IPART
New South Wales

Independent Pricing and Regulatory Tribunal

NSW Energy Savings Scheme - Compliance and Operation in 2014

Annual Report to the Minister

Energy Savings Scheme
July 2015

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The Committee members for this report are:

Mr Ed Willett, Chairman

Ms Fiona Towers, Committee Member

Dr Brian Spalding, Committee Member

Inquiries regarding this document should be directed to a staff member:

Rob McKenna	(02) 9113 7782
Christine Allen	(02) 9290 8412
Liz Mayfield	(02) 9290 8489

Independent Pricing and Regulatory Tribunal of New South Wales
PO Box K35, Haymarket Post Shop NSW 1240
Level 15, 2-24 Rawson Place, Sydney NSW 2000

T (02) 9290 8400 F (02) 9290 2061

www.ipart.nsw.gov.au

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1 Executive summary

This is the 2014 annual report for the NSW Energy Savings Scheme (ESS). It summarises the performance and activities of the scheme, including the energy savings achieved, the compliance by Scheme Participants and Accredited Certificate Providers, and key administration activities and developments during the 2014 calendar year.

Overall, the ESS's performance continued to be good. The 2014 energy savings target was met, and the compliance performance of both Scheme Participants and Accredited Certificate Providers was very high and high respectively. At the same time, there were significant amendments to the *Energy Savings Scheme Rule of 2009* (ESS Rule) which expanded the scope of the scheme. These amendments – referred to as the 2014 ESS Rule change throughout this report – required significant resources to implement and made the ESS more complex and resource intensive to administer.

Box 1.1 What is the Energy Saving Scheme?

The ESS is a state-based scheme that aims to reduce the consumption of electricity in NSW by encouraging the implementation of energy saving activities. It is established under Part 9 of the *NSW Electricity Supply Act 1995* (the Act).

The Act sets out **annual energy savings targets** to 2020, and obliges all electricity retailers operating in NSW and other specified parties – known as **Scheme Participants** – to meet these targets by purchasing and surrendering Energy Savings Certificates (ESCs or certificates).

It also provides for parties to be accredited to create those certificates from specific energy saving projects. These parties are voluntary participants in the ESS, and are known as **Accredited Certificate Providers**.

What is IPART's role?

The Independent Pricing and Regulatory Tribunal of NSW (IPART) is both Scheme Regulator and Scheme Administrator for the ESS. The Scheme Regulator role relates to activities of Scheme Participants, while the Scheme Administrator role relates to the activities of Accredited Certificate Providers.

1.1 Energy savings target met

In 2014, the ESS energy savings target was 5% of each Scheme Participant's liable electricity acquisitions for the year.[1] After deducting exemptions, the effective target was 4% of all electricity purchased for supply to end-users in NSW (see Box 1.2). This was equivalent to a total of 2,546,066 megawatt hours (MWh) of energy savings, or 2,698,830 certificates. Scheme Participants surrendered sufficient certificates to meet this target (section 1.4 provides more detail).

Box 1.2 What is the ESS energy savings target?

In the ESS, the energy savings target is expressed as a percentage of a Scheme Participant's annual liable electricity acquisitions. The targets started from 1% of liable acquisitions in 2009[a] and increased annually to reach 5% in 2014, after which they remain steady until 2020.[b]

A Scheme Participant's liable acquisitions include any electricity it purchases for supply to end-users in NSW, **except** for part of the load (either 60% or 90%) it supplies to entities in emissions-intensive and trade-exposed industries that have been granted an exemption from the ESS by the Minister for Industry, Resources and Energy.[c]

The energy savings target sets the demand for certificates by Scheme Participants in a year, and the Accredited Certificate Providers and their accredited energy savings projects determine the supply.

a The first compliance period of ESS was the half year to 31 December 2009. The energy savings target was 0.5% for the half year or 1% as a nominal annual rate.

b The energy savings scheme target for each calendar year is set out in Schedule 5 of the Act.

c Section 119 of the Act; *Scheme Regulator Exemptions Rule No. 1 of 2009*.

1.2 Certificates created and actual energy savings achieved

Accredited Certificate Providers created 3,154,258 certificates for energy saving activities in 2014, which is equivalent to 2,975,715 MWh of energy savings.[2] The number of certificates created in 2014 was lower than in 2013 (see Figure 1.1), though still above the required energy savings target for 2014 (see Table 3.1). We attribute this decline to the lower certificate spot price and large certificate surplus (discussed below) as well as the 2014 ESS Rule change. As in previous years, the majority of certificates created in 2014 were from lighting projects (see Figure 2.1).

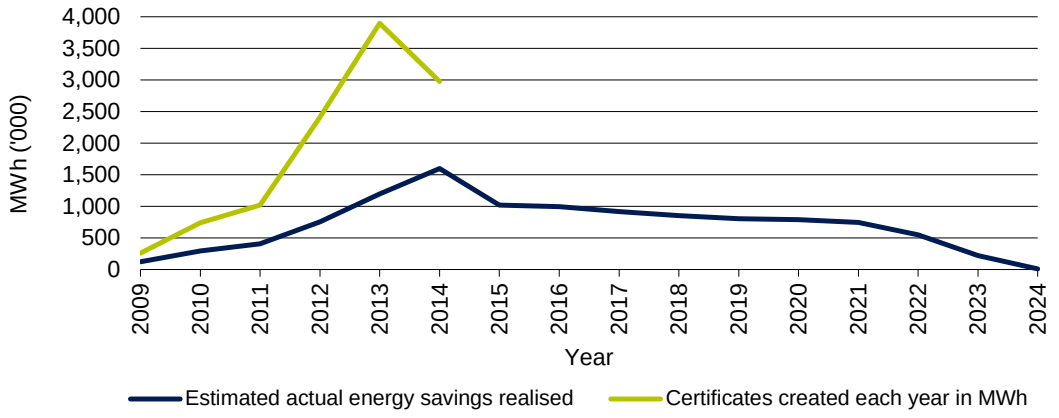
1 The energy savings scheme target for each calendar year is set out in Schedule 5 of the Act.

2 The certificate conversion factor (currently 1.06) is set out in Section 130 and Schedule 5B of the Act.

Since the scheme commenced in mid-2009, a total of 11,964,870 certificates have been created, equivalent to 11,287,613 MWh of energy savings (see Table 2.3). In general, certificates associated with an energy saving activity are created after the energy savings have occurred. However, the ESS Rule allows certificates for certain types of activity to be created up to 25 years in advance of the savings occurring (known as deeming),[3] and for some limited forward-creation of certificates.[4] When deeming and forward-creation are taken into account, we estimate that, for activities implemented during 2009-2014, the ESS has achieved (or will achieve) actual energy savings of:

- 2,781,811 MWh during the period 2009-2013
- 1,598,489 MWh during 2014, and
- 6,907,313 MWh over the next 10 years of 2015-2024 (Figure 1.1 and Table 2.1).[5]

Figure 1.1 Certificates created compared to estimated actual energy savings per year



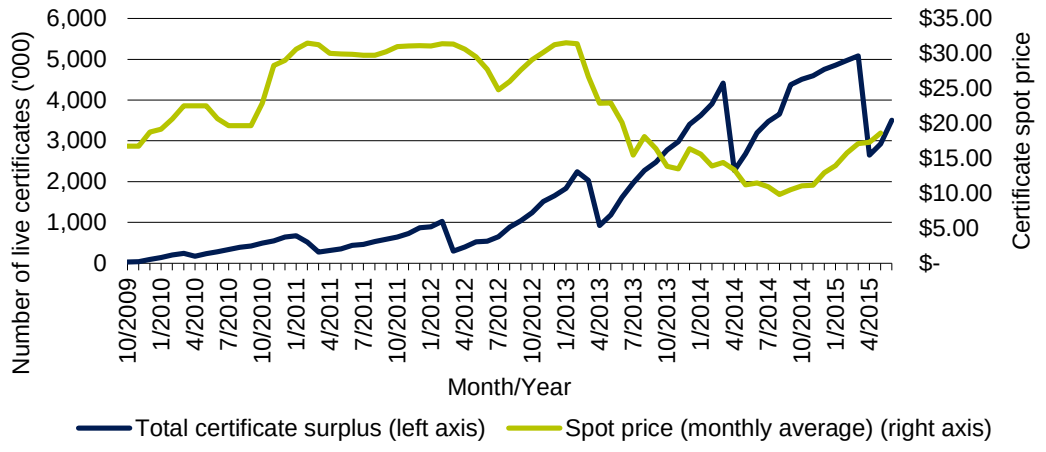
3 Section 9 of the *Energy Savings Scheme Rule of 2009*.
4 Section 7.4 of the *Energy Savings Scheme Rule of 2009*.
5 Section 174 of the Act requires an estimate of the actual energy savings that have been realised with regard to the number of certificates created.

1.3 Certificate spot price and surplus

The certificate spot price declined significantly during 2013 and 2014, reaching a historical low of $9.55 in August 2014.[6] This compares to a high of $32.35 in January 2013 (see Figure 1.2). We attribute this decline primarily to the large total certificate surplus,[7] and market uncertainty about the timing and impact of the 2014 ESS Rule change[8] (see section 6.1).

Typically, the total certificate surplus increases slowly throughout the year as Accredited Certificate Providers register certificates, and decreases sharply in March/April the following year when Scheme Participants surrender certificates to meet their compliance obligations.[9] During 2013 and 2014, the total surplus increased significantly due to the large number of certificates created in 2013. Therefore, although the annual certificate surplus in 2014 was relatively low compared to 2013 (Table 2.2), the total certificate surplus as at 30 June 2015 remained high (Figure 1.2). The certificate spot price was also increasing from the historic low level in mid-2014.

Figure 1.2 Certificate spot price and total surplus



Data source: ESS Registry as at 30 June 2015; The Green Room, published by Nextgen (see *www.nges.com.au*).

6 Published data indicates that spot trades constitute only a small proportion of total certificate transactions as most transactions are forward trades where the price is agreed between two parties. Nevertheless, the spot price provides a useful guide to broad movements in the certificate price over time.

7 Total surplus comprises all vintages, including 2015 certificates that were unable to be surrendered until after 30 June 2015.

8 Consultation on the proposed amendments to the ESS Rule commenced in late November 2013, with the new ESS Rule initially proposed for gazettal on 1 March 2014 for commencement on 1 April 2014. Two amendments to the ESS Rule were subsequently gazetted on 30 May 2014, for commencement on 1 June 2014 and 1 July 2014.

9 In 2012, we extended the deadline for Scheme Participant compliance from 18 March to 30 April to align with the Victorian Energy Efficiency Target (VEET) scheme.

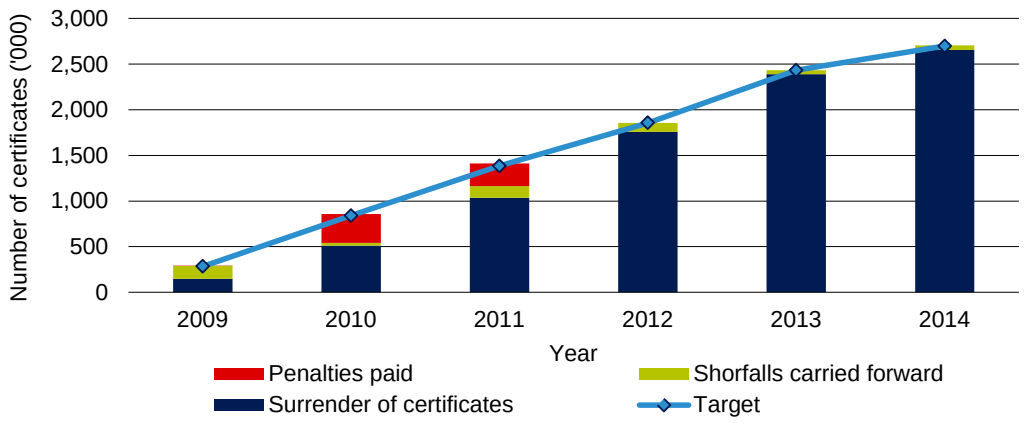
Although certificate registration declined during 2014, the number of certificates transferred rose, with more than 15 million certificates changing hands in 2014 through 1,266 trades (see Section 2.2.3). This represents a 66% increase in certificates transferred and a 28% increase in certificate trades compared to 2013, indicating that the certificate market remained very active.

1.4 Scheme Participant compliance

During 2014, 53 Scheme Participants were operating in NSW – an increase of six compared to 2013. As in previous years, Scheme Participants' compliance performance was very high. All Scheme Participants met their individual target by either surrendering certificates and/or carrying forward a shortfall. However, one Scheme Participant, new to the ESS, did not submit an Annual Energy Savings Statement or audit report. There was no record of any liable electricity purchases for this Scheme Participant for the year. However, we are taking appropriate follow-up action regarding their reporting obligations.

Figure 1.3 shows how Scheme Participants have met the energy savings target each year since the ESS began. Although the target increased by 1% of liable acquisitions each year between 2009 and 2014, the increase in certificate terms was lower than in previous years due to a reduction in electricity demand, which was partly driven by energy efficiency programs.[10]

Figure 1.3 How Scheme Participants met the energy savings target each year



[10] NSW Trade and Investment, *Review of the NSW Energy Savings Scheme, Part 1: Draft Statutory Review Report*, April 2015, p 21, accessed at *http://www.resourcesandenergy.nsw.gov.au/__data/assets/pdf_file/0009/558864/part-1-draft-statutory-report-april-2015.pdf*.

In 2014, a number of amendments were made to previous Annual Energy Savings Statements which was only possible due to amendments to legislation. This was because prior to June 2013 the definition of 'liable acquisitions' in the Act did not include non-market-settled electricity purchases from registered participants – although some Scheme Participants still included these in their estimates. Following amendments to legislation, these Scheme Participants were offered the opportunity to correct any over-statement. Three Scheme Participants did, resulting in the refund of $523,932 in overpaid shortfall penalties and the revival and return of 29,121 certificates to those participants.

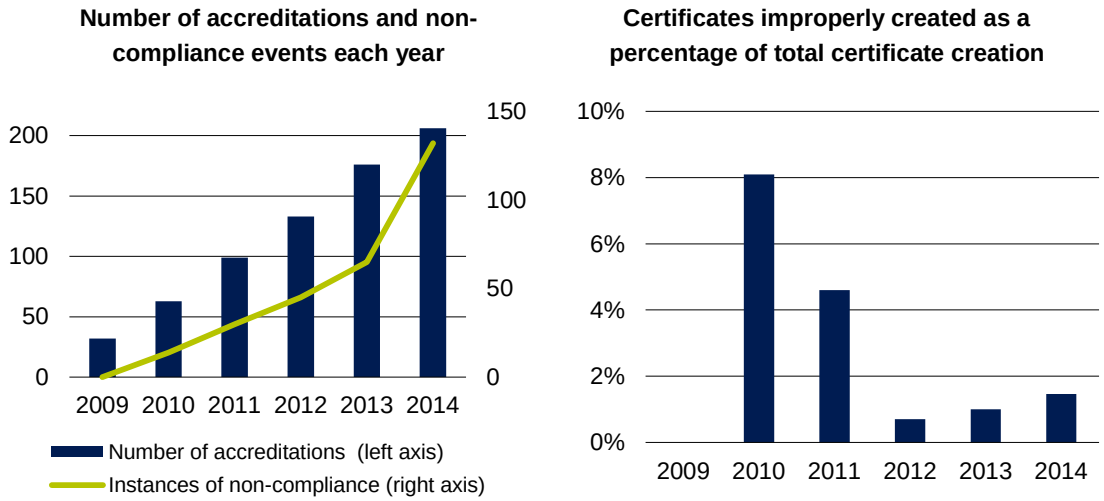
1.5 Accredited Certificate Provider compliance

One of our key considerations in administering the ESS is ensuring that Accredited Certificate Providers create certificates only where genuine energy savings have occurred. We monitor their energy savings activities and use independent third-party audits to verify savings. We also increasingly use set-aside deeds that commit the Accredited Certificate Provider to withholding from trade a percentage of the certificates it creates until an audit has been completed.

In 2014, the compliance performance of Accredited Certificate Providers was high, and the integrity of the ESS was maintained. While the number of non-compliance events increased by 103% compared with 2013 (see Figure 1.4), this mostly reflects improvements in our internal processes for identifying minor non-compliances. The 50 instances of improper creation of certificates resulted in the over-creation of just over 46,000 certificates, or 1.5% of the total certificates created during the year (see Figure 1.4). Almost all non-compliance events were resolved with the improperly created certificates voluntarily forfeited. One Accredited Certificate Provider did not voluntarily surrender the full amount of improperly created certificates (representing 0.19% of the total certificates created during the year) and the accreditation was cancelled.

There was one non-compliance event of note. An audit of Sustain Agility's accreditation identified a high error rate of 72.5% because it was unable to provide sufficient evidence to support the energy savings claimed and did not voluntarily forfeit the total amount of improperly created certificates. Sustain Agility's accreditation was cancelled later in the year for failure to maintain appropriate records.

Figure 1.4 Accredited Certificate Providers' compliance performance



1.6 ESS administration

During 2014, we approved 40 new accreditations for recognised energy saving activities (RESAs) and cancelled nine, resulting in a net increase of 31 accreditations during the year.[11] Most of the new accreditations were for activities under the Project Impact Assessment Method, for example, the installation of more efficient equipment at commercial and industrial sites. This differs from 2013, when most new accreditations were for commercial lighting projects. We also approved amendments to 264 existing accreditations[12] – an unusually high number, largely due to the 2014 ESS Rule change and other compliance-related activities.[13]

In addition, we:

- processed 1,237 applications for emerging lighting technologies (ELTs) and accepted 2,276 new lighting products for use in the scheme
- approved three new members of the Audit Services Panel and cancelled two memberships, resulting in a net increase of one
- reviewed our Compliance and Performance Monitoring Strategy (CPMS)
- conducted 20 stakeholder workshops for 242 participants
- held our first public consultation forum to help improve ESS administration and discuss current issues, and
- released the first stage of the ESS Portal – an online system to manage applications and compliance activities.

11 Accredited Certificate Providers are accredited to create certificates from their RESAs which is defined in the Act.

12 Some accreditations were amended multiple times.

13 The average number of amendments each year is 65.

1.7 Developments in the ESS

As noted above, there were significant amendments to the ESS Rule during 2014 that changed the structure of the rule and expanded the scope of the scheme and the number of methods for calculating energy savings under it. New calculation methods were introduced, definitions of core terms were amended and additional requirements were imposed on Accredited Certificate Providers. This has increased the workload for both Accredited Certificate Providers and IPART, which we have managed in part through the development and launch of the ESS Portal, and the improvement of our guidance material.

Another major development was the ESS Review, which is scheduled for completion in 2015 and could result in further amendments to the ESS Rule. We have also been liaising with the Commonwealth Government with a view to ensuring that the operation of the ESS and the Emissions Reduction Fund are as complementary as possible (see Section 6.3).

1.8 Scheme Regulator and Scheme Administrator

IPART is both Scheme Regulator and Scheme Administrator of the ESS. As allowed under the Act, the Tribunal delegated the exercise of these functions to an ESS Committee for most of 2014.[14] Throughout January to September, the ESS Committee comprised:

- Dr Paul Paterson as Chairman, and
- Dr Brian Spalding and Ms Fiona Towers as Committee Members.

For the remainder of 2014, the Tribunal exercised the functions of Scheme Regulator and Scheme Administrator itself. During this time, the Tribunal comprised:

- Dr Peter J. Boxall AO as Chairman, and
- Ms Catherine Jones as Tribunal Member.

[14] Section 152(4) of the Act allows IPART, with the approval of the Minister, to delegate the exercise of its functions as Scheme Regulator and Scheme Administrator to another person or body.

1.9 Report structure

The remainder of this report discusses the compliance performance and operation of the ESS during 2014 in more detail:

- Chapter 2 discusses scheme performance in terms of energy savings achieved and certificate market activity
- Chapters 3 and 4 report on the compliance performance of Scheme Participants and Accredited Certificate Providers
- Chapter 5 summarises our activities in administering the scheme during the year
- Chapter 6 describes policy and scheme developments, in particular the 2014 ESS Rule change, and
- the glossary provides a general guide to the terminology used in the ESS.

Background information about the ESS is available on our website.[15] For an overview of the scheme, see our fact sheet "Overview of the ESS" on our website.[16]

15 See *www.ess.nsw.gov.au*.

16 See *www.ess.nsw.gov.au/How_the_scheme_works*.

2 Scheme performance

The principal objective of the ESS is to reduce the consumption of electricity by encouraging energy saving activities. We measure the scheme's performance by the energy savings achieved, and the activity in the certificate market, including the creation and surrender of certificates and the certificate price.

2.1 Energy savings achieved

We have estimated the actual energy savings achieved both during 2014 and over the coming 10 years.[17] For certificates created in advance of energy savings (see Box 2.1 below), we estimated actual energy savings in future years by pro-rating the certificates created in any year across the forward-creation or deeming period of the energy savings activity. Our estimates indicate that as a result of certificates created between 2009 and 2014, the ESS realised actual energy savings of **1,598,489 MWh** during 2014, and will realise a further **6,907,313 MWh** over the next 10 years (Table 2.1).

Box 2.1 Certificate creation in advance of actual energy savings

Under the ESS, the certificates created from some recognised energy saving activities (RESAs) represent both savings in the year of creation and estimated savings in future years (up to 25 years). This is because the ESS Rule allows certificate creation in advance of actual energy savings where energy savings continue into the future. This is referred to as forward creation and 'deeming'.

Under the Project Impact Assessment Method, it is possible to forward-create certificates for up to five years of estimated energy savings at the start of the activity. In these cases, the certificates claimed are discounted by an approved percentage to account for some uncertainty, and may be 'topped up' at the end of the forward-creation period if actual savings can be verified.

Under the Deemed Energy Savings Method, the lifetime or deemed energy savings are estimated up-front and the certificates are forward-created from the time the activity is implemented. The deeming period depends on the type of activity, and ranges from 1.5 years to 25 years.

[17] Energy savings are reported in accordance with sections 174(2)(d) and 174(2)(e) of the Act.

Table 2.1 Estimated energy savings (in MWh) by calculation method

Calculation method	2009-13[a]	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024[b]	Total
Project Impact Assessment Method (and Measurement and Verification)	432,106	**193,664**	116,788	96,414	74,423	46,924	2,496	0	0	0	0	0	**962,815**
Deemed Energy Savings Method													
Commercial Lighting Formula	869,328	**783,278**	783,590	783,590	783,590	783,590	783,198	780,609	736,677	541,674	211,005	2,787	**7,842,913**
Default Savings Factors	358,215	**98,496**	98,451	95,936	39,140	405	319	289	120	0	0	0	**691,372**
Removal of Old Appliances	15,619	**12,927**	12,927	12,927	12,927	12,927	8,183	2,051	0	0	0	0	**90,487**
Sale of New Appliances	35	**4,668**	8,588	8,588	8,588	8,588	8,588	8,588	8,588	8,586	8,576	5,900	**87,882**
Power Factor Correction Formula	48	**22**	22	22	22	22	22	22	17	0	0	0	**215**
1-for-1 Residential Downlight Replacement	0	**3**	4	4	4	4	4	4	4	4	4	0	**37**
Installation of High Efficiency Appliances for Business	0	**0**	0	0	0	0	0	0	0	0	0	0	**0**
High Efficiency Motor Formula	0	**0**	0	0	0	0	0	0	0	0	0	0	**0**
Deemed Energy Savings Total	**1,243,245**	**899,393**	**903,581**	**901,065**	**844,269**	**805,535**	**800,314**	**791,563**	**745,406**	**550,264**	**219,584**	**8,687**	**8,712,906**
Metered Baseline Method[c]													
Baseline per unit of output	772,855	**309,389**	-	-	-	-	-	-	-	-	-	-	**1,082,243**
Normalised baseline	129,305	**131,273**	-	-	-	-	-	-	-	-	-	-	**260,577**
NABERS baseline	176,951	**37,944**	-	-	-	-	-	-	-	-	-	-	**214,895**
Baseline unaffected by output	27,350	**26,826**	-	-	-	-	-	-	-	-	-	-	**54,176**
Metered Baseline Total	**1,106,460**	**505,432**	-	-	-	-	-	-	-	-	-	-	**1,611,892**
Total estimated energy savings	**2,781,811**	**1,598,489**	**1,020,369**	**997,479**	**918,692**	**852,458**	**802,811**	**791,563**	**745,406**	**550,264**	**219,584**	**8,687**	**11,287,613[d]**
			(Equivalent to **6,907,313** MWh over the next 10 years of 2015 to 2024)										

Notes: Totals may not add exactly due to rounding. All data is in MWh. While the ESS closes at the end of 2020 (Section 178 of the Act), energy savings continue to be realised beyond that date. We have amended how estimated energy savings for projects under the Project Impact Assessment Method are calculated. Savings from forward created certificates were previously discounted over the forward creation period, but are now calculated evenly across the forward creation period because energy savings are assumed to occur evenly across future years.

a For the period from 1 July 2009 to 31 December 2013.

b Section 174(2)(e) of the Act requires the Scheme Administrator to estimate energy savings over the next 10 years having regard to the number of certificates created.

c Forward creation or deeming does not apply for certificates created under the Metered Baseline Method.

d Represents total energy savings achieved under the ESS based on total certificates created.

The ability to forward-create certificates in the ESS means that the certificates created in a year (in MWh) will be higher than the estimated actual energy savings in that year (Figure 1.1). For example, certificate creation peaked in 2013 due to the high level of commercial lighting activity in that year. As energy savings from this activity are deemed over 10 years in equal amounts, the estimated actual energy savings will occur fairly evenly across future years (Table 2.1). In 2014, there was a greater level of activities using the Project Impact Assessment Method (see Section 2.2.1). Energy savings from these activities are assumed to occur evenly over the 5-year forward creation period.

2.2 Certificate market activity

As Scheme Administrator, we maintain publicly available registers of Accredited Certificate Providers and energy savings certificates on the ESS Registry.[18]

The ESS Registry records information about all Accredited Certificate Providers, their RESAs and the certificates they create. It also records information about each certificate, including the creator, vintage, energy savings calculation method used and activity undertaken. In addition, it tracks the status of a certificate – live (available for transfer or surrender), surrendered or forfeited.

2.2.1 Creation of certificates

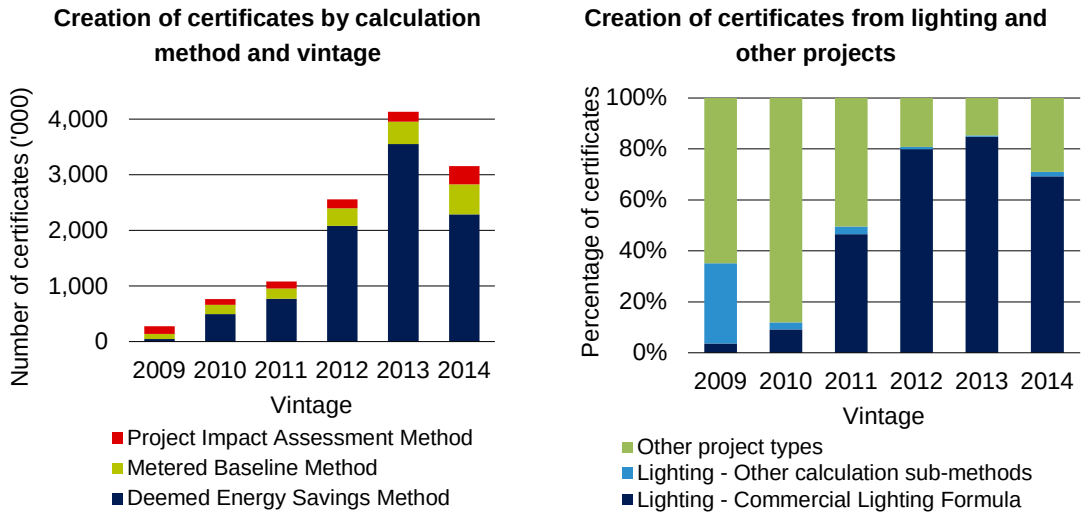
The Registry recorded the creation of 3,154,258 certificates of 2014 vintage,[19] which is 24% less than created in 2013 (see Figure 2.1 and Table 2.3). We attribute this decrease to the falling certificate spot price during 2013-14, the large certificate surplus, and the 2014 ESS Rule change, which affected the eligibility of some commercial lighting activities. (Section 6.1 provides more information on this rule change.)

The largest creator of certificates remains Out Performers Pty Ltd, which has created more than 1.5 million certificates since the ESS began. Other large creators are Demand Manager, The Green Guys Group, Low Energy Supplies & Services, and Maxee Innovations, each of which has created more than 780,000 certificates (see Figure 2.2). The 10 largest creators of certificates account for 61% of the total number of certificates created under the scheme to date.

18 See *https://www.ggas-registry.nsw.gov.au*.

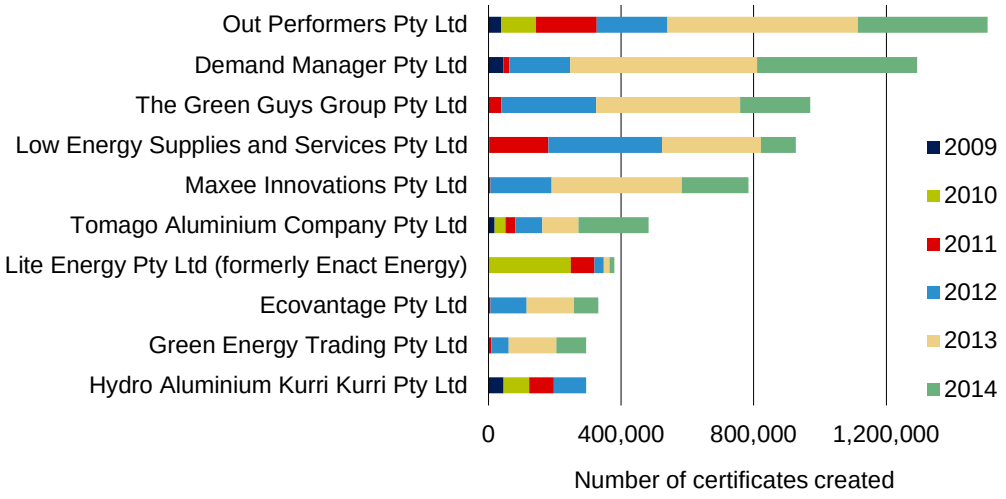
19 2014 vintage certificates relate to energy savings activities undertaken during the 2014 calendar year. However, certificates can be created up to six months after the end of the calendar year therefore a 2014 vintage certificate can be registered from 1 January 2014 to 30 June 2015.

Figure 2.1 Creation of certificates



Data source: ESS Registry as at 30 June 2015.

Figure 2.2 Accredited Certificate Providers – 10 largest certificate creators

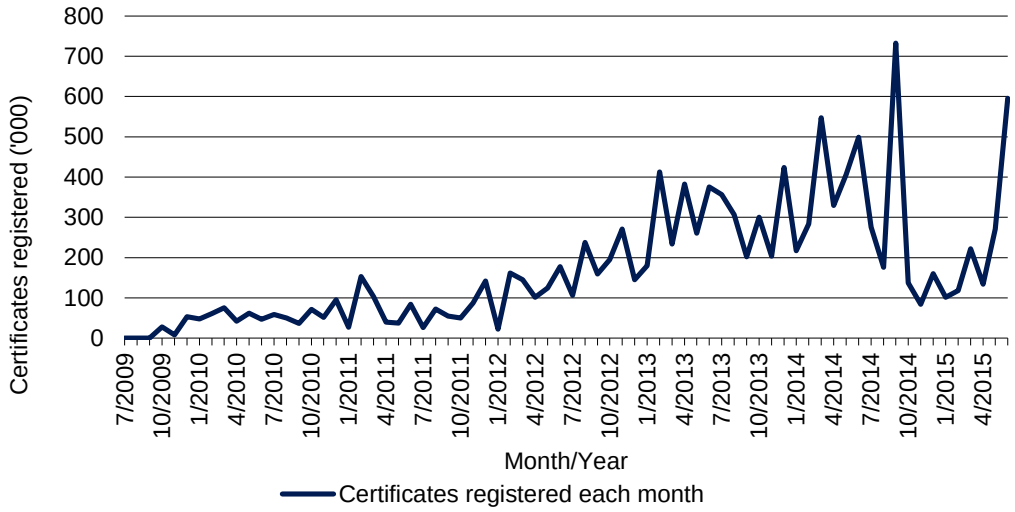


Data source: ESS Registry as at 30 June 2015.

2.2.2 Certificate registration activity

Certificate registration is generally cyclical, with highs coinciding with the March/April and June deadlines for Scheme Participant compliance and certificate registration. However, registration activity was unusual during the second half of 2014 as the 2014 ESS Rule change imposed a deadline to create certificates under the old ESS Rule by 30 September 2014 (section 6.1.2). As a result, over 730,000 certificates were registered during September 2014 – the highest number per month to date – and lower than usual numbers were registered in the surrounding months (see Figure 2.3).

Figure 2.3 Number of certificates registered each month

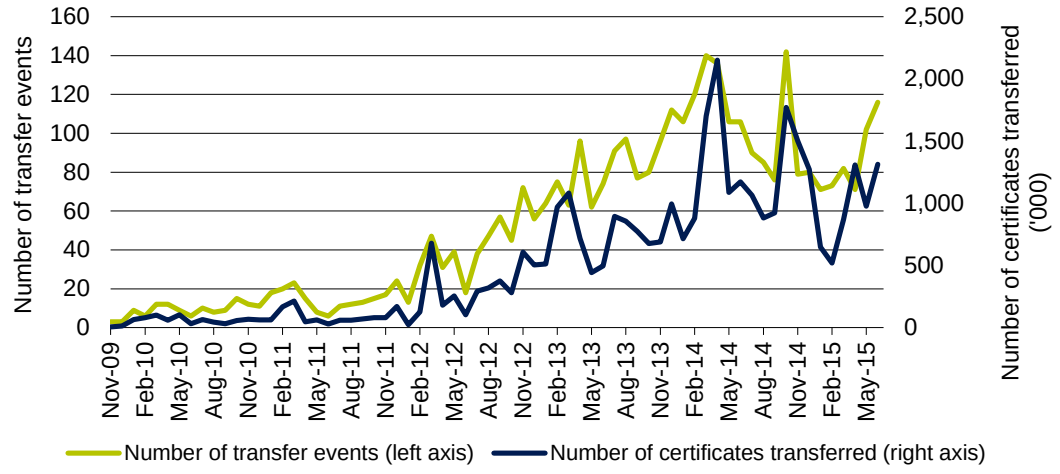


Source: ESS Registry as at 30 June 2015.

2.2.3 Transfer of certificates

During 2014, the Registry recorded 1,266 transfer events between parties, an increase of 28% compared with 2013. These transfers involved more than 15 million certificates (some of which were transferred on multiple occasions), an increase of 66% compared with 2013.

Figure 2.4 Certificates transferred each month



Source: ESS Registry.

2.2.4 Surrender of certificates

The Registry recorded the surrender of 2,700,190 certificates for 2014. All were surrendered by Scheme Participants to meet their compliance obligations (see Table 3.1).

2.2.5 Forfeiture of certificates

There were 83 instances where certificates were voluntarily forfeited in 2014, involving 83,546 certificates. Around half of these certificates were forfeited to resolve non-compliance by Accredited Certificate Providers due to improper creation (see section 4.2 for details). The remainder were voluntarily forfeited to correct errors during the registration process or errors identified by Accredited Certificate Providers.

2.2.6 Certificates available for surrender in future compliance years

At 30 June 2015, there were 3,050,841 certificates of 2014 vintage or older available for surrender in future compliance years. This figure is the sum of valid certificates created, less certificates surrendered since the scheme began, plus any revived certificates that remain live and available for surrender (see Table 2.2).

Table 2.2 Supply and surplus of certificates

Vintage/ Compliance year	Total certificates created[a]	Total certificates surrendered	Surplus for the compliance year	Revived certificates[b]	Cumulative surplus
2009	276,942	148,928	128,014	0	128,014
2010	764,385	651,655	112,730	0	240,744
2011	1,079,409	1,063,564	15,845	0	256,589
2012	2,556,554	1,885,240	671,314	0	927,903
2013	4,133,322	2,491,055	1,642,267	0	2,570,170
2014	**3,154,258**	**2,700,190**	**454,068**	**26,603**	**3,050,841**

a Small differences in data compared to previous annual reports reflect certificates that have been forfeited after the report was released.

b See section 3.3.

Data source: ESS Registry as at 30 June 2015.

Further information about creation, transfer and surrender of certificates is available on the ESS Registry.[20]

[20] See *https://www.ggas-registry.nsw.gov.au*.

Table 2.3 Number of certificates created by energy savings calculation sub-method

	2009-2011[a]	2012	2013	2014	Total
Commercial Lighting Formula (DESM)	582,848	2,043,387	3,504,917	**2,182,336**	8,313,488
Project Impact Assessment Method	356,373	158,623	177,604	**327,984**	1,020,584
Baseline per unit of output (MBM)	387,051	234,020	198,155	**327,952**	1,147,178
Normalised baseline (MBM)	0	19,185	117,878	**139,149**	276,212
Sale of New Appliances (DESM)[b]	38	108	88	**92,921**	93,155
NABERS baseline (MBM)	55,989	57,465	74,114	**40,221**	227,789
Baseline unaffected by output (MBM)	5,355	8,570	15,066	**28,436**	57,427
Removal of Old Appliances (DESM)[b]	0	35,196	45,500	**15,220**	95,916
1-for-1 Residential Downlight Replacement (DESM)[b]	0	0	0	**39**	39
Default Savings Factors (DESM)[b]	732,854	0	0	**0**	732,854
Power Factor Correction Formula (DESM)	228	0	0	**0**	228
Installation of High Efficiency Appliances for Business (DESM)	0	0	0	**0**	0
High Efficiency Motor Formula (DESM)	0	0	0	**0**	0
Number of certificates created each year	**2,120,736**	**2,556,554**	**4,133,322**	**3,154,258**	**11,964,870**

a Refer to the 2011 ESS Annual Report for breakdown of the number of certificates created during these years.

b The Default Savings Factors sub-method was replaced with three new sub-methods in the 2014 ESS Rule change: 1-for-1 Residential Downlight Replacement, Removal of Old Appliances and Sale of New Appliances. Some existing accreditations under the Default Savings Factors sub-method transitioned into the new sub-methods (see section 6.1).

Notes: Small differences in data compared to previous annual reports reflect certificates that have been forfeited after the report was released.

DESM stands for Deemed Energy Savings Method, MBM stands for Metered Baseline Method.

Data source: ESS Registry as at 30 June 2015.

Table 2.4 Number of certificates created by project type

	2009-2011[a]	2012	2013	2014	Total
Lighting	722,409	2,063,555	3,522,357	**2,238,916**	8,547,237
Process Change/Control Systems	437,607	231,358	147,560	**310,010**	1,126,535
Multiple activities	37,284	68,815	190,329	**259,393**	555,821
New Appliances	997	108	88	**92,921**	94,114
HVAC	54,568	40,965	64,963	**76,437**	236,933
Refrigeration	11,302	23,428	39,254	**42,811**	116,795
Building Upgrade	55,989	56,379	72,014	**32,429**	216,811
Compressed Air	47,898	30,297	23,899	**31,586**	133,680
Fans/Pumps	24,429	6,453	21,083	**30,385**	82,350
Power Systems	0	0	2,305	**24,150**	26,455
Refrigerator & freezer removal	0	35,196	45,500	**15,220**	95,916
Showerheads	728,025	0	0	**0**	728,025
Power Factor Correction	228	0	0	**0**	228
Power Systems	0	0	0	**0**	0
High Efficiency Motors	0	0	3,970	**0**	3,970
Number of certificates created each year	**2,120,736**	**2,556,554**	**4,133,322**	**3,154,258**	**11,964,870**

a Refer to the 2011 ESS Annual Report for breakdown of the number of certificates created during these years.

Note: Small differences in data compared to previous annual reports reflect certificates that have been forfeited after the report was released.

Data source: ESS Registry as at 30 June 2015.

3 Compliance by Scheme Participants

Scheme Participants include all holders of NSW electricity retail licences; NSW electricity generators that supply directly to retail customers in NSW; and market customers in NSW that purchase electricity directly from the National Electricity Market (NEM). We assess each participant's compliance performance based on whether it submitted its Annual Energy Savings Statement (AESS) by the required deadline and met its individual energy savings target and other compliance obligations (see Box 3.1).

Box 3.1 Scheme Participant obligations

Scheme Participants' key compliance obligations include:

- Calculating their individual energy savings target for the year.
- Obtaining and surrendering sufficient certificates to meet this target, or carrying forward some or all the resulting energy savings shortfall (within the 10% limit) and/or paying a shortfall penalty.
- Lodging their Annual Energy Savings Statement (AESS) by the compliance date, and ensuring it is complete and correct, covering:
  - the Scheme Participant's calculation of its individual energy savings target
  - the particulars of its liable electricity acquisitions and any deductions in respect of partially exempt loads
  - the extent to which it met the target by surrendering certificates
  - any energy savings shortfall it is carrying forward, and
  - any penalty it is required to pay.
- Lodging an independent audit report with the AESS, if required.[a]

We assess each AESS by reviewing the data it contains (and any audit report), cross-checking certificate numbers with the ESS Registry, and undertaking a reasonableness check. Where an error or misstatement is identified, we make an amendment. We advise Scheme Participants that the certificates they have offered for surrender have been accepted on the ESS Registry, and of any shortfall penalties they must pay.

a An audit is typically required if the AESS includes data about liable acquisitions from non-market sources or seeks exemptions for any electricity loads (see sections 3.2 and 3.5). The exempt person must provide details of their exempt load to the electricity retailer in order to claim the exemption.

3.1 Scheme Participants' performance

During 2014, there were 53 Scheme Participants in the ESS, including 50 retail electricity suppliers, two direct suppliers, and one market customer. Forty-seven of these fully met their individual energy savings targets for 2014 (see Box 1.1), plus any remaining obligations for the 2013 compliance year. Of these, 35 surrendered sufficient certificates to meet their energy savings target. The remaining 12 did not directly purchase or sell electricity in NSW and so were not required to surrender any certificates.

The five Scheme Participants that did not fully meet their individual energy savings targets identified a shortfall equal to or less than 10% of their target. Therefore, all were able to carry forward their total shortfall to 2015. None elected to pay a shortfall penalty.

Compliance issues involved:

- One Scheme Participant did not comply with the requirement to submit an audited AESS by the compliance deadline of 30 April 2015, but did after this date.
- One Scheme Participant did not comply with the requirement to submit an audited AESS by the compliance deadline and had not done so at the time of writing. This participant, OC Energy, is a new retailer and we are taking appropriate follow-up action.
- One Scheme Participant did not surrender the correct number of certificates by the compliance deadline, but did so after this date.
- Two Scheme Participants surrendered additional certificates in 2014 following amended assessments of their 2012 and 2013 compliance obligations.

The energy savings target for 2014 was equivalent to 2,698,830 certificates and Scheme Participants surrendered sufficient certificates to meet this target. Table 3.1 reconciles the certificates required to meet Scheme Participants' combined compliance obligation for 2014 with the certificates they surrendered. Table 3.2 summarises the compliance performance of individual Scheme Participants.

Table 3.1 Reconciliation of certificates required to meet combined compliance obligations and certificates surrendered, 2014

Certificates required to meet 2014 compliance obligations	**2,698,830**
Add: Certificates required to meet shortfalls carried forward from 2013	44,403
Less: Shortfall carried forward to 2015	(50,318)
Less: Penalties paid in lieu of certificate surrender	0
Add: Adjustments due to amended assessments from previous years	9,793
Less: Certificates returned to Origin Energy in lieu of revival (see section 3.3)	*(2,518)*
Total certificates surrendered	**2,700,190**

Table 3.2 Individual Scheme Participant compliance in 2014

Surrendered sufficient certificates to meet 2014 energy savings target	
Alinta Energy Retail Sales Pty Ltd	M2 Energy Pty Ltd (previously Dodo Power and Gas Pty Ltd)
Aurora Energy Pty Ltd	Macquarie Bank Limited
Ausgrid	Macquarie Generation[a]
Australian Power and Gas (NSW)	Momentum Energy Pty Ltd
Blue NRG Pty Ltd	Next Business Energy Pty Ltd
Click Energy Pty Ltd	Origin Energy Electricity Limited[c]
Cogent Energy Pty Ltd	Origin Uranquinty
Cova U Pty Ltd	Pooled Energy Pty Ltd
COzero Energy Retail Pty Ltd	Powershop Australia
Delta Electricity[a]	Progressive Green Pty Ltd
Diamond Energy	Red Energy Pty Ltd
EnergyAustralia Pty Ltd	Sanctuary Energy Pty Ltd
EnergyAustralia Yallourn Pty Ltd	Simply Energy
ERM Power Retail Pty Ltd	Stanwell Corporation
GoEnergy Pty Ltd	Sun Retail Pty Ltd
GridX Pty Ltd	Tomago Aluminium Company Pty Ltd[b]
Infigen Energy Markets Pty Limited	WINenergy
Lumo Energy (NSW) Pty Ltd	
Did not directly purchase or sell electricity in NSW in 2014 so were not required to surrender certificates	
ActewAGL Retail Ltd	Metered Energy Holdings Pty Ltd
CS Energy	Neighbourhood Energy Pty Ltd
EDL Retail Pty Ltd	Ozgen Retail Pty Ltd
Infigen Energy Holdings	Pacific Hydro Retail Pty Ltd
International Power (Retail) Pty Ltd	People Energy Pty Ltd
Locality Planning Energy Pty Ltd	Trustpower Australia Holdings Ltd
Surrendered certificates to meet part of 2014 energy savings target and chose to carry forward the remaining energy savings shortfall to 2015	
AGL Sales Pty Ltd	Powerdirect Pty Ltd
AGL Sales (Queensland Electricity) Pty Ltd	Qenergy Pty Ltd
AGL Macquarie Pty Ltd[a]	
Did not submit an annual energy savings statement	
OC Energy Pty Ltd	

a A direct supplier of electricity.

b A market customer. Section 101(2) of the Act defines a market customer as "a customer that has classified any of its electricity loads as a market load and that is registered with the Market Operator as a market customer under the *National Electricity Rules* (within the meaning of the *National Electricity (NSW) Law*)".

c Origin Energy submitted a single AESS covering Origin Energy Electricity, Origin Uranquinty, Cogent Energy and Sun Retail.

3.2 Deductions for exempt loads

Under Section 119 of the Act, the Minister can grant exemptions from the ESS for part of the electricity load used by entities in 'emissions-intensive and trade-exposed' industries or activities.[21] The entities with an exemption are listed in a Ministerial Order published each year in the Government Gazette.[22,23] Scheme Participants that supply electricity to these entities are entitled to deduct the exempt portion of their sales when calculating their annual liable acquisitions, thereby reducing their annual energy saving target (in MWhs).

During 2014, 23 entities had exemptions for 33 specified locations. These included:

- **9 locations with exemptions for 60% of the load**. The activities undertaken at these locations included the production of glass containers, chlorine gas, sodium hydroxide, ammonium nitrate, nitric acid, ethanol, hydrogen peroxide, magnetite concentrate and polymer grade propene.
- **21 locations with exemptions for 90% of the load**. The activities undertaken at these locations include the manufacture of paper, newsprint, packaging and flat glass, the production of lime, clinker, magnesia, carbon black, ethylene and polyethylene, coke and iron, as well as steel making, aluminium smelting and petroleum refining.

Twelve Scheme Participants supplied electricity to these entities at these locations. In total, the deductions they claimed for exempt loads represented approximately 17% of the total electricity supplied in NSW in 2014.

For more information on the Ministerial Order and the Exemptions Rule, see our website.[24]

3.3 Amended assessments from previous compliance years

In early 2013, it was identified that "liable acquisitions" as defined in the Act did not require Scheme Participants to include non-market settled electricity purchased directly from persons registered as generators under the National Electricity Law. This was inconsistent with the way Scheme Participants had been calculating their individual energy savings targets and the policy intent of the ESS, which was to capture all electricity purchased to be used or on-sold

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21 These entities must provide details of their exempt load to the electricity retailer in order to claim the exemption. The retailer then deducts this proportion of the load from its annual liable electricity acquisitions, thereby reducing its annual energy savings target (in MWh). It is then a matter for the exempt party and the retailer to negotiate any adjustment to pass through costs.

22 The Ministerial Order lists each exempt entity (company or business name), the trade exposed activity it undertakes, the site where the activity takes place, and the proportion of the load that is exempt under the ESS (either 60%, 90% or 100%).

23 The amended Ministerial Order published on 23 December 2013 applies for the 2014 year. See NSW Government Gazette no. 179 of 2013 at *www.nsw.gov.au/gazette*.

24 See *www.ess.nsw.gov.au/For_Liable_Entities* and *www.ess.nsw.gov.au/How_the_scheme_works*.

within NSW. This anomaly meant that some Scheme Participants had been over-stating their individual energy savings targets for the first three years of the ESS.

In June 2013, the Act was amended to redefine liable acquisitions. In September 2014, the Regulation was amended to allow Scheme Participants to apply for an amendment for their 2009, 2010 and 2011 assessments to correct any over-statement of individual energy savings targets for these years and refund any over-payment of penalties or over-surrender of certificates. Three Scheme Participants applied for amendments, and this has resulted in:

- the refund of $502,860 in overpaid shortfall penalties and revival and return of 25,570 certificates to Endeavour Energy
- the refund of $21,072 in overpaid shortfall penalties and revival and return of 1,033 certificates to Essential Energy
- the return of 2,518 certificates to Origin Energy Electricity Ltd, and
- a reduction in the energy savings targets for the 2009, 2010 and 2011 compliance years of 5,599, 17,151 and 29,121 certificates respectively.

3.4 Energy savings shortfalls carried forward and shortfall penalties paid

A Scheme Participant with an energy savings shortfall in a given year can elect to carry forward at least some of this shortfall to the next year – up to a maximum of 10% of its individual energy savings target. Any shortfall carried forward must be met in the following compliance year.

In 2014, five Scheme Participants elected to carry forward a total of 50,318 certificates to the 2015 compliance year. This represents less than 2% of Scheme Participants' combined compliance obligation for 2014 (see Table 3.1).

No Scheme Participants chose or were required to pay a shortfall penalty in 2014.

3.5 Audits of Annual Energy Savings Statements

As Scheme Regulator, we require Scheme Participants to have their AESS audited by a member of the Audit Services Panel prior to submission, unless they are exempted from this requirement or submitted nil returns.

For 2014, the Audit Services Panel undertook 21 AESS audits, which covered 27 Scheme Participants' statements. These audits were conducted in early 2015, prior to the compliance deadline of 30 April 2015.

Of the remaining 26 Scheme Participants, 13 were not required to have their AESS audited as they had limited input data and audit assurance was unnecessary. Twelve submitted nil returns. One, OC Energy Pty Ltd, did not submit a statement or audit report although it was required to.

AESS audits provide assurance that any energy savings shortfalls have been calculated correctly. The auditor is required to verify that inputs and arithmetical calculations are correct, and that claims for exemptions for electricity sold to exempt parties are supported by appropriate evidence.

4 Compliance by Accredited Certificate Providers

Accredited Certificate Providers include all organisations that have been accredited to create certificates from recognised energy saving activities (RESAs) in NSW. To maintain the integrity of the ESS, we need to ensure these organisations only create certificates where genuine energy savings have occurred. We monitor their compliance with their obligations and use independent third-party audits to verify the savings they claim (see Box 4.1 and Box 4.2).

4.1 Accredited Certificate Providers' performance

For all or part of 2014, there were 125 Accredited Certificate Providers and 206 accreditations. Of these, 73 providers and 105 accreditations were active and created certificates for energy savings activities at thousands of sites in NSW.

Across all Accredited Certificate Providers, there were 132 instances of non-compliance during the year (Table 4.1). This is a significant increase from the 65 instances in 2013, which we attribute to:

- the cumulative increase in the number of Accredited Certificate Providers and RESAs over the last five years
- the increased number of audits conducted as the scheme as has expanded, and
- improved data collection which now captures minor non-compliance events.

Of these instances of non-compliance, 50 involved the improper creation of certificates. Of these instances, six were considered to be material. However, the total number of improperly created certificates represents less than 1.5% of the total certificates created in 2014. Therefore, the vast majority of certificates created in the year were properly created at the time of registration and represent real energy savings.

The remaining instances of non-compliance were due to failure to submit a report statement by the required deadline, or failure to engage an auditor by the required deadline.

Box 4.1 Accredited Certificate Provider obligations

Accredited Certificate Providers' key obligations include complying with the:

- requirements of the Act, the Regulation and the ESS Rule, and
- conditions of accreditation set out in their Accreditation Notices, including submitting annual or quarterly report statements and engaging auditors to undertake the audits of their accreditations.

The Act also sets out a range of actions that constitute non-compliance with Accredited Certificate Provider obligations, and may result in apparent breach notices, or suspension or cancellation of accreditation. These include:

- contravening the conditions of accreditation (Section 138)
- improperly creating certificates (Section 133)
- obstructing the Scheme Administrator (Section 157), and
- supplying false or misleading information (Section 158).

Box 4.2 How we manage Accredited Certificate Providers' compliance

When we grant accreditation to an Accredited Certificate Provider to carry out a RESA, we impose audit and reporting requirements as part of the conditions of accreditation. We determine these requirements using a risk management approach set out in our Compliance and Performance Monitoring Strategy (see section 5.5). Where the risk of improper creation is considered to be high, we may require pre-registration audits. These audits must be completed (with a satisfactory result) before the Accredited Certificate Provider can register (and sell) certificates. These audits provide the highest level of assurance.

We can also make a set-aside deed with the Accredited Certificate Provider to provide additional assurance. We seek these agreements on a voluntary basis. Their terms and conditions vary to reflect the Accredited Certificate Provider's individual circumstances. However in general, the agreement requires it to withhold from trade a portion of the certificates it creates until an audit is completed. Typically, this portion is a set percentage of certificates depending on the risk rating of the RESA, and reduces to zero after three successive audits with no material error.

In extreme cases, we can suspend the accreditation of an Accredited Certificate Provider. Typically, we would consider this approach when we have serious concerns about the activities and evidence of serious instances of improper certificate creation. We have only used this measure once since the ESS commenced.

Table 4.1 Instances of non-compliance by Accredited Certificate Providers

	2010	2011	2012	2013	2014
Improper creation of certificates (Section 133 of the Act)	11	14	21	45	**50**
Failing to submit a report statement by required deadline (Section 138 of the Act)	3	15	19	14	**57**
Failing to engage an auditor by the required deadline (Section 138 of the Act)	0	1	4	3	**25**
Failing to meet other Accreditation Notice conditions (Section 138 of the Act)	0	0	1	3	**0**
Total	**14**	**30**	**45**	**65**	**132**

4.2 Improper creation of certificates

The 50 instances of improper creation of certificates in 2014 involved 33 Accredited Certificate Providers, and resulted in the over-creation of 46,020 certificates. All instances were identified through the audit process.

4.2.1 Reasons for improper creation

Auditors found a range of reasons for the instances of improper certificate creation. For some, they identified more than one reason. These reasons included:

- use of incorrect data, calculation factors or input errors
- insufficient or inconsistent evidence retained as records to support certificate claims
- creation of certificates in the incorrect vintage
- use of unapproved nomination forms
- rounding and pro-rating errors in calculations
- failure to update calculations following internal quality assurance review
- certificates created from a project where a reduction in service and/or production levels had occurred, and
- certificates being created prior to required product approvals.

A number of instances of improper creation related to certificates being created prior to obtaining product approvals which is a specific requirement in the ESS Rule. In many instances, product approval was subsequently granted and certificates re-created. Therefore, although certificates were identified as improperly created, the energy savings were effectively valid.

4.2.2 Material instances of improper creation

Six of the 50 instances of improper creation in 2014 were considered to be material.[25] These instances involved six Accredited Certificate Providers (see below) and together resulted in the over-creation of 33,015 certificates.

In each instance, we notified the Accredited Certificate Provider and asked it to voluntarily forfeit all invalidly created certificates. All but one agreed to this, and implemented the auditor's recommendations to resolve the issues that led to the over-creation. The exception was Sustain Agility, where we cancelled their accreditation for failure to maintain appropriate records.

All of the material instances were discovered during individual audits. Other audits of the same Accredited Certificate Providers undertaken in 2014 found no material errors.

Sustain Agility

An audit of Sustain Agility identified 7,254 over-created certificates, resulting in an error rate of 72.5%. The error was due to insufficient evidence being available to support the energy savings claimed.

At the time the error was identified, Sustain Agility had 1,384 certificates set aside in the registry as part of a voluntary deed arrangement. In accordance with this arrangement, Sustain Agility voluntarily forfeited these certificates. However, it was unable to meet our request to voluntarily forfeit the remaining 5,870 certificates and therefore did not voluntarily forfeit the total amount of improperly created certificates. The certificates that were not voluntarily forfeited represent 0.19% of the total certificates created during the year.

We cancelled the accreditation of Sustain Agility in September 2014 for failure to maintain appropriate records.

WBS Technology Pty Ltd

WBS Technology Pty Ltd invalidly created 6,737 certificates out of the 9,953 included in the audit. This was an error rate of 67.7%. The over-creation occurred because WBS Technology did not seek approval for non-default annual operating hours prior to the creation of certificates, as required by the ESS Rule.

[25] In general, the number of certificates improperly created is considered material if it exceeds 5% of the total certificate claim being audited.

COzero CreditPortal Pty Ltd

COzero CreditPortal Pty Ltd over-created 14,143 certificates out of the 39,757 certificates included in the audit. The majority of these were found to be ineligible as they were created prior to receiving the required approval to use a new product. The approval was subsequently granted. The overall error rate was 35.6%.

Watts Green Pty Ltd

Watts Green Pty Ltd invalidly created 1,227 certificates out of the 9,772 certificates included in the audit. The primary reason for this was that the certificates were created from activities at sites that were ineligible under the ESS Rule. The overall error rate was 12.6%.

Carbon Reduction Institute Pty Ltd

Carbon Reduction Institute Pty Ltd invalidly created 3,120 certificates from its commercial lighting activities. Of these, 69% were invalid due to a single error where certificates were created prior to receiving the required approval for a new product. The approval was subsequently granted. The overall error rate was 6.4%.

Priority Group Australia Pty Ltd

Priority Group Australia Pty Ltd invalidly created 534 certificates out of the 9,667 certificates presented for audit. This 5.5% error rate was due to errors in product approvals and calculations, and discrepancies in the operating hours applied to sites.

4.3 Failure to submit a report by the required deadline

Accredited Certificate Providers' reporting requirements are specified in the individual accreditation conditions. For most accreditations, they were required to submit quarterly reports if the activity involved the installation or modification of equipment at multiple sites.

In 2014, there were 57 instances of failure to submit complete and correct reports by the required deadline, involving 44 Accredited Certificate Providers. This is a large increase compared to the 14 instances in 2013. We attribute this primarily to better detection of minor non-compliances through improvements in our internal processes.

While most of these 44 Accredited Certificate Providers subsequently submitted their outstanding reports after we reminded them of their obligations, some remain outstanding. Several Accredited Certificate Providers have not responded to our communications and their RESAs appear to be inactive. We have contacted these Accredited Certificate Providers regarding their participation in the ESS and the possible cancellation of their RESAs.

As a result of the 2014 ESS Rule change (see section 6.1), we have now phased out the accreditation condition for periodic reporting. This is because the amended ESS Rule requires all Accredited Certificate Providers to submit certificate creation data before or when registering certificates, making periodic reporting redundant. We retain the power to request information from an Accredited Certificate Provider at any time.

4.4 Failure to engage an auditor by the required deadline

There were 25 instances of failure to engage an auditor by the required deadline, in respect of 25 accreditations. This is also a large increase compared to 2013 and reflects our internal processes for detecting minor non-compliance events. In two cases, the auditor was engaged after the deadline. In four cases, the Accredited Certificate Providers had created very low volumes of certificates, and in 10 cases the RESAs or Accredited Certificate Providers were inactive and had not created any certificates.

The remaining nine cases were identified as potential contraventions of accreditation conditions, and we notified the Accredited Certificate Providers in writing and followed up as appropriate. In one of these cases, the Accredited Certificate Provider requested that its accreditation be cancelled, as it was unable to comply with an outstanding requirement to commission an audit of the certificates it had created. It offered to voluntarily surrender the certificates it still owned in lieu of commissioning an audit. The accreditation was cancelled and the remaining certificates were surrendered.

4.5 Product safety event

In early 2014, a potential safety issue involving a fluorescent lamp adaptor was identified. We took steps to stop the product being installed while NSW Fair Trading investigated the issue. This involved amending the accreditation conditions of a number of Accredited Certificate Providers to temporarily restrict certificate creation from new installations of the product. The Accredited Certificate Provider also commenced a voluntary private recall of the product. This is the first time that this course of action has been required in the ESS.

NSW Fair Trading's investigation involved contacting numerous traders as well as requiring the manufacturer to undertake laboratory testing of the product. No issues were identified in testing and no incidents were reported. This type of technology is no longer eligible following the 2014 ESS Rule change.

4.6 Cancellation of ineligible and dormant accreditations

We identified a number of accreditations that appear to be inactive or dormant because the organisation is no longer undertaking the activity that it was accredited for. We contacted each of these Accredited Certificate Providers and will proceed with cancelling their accreditations where their inactivity has resulted in them no longer being eligible, or they request cancellation. This will result in increased efficiencies in our administration of the ESS.

4.7 Audits of Accredited Certificate Providers

During 2014, the Audit Services Panel undertook 92 audits of Accredited Certificate Providers, covering 54 accreditations. Of these, 56 were volumetric audits, 24 were pre-registration audits, 11 were periodic audits and one was a spot audit (see Box 4.3). On average, these audits took 38 days to complete.

Box 4.3 Why and how we audit Accredited Certificate Providers

When we accredit an Accredited Certificate Provider to carry out a RESA, we impose audit requirements as part of the accreditation conditions. Audits provide assurance that:

- certificates have been properly created and are supported by sufficient records, and
- the number of certificates created is accurate, based on valid information that is free from material misstatement.

These auditing functions maintain the integrity of certificates created under the ESS by ensuring that certificates are created in accordance with the Act, Regulation, the ESS Rule and accreditation conditions.

The timing and type of audits varies by RESA, depending on our risk assessment. For example, audits may be required on a **periodic** or **spot** basis, or on **volumetric** basis (ie, when a threshold number of certificates have been created). If the risk is assessed as high, **pre-registration** audits may be required.

Pre-registration audits are conducted prior to certificates being registered on the ESS Registry. This reduces the likelihood of invalid certificate creation, but requires the Accredited Certificate Provider to pay the audit costs before certificates can be created and sold.

5 Scheme administration

In our role as Scheme Administrator, our activities in 2014 included assessing applications for accreditation, the amendment, transfer or cancellation of existing accreditations, the use of emerging lighting technologies, and membership of the Audit Services Panel. We also undertook a range of other actions to improve the administration of the scheme, including revising our core compliance strategy and launching an integrated ESS Portal.

5.1 Accreditations approved

To be accredited, an energy saving activity needs to meet the criteria for one of the methods for calculating energy savings set out in the ESS Rule (see Box 5.1). Once an application is deemed complete and the application fee is paid, we review the information provided against the requirements of the Act, Regulation, the ESS Rule and our published policies.

During 2014, we approved 40 new accreditations, 11 less than in 2013 (Figure 5.1). These included:

- 21 using the Project Impact Assessment Method. This method covers a broad range of activities that involve small energy savings at technically complex sites (for example, upgrading conveyor belts at a mining site).
- Nine using the Commercial Lighting Formula which encompasses the replacement of inefficient lights with new more energy efficient lights. This is a sub-method of the Deemed Energy Savings Method (DESM). It is simple to apply, and makes use of deeming (claiming future energy savings) at the time of certificate creation.
- 10 using the other sub-methods of the DESM or the Metered Baseline Method (MBM). These methods cover a range of activities, such as upgrades to high efficiency motors or installing control systems on existing fans or motors. Two of these were accredited under new sub-methods introduced as part of the 2014 ESS Rule change (see section 6.1).

Compared with new accreditations in 2013, there was a shift in 2014 away from commercial lighting activities to more engineering-based activities using the Project Impact Assessment Method (Figures 5.1 and 5.2).

Figure 5.1 Accreditations by year accredited and energy savings calculation method shows a shift away from commercial lighting activities in 2014

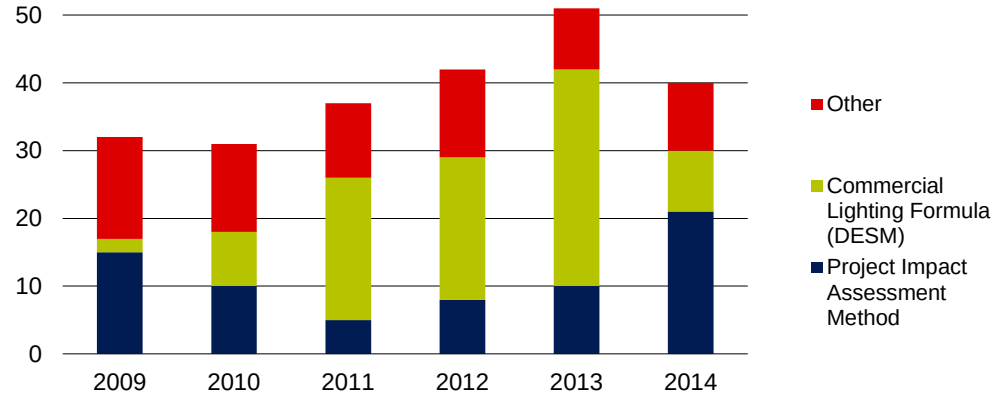
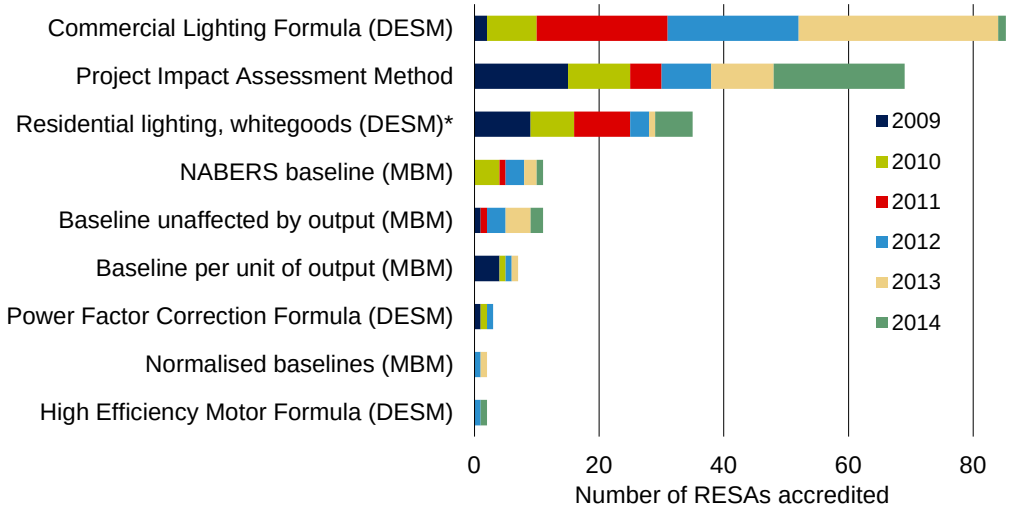


Figure 5.2 Accreditations by year accredited and energy savings calculation method



Notes: Residential lighting and whitegoods includes three sub-methods under the Deemed Energy Savings Method: Default Savings Factors, 1-for-1 Residential Downlight Replacement and Sale of New Appliances. DESM stands for Deemed Energy Savings Method, MBM stands for Metered Baseline Method.

Our average time for processing accreditation applications was 72 days. This was an improvement compared with processing times of 103 days in 2013 and 125 days in 2012. Processing times include days taken by the applicant to respond to requests for information.

We made significant changes to the application process during 2014 to make it more efficient and reflect the 2014 ESS Rule change. This rule change restricted certificate creation to projects implemented after accreditation. As such, certificates can no longer be created from demonstration projects, which were typically included in an application to demonstrate how applicants will implement projects.

Box 5.1 How do the calculation methods relate to energy savings activities?

The ESS Rule outlines how energy savings, and consequently certificates, are determined. It comprises four calculation methods, some of which include a number of sub-methods, that detail how energy savings are measured and calculated depending on the type of energy savings activity.

The **Deemed Energy Savings** method provides a wide range of energy savings activities, most of which can be applied in the residential sector. These calculation methods deem that energy savings commence at implementation and continue into the future (see Box 2.1). Deemed methods are specific to the type of activity as follows:

- **Sale of New Appliances** encourages retailers to sell energy efficient appliances over less efficient ones.
- **Commercial Lighting Energy Savings Formula** encompasses the replacement of inefficient lights with new more energy efficient lights.
- **High Efficiency Motor Energy Savings Formula** offers an incentive for purchasers of motors to choose high efficiency models.
- **Power Factor Correction Energy Savings Formula** covers the installation of capacitors to more efficiently manage the power supply to commercial or industrial sites.
- **Removal of Old Appliances** method encourages the removal and destruction of old inefficient fridges and freezers.
- **Home Energy Efficiency Retrofits** provides for bundling of activities to improve energy efficiency of homes and small businesses.

The **Project Impact Assessment Method** is designed to calculate energy savings from an engineering assessment or from modelling of reduced electricity consumption from an activity. This method is not available for activities that are implemented after 30 October 2015 as the new **Project Impact Assessment with Measurement and Verification** method, introduced with the 2014 ESS Rule change, provides more rigor around the calculation of energy savings using modelling and measurement for the same activities.

The **Metered Baseline Method** encompasses a range of sub-methods designed to achieve energy savings by measuring electricity consumption before and after an activity is carried out. This includes the **NABERS baseline** method, which uses commercial buildings ratings from the National Australian Built Environment Rating System to measure improvements in energy efficiency. The **Aggregated Metered Baseline** method provides for measured energy savings across a group of electricity users using statistical techniques.

Further information about accreditations is available on the ESS Registry.[26]

Further information about the application process is available on our website.[27]

[26] See *https://www.ggas-registry.nsw.gov.au*.

[27] See *www.ess.nsw.gov.au/How_to_apply_for_accreditation*.

5.2 Amendment, cancellation and transfer of existing accreditations

From time to time, the accreditation conditions imposed on Accredited Certificate Providers are amended. Amendments typically involve changing the limit on the number of certificates that can be created and the audit regime.

During 2014, we approved amendments to 264 existing accreditations, and took an average of 24 days to process each amendment. This number of amendments is significantly higher than in previous years, which we attribute to a range of factors. For example:

- 164 accreditations transitioned to the amended ESS Rule in July 2014[28] (see section 6.1.2)
- 20 accreditations were amended on two occasions to manage a potential safety issue involving a particular brand and model of lighting equipment (see section 4.5), and
- 22 accreditations were amended to reflect the change of an organisation name.

We also cancelled nine accreditations due to the Accredited Certificate Providers withdrawing from the ESS after they ceased carrying out eligible energy savings activities.

5.3 Approvals for emerging lighting technologies

Applicants can apply to have emerging lighting technologies (ELT) accepted for use in the ESS. To be accepted, the applicant must show that the product meets lighting equipment requirements, which were updated in October 2014 as a result of the 2014 ESS Rule change (see section 6.1).

During 2014, we processed 1,237 ELT applications covering 2,878 products, and accepted 2,276 of these products for use in the scheme. These included 676 products approved under the Victorian Energy Efficiency Target (VEET) scheme that we accepted for use under the ESS (see section 5.9).

Our average time for processing ELT applications was 47 days. This is longer than in 2013 (33 days). We attribute this to a focus on implementing the 2014 ESS Rule change as well as additional lighting equipment requirements that were introduced with the rule change.

[28] To ensure that Accreditation Notices remained effective, we amended conditions to update references to the relevant tables, equations and methods in the amended ESS Rule for affected RESAs.

We also updated the ELT Portal that manages ELT applications on two occasions during 2014. The first update in January improved useability and aligned the product categories with those used by the lighting industry and certifying bodies. The second update in August incorporated updated lighting equipment requirements and options for obtaining acceptance of ELT products.

Further information about emerging lighting technologies is available on our website.[29]

5.4 Approvals for membership of the Audit Services Panel

All audits must be undertaken by a member of our Audit Services Panel, with IPART (acting as either the Scheme Administrator or Scheme Regulator) as the principal client. Applications for panel membership may be made at any time. We assess applications against specific selection criteria to ensure that the firm has both the institutional capacity to support the audit process, and appropriate lead auditors with demonstrated skills and experience.

During 2014, we approved three new memberships to the Audit Services Panel and cancelled two. These changes increased the total number of members to 16 firms, with a total of 31 lead auditors.

Further information about the Audit Services Panel, including a list of panel members, is available on our website.[30]

5.5 Compliance and Performance Monitoring Strategy

Our Compliance and Performance Monitoring Strategy (CPMS) provides guidance on our approach in managing and monitoring the compliance and performance of Scheme Participants and Accredited Certificate Providers.

In 2014, we revised the CPMS to incorporate the lessons learnt from implementing our compliance strategy over the past three years. The main changes were:

- clarifying the use of voluntary set-aside agreements (deeds) as an additional compliance tool
- providing more detail on the approach for establishing an Accredited Certificate Provider's initial audit requirements
- describing the approach for setting and adjusting an Accredited Certificate Provider's ongoing audit requirements based on its performance, and
- clarifying the treatment of errors identified through audits, in particular invalid certificate creation, and how the materiality of such errors is assessed.

29 See *www.ess.nsw.gov.au/Projects_and_equipment/Emerging_lighting_technologies*.
30 See *www.ess.nsw.gov.au/For_Auditors*.

We plan to review CPMS again in 2016 to ensure that the way we monitor and manage compliance is effective and efficient and to reflect any changes as a result of the ESS Review that is being conducted by the NSW Government (see section 6.2).

The CPMS (and our other core compliance document, the Audit Guideline) are available on our website.[31]

5.6 In-person and online workshops

We hold both in-person and online workshops for potential Accredited Certificate Providers and auditors. These workshops help applicants and auditors understand the ESS legislation and obligations it places on them.

In 2014, we held 20 online and in-person workshops with 242 participants across all sessions. We also revised and updated our workshop coverage to encompass the 2014 ESS Rule change, and developed three new online workshops.

In addition, we held our first consultation forum intended to open a broader dialogue between ESS staff and stakeholders. We plan to hold these forums quarterly and focus discussion on current issues to assist us to be more efficient and effective. Further information about our workshops, including registration, is available on our website.[32]

5.7 Launch of ESS Portal

In January 2014 we engaged a consultant to develop an integrated ESS IT Portal to better manage our application processes and compliance activities as well as improve stakeholder interaction with IPART.

In November 2014 we launched the ESS Portal to external users. This first release enabled Accredited Certificate Providers to upload data about their activities,[33] which improved both processing times and data quality through automated data validation. A further update in late December provided reporting for the Office of Environment and Heritage on scheme activity, and internal reporting of key statistics such as website analytics.

Development is continuing throughout 2015, and two new features were released in the first half of 2015. These were an audit management system and an events manager that displays pending events such as audits. These features will assist Accredited Certificate Providers to meet their conditions of accreditation and reduce the instances of non-compliances in the future (see section 4.1).

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31 See *http://www.ess.nsw.gov.au/Audits_and_Compliance/Audit_and_compliance_guides*.

32 See *www.ess.nsw.gov.au/online_workshops*.

33 Under clause 6.8 of the ESS Rule, Accredited Certificate Providers are required to submit data about their energy savings activities before or when creating certificates.

5.8 Insulation risk mitigation

The 2014 ESS Rule change introduced the potential for home and small commercial insulation activities to be included in the ESS (see section 6.1).[34] Although insulation activities have not yet commenced, we have engaged with a range of industry and government stakeholders to assist our understanding of potential risks and how they might be mitigated to maintain the integrity of the ESS.

5.9 ESS and VEET harmonisation

In line with the NSW and Victorian governments' reform agenda,[35] we continued to implement initiatives to increase consistency between the ESS and the VEET scheme during 2014.

Since July 2014, we have been incorporating VEET scheme approved lighting products into the ESS public list of accepted lighting products (see section 5.3). This means that certain categories of VEET approved products may be also accepted for use under the ESS.

We have also formalised our process for incorporating a company's compliance performance in the VEET scheme into our CPMS. This means a company's compliance performance in the VEET scheme is considered when assessing an application for accreditation under the ESS.

5.10 Current and projected supply and demand for certificates

We publish market estimates for both supply and demand of certificates based on a number of assumptions and sources of information. In our market update published in August 2014 we:

- Estimated that certificate demand for the 2014 compliance year would be between 2.31 million and 2.60 million certificates. Actual demand was 2.70 million (see Table 3.1).
- Indicated that the certificate surplus was rising, noting that at the time the surplus was 3.4 million certificates and there was a further 10 months of certificate registration for 2014 activities.

34 The ESS Rule provides for insulation activities to commence on a date notified by the Minister responsible for the Act by notice published in the NSW Government Gazette.

35 In late 2011, the governments agreed to pursue a new reform agenda to promote economic growth, make it easier to do business, and reduce the costs of living and running a business. As part of this agenda, the State Premiers agreed to increase the consistency between the ESS and VEET schemes with the aim of harmonising the schemes wherever possible without the need to amend legislation.

- Expected that the most likely range for the certificate surplus after 2014 compliance obligations had been met would be around 2.2–2.4 million (including previous vintages). The actual certificate surplus at 30 June 2015 was 3.1 million (see Table 2.2).

See sections 1.3 and 2.2.6 for further information on the certificate surplus.

Market updates are available on our website.[36]

[36] See *www.ess.nsw.gov.au/certificate_market/market_update*.

6 Developments in the ESS

There were a range of important developments in the ESS in 2014, including significant amendments to the ESS Rule (the 2014 ESS Rule change), the ESS Review, and continued work to ensure the ESS and the Commonwealth Emissions Reduction Fund work in a complementary fashion.

6.1 2014 ESS Rule change

In late 2013, the NSW Government proposed changes to the ESS Rule to increase the effectiveness and scope of the ESS. The changes aimed to:

- encourage the take-up of a broader range of energy efficiency activities
- remove unnecessary red-tape that creates a barrier to households and businesses accessing energy efficiency incentives
- ensure consumers receive lasting energy savings through quality products and services, and
- increase the likelihood that energy savings are additional to business as usual.

The process to amend the ESS Rule was completed during 2014, and two amendments commenced on 1 June 2014 and 1 July 2014.[37] The amendments resulted in significant changes across the ESS and affected how current and future Accredited Certificate Providers participate in the scheme.

Transitional arrangements were put in place to assist Accredited Certificate Providers and applicants manage these changes. However, participation in a number of new activities has been minimal to date (see section 6.1.3).

6.1.1 Changes across the whole ESS

The amendments to the ESS Rule affected the scheme as a whole and comprised changes to:

- the core definitions and additional requirements of the ESS Rule, and
- the methods for calculating energy savings.

[37] The *Energy Savings Scheme (Amendment No. 1) Rule 2014* commenced on 1 June 2014 and the *Energy Savings Scheme (Amendment No. 2) Rule 2014* commenced on 1 July 2014, which replaced Amendment No. 1.

Core changes

There were three main changes to the ESS Rule structure. These were the introduction of eligibility and participation requirements (including data collection), amendments to the definitions of 'Implementation Date' and 'Energy Saver', and the removal of the nominated Energy Saver's ability to pass on a nomination to another party.

Method changes

The scope of the ESS was expanded to include more technologies and provide greater access to the residential sector. Major method changes included the introduction of four new methods or sub-methods for calculating energy savings. These were the:

- **Project Impact Assessment with Measurement and Verification Method** which uses measurement and verification techniques to calculate energy savings by comparing a baseline energy model with post-implementation performance.
- **Aggregated Metered Baseline** sub-method of the Metered Baseline Method, which provides for measured energy savings across a group of electricity users using statistical techniques.
- **Installation of High Efficiency Appliances for Businesses** sub-method of the Deemed Energy Savings Method, which enables retailers and other commercial businesses to participate by installing or retrofitting large refrigeration and cooling systems.
- **Home Energy Efficiency Retrofit** sub-method of the Deemed Energy Savings Method, which facilitates improved energy efficiency in homes and small business through bundling of activities.

Other method changes included:

- replacing the **Default Savings Factors** sub-method with three new sub-methods: the **1-for-1 Residential Downlight Replacement**, **Removal of Old Appliances** and **Sale of New Appliances**
- changing the eligibility requirements for commercial lighting, including new and expanded technical requirements for ELTs, and
- removing T5 adaptor kits and retrofitted LED linear lamps as eligible activities.

6.1.2 Transitional arrangements

Transitional arrangements were put in place to assist Accredited Certificate Providers and applicants to transition to the amended ESS Rule.[38] In particular, Accredited Certificate Providers had until 30 September 2014 to register certificates under the previous ESS Rule for activities implemented prior to 1 July 2014.

There were also additional method-specific transitional arrangements, especially if the method involved long-term projects. Most of these arrangements were concluded by the end of 2014. The transitional arrangements that remained in place beyond the end of 2014 allow ongoing certificate creation for activities implemented prior to 1 July 2014, and some of the ELT approvals.

6.1.3 Activity in new calculation methods

Participation in the new energy saving activities has been limited to four of the seven new calculation methods. During the first year of the new ESS Rule,[39] we received 17 applications for accreditation under the new calculation methods as follows:

- 10 applications for the **Project Impact Assessment with Measurement and Verification Method**. Of these, three were approved, two were withdrawn and the remainder were still under assessment at 30 June 2015.
- Four applications for the **Sale of New Appliances** sub-method. Of these, two were approved and two were withdrawn.
- One application for the **1-for-1 Residential Downlight Replacement** sub-method which was approved.
- Two applications for the **Installation of High Efficiency Appliances for Business** sub-method, both of which were approved.

Although five applicants were accredited under the **1-for-1 Residential Downlight Replacement** sub-method (one new accreditation and four that transitioned from the old Default Savings Factors sub-method), only a small number (39) of certificates were created (see Table 2.3). No further certificates can be created under this sub-method as it ceased on 1 February 2015.

38 Clause 11 of the ESS Rule.
39 1 July 2014 to 30 June 2015.

6.2 ESS Review

On 11 November 2014 the NSW Government announced its intention to reform the ESS following a consultation period with stakeholders that concluded in early 2015. Key changes considered are:

- expanding the fuel coverage of the ESS to include gas
- extending the duration of the ESS to 2025
- introducing a regional factor into the ESS to more accurately reward energy saved in regional NSW, and
- improving the administration and effectiveness of the ESS by developing a comprehensive monitoring and evaluation framework and conducting regular reviews of the ESS Rule.

The NSW Government has also consulted on further amendments to the ESS Further information is available on the website of the Department of Industry, Resources & Energy.[40]

6.3 Emissions Reduction Fund

The *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) establishes the Emissions Reduction Fund. This fund builds on the Carbon Farming Initiative to create incentives for businesses and communities across the economy to reduce greenhouse gas emissions. It has three elements: crediting emissions reductions, purchasing emissions reductions, and safeguarding emissions reductions.

The Emissions Reduction Fund covers a range of activities, some of which are also covered by the ESS – including upgrading commercial buildings and improving the energy efficiency of industrial facilities and houses. We have been liaising with the Commonwealth Department of the Environment on the development of the energy efficiency methods and will continue to work with the Clean Energy Regulator to ensure the two schemes operate together and complement each other. More information on the Emissions Reduction Fund can be found on the Clean Energy Regulator's website.[41]

40 See *www.resourcesandenergy.nsw.gov.au/energy-consumers/sustainable-energy/efficiency/scheme/energy-saving-scheme-review*.

41 See *www.cleanenergyregulator.gov.au*.

Glossary

This glossary provides a general guide to the terminology used in ESS. It is designed to be read in conjunction with the Act, Regulation and ESS Rule. This glossary should not be relied upon as a substitute for legal advice, and does not override the true definitions of these terms in the Act, Regulation or ESS Rule.

Term	Meaning
Accredited Certificate Provider	A person accredited by the Scheme Administrator to create Energy Savings Certificates relating to a Recognised Energy Saving Activity.
Act	The *Electricity Supply Act 1995,* which established the ESS.
Approved Corresponding Scheme	A scheme in another jurisdiction that the Minister has determined to have similar objectives to the ESS and an equivalent compliance regime to the ESS. Once a scheme is determined to be an Approved Corresponding Scheme, persons may carry out Recognised Energy Saving Activities that are approved under the Approved Corresponding Scheme and create Energy Savings Certificates.
Base Penalty Rate	Is listed in Schedule 5A of the Act.
Baselines	The level of energy consumption, or energy intensity against which improvements are measured, and from which the calculation of Energy Savings Certificates are made.
Carbon Dioxide Equivalent (CO_2-e)	The standard unit for the quantification of all greenhouse gases. One Energy Savings Certificate represents the energy savings equivalent to the abatement of one tonne of carbon dioxide equivalent (tCO_2-e).
Certificate Conversion Factor	Is listed in Schedule 5B of the Act as 1.06, and is used to convert the number of MWh of Energy Savings from a Recognised Energy Saving Activity to tonnes of carbon dioxide equivalent. This is done by multiplying the MWh saved by the Certificate Conversion Factor.
Confidence Factor	A factor applied, when calculating the number of Energy Savings Certificates using either the Project Impact Assessment Method or the Metered Baseline Methods, that reflects the accuracy of Accredited Certificate Provider's methodology. A more accurate methodology will generally result in a higher Confidence Factor, and a larger number of certificates.
Consumer Price Index (CPI)	Is the Consumer Price Index (All Groups Index) for Sydney. Under the Energy Savings Scheme, the Scheme Penalty Rate is adjusted, prior to the commencement of each calendar year, by the CPI, to give the adjusted Penalty Rate for that calendar year.

Term	Meaning
Default Savings Factors	A default figure which may be used to calculate the number of Energy Savings Certificates (ESCs) for each activity listed in Schedule A of the ESS Rule. The use of Default Savings Factors allows all the energy savings associated with the activities listed in Schedule A to be brought forward to the point at which the activity takes place.
End-user Equipment	End-user equipment refers to the electricity consuming equipment, processes, or systems, including equipment directly consuming electricity and any other equipment which controls or influences the consumption of electricity.
Energy Saver	The person contractually liable for the energy consumed by the end-user equipment or site that is the subject of a Recognised Energy Saving Activity (RESA), or the person nominated in writing to be the Energy Saver in respect of a RESA.
Energy Savings	Energy Savings refers to the calculated reduction in electricity consumption arising from a Recognised Energy Saving Activity (RESA) and calculated according to the ESS Rule.
Energy Savings Certificate (ESC)	A transferable certificate under Part 9 of the Act, which is created in accordance with the ESS Rule. A certificate represents the Energy Savings associated with the abatement of one tonne of carbon dioxide equivalent (tCO_2-e).
Energy Savings Scheme Rule	The Energy Savings Scheme Rule of 2009 published by the Minister for Industry, Resources and Energy, sets out the primary eligibility requirements, calculation methodologies and arrangements for the creation of Energy Savings Certificates. This rule is amended from time to time.
Energy Savings Target	The Energy Savings Target refers to a figure, specified in Schedule 5 of the Act, that is applied to the total Liable Acquisitions in NSW to determine each Scheme Participant's Individual Energy Savings Target for each calendar year.
Entitlement Date	The date an ESS application for accreditation is accepted as being lodged in a complete and acceptable form by the Scheme Administrator, and once accredited, the date from which an Accredited Certificate Provider may create certificates.
Energy Savings Shortfall	If a Scheme Participant fails to surrender enough Energy Savings Certificates to meet its Individual Energy Savings Target for the year, it has an Energy Savings Shortfall for that year and is liable to pay a penalty for each Energy Savings Certificate it has failed to surrender.
Exempt Electricity Load	An Exempt Electricity Load is the load attributed to a person or class of person which has been granted partial exemption (60% or 90%) from the scheme by the Minister, as specified in the Ministerial Order.
Implementation Date	The Implementation Date is the date on which the Energy Savings from the Recognised Energy Saving Activity (RESA) commences.
Individual Energy Savings Target	The Individual Energy Savings Target is the number of Energy Savings Certificates which a Scheme Participant must surrender each year to meet obligations under the Energy Savings Scheme. This target is determined by multiplying the Energy Savings Scheme Target for that year by the total liable acquisitions in that year and the certificate conversion factor.

Term	Meaning
Liable Acquisition	Is any purchase of electricity by a Scheme Participant which is purchased from the Market Operator, or from parties not registered with the Market Operator for supply to end users in NSW whose loads have not been listed as Exempt Electricity Loads.
Market Operator	Is the entity responsible for the administration and operation of the wholesale national electricity market in accordance with the National Electricity Law (currently the Australian Energy Market Operator (AEMO)).
Ministerial Order	The Ministerial Order is published annually, or when required, and lists all emissions intensive trade exposed industries, their location and proportion of electricity load granted an exemption (either 60% or 90%) under the ESS.
National Australian Built Environment Rating System (NABERS)	A ratings methodology administered by the NABERS Administrator (currently the Office of Environment and Heritage (OEH)) which can be used to calculate Energy Savings under the Metered Baseline Method. This method can be used for new or existing buildings.
Penalty Conversion Factor	Is specified in Schedule 5A of the Act, and is 0.94 for the duration of the Scheme.
(ESS) Penalty Rate	Is calculated by multiplying the Base Penalty Rate per MWh by the Penalty Conversion Factor. The ESS Penalty Rate is the amount per certificate that is applied to a Scheme Participant's Energy Savings Shortfall to calculate the monetary penalty as a result of the shortfall. The ESS Penalty Rate is listed in Schedule 5A of the Act.
Recognised Energy Saving Activity (RESA)	A specific activity, approved by the Scheme Administrator, which is implemented by an Energy Saver and increases the efficiency of electricity consumption or reduces electricity consumption with no negative effect on production or service levels.
Regulation	*Electricity Supply (General) Regulation 2001*.
Retail Supplier	A Scheme Participant under the Energy Savings Scheme. Includes all holders of an electricity retail licence in NSW.
Scheme Administrator	The body responsible for administering functions such as accrediting Accredited Certificate Providers, verifying Energy Savings activity and maintaining a registry of certificates. The NSW Independent Pricing and Regulatory Tribunal (IPART) is the Scheme Administrator for the Energy Savings Scheme.
Scheme Participant	A person who is required to comply with an Individual Energy Savings Target. Scheme Participants include all Retail Suppliers of electricity in NSW, any person directly supplying a customer in NSW or any person directly purchasing electricity from the Market Operator (other than a Retail Supplier).
Scheme Regulator	The body that monitors the compliance of Scheme Participants with their Individual Energy Savings Targets under the Act. The NSW Independent Pricing and Regulatory Tribunal (IPART) is the Scheme Regulator for the Energy Savings Scheme.
Site	A Site refers to all the end-user equipment for which the electricity consumed is measured by the same utility meter allocated a National Meter Identifier (NMI) under the National Electricity Law, or by other meters or logging devices approved by the Scheme Administrator.

Term	Meaning
Victorian Energy Efficiency Target (VEET)	Similar to the ESS, the VEET scheme is a Victorian Government initiative designed to make energy efficiency improvements more affordable, contribute to the reduction of greenhouse gases, and encourage investment, employment and innovation in industries that supply energy efficiency goods and services.