reviewing the list of approved energy efficiency activities;
- ▲ regular review of the REES Code, which sets out a reporting and compliance regime with respect to the achievement of annual REES targets;
- ▲ ongoing development of a dedicated REES IT system, with associated internal controls and processes;
- ▲ provision of regulatory advice on REES matters to obliged retailers, and regular review of the REES page on the Commission's website;
- ▲ ensuring compliance with the REES Code and relevant Acts and Regulations, including assessing achievement of targets;
- ▲ managing customer complaints and enquiries; and
- ▲ administering the Energy Efficiency Fund Initiative.

### 6.1 *New Energy Efficiency Activities*

During 2013, the Commission made a public call for applications for new REES activities, including applications to vary or delete existing activities. The Commission received two applications for new energy efficiency activities; one from AGL Energy Limited for an Energy Efficiency Campaign and one from Power Eco Solutions for voltage optimisers.

AGL's proposed Energy Efficiency Campaign relied on behaviour change - focusing on participants reducing energy use rather than energy efficiency. The REES protocol precludes behaviour change activities that save energy through energy conservation rather than energy efficiency. Power Eco Solutions' application for voltage optimisers did not include field trials applicable to the South Australian residential sector. It therefore did not provide sufficient evidence to satisfy the Commission that such a device would deliver reliable savings in South Australian homes.

Having regard to the intentions of REES, and the key principles and constraints set by the Ministerial Protocol for maintaining the list of Energy Efficiency Activities, the Commission decided not to adopt either proposed activity.<sup>30</sup>

### 6.2 *REES Code Amendment*

The REES Code establishes requirements in relation to the conduct and operations of energy retailers in satisfaction of their REES obligations. In November 2013, the Commission consulted on proposed changes to the REES Code relating to allowing LED down light retrofits of products approved by the Commission, reducing the deeming values for SPCs and

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<sup>30</sup> See - <http://www.escosa.sa.gov.au/projects/191/2013-public-call-for-applications-for-new-rees-energy-efficiency-activities.aspx>

allowing more than one SPC activity to be undertaken at a premises where the occupant has changed.

The final amendment to the REES Code, released in February 2014,<sup>31</sup> implemented these changes and included an update to the Water Heater specification to reflect changes to South Australia's Residential Water Heater Installation Requirements.

### *6.3 REES Retailer File Validation System (REES-R)*

The Commission maintains an outwards-facing file verification system called the Retailer File Validation System (**REES-R**).

REES-R improves data file processing efficiency by allowing retailers to validate data files for data and address errors prior to submission. REES-R also provides multiple claim notifications for all activities and audits. This compliance check notifies retailers of individual activities or audits that have previously been reported to the Commission. Given the previous high level of non-compliance of reported data against this particular compliance trigger, this validation was implemented in the interests of providing retailers with a greater level of upfront assurance of activity compliance. Access to the REES-R is also available to third party providers.

### *6.4 REES Communication*

The Commission places great importance on working cooperatively with scheme participants and other stakeholders. This has involved regular informal telephone discussions and written communications with obliged retailers, workshops, the issuing of advisory REES Bulletins and formal consultation on REES Code amendments.

The Commission conducts regular workshops with obliged retailers, usually six monthly, to discuss issues relating to the operation of REES, and to set expectations going forward. Those workshops include discussions on individual retailer progress in a given REES year, the Annual Report, enhancements to REES-R, any REES Code amendments and compliance issues.

The Commission updates the contents of REES related pages on its website regularly to ensure current and consistent communication to all interested parties. A direct link to the REES main page is provided on the Commission's website homepage.

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<sup>31</sup> Refer: <http://www.escosa.sa.gov.au/projects/203/rees-code-proposed-amendments-2013-14.aspx#stage-list=2>

## 6.5 Compliance

The Commission's role is to ensure that energy retailers comply with all regulatory obligations under REES. In particular, the Commission assesses whether obliged retailers have met their REES annual targets for energy efficiency activities and audits, and requires that obliged retailers submit a compliance plan at the beginning of each REES year (due by 31 March).<sup>32</sup>

In assessing obliged retailers' REES annual achievements, the Commission undertakes an annual compliance assessment of all activities and audits against the requirements of the REES Code. This can result in some activities and audits being disallowed. In 2013, a small number of activities and audits were removed due to duplicate reporting at the same premises or where greater than the maximum number of allowable products were installed at a premises. The Commission did not apply any shortfall penalties to retailers in 2013.

The Commission reviewed all retailer compliance plans for 2013 and was satisfied that they all met the requirements set out in the REES Code.

The Commission also investigated a REES third party provider in 2013 in relation to REES data provided to two obliged retailers in late 2012. The third party provider accepted that system and process deficiencies had resulted in errors in some of the data it had provided to obliged retailers. The Commission is satisfied that those errors have been corrected and that the provider has made system and process improvements to prevent such errors reoccurring.

Whilst the Commission is generally satisfied that obliged retailers have the appropriate systems and processes in place, it will continue to monitor retailers' compliance with the REES Code by undertaking projects such as (but not limited to):

- ▲ 'mystery shopping' telephone calls to ensure that call centre staff are providing customers with basic information about REES;
- ▲ undertaking targeted audits on obliged retailers' compliance systems from time to time, to ensure compliance with the REES Code provisions; and
- ▲ follow-up calls to customers to ensure that activities/audits have been implemented according to the relevant specification in response to complaints received.

The Commission has released a REES Bulletin outlining the compliance framework and approach for REES, including: requirements for compliance plans, compliance reporting and the penalty regime.<sup>33</sup>

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<sup>32</sup> Compliance plans are required pursuant to clause 5.1.2 of the REES Code. Following the "[Residential Energy Efficiency Scheme Code \(REES Code\) – New Activities & Miscellaneous – Proposed Amendments – Final Decision](#)" released in December 2012, the submission date for annual compliance plans has been retained as 31 March in each REES year. Retailers are reminded that the compliance plan is a 'living document' and any material changes should be reported to the Commission within 20 business days.

<sup>33</sup> Refer: <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-bulletins.aspx>

## 6.6 Consumer Complaints and REES Enquiries

The Commission dealt with customer enquiries and complaints in the year, the majority of which were from customers seeking to verify the legitimacy of REES and the information provided by energy efficiency activity installers or energy auditors.

The Commission has also dealt with several enquiries and complaints, throughout the course of the scheme, concerning the conduct of persons carrying out energy efficiency activities or energy audits on behalf of obliged retailers. The Commission has raised these instances with the relevant retailers and has been satisfied with the prompt and appropriate responses of those retailers.

## 6.7 Energy Efficiency Fund Initiative (EEFI)

In the 2011 REES year, Lumo Energy failed to meet its greenhouse gas reduction target, priority group greenhouse gas reduction target and energy audit target. Accordingly<sup>34</sup>, the Commission issued a shortfall penalty notice for \$243,750. The Commission<sup>35</sup> used these funds to establish the Energy Efficiency Fund Initiative (**EEFI**); a scheme that provides energy efficiency benefits to energy consumers in financial stress, through grants delivered to not-for-profit organisations.<sup>36</sup>

Following public nomination processes, the Commission approved funding under EEFI in 2013 for Uniting Care Wesley Country SA, Normanville Natural Resource Centre, Orana Inc. and Uniting Communities as follows:

- ▲ Uniting Care Wesley Country SA received funding to provide targeted grants to households to purchase energy efficient products in country areas, and to distribute 5,000 energy efficient light globes.
- ▲ Normanville Natural Resource Centre received funding to conduct energy audits (including training for volunteers to undertake energy efficiency audits), install simple energy saving devices and conduct energy efficiency courses for households in the Yankalilla area.
- ▲ Orana Inc. installed solar power units for its newly renovated housing complex at Marlestone.
- ▲ Uniting Communities received funding to distribute energy efficiency retrofit packs (containing showerheads, light globes, door snakes, power boards, kill switches, window seals, shower timer and thermometer) and provide small grants for larger energy efficient items.

EEFI recipients have made acceptable progress to date in terms of program roll-out and will continue to report to the Commission on progress and expenditure of the approved funds. The Commission will ensure that the funds continue to be appropriately spent for the purpose granted.

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<sup>34</sup> Pursuant to the provisions of section 94B of the *Electricity Act 1996*.

<sup>35</sup> Pursuant to its requirements under section 94B(12) of the *Electricity Act 1996*

<sup>36</sup> Refer REES Bulletin 18 for details on the penalty regime available at: <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-bulletins.aspx>. No penalties were issued in 2013.

## 6.8 Future of REES

REES was established by the South Australian Government and commenced on 1 January 2009. REES Stage 1 (2009-2011) has been completed and Stage 2 (2012-2014) runs until 31 December 2014.

The Government undertook a review to assess the operation of REES and to consider the scheme's future past 2014, and the Minister tabled the Review Report in Parliament in November 2013.<sup>37</sup> The Review Report recommends that the scheme be expanded and extended for a further 6 years - until 2020, or until a national scheme is in place.

The Government is expected to confirm the structure of REES post-2014 in the second half of 2014.

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<sup>37</sup> Further information on the REES Review is available at <http://www.sa.gov.au/topics/water-energy-and-environment/energy/rebates-concessions-and-incentives/residential-energy-efficiency-scheme-rees>



The Essential Services Commission of South Australia

Level 1, 151 Pirie Street Adelaide SA 5000

GPO Box 2605 Adelaide SA 5001

T 08 8463 4444

E [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au) | W [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)

