IPART
New South Wales

Independent Pricing and Regulatory Tribunal

Method Guide
Removal of Old Appliances

Deemed Energy Savings Method

Energy Savings Scheme
August 2016

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V1.0	Initial release – following gazettal of ESS Rule Amendment No. 2	September 2014
V2.0	Application Form: Part B – Method Details and Nomination Form removed from the Method Guide to be separate documents.	January 2015
V3.0	Updated to reflect amendments to the ESS Rule.	August 2016

Contents

1 About this document

The NSW Energy Savings Scheme (**ESS**) seeks to reduce energy consumption in NSW by creating financial incentives for organisations to invest in energy saving projects.

The other objects of the ESS are to:

- assist households and businesses to reduce energy consumption and energy costs
- make the reduction of greenhouse gas emissions achievable at a lower cost, and
- reduce the cost of, and need for, additional energy generation, transmission and distribution infrastructure.[1]

Electricity retailers and other mandatory participants (**Scheme Participants**) are obliged to meet energy saving targets. Energy savings can be achieved by installing, improving or replacing energy saving equipment. Persons that become Accredited Certificate Providers (**ACPs**) can create energy savings certificates (**ESCs**) from these activities and then sell those ESCs to Scheme Participants. The Independent Pricing and Regulatory Tribunal of NSW (**IPART**) is both the Scheme Administrator and Scheme Regulator of the ESS.[2]

This document provides guidance about how the Removal of Old Appliances (**RoOA**) method of the ESS operates, some of the key requirements that must be met when using the method, and how to calculate energy savings for a Recognised Energy Saving Activity (**RESA**) and create ESCs. This document should be used by:

- applicants seeking accreditation as a certificate provider, to assist them in completing their application,[3] and
- those persons who are already ACPs, to assist them in accurately calculating energy savings using this method.

1.1 Legislative requirements

This document is a guide only and is not legal advice. The legal requirements for ACPs participating in the ESS are set out in:

- Part 9 of the *Electricity Supply Act 1995* (**Act**)

1 *Electricity Supply Act 1995*, section 98(2)
2 *Electricity Supply Act 1995*, sections 153(2) and 151(2)
3 A full explanation of the application process is provided in the Application Guide www.ess.nsw.gov.au/How_to_apply_for_accreditation/Apply_now_-_guides_and_application_forms. Please ensure you read this document and the Application Guide in full before applying for accreditation.

- Part 6 of the *Electricity Supply (General) Regulation 2014* (**Regulation**), and
- the *Energy Savings Scheme Rule of 2009* (**ESS Rule**).

ACPs are also required to meet any additional conditions of accreditation as set out in their Accreditation Notice.

The **ESS Rule was amended** on 15 April 2016. The information in this document reflects the requirements of the ESS Rule as amended and should be referred to for all implementations. Where changes have been made to a section of this document as a result of amendments to the ESS Rule, the section is highlighted and marked with the following symbol:

Note that the previous version of the ESS Rule could have been used to calculate energy savings arising from an implementation with an implementation date before 15 April 2016, provided that:

- no previous applications to register ESCs in respect of that implementation were made prior to 15 April 2016, and
- the application to register ESCs in respect of those energy savings was made on or before 30 June 2016.[4]

Further guidance on calculating energy savings under the previous version of the ESS Rule, in accordance with cl 11.1 of the ESS Rule, can be found in version 2.0 of this document.[5]

2 Method overview

The method can be used to calculate energy savings and create ESCs from the removal of old, or spare, refrigerators and freezers that consume more electricity than new refrigerators and freezers.

3 Requirements that must be met

The information below is guidance about the requirements of the method. This is not an exhaustive list of requirements, and you should ensure that you are familiar with your obligations under the Act, Regulation, ESS Rule and any conditions of your accreditation.

4 *ESS Rule*, cl 11.1
5 Available here: http://www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Document_archive

3.1 Energy saver

An ACP can only calculate energy savings and create ESCs from an implementation if the ACP is the 'energy saver' under the ESS Rule. The ACP must be the energy saver as at the implementation date. An energy saver can be either:

- **the original energy saver** – which, under this method, is the person who is contracted to remove the equipment (the **contractor**), or
- **the nominated energy saver** – which is someone the original energy saver has nominated as the energy saver by completing a Nomination Form using the method-specific template.[6]

An ACP that is the original energy saver must be accredited as an ACP prior to the implementation date in order to create ESCs from an implementation.

If you intend to become a nominated energy saver, you must have a documented procedure identifying how you will obtain the nomination from the original energy saver. The nomination is taken to occur on the date that it is signed by both the **original energy saver** and **nominated energy saver.** To create ESCs from an implementation you must be:

- **accredited** as an ACP **prior to** the implementation date and before the nomination is made,[7] and
- **nominated** by the original energy saver **on or before** the implementation date.

3.2 Implementation and implementation date

An implementation is the delivery of a recognised energy saving activity (**RESA**)[8] at a site. The implementation date is the date the appliance is removed from the site.

Each site address is a different implementation under this method, and multiple eligible old appliances may be removed from a site. If they are removed on the same date they will be part of the same implementation.

To create ESCs, an ACP must be accredited for the relevant RESA **prior to** the implementation date.[9] ACPs that create ESCs must be the energy saver as at the implementation date. ACPs that are nominated as the energy saver must be nominated by the original energy saver **on or before** the implementation date.

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6 Available here: www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Removal_of_Old_Appliances

7 The ESS website provides information on applying to become an ACP at: www.ess.nsw.gov.au/How_to_apply_for_accreditation.

8 RESAs are defined in clause 5.3 of the ESS Rule.

9 The ESS website provides information on applying to become an ACP at: www.ess.nsw.gov.au/How_to_apply_for_accreditation.

3.3 Eligible appliances

The appliance removal must be included in an activity definition in Schedule C of the ESS Rule (see Appendix A of this guide). Each activity definition defines a class of appliance that can be removed and the requirements the appliance must meet. The activity definitions are listed in Table 3.1 below.

Table 3.1 Eligible equipment types

Activity Definition	Old Appliance Type
C1	Spare refrigerator or freezer – capacity of 200 L or greater
C2	Primary refrigerator or freezer – capacity of 200 L or greater

3.3.1 Equipment requirements

Equipment requirements are specified under each activity definition. Generally the appliance must meet the appropriate group classification under AS/NZS 4474,[10] be in working order and be of 200 litres (L) capacity or more. For category C1, it must be a spare refrigerator or freezer, and the site must have another refrigerator or freezer providing primary refrigeration that is located in, or closer to the kitchen. For category C2, it must be the primary refrigerator or freezer.

The capacity requirement for 200 L or greater is intended to exclude bar fridges from this method. Most other refrigerators will have capacities greater than 200 L. For combined refrigerator/freezers the capacity includes both compartments. You must ensure each appliance you remove meets this size requirement.

From time to time we may also update this guide, which may include other evidence acceptable to the Scheme Administrator for the removal of the relevant refrigerators/freezers.

3.3.2 Activity requirements

The requirements for both removal activities (C1 and C2) from the ESS Rule are that:

- The site from which the appliance(s) is removed must be an eligible building. For activity C1, it must be an eligible residential building, however, for activity C2, both residential and small business buildings are eligible.
  - A 'residential building' means a building classified by the Building Code of Australia (BCA) as a Class 1 or Class 2 building, and may include any non-habitable building on the same site.

[10] Refer to Schedules C1 and C2 of the ESS Rule.

  - A ‘small business building’ means a building comprising total floor space less than 200 square metres and classified by the BCA as a Class 6 building.
- The appliance(s) being removed must meet the relevant equipment requirements defined in Schedule C of the ESS Rule (refer to Appendix A of this guide).
- Each eligible appliance must be removed from the site and disposed of.
  - You must track each appliance from pick up to destruction with a unique identifier to ensure that each appliance picked up is disposed of correctly.
- The disposal agent must have a refrigerant handling licence.
  - This is to ensure that refrigerant gases from the disposed appliances are disposed of according to relevant legislation.

For implementations with an implementation date on or after 15 May 2016, recycling evidence must be obtained for any refrigerants being disposed of, such as a tax invoice or a recycling receipt, or any other evidence acceptable to the Scheme Administrator.

4 Calculating energy savings

The relevant equations and tables used to calculate energy savings using the method are provided in Appendix A of this guide. Under the ESS Rule, energy savings comprise both ‘electricity savings’ and ‘gas savings’.

4.1 Electricity savings

The electricity savings from an implementation of the method can be calculated using equation 15 of the ESS Rule, which uses:

- the Deemed Equipment Electricity Savings from Activity Definitions C1 and C2 from the ESS Rule (refer to Appendix A of this guide), and
- the Regional Network Factor from Table A24 in Schedule A of the ESS Rule (refer to Appendix A of this guide).

If a contractor removes multiple appliances in a single removal, all the appliances removed are treated as belonging to a common implementation (removal), and the energy savings for that implementation are the sum of the deemed equipment energy savings for each eligible appliance removed.

4.1.1 Regional Network Factor

The equation to calculate electricity savings includes a regional network factor. The applicable regional network factor is based on the postcode of the site and can be found in Table A24 of the ESS Rule (refer to Appendix A of this Guide).

4.2 Gas savings

The gas savings from this method will always be equal to zero (as, under the ESS Rule, gas savings are not calculated for this method and are therefore not applicable).

5 Calculating and creating ESCs

Equation 1 of the ESS Rule is used to calculate the number of ESCs that may be created from the energy savings calculated in relation to an implementation.

Equation 1

$$Number\ of\ Certificates = \Sigma_{Implementations}\ Electricity\ Savings\ x\ Electricity\ Certificate\ Conversion\ Factor + Gas\ Savings\ x\ Gas\ Certificate\ Conversion\ Factor$$

5.1 Applying to register ESCs

Certain information must be submitted to us **before an ACP applies to register** ESCs created from energy savings arising from an implementation or implementations.[11] ACPs are to provide the required information by completing an Implementation Data Sheet[12] and submitting it through the ESS Portal.[13] The Implementation Data Sheet will include a calculation of the number of ESCs to be created in accordance with Equation 1 in the ESS Rule. This calculation involves multiplying the electricity savings arising from the implementation or implementations by the certificate conversion factor for electricity (1.06).[14]

The result is the total number of ESCs that ACPs can apply to register from the implementation or implementations. If the result is not a whole number, it is rounded down to the nearest whole number.

There are no restrictions on how many implementations can be bundled together in the same Implementation Data Sheet. However:

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11 *ESS Rule*, cl 6.8

12 The implementation data sheet is available from the ESS Website at: www.ess.nsw.gov.au/Registry/Registering_certificates

13 Information and access to the portal can be found here: www.ess.nsw.gov.au/ESS_Portal

14 *The Act*, s 130(1)(a). This may be amended by regulations: see *the Act*, s 130(3).

- ACPs must apply to register all ESCs included in an Implementation Data Sheet in a single application
- ACPs cannot split energy savings calculated from a single implementation across two or more Implementation Data Sheets, and
- each Implementation Data Sheet must only include the calculation of energy savings that are taken to have occurred in the same calendar year (commonly referred to as 'vintage').

When determining how many Implementations to bundle in the same Implementation Data Sheet, ACPs should consider:

- the ESC creation limit specified in their Accreditation Notice, as they must be able to register all the ESCs in the bundle at the same time, and
- the cost of registering the ESCs.[15]

More information on applying to register the creation of ESCs can be found on the ESS website.

6 Minimum required records

ACPs are required to keep records of the energy savings activity, including:

- the location in which the energy savings activity occurred
- the energy savings arising from that activity
- the methodology, data and assumptions used to calculate those energy savings, and
- any other records specified by the Scheme Administrator.[16]

ACPs must retain records for at least six years, in a form and manner approved by the Scheme Administrator. Each ACP's Accreditation Notice may include a condition requiring that the ACP's record keeping arrangements are consistent with the ESS Record Keeping Guide.[17]

Table 1 below describes the minimum documents you are required to keep as a record of the energy savings from your project. You must collect the required documents for each implementation of your activity.

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15 The ESC registration fee must be paid in a single payment for all ESCs registered in a single bundle. Payment for a single bundle cannot be split into two payments. Refer: www.ess.nsw.gov.au/Registry/Registering_certificates

16 *The Regulation*, cl 46

17 Available at: www.ess.nsw.gov.au/Accredited_Certificate_Providers/Record_keeping_arrangements

Table 1.1 Minimum required records for all implementations

Requirement	Document	Description
Implementation Date and Address	Tax invoice **or** Run sheet **or** Signed owner and contractor declaration **or** Time-stamped photo	The document must clearly show the date of the removal and the address where the removal occurred.
Energy Saver	Signed appliance owner and contractor declaration **or** Tax invoice	The document must clearly show: ▾ the contractor's name, ABN and address ▾ the address of the appliance retailer. If the declaration is provided, it must be signed and dated by both the appliance owner and contractor.
Nomination	Nomination form	The nomination form must: ▾ be in the required form (ie, using the relevant template available from the ESS website), and ▾ be signed by both the purchaser and the ACP on or before the implementation date.
Appliance size and working order	Signed appliance owner and contractor declaration	The declaration must state: ▾ that the capacity of the appliance is 200L or greater ▾ whether the label was used or the capacity was measured ▾ that another primary refrigerator is at the premises, and is located close to, or in, the kitchen (C1 activities only) ▾ the appliance is in working order. The declaration must be signed and dated by both the appliance owner and contractor.

Requirement	Document	Description
Disposal	Tax invoice or recycling receipt and	The document must show that the fridge or freezer has been disposed of at a metal recycling and/or refrigerant destruction facility.
	Disposal Agent's Licence	The document must show that the fridge or freezer has been disposed of by a licensed refrigerant handler (licences are issued by Australian Refrigeration Council).
Calculations	The spreadsheet or calculation tool used to calculate energy savings from each implementation.	The document must clearly show your calculation of energy savings, and the data inputs and factors applied as required for the relevant activity in Schedule C of the ESS Rule.

7 Glossary

Term	Definition
ACP	Accredited Certificate Provider
Activity Definition	Refer Section 3.3 of this document
BCA	Building Code of Australia
Contractor	Refer Section 3.1 of this document
Disposal Agent	Refer Section 3.3.2 of this document
Energy Saver	Refer Section 3.1 of this document
ESC	Energy Savings Certificate
ESS	Energy Savings Scheme
ESS Rule	*Energy Savings Scheme Rule of 2009*
Implementation	Refer Section 3.2 of this document
Implementation Date	Refer Section 3.2 of this document
Removal	Refer Section 3.2 of this document

Appendix

A Activity definitions and tables from the ESS Rule

Activity Definition C1

Name of Activity
REMOVE A SPARE REFRIGERATOR OR FREEZER

Equipment Requirements

1. The Site where the End-User Equipment is located must be a Residential Building.
2. The End-User Equipment must be a Refrigerator or Freezer (or combination) that may be classified as Group 1, 2, 3, 4, 5T, 5B, 5S, 6C, 6U or 7 according to *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances.*
3. The Capacity of the Refrigerator or Freezer (as defined in AS/NZS 4474) must be 200 litres or more.
4. The Refrigerator or Freezer must be in working order.
5. There must be another Refrigerator or Freezer (as appropriate) at the Site that provides primary refrigeration or freezing services, located in, or closer to, the kitchen.
6. As a result of the activity there must be 1 fewer spare refrigerators and freezers at the Site.

Equipment Electricity Savings

Deemed Equipment Electricity Savings = 5.7 MWh per spare refrigerator or freezer removed

Lifetime (for information purposes only)

Lifetime = 7 years.

Activity Definition C2

Name of Activity
REMOVE A PRIMARY REFRIGERATOR OR FREEZER

Equipment Requirements

1. The Site where the End-User Equipment is located must be a Residential Building or Small Business Building.
2. The End-User Equipment must be a Refrigerator or Freezer (or combination) that may be classified as Group 1, 2, 3, 4, 5T, 5B, 5S, 6C, 6U or 7 according to *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances.*
3. The Capacity of the Refrigerator or Freezer (as defined in AS/NZS 4474) must be 200 litres or more.
4. The Refrigerator or Freezer must be in working order.
5. The activity may be carried out in combination with the delivery of a new refrigerator or freezer.

Equipment Electricity Savings

Deemed Equipment Electricity Savings = 2.4 MWh per primary refrigerator or freezer removed

Lifetime (for information purposes only)

Lifetime = 7 years.

Table A24: Regional Network Factors

Postcode of Site where Implementation occurred	Regional Network Factor
2311-2312	1.03
2321	1.03
2324	1.03
2329	1.03
2338-2490	1.03
2536-2537	1.03
2545-2551	1.03
2579-2599	1.03
2619-2739	1.03
2787	1.03
2791-2844	1.03
2850-2880	1.03
3585	1.03
3644	1.03
4383	1.03
All other postcodes	1