

# Energy Company Obligation

## Carbon Saving Community Obligation Compliance Report

1 April 2015 – 31 March 2017

[www.ofgem.gov.uk/eco](http://www.ofgem.gov.uk/eco)

28 September 2017



# Foreword

Energy efficiency is a key part of government policies for reducing the UK's greenhouse gas emissions. These policies contribute to the government's wider commitment to cut greenhouse gases by at least 34% by 2020 and at least 80% by 2050.<sup>1</sup> The Energy Company Obligation (ECO), first introduced in 2013, is an energy efficiency scheme for Great Britain and is the main legislative driver for making British homes more energy efficient.

The Department of Business Energy and Industrial Strategy (BEIS) was responsible for setting the overall targets and designing the policy. We, the Office of the Gas and Electricity Markets Authority ('Ofgem'<sup>2</sup>), administered ECO on behalf of the Gas and Electricity Markets Authority, ('GEMA').

We administered ECO in line with The Electricity and Gas (Energy Companies Obligation) Order 2014 (referred to as 'the ECO2 Order'), for the obligation period that ran from 1 April 2015 to 31 March 2017 (referred to as 'ECO2'). A new Order, referred to as the ECO2 Order as amended<sup>3</sup>, was laid in March 2017 extending the scheme from April 2017 to September 2018 (referred to as 'ECO2t').

Throughout the scheme, the ECO2 Order required us to report progress each month to the Secretary of State. We also published monthly compliance reports from July 2015 on our website<sup>4</sup>. The ECO2 Order requires the administrator to notify a supplier of its CSCO determination and submit a report to the Secretary of State setting out whether suppliers achieved their obligation by no later than 30 September 2017. This report details the final position of the CSCO and CSCO rural sub-obligation at the end of the ECO2 obligation period (which covered April 2015 to March 2017).

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<sup>1</sup> The Carbon Plan: Delivering our low carbon future, December 2011

<https://www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2>

<sup>2</sup> The terms 'GEMA', 'the Authority' and 'Ofgem' are used interchangeably. 'GEMA' and 'the Authority' are terms to describe the Gas and Electricity Markets Authority. Ofgem is the Office of the Gas and Electricity Markets Authority

<sup>3</sup> Any further references to the ECO2 Order are references to the ECO2 Order as amended by the Electricity and Gas (Energy Company Obligation) (Amendment) Order 2017

<sup>4</sup> <https://www.ofgem.gov.uk/environmental-programmes/eco/contacts-guidance-and-resources/eco-public-reports-and-data/scheme>

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## Associated Documents

- The Electricity and Gas (Energy Company Obligation) Order 2014  
<http://www.legislation.gov.uk/uksi/2014/3219/contents/made>
- The Electricity and Gas (Energy Company Obligation) (Amendment) Order 2017  
<http://www.legislation.gov.uk/uksi/2017/490/contents/made>
- Energy Company Obligation 2015-17 (ECO2) Guidance: Administration (version 1.1)I  
<https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-2015-17-eco2-guidance-administration>
- Energy Company Obligation 2015-17 (ECO2) Guidance: Delivery (version 1.1)  
<https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-2015-17-eco2-guidance-delivery>
- Government response to the Energy Company Obligation (ECO): Help to Heat consultation  
<https://www.gov.uk/government/consultations/energy-company-obligation-eco-help-to-heat>

## Executive Summary

- i. The Energy Company Obligation (ECO2), which started in 2015, is a Government scheme for Great Britain that places legal obligations on larger energy companies to deliver energy efficiency measures to domestic premises. It was preceded by ECO1<sup>5</sup> which ran from 2013 to 2015<sup>6</sup>.
- ii. The ECO2 scheme was originally established under the Electricity and Gas (Energy Company Obligation) Order 2014 (the 'ECO2 Order'), and developed to run from 1 April 2015 to 31 March 2017. The obligation period for ECO2 was subsequently extended by the Electricity and Gas (Energy Company Obligation) (Amendment) Order 2017 to run from 1 April 2017 to 30 September 2018 (referred to as 'ECO2t').
- iii. There were three distinct obligations under ECO2 which energy companies were required to meet. These were:
  - a. Carbon Emissions Reduction Obligation (CERO)
  - b. Carbon Saving Community Obligation (CSCO)<sup>7</sup>
  - c. Home Heating Cost Reduction Obligation (HHCRO)
- iv. The CERO and HHCRO obligations have been extended for the third phase of the scheme through the extension to the obligation period. Obligated suppliers must achieve their obligations on or before 30 September 2018.
- v. The CSCO obligation and CSCO rural sub-obligation were not extended and ended on 31 March 2017. The requirement under article 31 of the ECO2 Order, requires the administrator to notify a supplier of its CSCO determination by no later than 30 September 2017, and this is the focus of this report.<sup>8</sup>
- vi. The overall obligation period for ECO2 runs from 1 April 2015 to 30 September 2018 and is split into three phases. We are required to determine a supplier's obligations for each of these phases:
  - a. phase 1: 1 April 2015 to 31 March 2016,
  - b. phase 2: 1 April 2016 to 31 March 2017, and
  - c. phase 3 (ECO2t): 1 April 2017 to 30 September 2018.
- vii. Under phase 1 of ECO2, 11 energy companies were obligated which included OVO Energy and Utilita, who were not obligated under ECO1. Extra Energy were obligated for phase 2 from 1 April 2016. Economy Energy, Spark Energy and Flow Energy are obligated from 1 April 2017 for phase 3 (ECO2t) and are required to meet the two distinct ECO2t obligations, CERO and HHCRO.
- viii. A report will be produced notifying the final determination of ECO2 following the end of the extended obligation period (April 2017 to September 2018) by no later than 31 March 2019. The final report will show whether suppliers achieved the overall CERO target (including the

<sup>5</sup> The Energy Companies Obligation (ECO1) Final Report. See: <https://www.ofgem.gov.uk/publications-and-updates/energy-companies-obligation-eco1-final-report>

<sup>6</sup> For an overview of previous schemes see: <https://www.ofgem.gov.uk/environmental-programmes/eco/overview-previous-schemes>

<sup>7</sup> CSCO also had a sub-obligation focused on rural areas (the CSCO rural sub-obligation)

<sup>8</sup> ECO2 Order article 31(4)(a). This report was published to discharge Ofgem's duties to report to the Secretary of State under article 31(6)(b)

solid wall minimum requirement (SWMR) and the rural minimum requirement), and the overall HHCRO target (including the home heating minimum requirement (HHRM)).<sup>9</sup>

### Overall energy supplier performance

- ix. The position of the ECO2 CSCO scheme is summarised below:
- **every supplier met its CSCO and CSCO rural sub-obligation**, as detailed in **Table I**
  - the total lifetime carbon savings<sup>10</sup> achieved under CSCO were 7.28 MtCO<sub>2</sub>, including 1.57 MtCO<sub>2</sub> achieved under the rural sub-obligation. These constitute 121% of the CSCO target and 174% of the rural sub-obligation target.
- x. A supplier may apply to re-elect qualifying actions that have been credited against CSCO and CSCO rural to another ECO2t obligation at any time before 1 January 2019<sup>11</sup> where the qualifying actions are not required by a supplier to meet its total CSCO.
- xi. It is likely that the majority of any CSCO excess savings will be re-elected and credited towards a different obligation during ECO2t.<sup>12</sup>

**Table I: Energy supplier performance against CSCO and CSCO Rural obligations**

Energy Company	CSCO	CSCO Rural
British Gas	119%	161%
The Co-Operative Energy	120%	115%
EDF Energy	129%	182%
E.ON	114%	170%
First Utility	119%	111%
Npower	133%	162%
OVO Energy	113%	106%
Scottish Power	112%	180%
SSE	127%	228%
Utilita	125%	107%
The Utility Warehouse	131%	143%
Extra Energy	112%	327%

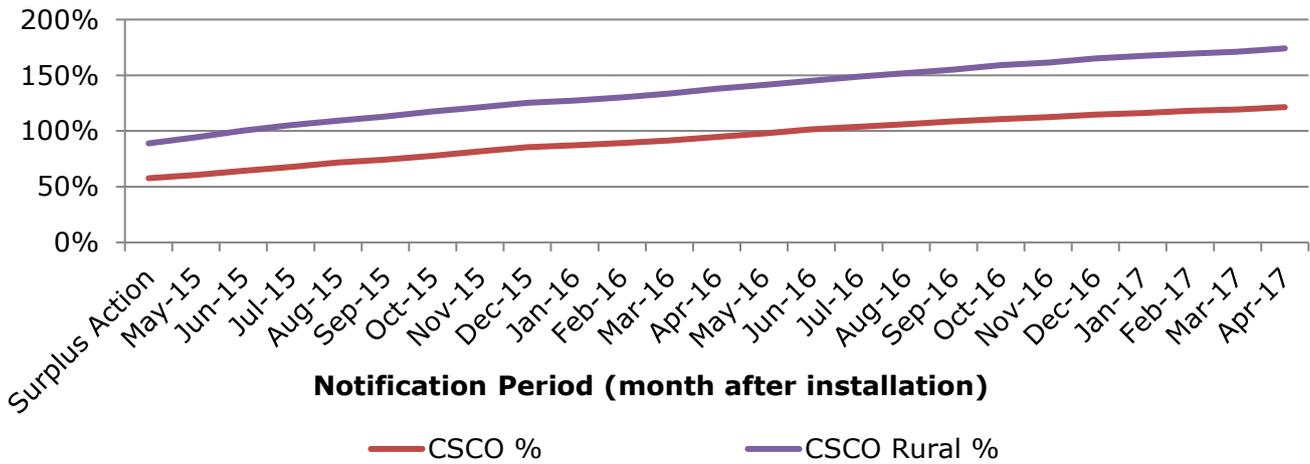
<sup>9</sup> See Chapter 4 and Chapter 5 of the ECO2t Guidance: Delivery, for more information on CERO and HHCRO.

<sup>10</sup> The CSCO targets were measured in the amount of carbon dioxide emissions that the measures will reduce over their lifetimes (ie 'carbon savings').

<sup>11</sup> See Chapter 9 of the ECO2t Guidance: Administration, for more information on re-election of obligations.

<sup>12</sup> The progress towards obligations presented here is accurate as of 13 September 2017. These figures may change before the final determination of ECO2 in March 2019. Please note that, unless specified, the figures in this and the following chapters do not include surplus actions from ECO1.

**Figure I: Cumulative ECO2 delivery of CSCO over time**



**Key observations:**

- xii. There were several observations and findings from the administration of CSCO during ECO2, including:
  - overall, the most frequently installed measure type under CSCO and CSCO rural was cavity wall insulation, followed by loft insulation and solid wall insulation;
  - a greater number of measures per household were delivered in England for CSCO and CSCO rural than in Scotland or Wales;
  - a significant proportion of the suppliers’ achievement of their CSCO and CSCO rural obligations were carried over from ECO1 surplus actions<sup>13</sup> as seen in **Figure I**.

<sup>13</sup> See Chapter 7 of the ECO2 Guidance: Administration, for more information on surplus actions

# 1. Overall performance

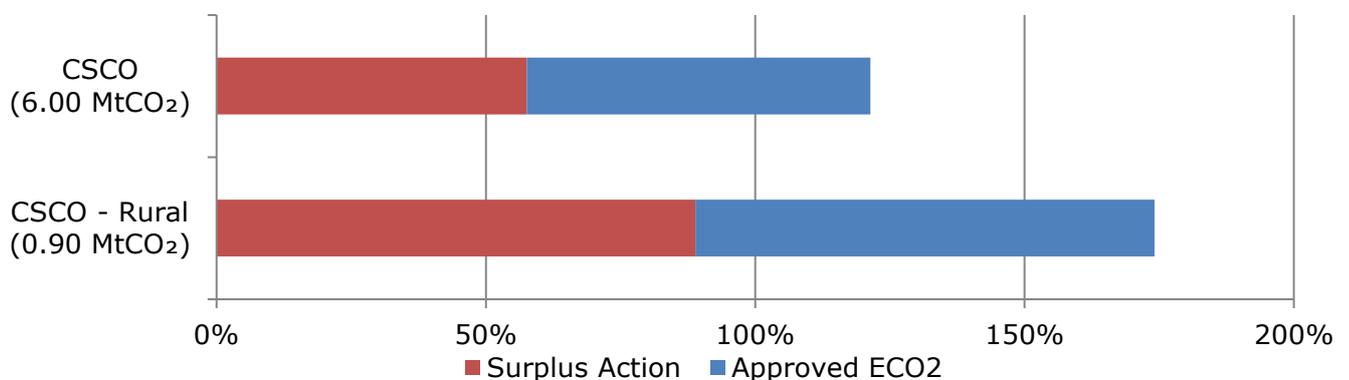
## Chapter Overview

This chapter gives a summary of the overall performance of energy companies against the phase 1 and phase 2 CSCO and CSCO rural sub-obligation targets.

## Introduction

- 1.1. Each ECO2 obligation had specific eligibility criteria for measures delivered under that obligation. The carbon and cost savings attributed to the measures meeting those eligibility requirements contributed to an energy company's progress towards its obligations. Here we present the combined performance of all energy companies towards the CSCO and CSCO rural phase 1 and 2 targets to 1 April 2017 as of 13 September 2017.
- 1.2. The ECO2 Order also set out a limit on the amount of CSCO measures that could be installed in adjoining areas<sup>14</sup>. This chapter shows whether the energy companies reached this limit.

**Figure 1.1: Overall achievement by energy companies of phase 1 and phase 2 CSCO and CSCO rural sub-obligation targets<sup>15</sup>**



- 1.3. **Figure 1.1** above shows achievement against the CSCO and CSCO rural phase 1 and 2 ECO2 targets set for all energy suppliers. The CSCO and CSCO rural targets were exceeded and it is likely that many of these excess savings will be taken forward into ECO2t.
- 1.4. As shown in [Figure I](#), the delivery of measures was consistent across phase 1 and 2 and a significant proportion of the suppliers' achievement of their CSCO and CSCO rural sub-obligation was carried over from ECO1 as surplus actions.

<sup>14</sup> Adjoining areas are those that share a border with an area of low income. In England and Wales areas are described as lower super output areas (LSOA). In Scotland, areas are described as data zones. Suppliers could use the [ECO tool](#), or an equivalent system, to identify adjoining areas.

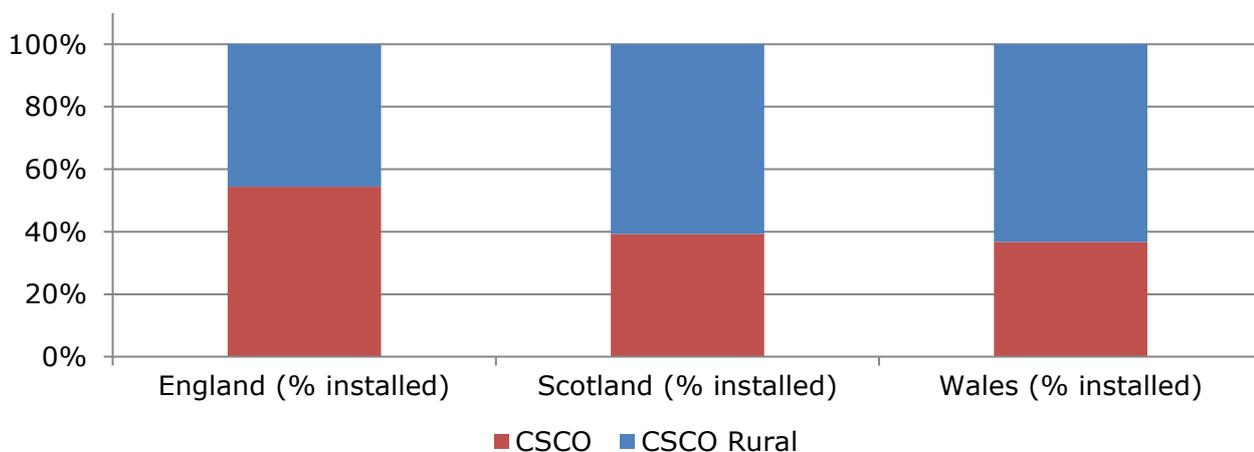
<sup>15</sup> The progress towards obligations presented here is accurate as of 13 September 2017. These figures may change before the final determination of ECO2 in March 2019. See: ECO public reports and data for energy companies' progress towards their targets. <https://www.ofgem.gov.uk/environmental-programmes/eco/contacts-guidance-and-resources/eco-public-reports-and-data/scheme>

## Delivery mechanisms

- 1.5. Energy suppliers delivered ECO measures through a variety of mechanisms. The most widely used methods were to contract work directly with installers or to employ managing agents who represented a number of installers.
- 1.6. Energy suppliers could also use another mechanism called 'ECO brokerage'. Brokerage was a blind auction platform developed by the Department for Business, Energy and Industrial Strategy (BEIS)<sup>16</sup>, where suppliers could buy forward contracts for the delivery of carbon or cost savings by participating asellers. Installers could sell 'lots' of savings which they would then have to deliver for the energy company who successfully bid for the lot. This system was created in response to requests from the energy efficiency industry to help smaller and newer installers access the market. 5% of CSCO measures were delivered through this mechanism, including 4% carried forward from ECO1.
- 1.7. Energy suppliers could also identify low income, adjoining and rural areas that may have been eligible for energy efficiency measures under CSCO by referring to the 2014 low income and rural document<sup>17</sup>, or by using software including our ECO tool<sup>18</sup>, formally known as the CSCO tool.

## Measures delivered per country

**Figure 1.2: Approved CSCO and CSCO rural measures by country of installation**



- 1.8. **Figure 1.2** shows the proportion of approved measures installed for CSCO and CSCO rural and by country. A greater proportion of measures were delivered in England for CSCO, compared to Scotland and Wales whereas a greater number of CSCO rural measures were delivered in Scotland and Wales, than in England. This may be due to larger areas of these countries as a percentage, being defined as rural.

<sup>16</sup> Formerly the Department of Energy and Climate change (DECC)

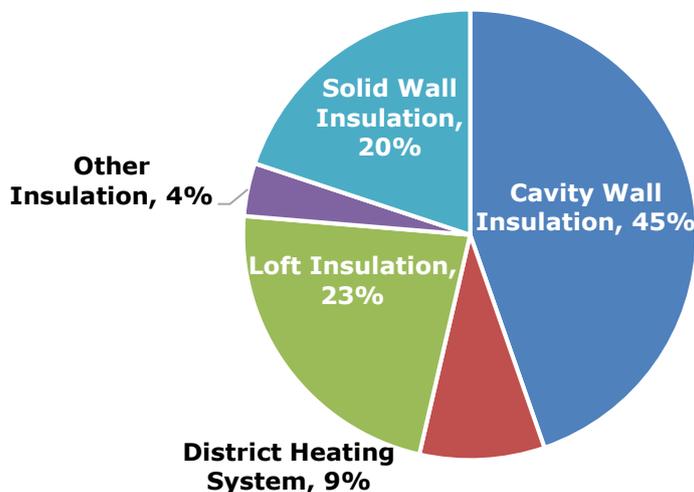
<sup>17</sup> See: <https://www.gov.uk/government/publications/the-future-of-the-energy-company-obligation-small-area-geographies-eligible-for-eco-csco-support>

<sup>18</sup> See: <https://eco.locationcentre.co.uk/>. This is a publically available version of the tool we use to assist in the verification of CSCO measures.

CSCO

- 1.9. The Carbon Saving Community Obligation (CSCO) focussed on the installation of insulation measures and connections to district heating systems at domestic premises in low income, adjoining or rural areas. A total of 120,865 measures were delivered under CSCO in ECO2, with an additional 140,802 measures carried forward from ECO1.
- 1.10. The carbon savings under CSCO (including the rural sub-obligation) achieved 121% of the CSCO obligation, with 57% of this carried forward from ECO1. All of the energy companies met their main CSCO obligation. As shown in [Figure 1](#) enough measures were delivered to meet the overall CSCO target by the end of July 2016.

**Figure 1.3: Measure types in CSCO<sup>19</sup>**



- 1.11. The overall proportion of measure types delivered under CSCO is shown in Figure 1.3. The most frequently installed measure type in CSCO was cavity wall insulation (45%) followed by loft insulation (23%) and solid wall insulation (20%). The remainder (13%) consisted of connections to district heating systems as well as much smaller numbers of other insulation measure types (including draught proofing, under floor insulation and window glazing).

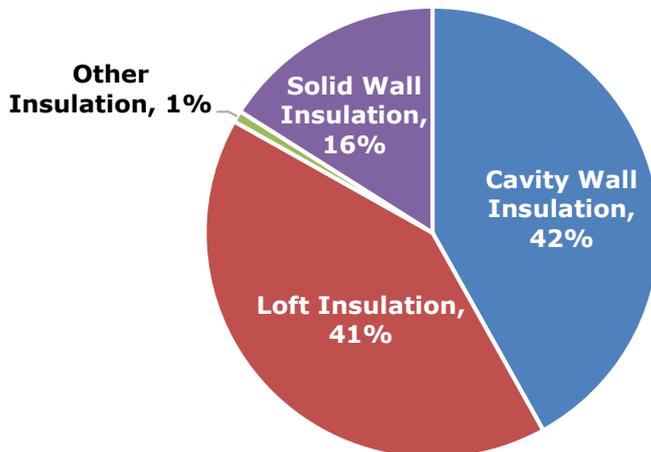
CSCO rural sub-obligation

- 1.12. The rural sub-obligation required that at least 15% of a supplier’s CSCO delivery was promoted to members of the affordable warmth group (AWG) living in a rural area, or in a deprived rural area. All of the energy companies met their rural sub-obligation.
- 1.13. As shown in Figure 1.1, 174% of the CSCO rural sub-obligation was achieved, with 88% of this carried forward from ECO1, the highest level of over-achievement of all obligations for phases 1 and 2 of ECO2. A total of 20,732 measures were delivered

<sup>19</sup> Loft insulation in this figure also includes room-in-roof insulation. ‘Other insulation’ includes window glazing, flat roof insulation, under floor insulation, draught proofing and hot water cylinder insulation. Values have been rounded.

under the CSCO rural sub-obligation in ECO2, with 28,363 measures carried forward from ECO1. [Figure 1](#) shows that the overall CSCO rural sub-obligation target was met by the end of June 2015.

**Figure 1.4: Measure types in the CSCO rural sub-obligation**



- 1.14. **Figure 1.4** shows that the two main measure types installed in rural areas were cavity wall insulation (42%) and loft insulation (41%). A lower proportion of solid wall insulation measures (16%) were installed.

### Adjoining areas

- 1.15. Under CSCO, adjoining areas were those that shared a border with an area of low income. As set out in the ECO2 Order<sup>20</sup>, the total carbon savings of measures carried out in CSCO adjoining areas could not exceed 25% of the total savings achieved in the related low income area. Any savings which exceeded the 25% limit could not contribute to a supplier’s CSCO obligation.
- 1.16. Several energy suppliers did not engage in the delivery of measures in adjoining areas. For those that did, we conducted indicative assessments of notified adjoining installations in November 2016, March 2017, and June 2017. This early analysis helped energy suppliers to identify if the 25% limit had been exceeded. Suppliers could then make adjustments to the number of measures in adjoining areas or related low income areas to mitigate the amount of carbon savings at risk of rejection ahead of the final deadline.
- 1.17. In September 2017, we conducted our final assessment of those suppliers that participated in the delivery of measures in adjoining areas. A total of 113 measures installed as adjoining installations were subject to this assessment. No suppliers who notified measures in adjoining areas exceeded the 25% limit. Measures in adjoining areas accounted for 0.1% of CSCO savings.

<sup>20</sup> article 15 of the ECO2 Order

## 2. Energy company performance

### Chapter overview

This chapter presents each energy company's achievement against CSCO and CSCO rural.

### Introduction

- 2.1. The size of each energy supplier's CSCO and CSCO rural obligations were calculated by their domestic customer numbers and the amount of energy supplied to its domestic customers (ie similar to market share) in the year preceding each phase. Supplier obligations were set at the individual licence level, here we present licence level performance alongside progress at the group energy company level. **Table 2.1** provides an index for each supplier's achievement against their CSCO and CSCO rural obligations.

**Table 2.1: Energy company performance index reference**

Energy Company	Index
British Gas (BGT)	See Table 2.2 and Figure 2.1
The Co-Operative Energy (COP)	See Table 2.3 and Figure 2.2
EDF Energy (EDF)	See Table 2.4 and Figure 2.3
E.ON (EON)	See Table 2.5 and Figure 2.4
First Utility (FUL)	See Table 2.6 and Figure 2.5
Npower (NPW)	See Table 2.7 and Figure 2.6
OVO Energy (OVO)	See Table 2.8 and Figure 2.7
Scottish Power (SPW)	See Table 2.9 and Figure 2.8
SSE (SSE)	See Table 2.10 and Figure 2.9
Utilita (UTA)	See Table 2.11 and Figure 2.10
The Utility Warehouse (UTW)	See Table 2.12 and Figure 2.11
Extra Energy (XEN)	See Table 2.13 and Figure 2.12

- 2.2. The carbon savings achieved by each energy company include any savings that were carried over from ECO1 as surplus actions. It is likely that the majority of any CSCO excess savings will be re-elected and credited towards a different obligation during ECO2t.
- 2.3. Throughout ECO2 we sought to provide information to stakeholders by engaging with suppliers and the wider supply chain to clarify scheme requirements and resolve issues. We provided additional information and guidance through stakeholder events and working level bilateral meetings to support delivery of eligible measures and to improve data quality. We also worked with various industry groups to standardise documentation and made available our ECO Tool<sup>21</sup> to help suppliers identify eligible CSCO and CSCO rural areas, and to assist in the verification of CSCO measures.

<sup>21</sup> See: <https://eco.locationcentre.co.uk/>. Formally known as the CSCO Too, this is a publically available version of the tool we use to assist in the verification of CSCO measures.

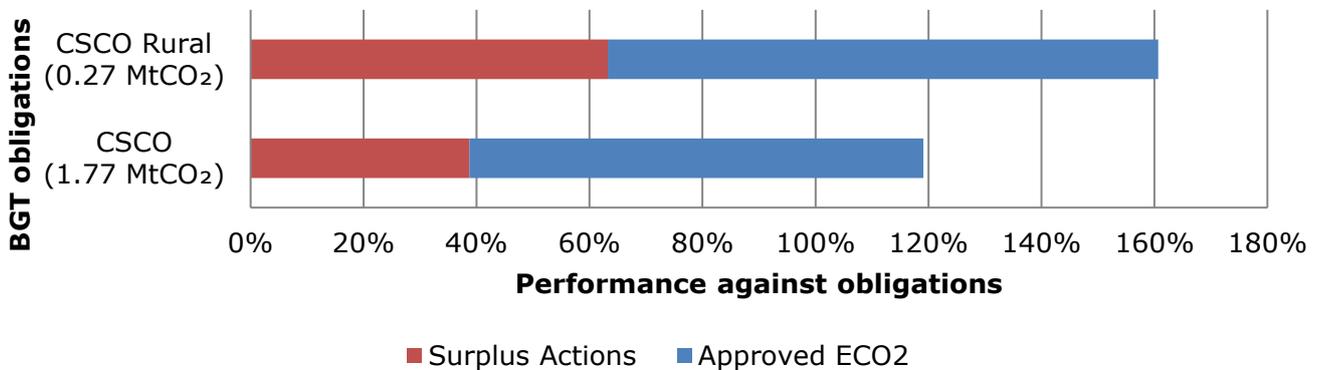
British Gas

2.4. Two British Gas licences were obligated under ECO2 and, as shown in **Table 2.2**, they both met the CSCO and CSCO rural obligations.

**Table 2.2: British Gas performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
British Gas Trading Ltd (Elec)	119.2	160.4
British Gas Trading Ltd (Gas)	119.0	160.8

**Figure 2.1: British Gas performance against CSCO and CSCO rural obligations**



2.5. **Figure 2.1** shows that British Gas achieved 119% towards its CSCO obligation and 161% towards its CSCO rural sub-obligation. British Gas’ carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.69 MtCO<sub>2</sub> (39%) for CSCO and 0.17 MtCO<sub>2</sub> (63%) for CSCO rural.

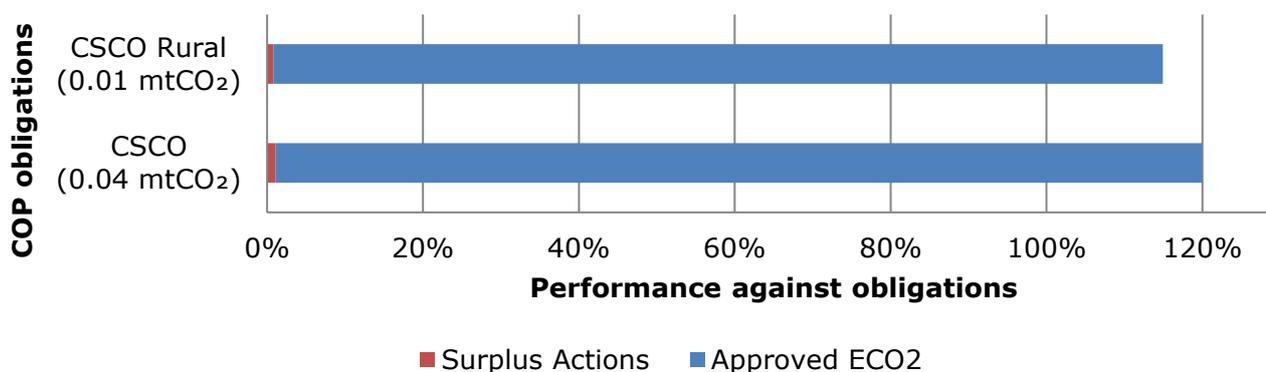
The Co-operative Energy

2.6. Two Co-operative Energy (Co-op) licences were obligated under ECO2 and as shown in **Table 2.3**, they both met the CSCO and CSCO rural obligations.

**Table 2.3: Co-op performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
Co-operative Energy Ltd (Elec)	116.0	118.2
Co-operative Energy Ltd (Gas)	125.6	110.2

**Figure 2.2: Co-op performance against CSCO and CSCO rural obligations**



2.7. **Figure 2.2** shows that Co-op achieved 120% towards its CSCO obligation and 115% towards its CSCO rural sub-obligation. Co-op’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.00044 MtCO<sub>2</sub> (1%) for CSCO and 0.00005 MtCO<sub>2</sub> (1%) for CSCO rural. These savings are relatively low compared to other suppliers as Co-op were not obligated under ECO1 until April 2014<sup>22</sup>.

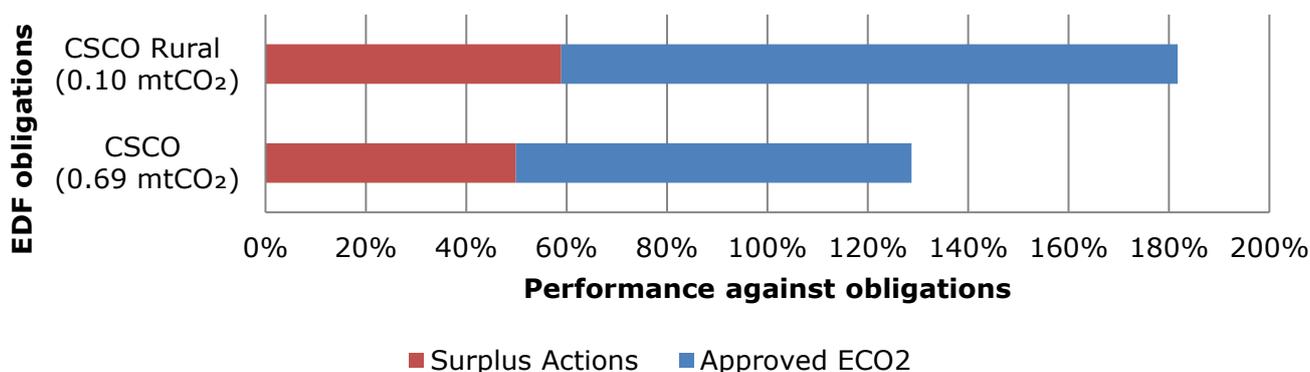
EDF Energy

2.8. Two EDF Energy licences were obligated under ECO2 and as shown in **Table 2.4**, they both met the CSCO and CSCO rural obligations.

**Table 2.4: EDF Energy performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
EDF Energy Customers plc (Elec)	128.5	189.0
EDF Energy Customers plc (Gas)	128.9	171.2

**Figure 2.3: EDF Energy performance against CSCO and CSCO rural obligations**



<sup>22</sup> See: <https://www.ofgem.gov.uk/publications-and-updates/energy-companies-obligation-eco1-final-report>

2.9. **Figure 2.3** shows that EDF Energy achieved 129% towards its CSCO obligation and 182% towards its CSCO rural sub-obligation. EDF Energy’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.35 MtCO<sub>2</sub> (50%) for CSCO and 0.06 MtCO<sub>2</sub> (59%) for CSCO rural.

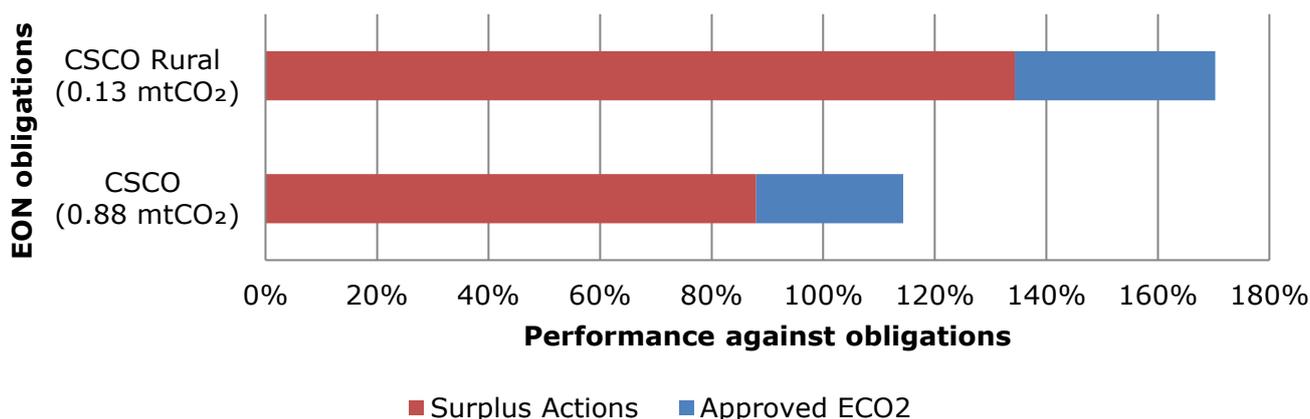
## E.ON

2.10. Two E.ON Energy licences were obligated under ECO2 and as shown in **Table 2.5**, they both met the CSCO and CSCO rural obligations.

**Table 2.5: E.ON performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
E.ON Energy Solutions Ltd (Elec)	119.2	192.6
E.ON Energy Solutions Ltd (Gas)	108.4	142.7

**Figure 2.4: E.ON performance against CSCO and CSCO rural obligations**



2.11. **Figure 2.4** shows that E.ON achieved 114% towards its CSCO obligation and 170% towards its CSCO rural sub-obligation. E.ON’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.77 MtCO<sub>2</sub> (88%) for CSCO and 0.18 MtCO<sub>2</sub> (134%) for CSCO rural.

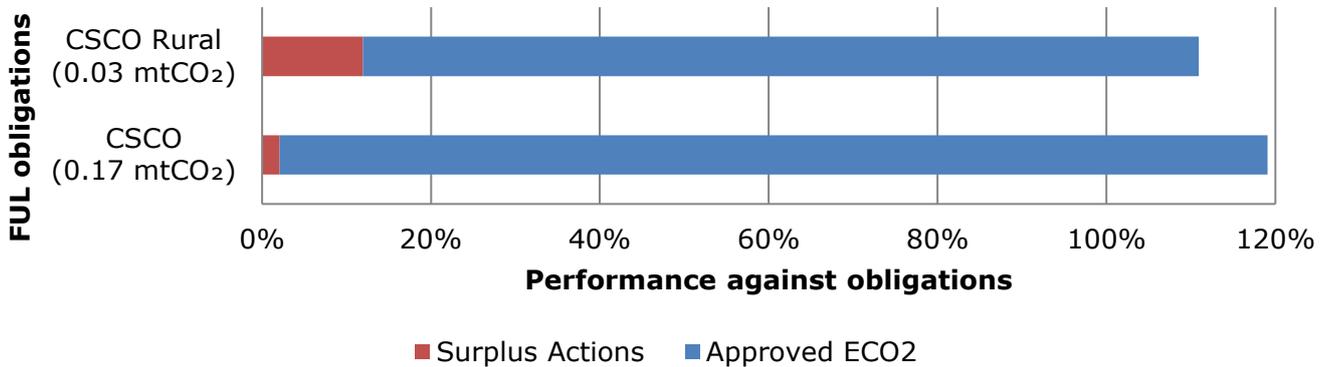
## First Utility

2.12. Two First Utility licences were obligated under ECO2 and as shown in **Table 2.6**, they both met the CSCO and CSCO rural obligations.

**Table 2.6: First Utility performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
First Utility Limited (Elec)	137.9	116.9
First Utility Limited (Gas)	104.0	106.2

**Figure 2.5: First Utility performance against CSCO and CSCO rural obligations**



2.13. **Figure 2.5** shows that First Utility achieved 119% towards its CSCO obligation and 111% towards its CSCO rural sub-obligation. First Utility’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.0036 MtCO<sub>2</sub> (2%) for CSCO and 0.0031 MtCO<sub>2</sub> (12%) for CSCO rural.

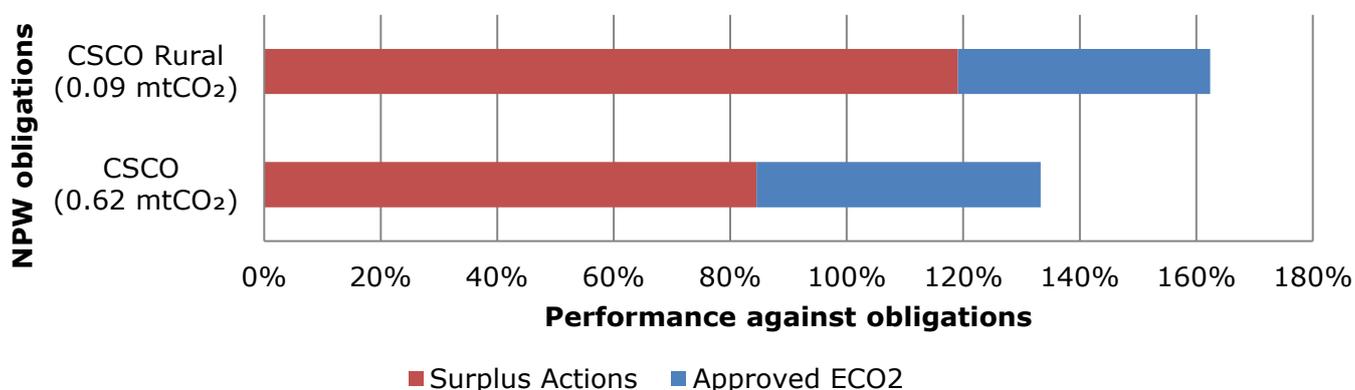
Npower

2.14. Nine npower licences were obligated under ECO2 and as shown in **Table 2.7**, they all met the CSCO and CSCO rural obligations.

**Table 2.7: Npower performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
npower Direct Limited (Elec)	117.2	130.6
npower limited (Elec)	142.4	156.3
npower Northern Supply Limited (Elec)	148.0	117.7
npower Yorkshire Supply Limited (Elec)	125.7	154.2
npower Gas Limited (Gas)	127.5	315.9
npower Commercial Gas Limited (Gas)	2575.3	3312.9
npower Northern Limited (Gas)	119.0	156.3
npower Yorkshire Limited (Gas)	117.0	144.6
npower Direct Limited (Gas)	5412.2	5376.0

**Figure 2.6: Npower performance against CSCO and CSCO rural obligations**



2.15. **Figure 2.6** shows that Npower achieved 133% towards its CSCO obligation and 162% towards its CSCO rural sub-obligation. Npower’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.52 MtCO<sub>2</sub> (85%) for CSCO and 0.11 MtCO<sub>2</sub> (119%) for CSCO rural.

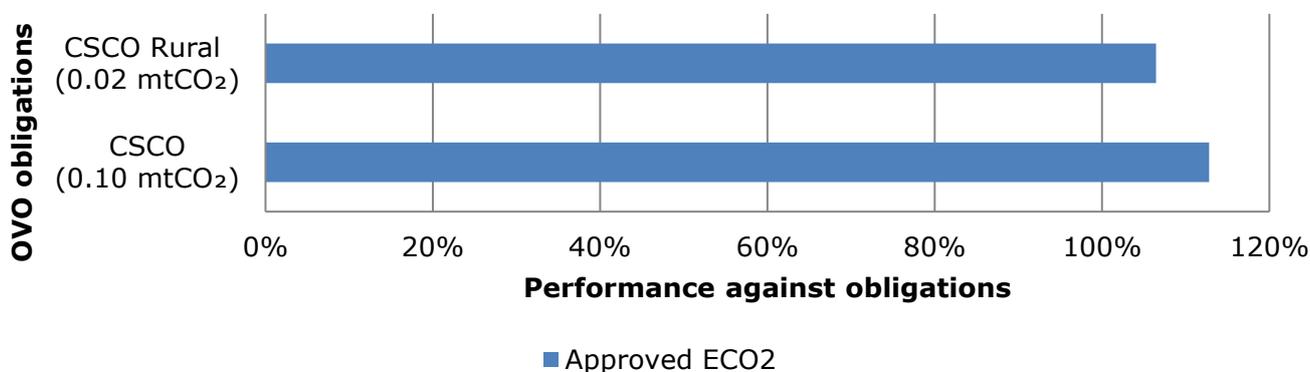
### OVO Energy

2.16. Two OVO Energy licences were obligated from phase 1 of ECO2 (from 1 April 2015) and as shown in **Table 2.8**, they both met the CSCO and CSCO rural obligations.

**Table 2.8: OVO Energy performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
OVO Electricity Limited (Elec)	103.9	106.6
OVO Gas Limited (Gas)	121.6	106.3

**Figure 2.7: OVO Energy performance against CSCO and CSCO rural obligations**



2.17. **Figure 2.7** shows that OVO Energy achieved 113% towards its CSCO obligation and 106% towards its CSCO rural sub-obligation. OVO Energy were not obligated under ECO1 so did not have any carbon savings from this scheme to carry forward.

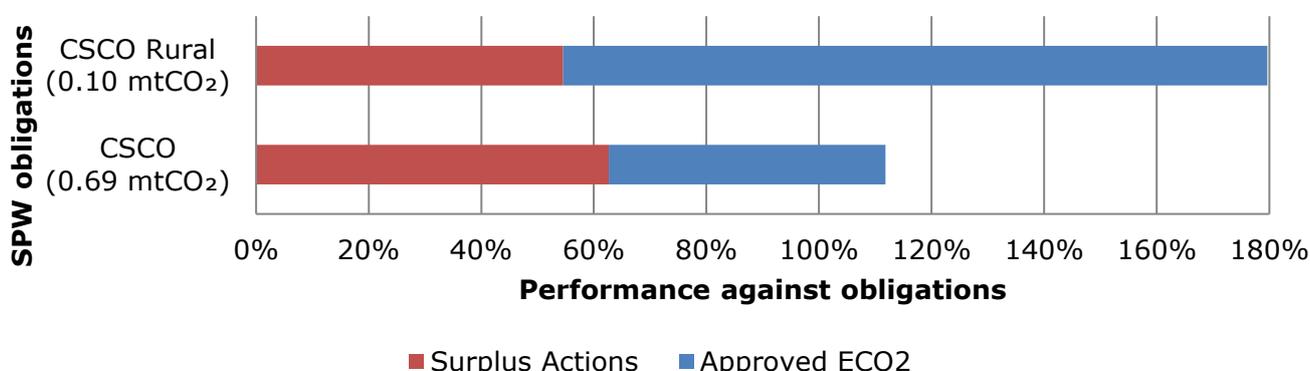
Scottish Power

2.18. Two Scottish Power licences were obligated under ECO2 and as shown in **Table 2.9**, they both met the CSCO and CSCO rural obligations.

**Table 2.9: Scottish Power performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
ScottishPower Energy Retail Limited (Elec)	111.8	179.7
ScottishPower Energy Retail Limited (Gas)	111.8	179.5

**Figure 2.8: Scottish Power performance against CSCO and CSCO rural obligations**



2.19. **Figure 2.8** shows that Scottish Power achieved 112% towards its CSCO obligation and 180% towards its CSCO rural sub-obligation. Scottish Power’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.44 MtCO<sub>2</sub> (63%) for CSCO and 0.06 MtCO<sub>2</sub> (55%) for CSCO rural.

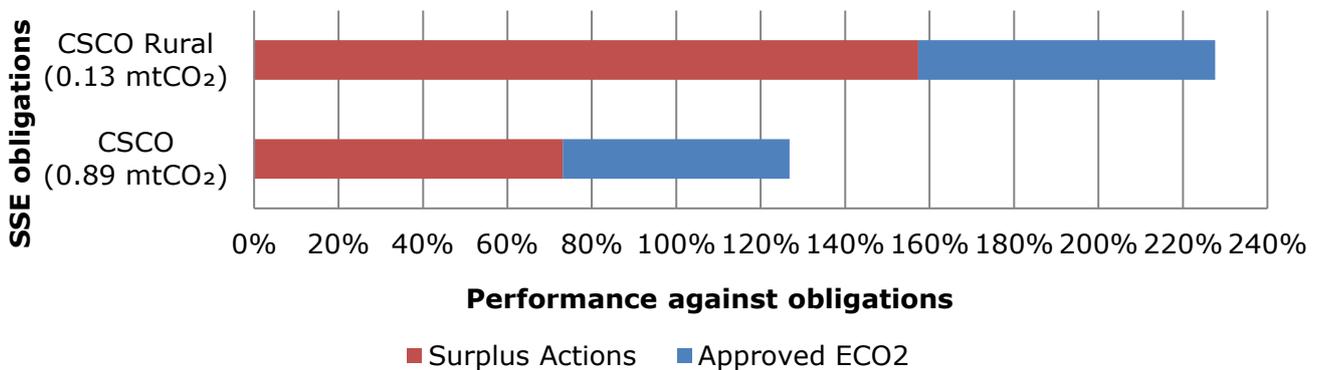
SSE

2.20. Two SSE licences were obligated under ECO2 and as shown in **Table 2.10**, they both met the CSCO and CSCO rural obligations.

**Table 2.10: SSE performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
SSE Energy Supply Limited (Elec)	126.9	228.9
Southern Electric Gas Limited (Gas)	126.6	225.9

**Figure 2.9: SSE performance against CSCO and CSCO rural obligations**



2.21. **Figure 2.9** shows that SSE achieved 127% towards its CSCO obligation and 228% towards its CSCO rural sub-obligation. SSE’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.65 MtCO<sub>2</sub> (73%) for CSCO and 0.21 MtCO<sub>2</sub> (157%) for CSCO rural.

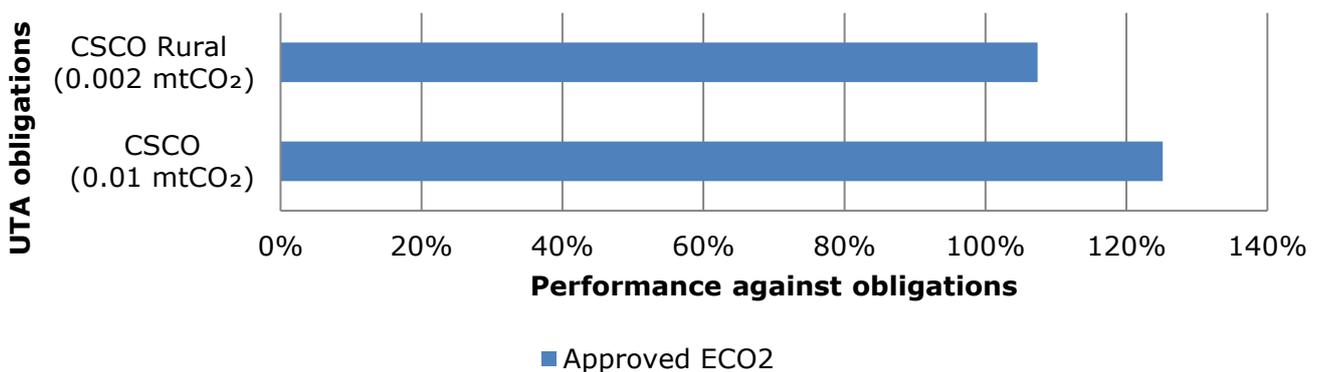
Utilita

2.22. One Utilita licence was obligated from phase 1 of ECO2 (from 1 April 2015) and as shown in **Table 2.11**, it met the CSCO and CSCO rural obligations.

**Table 2.11: Utilita performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
Utilita Energy Limited (Elec)	125.2	107.4

**Figure 2.10: Utilita performance against CSCO and CSCO rural obligations**



2.23. **Figure 2.10** shows that Utilita achieved 125% towards its CSCO obligation and 107% towards its CSCO rural sub-obligation. Utilita were not obligated under ECO1 so did not have any carbon savings from this scheme to carry forward.

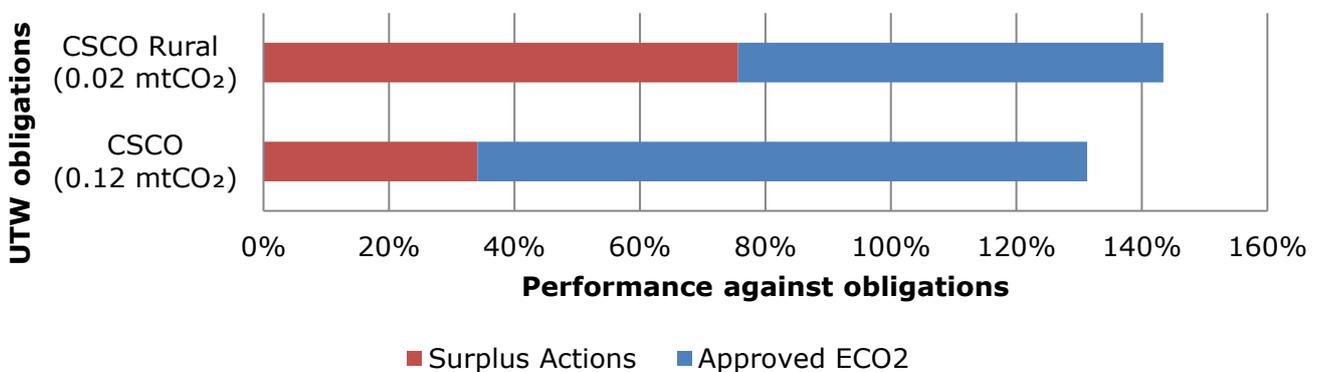
Utility Warehouse

2.24. Two Utility Warehouse licences were obligated under ECO2 and as shown in **Table 2.12**, they both met the CSCO and CSCO rural obligations. Utility Warehouse completed all their obligations via the transfer of measures from another energy company.

**Table 2.12: Utility Warehouse performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
Electricity Plus Supply Limited (Elec)	135.8	145.2
Gas Plus Supply Limited (Gas)	127.1	141.7

**Figure 2.11: Utility Warehouse performance against CSCO and CSCO rural obligations**



2.25. **Figure 2.11** shows that Utility Warehouse achieved 131% towards its CSCO obligation and 143% towards its CSCO rural sub-obligation. Utility Warehouse’s carbon savings achieved in CSCO and CSCO rural include carbon from measures carried forward from ECO1. The value of savings from ECO1 was 0.039 MtCO<sub>2</sub> (34%) for CSCO and 0.013 MtCO<sub>2</sub> (76%) for CSCO rural.

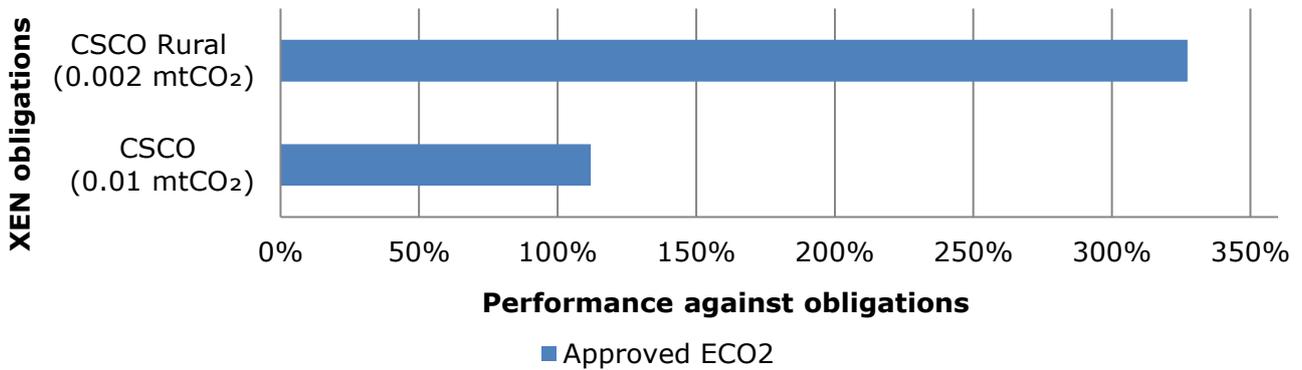
Extra Energy

2.26. Two Extra Energy licences were obligated from phase 2 of ECO2 (from 1 April 2016). As shown in **Table 2.13**, they both met the CSCO and CSCO rural obligations.

**Table 2.13: Extra Energy performance against CSCO and CSCO rural obligations**

Licence	CSCO (%)	CSCO Rural (%)
Extra Energy Supply Ltd (Elec)	107.3	341.0
Extra Energy Supply Ltd (Gas)	141.3	241.3

**Figure 2.12: Extra Energy performance against CSCO and CSCO rural obligations**



2.27. **Figure 2.12** shows that Extra Energy achieved 112% towards its CSCO obligation and 327% towards its CSCO rural sub-obligation. Extra Energy were not obligated under ECO1 so did not have any carbon savings from this scheme to carry forward.

## 3. Monitoring and compliance

### Chapter overview

This chapter explains the activities undertaken by Ofgem to support ECO compliance for CSCO delivery. It includes an overview of the monitoring and compliance activities we required and administered, along with the results and actions taken.

### Introduction

- 3.1 To ensure that all the relevant eligibility requirements were met and that the savings reported by suppliers were accurate for all ECO2 CSCO measures, we undertook various checks and a number of core compliance activities. These checks included a review of measures to ensure they complied with the legislation and our guidance, requiring energy suppliers to conduct technical and score monitoring of installations, auditing of energy companies, investigating suspected fraudulent activity and verifying savings attributed to measures.

### Measure Processing

- 3.2 Each month, after measures had been notified to us, we assessed the information provided by the energy companies to check whether the measures met the requirements set out in the legislation and our guidance. Checks were conducted across all aspects of the information notified, including in relation to the eligibility requirements for each obligation, carbon scores<sup>23</sup> and checks for duplicated measures.
- 3.3 Whilst energy companies were required to notify measures to us during the month after they had been installed, there was a mechanism which allowed an extension of this monthly deadline<sup>24</sup>. We assessed requests for an extension to the notification deadline on an individual basis and granted these where a supplier satisfied us that there was a reasonable excuse for missing the notification deadline<sup>25</sup>. We received 110 extension requests in ECO2 covering 3,305 measures, which included 442 CSCO measures. 87% of these requests were approved, 11% were withdrawn by the supplier, 1% were rejected and the remaining 1% remains under investigation.
- 3.4 Another mechanism available to energy companies to manage compliance with their obligations was transfer requests<sup>26</sup>. The transfer of measures could occur between licences held by the same or different energy companies. We received a total of 54 transfer requests for CSCO measures in ECO2 and we approved them all. The majority of approved CSCO transfers (67%) occurred between licences held by the same energy company in order to balance or optimise their savings. The remaining 33% was between Utility Warehouse and another company, enabling Utility Warehouse to meet its CSCO obligation.

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<sup>23</sup> Scores here refers to the annual carbon savings multiplied by the lifetime and by the in-use factor to achieve a lifetime score.

<sup>24</sup> article 17(2) of the ECO2 Order

<sup>25</sup> We were unable to grant an extension to the notification deadline where the reason related to administrative oversight on the part of the supplier

<sup>26</sup> articles 26(2) and 30(2) of the ECO2 Order

Refused or revoked savings

3.5 Following all of our compliance checks, 938 CSCO measures (including surplus actions) were deemed to be ineligible and savings were not attributed to these measures. These measures accounted for 0.36% of all CSCO measures notified. Figure 3.1 below highlights the five main reasons for refusing or revoking savings.

**Figure 3.1: Five main reasons for refusing or revoking CSCO savings in ECO2**

Reason for revoking/refusing savings	No. of measures	Percentage of notified CSCO measures
Duplicate measure	303	0.12%
DHS measure does not meet pre-conditions	106	0.041%
Notified savings not accurate – Score verification <sup>27</sup>	94	0.032%
No evidence demonstrating date of completed installation	83	0.030%
Supplier did not promote the measure	66	0.025%

3.6 Duplicate measures in Figure 3.1 were where an ECO2 measure had been notified more than once, or an ECO2 measure was also notified at the same property as a surplus action. Energy companies resolved the duplicates between themselves in the majority of cases and then notified us of the outcome; as a result the valid measure was retained. The duplicates had their savings revoked and could not be claimed under ECO2.

Appropriate Methodologies

- 3.7 Under ECO2, carbon and cost savings were required to be calculated using the Standard Assessment Procedure (SAP) or Reduced Standard Assessment Procedure (RdSAP).<sup>28</sup> In cases where these methodologies could not be used to calculate the savings then energy companies could apply to use an alternative methodology<sup>29</sup>.
- 3.8 One alternative methodology was submitted to us, which we approved as meeting the requirements set out in the Order<sup>30</sup>. This methodology enabled the calculation of savings achieved by measures installed in multiple occupancy premises, for example, student halls or hostels, where these premises meet the ECO definition of domestic premises. These premises could not be modelled in SAP or RdSAP, as such we approved the Simplified Building Energy Model (SBEM)<sup>31</sup> to be used to calculate savings in these types of properties.
- 3.9 Under CSCO in ECO2, 8.8% of measures were scored using SAP and 91.2% were scored using RdSAP. The remainder (0.00048%) were scored using SBEM.

<sup>27</sup> Score Verification is further detailed in paragraph 3.10 to 3.13

<sup>28</sup> SAP is the methodology used by Government to assess the energy and environmental

<sup>29</sup> <https://www.ofgem.gov.uk/publications-and-updates/eco2-appropriate-methodologies>

<sup>30</sup> article 24(3) of the ECO2 Order

<sup>31</sup> SBEM was developed by the BRE to assess the carbon emissions of non-domestic buildings.

### Score Verification

- 3.10 As part of our checks to ensure the savings notified were accurate, we conducted score verification, which assessed the carbon savings calculated using SAP and RdSAP and focused on identifying abnormally high/low carbon scores and abnormally high/low floor areas, this allowed us to identify scores that fell outside an expected range for a measure, property and fuel type mix. We required suppliers to verify the scores for these measures and re-notify the corrected inputs if errors were identified.
- 3.11 In total, 4,225 CSCO measures were identified for score verification. Suppliers or third parties investigated these measures which resulted in 76.8% of measures not requiring suppliers to amend notifications. However, 18% of measures did require amendments to measure notifications after investigations found measures were incorrectly notified. The remaining 4.9% of measures were not investigated by suppliers as the intention was to reject the measures.
- 3.12 A range of measures were part of score verification, including solid wall insulation, cavity wall insulation, loft insulation, room in roof insulation, under floor insulation, window glazing, flat roof insulation and district heating insulation.
- 3.13 From 1 April 2017, deemed scores were introduced, replacing the approach of calculating bespoke carbon savings for all measures types. As a result, score verification has ceased in this form. Ofgem is exploring other verification processes for deemed scores.

### Technical and score monitoring

- 3.14 Energy companies were required to commission technical and score monitoring on a minimum of 5% random sample of the ECO2 measures that they delivered each quarter. This monitoring requirement was applied across all measure types but was not applied to each obligation, so there was no requirement to specifically monitor 5% of CSCO or CSCO rural measures, although all measures had an equal chance of being selected. Suppliers were also required to monitor 3% of the installations submitted by each installer, per quarter. Where the number of measures of a particular type or installed by a particular installer was less than 100 for a specific quarter, monitoring was conducted on at least one measure installed by each installer.
- 3.15 All monitoring was undertaken by monitoring agents who were independent of the supplier and the installer. Monitoring agents assessed standards of installation and ECO scoring inputs against a standard question set provided by us<sup>32</sup>. The results were reported to us by suppliers on a quarterly basis, which we then analysed<sup>33</sup>.
- 3.16 Where measures failed monitoring we required the suppliers to resolve any issues discovered. Where a CSCO or CSCO Rural measure failed technical or score monitoring, suppliers were not allowed to attribute carbon-savings to their obligation until they remediated and arranged independent re-inspection of the measure to ensure it now adhered to requirements.
- 3.17 In ECO2, technical monitoring (TM) was undertaken on 9,761 CSCO and CSCO Rural measures of which 412 (4%) failed inspection. In relation to score monitoring (SM), 7,421 measures were monitored of which 343 (5%) failed inspection.

<sup>32</sup> See: <https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-monitoring>

<sup>33</sup> See: ECO public reports and data for ECO monitoring reports. <https://www.ofgem.gov.uk/environmental-programmes/eco/contacts-guidance-and-resources/eco-public-reports-and-data/scheme?page=1#block-views-publications-and-updates-block>

**Figure 3.2: Technical and Score Monitoring failure rate by measure category for CSCO measures in ECO2**

Measure Category	CSCO TM Fail Rate (%)	CSCO SM Fail Rate (%)
Loft Insulation	7.24	5.44
Cavity Wall Insulation	6.24	4.35
External Wall Insulation	5.10	2.71
DHS <sup>34</sup>	0.54	N/A
Room in Roof	0.46	11.60
Window Glazing	0.00	0.00
Under Floor Insulation	0.91	7.55
Internal Wall Insulation	2.60	2.82
Flat Roof Insulation	0.00	0.00
Party Wall Insulation	0.00	0.00

- 3.18 **Figure 3.2** shows that nearly all TM and SM monitoring fails arose from insulation measures, which was the main focus of the obligation. The highest proportion of TM fails were found in in loft insulation, cavity wall insulation and external wall insulation measures, whilst the highest proportion of SM fails were found in room in oom and under floor insulation measures.
- 3.19 In line with the practices stated above none of the measures that failed inspection were allowed to be attributed towards the suppliers' CSCO obligations until these measures were satisfactorily remediated or rescored.

### Pathways to Compliance

- 3.20 We introduced an enhanced technical and score monitoring process in ECO2 to drive improvements in the quality of installations and calculated scores. Where an installer did not inspect the minimum required number of measures, or breached set failure rate tolerances (20% for score monitoring and 10% for technical monitoring) it was placed on a "Pathway to Compliance". This meant that an installer's measures, notified by a particular supplier and within a set quarter, were placed at risk of rejection until appropriate action was undertaken to satisfy us that the installer could meet the relevant requirements. In the first instance this meant performing additional inspections to either meet the required monitoring rate or to confirm or refute the original reported failure rate.
- 3.21 Where the failure rate remained above the tolerance, suppliers were required to submit additional assurances (including actions such as root cause analyses and improvement plans) to provide Ofgem with assurance that installation and scoring issues were addressed. This was intended to give Ofgem increased confidence in the quality of that installer's measures moving forward.
- 3.22 In ECO2 we opened 379 pathways to compliance for installers with CSCO and CSCO Rural measures in them. As of 13 September 2017, 6 of the CSCO pathways remain open. We are requiring suppliers to undertake the required outstanding additional actions before these pathways are resolved. Should the measures involved in these investigations have their savings amended or revoked, this would not currently cause any energy company to fail its obligation.

<sup>34</sup> Technical Monitoring on DHS relates to the insulation pre-conditions only

- 3.23 All obligated suppliers had CSCO-related pathways to compliance open at one point during ECO2. In addition there were more pathways to compliance opened during phase 1 of ECO2 compared to phase 2. This indicates a general improvement in installation and scoring standards as the scheme progressed.
- 3.24 Pathways were only closed once we had received the results of additional monitoring and assurance that gave us sufficient confidence over the quality and accuracy of an installer's installations. Where there was insufficient evidence to support the eligibility of any measure, approval was revoked.
- 3.25 Going forwards, we are looking at ways we can better utilise pathways information to aid suppliers, including the possibility of sharing aggregated data sets.

### Process audits

- 3.26 A key aspect of our ECO2 administration was developing and managing an effective auditing framework.<sup>35</sup> The aim of the framework was to minimise the risk and impact of non-compliance with ECO2 requirements on consumers. We worked with all energy companies to detect and mitigate this risk.
- 3.27 A number of audit activities were conducted during ECO2. These included a mixture of process-based and measure-specific audits. These assessed energy companies' readiness for delivering ECO and notifying the measures to us. Following initial health checks, annual process-based audits assessed energy companies' procedures and compliance checks for measures. These were complimented by measure-specific audits, which included a mix of documentation reviews and on-site monitoring activity.
- 3.28 Whilst there were no specific CSCO audits, checks within other audits contained provision for CSCO-related processes, such as validating LSOAs. Further details on audits undertaken in relation to all aspects of ECO2 will be outlined in the ECO2 final report at the end of ECO2t.

### Fraud Prevention

- 3.29 The supply chain for ECO delivery can consist of a number of different elements. Over our administration of ECO we have identified aspects of this supply chain which may be vulnerable to fraudulent activity. We required that energy companies had robust controls in place for detecting and mitigating fraud within their supply chains.
- 3.30 We regard fraudulent activity as covering any dishonesty or misrepresentation in the context of the ECO2 Order or our guidance. We also scrutinised behaviour which may have undermined the government's policy intent or our administration of the scheme.
- 3.31 Throughout ECO2 we took the following steps in order to mitigate the risk of fraud:
  - Taking a zero tolerance approach to fraud by investigating all cases of suspected fraud, reporting matters to Action Fraud and any relevant accreditation bodies when suspected fraudulent activity is found. As a result, we have developed relationships with these bodies and other external stakeholders who can assist us with investigations into suspected fraud.

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<sup>35</sup> i.e. as required by the directions and guidance from the Secretary of State dated 9 February 2015

- Chairing the quarterly forum of the ECO Industry Fraud Prevention and Compliance Committee to engage with suppliers and discuss fraud risks and drive best practice.
- Reviewing the energy company's fraud strategies, alongside Ofgem's ECO Fraud prevention strategy, to ensure they are effective and robust and offering guidance on where they could be strengthened.

### Areas of Concern

- 3.32 67% of suspected fraud cases investigated with CSCO measures were focused on manipulation of EPCs to inflate scores for measures. Although this will no longer be a direct concern as EPCs are not a requirement under ECO2t, we will continue to monitor potential score inflation with regards to property details provided for deemed scores. Many of the practices previously used to monitor this concern can still be used in terms of checking property details online, reviewing previous EPCs and studying online mapping systems.
- 3.33 24% of suspected fraud cases with CSCO measures looked at documentation issues, for example the misrepresentation of installation date or the householders consent. This will continue to be monitored by requesting and reviewing supporting documents in line with Ofgem guidance. In addition, 9% of cases considered concerns around non-install of the measure which also ties in with the falsifying of documents.
- 3.34 As a result of our suspected fraud investigations into 670 CSCO measures, 309 measures were retained as unchanged as the concerns were alleviated through investigation or could not be verified, 286 were amended and 75 were refused savings.
- 3.35 Due to the timing of concerns being identified and conducting full investigations, a number of suspected fraud investigations were ongoing at the time of our final determination. This means a total of 218 measures that have been approved may yet have savings amended or revoked.<sup>36</sup> The carbon savings, which total 0.088 MtCO<sub>2</sub> would not currently cause any energy company to fail its obligation.
- 3.36 As the investigations progress, potential concerns may increase and lead to additional approved CSCO measures being investigated. We aim to complete these investigations in a timely manner but must also be confident any investigation is concluded following a thorough examination.

### Investigations

- 3.37 At the time of our final determination, a total of 239 CSCO measures remained under investigation relating to issues that could not be resolved before 13 September 2017. The carbon savings, which total 0.0097 MtCO<sub>2</sub> would not currently cause any energy company to fail its obligation.
- 3.38 The combined total of measures that remained under investigation and were involved in ongoing suspected fraud investigations at the time of final determination would not cause any energy company to fail its obligation.

<sup>36</sup> These figures may change before the final determination of ECO2 in March 2019