Renewables Obligation Annual Report 2022-23





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Foreword

The Renewables Obligation (RO) scheme launched in Great Britain in 2002 and in Northern Ireland in 2005. The RO scheme provides long-term support for renewable electricity generators accredited under the scheme in the form of Renewables Obligation Certificates (ROCs). The number of ROCs an eligible generator will receive depends on a number of criteria. This includes the type of generation (i.e. wind, solar, etc), when the installation was eligible from, and the volume of electricity produced. Generators are supported financially as ROCs are tradeable and used by electricity suppliers to meet their scheme obligations, which require a specified number of ROCs to be presented for each megawatt hour of electricity supplied to customers. The value of the RO scheme in 2022-23 was £6.4 billion.

The Department for Energy Security and Net Zero (DESNZ) is responsible for RO policy in England & Wales, the Scottish Government is responsible for RO policy in Scotland and the Department for the Economy (DfE) are responsible for RO policy in Northern Ireland. Ofgem has overseen the administration of the RO since its launch and our role includes, the setting of supplier obligations, issuing ROCs to eligible generators and ensuring that generators and suppliers comply with their responsibilities under the scheme.

Since its introduction, the RO has provided support to over 26 thousand accredited generators who supply clean renewable electricity to millions of UK homes and businesses. Over 70% of the renewable electricity generation in the UK today is provided by generators accredited under the RO, and the scheme has played a pivotal role in the transformation of the UK electricity generation market. For example, in 2010 around 7% of the UK's electricity was generated by renewables; this has grown to well over 40% today. This transformation of the UK electricity generation market, supported by investment under the scheme, has made a vital contribution on our journey towards net zero.

Although the scheme is now closed to new entrants, we will continue to play an important role ensuring that the scheme operates efficiently until the final participants have reached the end of their eligibility periods in 2037. Part of our role is making sure that only those eligible for support receive it. We therefore ensure robust audit and compliance arrangements are in place, in line with the oversight requirements set out by Government. The onus for scheme compliance sits squarely with participants. It is the participant's responsibility to take the appropriate steps to assure themselves that their claims under the scheme are accurate. We also expect boards of directors, who are responsible for RO accredited generating stations, to assure themselves that their assets are compliant with the scheme. Where scheme noncompliance is identified, we will not hesitate to take firm action where needed – for example by revoking ROCs, withdrawing accreditation or through enforcement action where appropriate.

Renewables Obligation (RO)

This year has seen a significant decrease in the number of suppliers being found non-compliant with their obligations under the scheme. This has contributed to Scheme Year 21 being the first since Scheme Year 16 when the scheme's 'mutualisation' mechanism (which accounts for shortfalls in scheme payments from suppliers) has not been triggered. Despite this positive change, we will continue to monitor suppliers and generators closely, holding those who don't follow scheme rules or comply with their obligations to account.

We welcome comments from readers on the content of this report, so if you want to get in touch, please contact us at <u>SchemesReportingFeedback@ofgem.gov.uk</u>.

Neil Lawrence

Director, Delivery & Schemes

Executive summary

Ofgem runs a range of environmental and social schemes on behalf of government and for the devolved administrations. Together, these were worth over £9.9 billion in 2022-23. Our schemes fall into three main categories: renewable electricity schemes, renewable heat schemes, and energy efficiency and fuel poverty schemes.

We work with energy companies, consumer groups and other stakeholders, including the UK's elected representatives and other delivery partners across government, to make sure policy targets are met in an economical and consumer conscious way.

The Renewables Obligation

The RO is a scheme designed to encourage large-scale renewable electricity generation in Great Britain (GB), and both large-scale and smaller-scale renewable electricity generation in Northern Ireland (NI). By helping to increase the proportion of UK electricity coming from renewable sources, the scheme is an important contributor on the country's journey to Net Zero.

Since its introduction in 2002 in England, Wales, and Scotland, and 2005 in Northern Ireland, Ofgem has been responsible for the successful administration of the RO scheme,¹ including stringent monitoring and compliance activity. The scheme closed to all new entrants in March 2017.

The RO is made up of three separate obligations across the United Kingdom and is governed by three separate but similar pieces of legislation, one for each obligation: The Renewables Obligation Order 2009, the Renewables Obligation (Scotland) Order 2009 (ROS), and the Renewables Obligation Order (Northern Ireland) 2009 (NIRO). These are known as the RO Orders (the Orders). Each obligation period, licensed electricity suppliers are required to present a specified number of Renewables Obligation Certificates (ROCs), in respect of each MWh of electricity supplied to customers.² Those suppliers not presenting sufficient ROCs to fulfil their obligation are required to make a payment to cover the shortfall.

This report covers scheme activity during the 2022-23 obligation period (Scheme Year 21/SY21: 1 April 2022 – 31 March 2023).

¹ The Department for Energy Security and Net-Zero (DESNZ) are responsible for RO policy in England & Wales, the Scottish Government are responsible for RO policy in Scotland and the Department for the Economy (DfE) are responsible for RO policy in Northern Ireland, but the scheme is administered by Ofgem.

² Unless it is clear from the context, 'RO' refers to the three UK obligations – the RO England and Wales, the ROS and the NIRO – collectively. Similarly, 'ROC' usually refers collectively to England and Wales ROCs (EWROCs), Scottish ROCs (SROCs) and Northern Ireland ROCs (NIROCs).

Profile of generators under the RO (page 16)

At the end of SY21, a total of 26,606 stations were accredited on the RO with a total installed capacity of 35.4 GW. Over 85% of these accredited stations are micro³ installations in Northern Ireland. Whilst these micro-NIRO installations account for the majority of accredited stations, they only account for 0.3% of installed capacity.

Note that to prevent the volume of micro-NIRO installations skewing the figures, they are excluded from the statistics in the following paragraph.

Onshore wind has the most installed capacity at 12,277 MW, and the largest number of stations at 1,406. Fuelled⁴ stations account for the second highest installed capacity of 8,923 MW from 686 stations. Other significant contributors to the total capacity installed under the RO are offshore wind (6,565 MW from 36 stations) and solar PV (5,790 MW from 919 stations). Whilst the largest share of installed capacity in England belongs to fuelled, offshore wind and solar PV technologies, in Scotland, Wales and Northern Ireland, onshore wind is the technology type associated with the most deployed capacity.

ROCs issued and renewable generation (page 24)

In SY21, we issued 108.30 million ROCs to renewable generating stations. These ROCs represent 80.3 TWh of renewable electricity generation, an increase of 3.0% from last year. Electricity generation under the RO stood at the equivalent of 31.8% of the UK's 2022-23 electricity supply. This was an increase of 2.3 percentage points compared to SY20.

When compared to SY20, onshore wind, offshore wind and solar PV technologies all saw a modest increase in ROC issue. Tidal stations saw a much larger increase of 124.0% but the total number of ROCs issued to this technology type was very small. Sewage gas, landfill gas, hydro and fuelled generating stations all saw a decrease in ROC issue compared to SY20. Sewage gas saw the largest fall in ROCs issued with a decrease of 11.5%. ROCs issued to fuelled installations experienced the smallest drop, a decrease of 0.1%.

Onshore wind generated 28.2 TWh or 35.1% of the renewable electricity under the scheme, being the largest contributor in total, as well as being the largest contributor in every country except England. Offshore wind generated the highest amount of renewable electricity in England and the second highest amount overall at 22.0 TWh or 27.3% of the total. The third biggest contribution was from fuelled generating stations, generating 17.7 TWh or 22.0%. Other technology types account for 12.4 TWh or 15.5% of generation.

³ Micro installations are those with a DNC of 50kW or less. The vast majority of micro generators are located in NI and are referred to as micro-NIRO.

⁴ References to "fuelled" generating stations relate to stations generating electricity from eligible biomass, bioliquids, biogas, energy crops or waste, but do not include landfill gas and sewage gas only stations.

Biomass sustainability (page 36)

In SY21, 320 fuelled generating stations were required to report their biomass fuels against the land and greenhouse gas emissions criteria, collectively known as the sustainability criteria⁵. Compliance with the sustainability criteria is a requirement for ROC issue for the 108 bioliquid, solid biomass, or biogas stations with 1 MW or more Total Installed Capacity (TIC). The 212 solid biomass, or biogas stations with a TIC less than 1 MW and a Declared Net Capacity (DNC) of more than 50kW, are required to report against the sustainability criteria, but receiving ROCs does not depend on meeting the criteria.

There were no fuel consignments that reported failures to meet the land criteria during SY21. In total, three consignments failed to meet the greenhouse gas (GHG) emission criteria in comparison to 20 during SY20. The proportion failing to meet the criteria is very small against the total number of 4,049 consignments reported against the sustainability criteria for SY21.

Generators are required to report certain information to Ofgem, in line with specific legislative requirements. Some of this information is used to inform ROC allocation whilst other information is primarily used to provide transparency around the scheme. In both cases it is critical this information is accurate and complete.

Ofgem has an open investigation into whether Drax Power Limited (the UK's largest biomass generator) is in breach of annual profiling reporting requirements relating to the Renewables Obligations scheme, and other related matters.⁶ The opening of this investigation does not imply that Ofgem has made any findings about possible non-compliance by Drax Power Limited.

Compliance by licensed suppliers (page 47)

In SY21 (2022-23 compliance period), suppliers presented 107.7 million ROCs towards the total UK obligation of 121.8 million ROCs. Each ROC was notionally worth £59.76, giving a scheme value of approximately £6.4 billion. Those suppliers who did not meet their obligation through presenting ROCs by the deadline of 1 September 2023 were required to make up the shortfall by making payments into the buy-out fund no later than 31 August 2023. Where this payment deadline was missed, suppliers had not met their obligations on time and were required to fulfil any remaining part of their obligation by paying into the late payment fund by 31 October 2023. The payments collected resulted in £740.4 million being redistributed to eligible suppliers from the buy-out and late payment funds. This was a reduction on the £813.4

⁵ <u>Information on the sustainability criteria:</u> <https://www.ofgem.gov.uk/environmentalprogrammes/ro/applicants/biomass-sustainability>

⁶ Information on Ofgem's investigation into Drax Power Ltd:

<https://www.ofgem.gov.uk/publications/ofgem-investigating-drax-power-limiteds-compliance-reporting-requirements-relating-renewables-obligation>

million redistributed in SY20. All but one supplier met their obligations by the final late payment deadline of 31 October.

UK Energy Incubator Hub, with two obligations equating to 1,882 ROCs, did not present ROCs or make payments sufficient to meet their obligations. The supplier ceased trading during SY21 and we are pursuing the outstanding balances for this supplier through their administrators. Non-compliance by this supplier resulted in a shortfall of £99,520.16 (excluding interest) in the buy-out and late payment funds. This resulting shortfall is well below the mutualisation threshold for both RO and ROS⁷, meaning mutualisation has not been triggered this scheme year for the first time since SY16 (2017-18).

Additionally, suppliers are required to submit data on their supply volumes, which is used to help set scheme obligations. There were three suppliers that submitted their supply volumes after the 1 July supply submission deadline. There were no active suppliers that failed to provide data. The three suppliers that missed the deadline were:

- PX Supply Limited
- United Gas & Power Trading Ltd
- Pozitive Energy Ltd

To provide transparency and to hold suppliers to account for their performance, all instances of non-compliance will be added to our Supplier Performance Report⁸ (SPR).

We take non-compliance with scheme obligations very seriously. As in previous years, we took a robust and proactive approach to compliance and enforcement on the RO scheme. This included early communication with suppliers for assurance that they would be able to discharge their obligations under the RO. This was supplemented by requests to suppliers who failed to discharge their obligations by the 1 September deadline, for assurances and evidence of their ability to meet their obligations in full by the late payment deadline.

As part of our duties as scheme administrator, we conduct audits of selected suppliers to ensure their internal processes are robust and to gain assurance on the accuracy of the electricity figures submitted to us. Of the four audits carried out in relation to SY21, two were rated 'Good' (50%), one was rated 'Satisfactory' (25%), and one was rated 'Weak' (25%). This is the same distribution of results as in SY20. Where audit findings give cause for concern or identify areas for improvement, we engage with the relevant supplier(s) to develop an action plan.

⁷ <u>2022-23 Mutualisation notice</u>: <https://www.ofgem.gov.uk/publications/renewablesobligation-202122-mutualisation>

⁸ The SPR documents incidents of supplier non-compliance across all of the renewable energy, energy efficiency and social schemes we administer. <u>Supplier Performance Report webpage</u>: https://www.ofgem.gov.uk/supplier-performance-report-spr

Compliance of RO generators (page 68)

The SY21 generator audit programme consisted of 50 targeted and 150 statistical audits being conducted on stations in the UK. This was the third year in which statistical audits have been conducted on the RO.

Overall, 84% of targeted audits resulted in an initial 'Weak' or 'Unsatisfactory' audit rating. A high level of non-compliance is expected under our targeted audit programme, as audits are focused on known risk areas on the scheme. Additionally, 63% of the statistical audits were initially rated as either 'Weak' or 'Unsatisfactory'. It should be noted that stations receiving a 'Weak' or 'Unsatisfactory' rating are subject to further compliance investigation. Following this the confirmed levels of non-compliance are expected to be lower.

After an analysis of the ratings and associated audit findings of our generator audits, we identified that some were receiving 'Weak' or 'Unsatisfactory' ratings, despite no financial non-compliances being identified as part of the audit. This is a result of the determined assurance ratings and the evidence required to satisfy these definitions. As such, we have changed our assurance rating definitions to ensure the audit ratings better reflect instances whereby potential financial non-compliances are identified. This change will allow us to more accurately identify which audits require further compliance investigation.

In addition to the generator audits, we also conducted three agent or `rent-a-roof' company audits and all were rated either `Good' or `Satisfactory'.

A total of 151 compliance investigations were closed during SY21. Satisfactory evidence addressing the concerns raised was provided in 150 of these cases. Therefore, they were closed with no compliance action. The remaining station, owned by Gravis Capital Limited, was unable to provide sufficient evidence showing initial generation, so the decision was made to withdraw its RO accreditation. As noted above, Ofgem has an open enforcement investigation into Drax Power Limited.

As a result of our work administering the RO, including our audit and compliance activity, we identified around £13.5 million of error. The vast majority of this error is made up of ROCs that we prevented from being issued to generators not eligible to receive them. A much smaller proportion relates to ROCs issued to generators we subsequently determined were not eligible to receive them (for which we take recovery action). The value of certificates involved is 168% of our costs for administering the scheme – demonstrating the value for money our work delivers for consumers.

Please note: a spreadsheet containing all the data used in the production of this report is published alongside the report on our website.



80.3 TWh of electricity was generated under the RO scheme in Scheme Year 21 (SY21), up from 78.0 TWh in SY20. This is equivalent to approximately 31.8% of the total UK electricity supply market (and 42.8% when combined with generation under the Feed-in Tariffs (FIT) and Contracts for difference (CfD) schemes).



The electricity generated resulted in **108.3 million** ROCs being issued to renewable generating stations. This was an increase of 3.1% on the 105.1 million ROCs issued in SY20.



In SY21, suppliers presented **107.7 million ROCs** towards the total UK obligation. This was equal to 88.4% of the total obligation of 121.8 million ROCs. Each ROC was notionally worth **£59.76**, giving a scheme value of approximately **£6.4 billion**.



The total capacity of stations accredited on the RO at the end of SY21 stood at **35.4 GW**. Of the **26,606** stations making up this capacity, 22,684 are micro generators in Northern Ireland. Whilst these micro generators account for 85.3% of accredited stations, they only account for 0.3% of installed capacity.

1. About the scheme

Chapter purpose

This chapter introduces the context and background to the Renewables Obligation (RO) scheme, including Ofgem's administrative duties. This chapter also summarises changes to the scheme affecting and/or coming into force during SY21.

- 1.1 The Renewables Obligation (RO) is a government scheme designed to support large-scale renewable electricity generation in Great Britain (GB), and both large-scale and smaller scale renewable electricity generation in Northern Ireland (NI). The RO is designed to provide long term⁹ support for renewable electricity generators in the form of Renewables Obligation Certificates (ROCs), and requires that in each obligation period, licensed electricity suppliers present a specified number of ROCs in respect of each MWh of electricity supplied to customers. Those suppliers not presenting sufficient ROCs to fulfil their obligation are required to make a payment to cover the shortfall.¹⁰
- 1.2 The scheme was introduced in England, Wales, and Scotland in 2002 and in Northern Ireland in 2005; and with some exceptions, it closed to new generation capacity on 31 March 2017.¹¹
- 1.3 There are three separate obligations across the UK: The Renewables Obligation England and Wales, the Renewables Obligation Scotland (ROS), and the Northern Ireland Renewables Obligation (NIRO). The scheme is governed by three separate but similar pieces of legislation, one for each obligation. These are known as the RO Orders (the Orders).
- 1.4 The Gas and Electricity Markets Authority (the Authority) is the statutory body responsible for administering the RO and ROS in Great Britain. We also administer the NIRO on behalf of the Northern Ireland Authority for Utility Regulation (NIAUR); however, NIAUR retains the statutory responsibility for administering the NIRO. The Authority's day-to-day functions are performed by Ofgem, the office of the Authority. We do this according to the legislation (the RO Orders in England and Wales, the ROS Orders in Scotland, and the NIRO Orders in Northern Ireland).

⁹ Twenty years from the date of accreditation or until 31 March 2037, whichever is earlier - except for generators accredited before 26 June 2008 that are eligible to claim ROCs on generation that occurs until 31 March 2027.

 ¹⁰ The buy-out price is the sum that suppliers must pay for each ROC not presented towards their obligation. <u>Buy-out price information for 2022-23</u>: "https://www.ofgem.gov.uk/environmental-programmes/ro/about-

ro/ro-closure>

- 1.5 The Orders explain what our functions are; they include:
 - Accrediting generating stations that can generate electricity from eligible renewable energy sources
 - Issuing England & Wales Renewables Obligation Certificates (EWROCs), Scottish Renewables Obligation Certificates (SROCs) and Northern Ireland Renewables Obligation Certificates (NIROCs)
 - Establishing and maintaining a register of EWROCs, SROCs and NIROCs
 - Revoking EWROCs, SROCs and NIROCs where necessary
 - Monitoring compliance with the requirements of the Orders
 - Calculating the buy-out price to reflect changes in the Retail Price Index and receiving and re-distributing buy-out payments and late payments
 - Calculating the mutualisation threshold to reflect changes in scheme value, adjusting the mutualisation ceilings and receiving and re-distributing mutualisation payments.
- 1.6 The scheme obligation period runs annually from 1 April to 31 March. The obligation level for suppliers is announced before the start of each obligation period and is set based on a forecast of renewable electricity generation plus a headroom of 10%. This is intended to ensure demand for ROCs outstrips supply, thereby ensuring the value of ROCs is maintained and the scheme administration costs can be met from the buyout-fund.
- 1.7 During an obligation period, we issue eligible generating stations with ROCs for the renewable electricity they generate. ROCs are tradeable, can be sold between parties, and can be redeemed against any of the three separate obligations. After the end of an obligation period, we confirm each supplier's obligation based on the amount of electricity it has supplied to customers in the countries (England and Wales, Scotland and/or Northern Ireland) in which it holds licences. We set this obligation as a specific number of ROCs. Suppliers must meet their obligations by presenting ROCs to us, making a payment per ROC into a buy-out fund, or through a combination of these. We then withdraw our scheme administration costs from the buy-out fund and redistribute the remaining buy-out payments to suppliers, in proportion to the number of ROCs they presented.
- 1.8 The Orders require us to produce an annual report on the scheme by 1 April following the end of an obligation period. This report fulfils this duty covering SY21 (obligation period:

1 April 2022 to 31 March 2023). The Orders¹² state the minimum information the report must include:

- Details of the compliance of each obligated electricity supplier, including the ROCs they presented, payments they made and our redistribution of these payments
- The number of ROCs we issued, broken down by generation technology
- Details of any mutualisation triggered (not applicable for the NIRO)
- The outcome of any investigations we conducted into suppliers' and generators' compliance with the Orders.
- 1.9 We can also publish "any other matter" that we consider relevant in the report. As such we have provided information including the number and type of stations we have accredited, the amount of renewable generation for which ROCs were claimed, biomass sustainability, the value of the scheme, recent and upcoming changes in legislation, and improvements we have made to the administration of the scheme.

Points to note

- 1.10 Unless it is clear from the context, 'RO' refers to the three UK obligations the RO England and Wales, the ROS, and the NIRO – collectively. Similarly, 'ROC' usually refers collectively to England and Wales ROCs (EWROCs), Scottish ROCs (SROCs) and Northern Ireland ROCs (NIROCs).
- 1.11 Although there are three buy-out funds and three late payment funds for the RO (one for each obligation), where we refer to the 'buy-out fund' or 'late-payment fund' without specifying the obligation, this refers to all three collectively.
- 1.12 When referring to 'we' in the report this means 'Ofgem' or 'the Authority'.
- 1.13 The data included in this report was extracted from the Renewables and CHP Register (the Register) on 30 October 2023.¹³ This date allowed production of the report to commence once the late payment deadline of 31 October 2023 had passed and activities in relation to SY21 were predominantly complete. The data stored in the Register is live data and subject to change. For example, a station's accreditation details might be

 $^{^{12}}$ Article 86(1)(f) of the RO, Article 57(1)(f) of the ROS and Article 49(1)(e) of the NIRO list the requirements for the annual report.

¹³ For information on extracting data from the Register public reports please refer to Appendix 4.

amended, or the number of ROCs issued/revoked might change. As such, data downloaded from the Register at a later date may vary from those used in this report.

Changes to the scheme

Renewables Obligation Scotland (ROS) mutualisation threshold

1.14 On 29 September 2022, the Scottish Government published their decision to move the ROS mutualisation threshold from its fixed position of £1.54m to a variable sum of 0.1% of the annual cost of the scheme to suppliers¹⁴. The legislative change came into force on 31 March 2023¹⁵. The ROS threshold was first calculated under the new arrangement for the 2023-24 obligation period.

¹⁴ <u>Changes to the Renewables Obligation (Scotland) scheme</u> <https://consult.gov.scot/energy-and-climate-change-directorate/changes-to-ros-scheme>
 ¹⁵ <u>The Renewables Obligation (Scotland) Amendment Order 2023</u>

<a>https://www.legislation.gov.uk/ssi/2023/103/made>

2. Profile of generators accredited under the RO

Chapter purpose

This chapter provides a profile of generators accredited under the Renewables Obligation scheme. It includes information on the number of accredited stations and installed capacity, by country and technology. Additionally, this chapter provides an update on changes to installed capacity and accredited stations compared to the previous scheme year.

Data assumptions

- 2.1 We make several general assumptions on the data used within this section of the report. The data we receive is largely determined by the regulations. These assumptions, which are the same assumptions applied since the 2014-15 (SY13) RO Annual Report, are as follows:
 - We only include data on generating stations that have received full accreditation.
 We have not included any information on stations that have had their accreditation withdrawn so the data are subject to change year on year
 - References to "fuelled" generating stations relate to stations generating electricity from eligible biomass, bioliquids, biogas, energy crops or waste, but do not include landfill gas and sewage gas only stations
 - The capacities we quote are Declared Net Capacity (DNC),¹⁶ rather than Total Installed Capacity (TIC),¹⁷ values unless specified otherwise. The main exception to this is fuelled generating stations that burn renewable fuel alongside fossil fuel (we term these co-firing stations)
 - To determine the capacity of a fuelled station we estimate the renewable proportion of the electricity generated, based on an average calculated from historical data.

¹⁶ DNC means "the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption) less the amount of electricity that is consumed by the plant". ¹⁷ TIC means "the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption)".

Micro generation on the RO

2.2 From 1 April 2010, with the introduction of the Feed-in Tariffs (FIT) scheme in GB, all wind, solar PV, hydro and anaerobic digestion (AD) stations with a DNC of 50 kW or less (micro generators) became ineligible for the RO. Since no FIT scheme exists in Northern Ireland, micro generators were still able to apply for accreditation under the NIRO. As such, most accreditations on the RO have been granted to these stations. Given this, when reporting on the number and type of stations accredited, we have separated out micro-NIRO stations from some of the information in this chapter.

Profile of RO generators

2.3 There were 26,606 stations with a combined capacity of 35.4 GW accredited under the RO when data was extracted from the Renewables & CHP Register on 30 October 2023. Figure 2.1 provides a detailed breakdown of these stations by technology type and country (including Micro-NIRO). Figure 2.2 gives a visual overview of the technology types with the most capacity installed in each country.

Figure 2.1: Accredited stations and capacity by country and technology (including micro-NIRO)

Generation Technology	England Stations	England Capacity (MW)	Scotland Stations	Scotland Capacity (MW)	Wales Stations	Wales Capacity (MW)	Northern Ireland Stations	Northern Ireland Capacity (MW)	Total Stations	Total Capacity (MW)
Onshore wind	238	2,595	252	7,448	58	977	1,298	1,261	1,846	12,281
Fuelled	410	7,891	88	276	55	149	137	607	690	8,923
Offshore wind	26	5,481	7	364	3	720	0	0	36	6,565
Solar PV	783	5,103	15	41	80	486	22,230	276	23,108	5,906
Landfill gas	367	686	38	78	16	23	8	11	429	799
Hydro	43	21	147	618	30	77	89	7	309	723
Sewage gas	152	189	6	7	16	12	0	0	174	208
Tidal stream	0	0	7	13	1	0.4	1	1	9	14
Wave Power	0	0	5	3	0	0	0	0	5	3
Total	2,019	21,966	565	8,847	259	2,445	23,763	2,164	26,606	35,422

Figure 2.2: Capacity deployed by country and technology type (including micro-NIRO)

Map of the United Kingdom with separate pie charts for each country presenting the capacity deployed by technology type. Whilst most capacity installed in England is for fuelled, offshore wind and solar PV technologies, in the other countries onshore wind is the technology type associated with the most deployed capacity.



2.4 **Figure 2.3** below shows the split between micro-NIRO and non-micro-NIRO accredited stations. Micro-NIRO refers to generating stations in Northern Ireland with a DNC of 50kW or less.

Figure 2.3: Percentage of accredited stations and capacity, micro-NIRO vs nonmicro-NIRO

Two pie charts presenting the percentage split between micro-NIRO and non-micro-NIRO (a) accredited stations, and (b) installed capacity. While micro stations make up 22,684 (85.3%) of the 26,606 accredited stations, they only provide 122 MW or 0.3% of installed capacity. The combined capacity of non-micro-NIRO stations is 35,301 MW.



2.5 **Figure 2.4** shows the total accredited capacity and number of stations by technology (excluding micro-NIRO).

Figure 2.4: Total accredited capacity and number of stations by technology (excluding micro-NIRO)

Clustered column chart providing a snapshot of the capacity accredited under the scheme (excluding micro-NIRO) and the corresponding number of stations. Onshore wind has the most capacity (12,277 MW) and number of stations (1,406), giving an average capacity of 8.73 MW. Offshore wind, which has a total of 6,565 MW and only 36 stations, has a much larger average capacity of 182.35 MW. Fuelled and solar PV stations also have relatively large average capacities – 13.01 MW and 6.30 MW respectively. The average size of stations for the other technology types are smaller - hydro (2.80 MW), landfill gas (1.86 MW), tidal stream (1.58 MW), sewage gas (1.19 MW) and wave power (0.67 MW).



2.6 As shown in Figure 2.5, by far the most common micro-NIRO technology is solar PV, making up 97.8% of all micro accreditations and accounting for 96.0% of installed micro capacity. After this, onshore wind accounts for the second highest proportion, making up about 1.9% of stations and 3.1% of installed capacity.

Figure 2.5: Micro NIRO accredited capacity and number of stations by technology

	Solar PV	Onshore wind	Hydro	Fuelled
Sum of capacity (MW)	116.6	3.8	0.9	0.2
Number of stations	22,189	440	51	4

Accreditations and withdrawals

- 2.7 One of our key duties as administrator is to assess applications for accreditation against the scheme eligibility criteria. The RO is now closed to all new applications¹⁸ but we continue to assess the eligibility of a small number of applications made prior to closure.
- 2.8 As shown in Figures 2.6 & 2.7, since SY20 the number of stations accredited on the scheme has reduced by three and the total capacity installed has reduced by 27.5 MW. Please note that these figures are the net change in installed capacity and stations accredited (including micro-NIRO). As well as stations being accredited to the scheme, the totals can also be affected by existing stations increasing their capacities¹⁹, stations withdrawing from the scheme, the capacity of a station changing (for example, because of decommissioning a wind turbine), a capacity correction following an audit or us taking compliance action.

¹⁸ <u>Information on the RO closure</u>: <https://www.ofgem.gov.uk/environmental-programmes/ro/aboutro/ro-closure>

¹⁹ Note that following scheme closure stations can increase their capacity, but this will be unsupported.

Figure 2.6: Accredited station and capacity change²⁰ by country (net change)

Clustered column chart showing the net change in the number of accredited stations and capacity by country since the previous scheme year. The number of accredited stations in NI grew by one. In Scotland, there was no change in the total number of accredited stations compared to the previous year, whereas in England and Wales the total reduced by three and one respectively. Installed capacity increased by 37.4 MW in Scotland and 14.4 MW in NI, whereas it reduced by 23.9 MW in England and 0.4 MW in Wales.



²⁰ Note that unsupported capacity added following scheme closure will be included in these figures.

Figure 2.7: Accredited station and capacity change²¹ by technology (net change)

Clustered column chart showing the net change in the number of accredited stations and capacity by technology type since the previous scheme year. Of note, onshore wind saw a significant increase in installed capacity (52.4 MW) and a modest increase of one accredited station. The total number of accredited stations and capacity fell or remained the same for all other technology types. Landfill gas and solar PV saw relatively significant reductions in capacity (15.2 MW and 9.2 MW) but modest reductions in the total number of stations (three and one). Smaller changes occurred for hydro and sewage gas which saw a capacity reduction of 0.4 MW and 0.1 MW respectively, whilst the number of stations for these technology types saw no change.



Application refusals

2.9 During an application assessment, if it is demonstrated that the applicant does not meet the eligibility criteria then we will refuse the application. A total of one application with an estimated value of £6.56 million was refused on this basis during SY21.

²¹ Note that unsupported capacity added following scheme closure is included in these figures.

3. ROCs issued and renewable generation

Chapter purpose

This chapter provides an update on the ROCs issued and associated renewable generation in SY21. It also demonstrates historical trends in ROC issue and renewable generation.

ROCs issued and renewable generation in SY21²²

3.1 SY21 saw an increase in the amount of renewable electricity generated under the RO resulting in an increase in the number of certificates issued, which rose by 3.1% compared to SY20. Renewable generation on the RO was equivalent to 31.8% of the electricity supplied in the UK. This rises to 42.8% when including generation from the Feed-in Tariff (FIT)²³ and Contracts for Difference (CfD)²⁴ schemes, an increase of 2.0% percentage points compared to SY20. The exact figures for SY21 and change from previous years are shown in **Figure 3.1**.

	SY21 (2022-23)	Change from SY20 (2021-22)	Change from SY19 (2020-21)
Total number of ROCs issued	108,298,132	+3.1%	-0.9%
Associated renewable generation (MWh)	80,312,996	+3.0%	-0.04%
Total UK electricity supply (MWh)	252,616,444	-4.4%	-1.8%
RO renewable generation as a proportion of electricity supply*	31.8%	+2.3pp**	+0.6pp**
Renewable generation including FITs & CfD	108,210,430	+0.2%	-3.5%
Renewable generation as a proportion of electricity supply*	42.8%	+2.0pp**	-0.7pp**

Figure 3.1 Comparison of ROCs issued from SY19 to SY21

* These figures include generation not exported to the grid. This generation is not captured within the total electricity supply figure; therefore, these figures are only representative.

** pp – Percentage points.

²² The data for 2022-23 (SY21) used in this chapter was downloaded from the Renewables and CHP Register on 30 October 2023. For more information on extracting data from the public reports please refer to Appendix 4.

²³ Information on the FIT scheme: <https://www.ofgem.gov.uk/fits>

²⁴ <u>Information on the CfD scheme</u>: <https://www.lowcarboncontracts.uk/our-schemes/contracts-fordifference/>

3.2 **Figure 3.2** gives a more detailed breakdown of ROC issue by technology and country for SY21. In terms of ROCs issued, England issued the highest number for offshore wind, fuelled, solar PV, landfill gas and sewage gas. Whereas in Scotland, ROC issue to onshore wind, tidal and hydro stations was higher than elsewhere in the UK. These figures reflect the capacity of each technology installed in each country.

Technology	England	Scotland	Wales	Northern Ireland	Total
Offshore wind	35,075,616	2,704,944	3,915,034	-	41,695,594
Onshore wind	5,467,615	16,589,022	2,202,529	3,808,142	28,067,308
Fuelled	18,395,622	2,438,440	596,941	1,651,689	23,082,692
Solar PV	8,642,629	57,395	756,555	543,608	10,000,187
Landfill gas	2,155,621	249,918	72,477	50,448	2,528,464
Hydro	49,536	2,064,593	119,787	36,892	2,270,808
Sewage gas	527,351	32,619	28,745	-	588,715
Tidal power	-	64,364	-	-	64,364
Total	70,313,990	24,201,295	7,692,068	6,090,779	108,298,132

Figure 3.2: ROCs issued by technology and country in SY21

3.3 Figure 3.3 below gives a breakdown of the amount (MWh) of renewable electricity generated by each technology type in each country during SY21. Onshore wind generated 35.1% of the renewable electricity under the scheme, being the largest contributor in total, as well as in every country except England. Offshore wind generated the highest amount of renewable electricity in England and the second highest amount overall at 27.3% of the total. The third biggest contributor was fuelled stations, generating 22.0%. Other technology types account for 15.5% of the total generation.

Figure 3.3: Renewable generation (MWh) by technology and country in SY21

Technology	England	Scotland	Wales	Northern Ireland	Total (MWh)
Onshore wind	5,695,459	17,349,362	2,327,387	2,848,712	28,220,919
Offshore wind	18,710,235	1,144,574	2,104,694	-	21,959,503
Fuelled	15,434,300	1,285,787	436,399	533,470	17,689,955
Solar PV	6,030,047	45,355	552,853	239,007	6,867,262
Landfill gas	2,209,951	249,918	72,477	50,448	2,582,794
Hydro	49,663	2,064,593	119,831	14,618	2,248,705
Sewage gas	668,738	33,393	28,854	-	730,985
Tidal power	-	12,873	-	-	12,873
Total (MWh)	48,798,393	22,185,854	5,642,494	3,686,254	80,312,996

ROCs issued and renewable generation under the scheme

3.4 The UK obligation for SY21 was 121.8 million ROCs. As shown in Figure 3.2 above and Figure 3.4 below, 108.30 million ROCs were issued to renewable generating stations. This was equivalent to 88.9% of the total obligation, representing a higher proportion in comparison to the 82.2% issued in SY20 but a lower proportion in comparison to the 91.7% in SY19.

Combined column and line chart showing total ROCs issued and the associated renewable electricity generation since SY6. With one exception (SY15), the number of ROCs issued and renewable generation grew until SY18, and then decreased in SY19 and SY20 before a slight increase in SY21.

Figure 3.4: ROCs issued, UK obligation and RO generation since SY6 (2007-08)



3.5 Since the introduction of banding in 2009, different ROC rates per MWh of generation have been available for different technology types, and in some cases stations of different capacities. Most of the installations accredited at higher ROC rates are in Northern Ireland; although this is largely due to microgeneration which is not a significant factor elsewhere in the UK due to the presence of the FIT scheme.²⁵ England also had ROCs issued per MWh above the UK average, while in Scotland and Wales most capacity is associated with technologies that receive lower ROC rates. **Figure 3.5** shows the volumes of generation and ROCs issued in each country, from SY6 to SY21.

Figure 3.5 (a-d): ROCs issued and renewable generation by country, SY6 to SY21

Combined column and line charts showing the number of ROCs issued and renewable generation by country. Variation can be observed between countries, however, in each there was a slight increase in the number of ROCs issued in SY21 compared to the previous scheme year. In SY21, the average number of ROCs issued per MWh was 1.35 in the UK (1.44 ROCs/MWh in England, 1.09 ROCs/MWh in Scotland, 1.36 ROCs/ MWh in Wales, and 1.65 ROCs/MWh in Northern Ireland).



²⁵ In GB, wind, solar PV, hydro and anaerobic digestion (AD) stations with a DNC of 50kW or less (micro generators) are ineligible under the RO and are supported through the FIT scheme. The FIT scheme does not exist in NI where these micro generators are supported under the NIRO.





3.6 Figure 3.6 shows the number of ROCs issued to different technologies and renewable generation each obligation period since April 2007 (SY6). Compared to SY20, offshore wind, onshore wind, solar PV, and tidal power technologies all saw an increase; the largest percentage increase in ROCs issued was a 124.0% increase to tidal power generating stations. ROCs issued to solar PV installations experienced the smallest increase of 0.3%. Fuelled, landfill gas, hydro and sewage gas generating stations all saw a decrease in the number of ROCs issued with sewage gas experiencing the largest percentage drop of 11.5%. Fuelled generating stations saw the smallest drop, a decrease of 0.1% in ROCs issued.

Figure 3.6 (a-i): Issue of ROCs and renewable generation by generation technology since SY6

Combined column and line charts showing the number of ROCs issued and renewable generation by generation technology. The number of ROCs issued and the amount of renewable electricity generated over time varies between each technology type. Apart from fuelled, all technology types observed a decrease in the number of ROCs issued and renewable generation from SY18. However, tidal power, onshore wind, offshore wind, and solar PV generating stations all saw an increase in ROC issue in SY21 when compared to SY20. In SY21, the ROCs issued per MWh was highest with tidal power at 5 ROCs/MWh. 1.90 ROCs/MWh were issued for offshore wind, 1.46 ROCs/MWh for Solar PV, 1.30 ROCs/MWh for fuelled and 1.01 ROCs/MWh for hydro generating stations. The other technology types were issued at a rate of less than 1 ROC/MWh.

Note that due to the significant difference in volume of ROCs issued and electricity generated, charts h) and i) for tidal and wave power have a different scale to the others in this section.











Revoked and retired ROCs

- 3.7 ROCs can be revoked if, for example, we find that the number initially issued was incorrect. We may identify such errors through reviews of data submitted to us, audits of generating stations (see Chapter 6), or where the generator notifies us of an error. This year we revoked 31,072 ROCs from 54 stations, which were issued in respect of SY21. The station with the most ROCs revoked accounted for 49.6% of that total, and the top five accounted for around 80% of all ROCs revoked. The total is significantly lower than the 316,099 ROCs revoked in SY20. In SY20 a number of errors were detected in larger wind farms resulting in a higher number of ROCs revoked. The figure can vary considerably from year to year as it is largely dependent on submission errors made by generators.
- 3.8 We are unable to revoke ROCs if a supplier has already presented them to us for compliance with their obligation. In this situation, we must withhold an equivalent number of ROCs from being issued to the station in the future.²⁶ This year a total of 1,010,810 ROCs were withheld from 23 generating stations. The station with the most ROCs withheld accounted for 95.9% of that total. This compares to the 239,684 ROCs from 14 stations withheld in SY20.
- 3.9 The registered holder of a ROC may voluntarily retire it on the Register at any time. After retirement it can no longer be used for RO compliance. A registered holder may retire a ROC for several reasons, for example if they can no longer use it towards their obligation because it has already expired. There were no ROCs retired during SY21.

 $^{^{\}rm 26}$ Article 25 of the RO, 41A of the ROS and article 37A of the NIRO.

4. Biomass sustainability

Chapter purpose

This chapter provides an update on the performance of biomass fuelled stations against the sustainability criteria. It updates on feedstock types used in the different types of biomass-generating stations and their country of origin.

Sustainability criteria

- 4.1 All bioliquid stations, solid biomass and/or biogas (gasification or anaerobic digestion) stations with a Total Installed Capacity (TIC)²⁷ greater than or equal to 1 MW must report against and meet sustainability criteria to be eligible for ROCs. Solid biomass and/or biogas stations with a TIC less than 1 MW and a Declared Net Capacity (DNC)²⁸ of more than 50kW, are required to report against the sustainability criteria, but receiving ROCs does not depend on meeting the criteria. Solid biomass or biogas stations with a DNC of less than or equal to 50kW are not required to report sustainability information. The data we receive is largely determined by the regulations.
- 4.2 There are two parts to the sustainability criteria:
 - Land criteria, which focuses on the land from which the biomass is sourced.
 - **Greenhouse gas (GHG) criteria**, which account for the life cycle GHG emissions of the biomass.
- 4.3 To comply the following reporting requirements must be met:
 - Land and GHG data For all bioliquid stations, and stations with a TIC greater than or equal to 1 MW using solid biomass and/or biogas fuels, land use and GHG emission information is submitted monthly. For these stations both the land and GHG criteria must be met to be eligible for support. For stations with a TIC less than 1 MW using solid biomass and/or biogas this information is reported annually and does not link to ROC issue.
 - **Annual profiling data** This is information submitted by the operator regarding the sustainability characteristics of their fuel. This includes information such as:

²⁷ TIC means "the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption)".

²⁸ DNC means "the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption) less the amount of electricity that is consumed by the plant".
the type of biomass, the form of biomass (whether solid or liquid), country of origin and whether it was wood or derived from wood. All fuelled stations with a declared net capacity (DNC) greater than 50 kW are required to provide this information. Issuing of ROCs is suspended for stations that fail to submit profiling data or fail to meet the required standard.

- **Annual sustainability audit report** This is an independent audit report commissioned by all generating stations using bioliquid fuels and stations with a TIC greater than or equal to 1 MW using solid biomass and/or biogas fuels. The aim of the audit is to verify the monthly sustainability information that has been submitted by the operator.
- 4.4 Generators are required to report certain information to Ofgem, in line with specific legislative requirements. Some of this information is used to inform ROC allocation while other information is primarily used to provide transparency around the scheme. In both cases it is critical this information is accurate and complete.
- 4.5 The information in this chapter is based on the data provided by the operators of fuelled stations as part of their monthly and annual reporting requirements.²⁹ It is important to note that this chapter only includes the information for stations that have been granted accreditation and where the sustainability information reported is not under investigation.
- 4.6 For comparisons to be made³⁰, the 'Renewables Obligation: Annual Report SY19'³¹, 'Renewables Obligation: Annual Report SY20'³² and associated Sustainability Datasets³³ were utilised. Additional information on the sustainability requirements can be found in the 'Renewables Obligation: Sustainability Criteria Guidance' and 'Renewables Obligation: Sustainability Reporting Guidance' available on our website.³⁴

²⁹ Correct as of 11 January 2024.

³⁰ The 2020-21 and 2021-22 Biomass Sustainability Datasets and Annual Reports have been utilised for comparison purposes only and will not contain information for stations that were granted accreditation after the reports were written.

³¹ <u>Renewables Obligation (RO) Annual Report 2020-21:</u>

<https://www.ofgem.gov.uk/publications/renewables-obligation-ro-annual-report-2020-21> ³² <u>Renewables Obligation (RO) Annual Report 2021-22:</u>

<https://www.ofgem.gov.uk/publications/renewables-obligation-ro-annual-report-scheme-year-20-2021-22>

³³ <u>Biomass Sustainability Dataset 2020-21:</u> <https://www.ofgem.gov.uk/publications/biomasssustainability-dataset-2020-21> and

<u>Biomass Sustainability Dataset 2021-22:</u> <https://www.ofgem.gov.uk/publications/biomasssustainability-dataset-2021-22-scheme-year-20>

³⁴ <u>Sustainability Criteria Guidance:</u> <https://www.ofgem.gov.uk/publications-and-updates/renewablesobligation-sustainability-criteria> and

<u>Sustainability Reporting Guidance:</u> <https://www.ofgem.gov.uk/publications-and-updates/renewablesobligation-sustainability-reporting>

Performance summary

- 4.7 Of the 108 stations required to submit an annual sustainability audit report, 99 were presented to us in SY21. Of the reports submitted, 96 were of an adequate standard. There were three reports that did not meet the required standard and a further nine accredited RO stations that have not yet presented an audit report. We have suspended the ROCs issue to these 12 stations as a result.
- 4.8 The 212 stations not required to provide an annual sustainability report are still required to provide an annual profiling dataset. Of these, operators presented 201 profiling datasets to us in SY21. Of the datasets submitted, 194 were of an adequate standard and seven have not met the required standard. The remaining 11 RO stations have not (as of 11 January 2024) presented profiling data. We have suspended ROC issue to the 18 stations where the datasets have not met the required standard or have not been submitted.
- 4.9 In total, 290 stations reported to an adequate standard against the sustainability criteria. Information on the compliance of their fuel consignments against the GHG and land criteria can be seen in **Figure 4.1**. There is one generating station that used both solid biomass fuels and bioliquid fuels. The consignments used by this station appear in each relevant section.
- 4.10 There were three anaerobic digestion (AD) consignments and one solid biomass consignment which did not meet the GHG emissions criteria. This represents a significant fall in consignments not meeting the criteria when compared to SY20, when 20 AD consignments did not meet the GHG threshold. The fall in consignments not meeting GHG emissions criteria could be attributed to stations being more knowledgeable and proficient regarding the change to GHG emissions thresholds, effective from 1 April 2020.

Criteria met?	Gasification stations <1 MW	Gasification stations ≥1 MW	AD stations <1 MW	AD stations ≥1 MW	Solid biomass stations <1 MW	Solid biomass stations ≥1 MW	Bioliquid stations All
Land - Yes	55	12	151	204	11	1,316	28
Land - No	0	0	0	0	0	0	0
Land - Exempt	0	32	279	1,222	12	606	97
Land – Unknown ³⁷	0	0	24	0	0	0	0
GHG - Yes	45	12	51	366	12	1,406	125
GHG - No	0	0	1	2	0	1	0
GHG - Exempt	0	32	259	1,058	10	515	0
GHG – Unknown ³⁷⁷	10	0	143	0	1	0	0

Figure 4.1: Consignments³⁵ reported by stations against the sustainability criteria³⁶

N.B. The number of consignments reported varies between stations.

- 4.11 The average life cycle GHG emissions for the biomass used are shown in **Figure 4.2**, split by technology type. For bioliquids, this is based on a percentage emission saving against the fossil fuel comparator.³⁸
- 4.12 During SY21, gasification stations had an increase in their weighted average GHG emissions of 18.1%. Looking at individual stations, in SY20 the highest life cycle GHG emissions reported were 31.66 gGHG/MJ, whereas for SY21 the highest reported emissions were 24.09 gGHG/MJ.
- 4.13 There was also a small increase in average GHG emissions from solid biomass consignments (6.17%) and those from bioliquid stations (leading to a fall in emissions savings of 4.26 percentage points). Meanwhile, the GHG emissions from anaerobic digestion stations dropped by 5.97%.

³⁵ The number of consignments reported varies between stations. Where we refer to a consignment in the context of stations greater than or equal to 1 MW, this refers to a single consignment submission for one month. For stations less than 1 MW, this is reported once per year.

³⁶ To differentiate between the different reporting requirements consignments are split by capacity as well as technology type.

³⁷ Solid biomass and biogas stations with a TIC less than 1 MW can report unknown as ROC issue is not linked to the sustainability criteria.

³⁸ The fossil fuel comparator is specified in Paragraph 19, Annex V, Part C of the Renewable Electricity Directive as 91gCO2e/MJ.

Figure 4.2: Weighted average GHG emission figures and thresholds by technology type

	Gasification stations (gGHG/MJ)	AD stations (gGHG/MJ)	Solid biomass stations (gGHG/MJ)	Bioliquid stations (% savings)
SY19	24.90	29.66	20.59	88.95%
SY20	8.01	31	19.44	87.41%
SY21	9.46	29.15	20.64	83.15%
Threshold target	55.6	55.6	55.6	50%/60% ³⁹
Threshold ceiling	75 ⁴⁰	75 ⁴¹	7541	50%/60% ⁴⁰

³⁹ From 1 January 2018, any consignment of bioliquid produced by an installation that first started producing liquid fuel from biomaterial before 6 October 2015 is currently required to meet the GHG threshold of 50%. Any consignment of bioliquid produced by an installation that first started producing liquid fuel from biomaterial on or after 6 October 2015 is currently required to meet a GHG threshold of 60%.

⁴⁰ For solid biomass and biogas stations, the GHG criteria can be met in one of two ways. Either all individual consignment emissions are less than the threshold target or an annual average for a station is used. For an annual average to be used all individual consignment GHG emissions must be less than or equal to the threshold ceiling and that in an obligation period, the average GHG emissions from all consignments are less than or equal to the threshold target.

Feedstock/fuel types

4.14 Gasification⁴¹ - The 61 stations that reported against the sustainability criteria burnt
1,158.06 million m³ of syngas⁴² in SY21; a 128.66 million m³ decrease compared to SY20.
As shown in Figure 4.3 all gasification consignments were derived from woody
biomass⁴³.

Figure 4.3: Type of feedstocks used (by volume of gas burnt) in gasification stations

Pie chart presenting the proportion of feedstock types used in gasification stations. 88.72% of syngas burnt was derived from 'waste wood', which is a nominal increase of 0.14% when compared to SY20. The remaining gas burnt was derived from 'wood residue', 'wood product' and 'forestry residues'.



⁴¹ Gasification converts fuel into a synthetic gas by partial combustion. This can then be used in a generating station. 'Gasification' is defined in Article 2 of the ROO (as amended), ROS 2009 (as amended) and NIRO 2009 (as amended).

⁴² Syngas or synthetic gas is produced from gasification and is a form of biogas.

⁴³ For consignments derived from waste, operators of generating stations do not need to complete the woody biomass section of the profiling data.

4.15 Anaerobic digestion - The 158 stations that reported against the sustainability criteria burnt 587.83 million m³ of biogas in SY21⁴⁴; a 13.75 million m³ decrease compared to SY20. Figure 4.4 provides an overview of the types of feedstocks used to produce biogas via anaerobic digestion.

Figure 4.4: Type of feedstocks used (by volume of gas burnt) in anaerobic digestion stations.

Pie chart presenting the proportion of feedstock types used in anaerobic digestion stations. 33.70% of the gas burnt was derived from 'silage⁴⁵, 31.38% from 'food, garden and plant waste', and a further 10.77% from 'manures and slurries'. The remaining 24.16% of gas burnt was derived from 'crops', 'brewery and distilleries waste', blood and Viscera and 'other' sources. The 'other' consignments consist of municipal waste, biodegradable waste, dissolved air flotation (DAF) sludge/wastewater, glycerol, dairy waste, fishery wastes, and fats & oils.



fermentation.

 ⁴⁴ There are a number of stations whose fuel measurement and sampling procedures do not require them to keep records of individual feedstocks, and so report a mixture on their profiling data.
 ⁴⁵ Feedstock made from green foliage crops which have been preserved through a process of anaerobic

4.16 Bioliquid - The seven bioliquid stations that reported against the sustainability criteria burnt 96.17 million litres of bioliquid consignments in SY21; a 7.03 million litre decrease compared to SY20. Figure 4.5 provides an overview of the types of bioliquid consignments burnt.

Figure 4.5: Type of bioliquid used in bioliquid stations.

Pie chart presenting the proportion of feedstock types burnt in bioliquid stations. 'Digestate' made up 32.54% of this biomass and 'food, garden and plant waste' made up 30.53%. 'Fats and oils', 'tallow' and 'blood and viscera' complete the remaining proportion (36.93%). Compared with SY20 there has been a decrease in the proportion of 'digestate' and an increase in the use of 'food, garden and plant waste' and 'fats and oils'.



4.17 Solid biomass - The 65 stations that reported solid biomass consignments burnt 13.37 million tonnes in SY21; a 900,000 tonne decrease compared to SY20. Figure 4.6 provides an overview of the types of solid biomass consignments burnt in direct combustion stations.

Figure 4.6: Type of solid biomass used in direct combustion stations.

Pie chart presenting the proportion of feedstock types burnt in direct combustion stations. Around 86.01% of solid biomass used in SY21 was of woody origin. The greatest contributions to this total were from 'forestry residues' which make up 30.52%, followed by 'wood residues' at 28.45%, 'waste wood' at 18.68% and 'crops' at 7.55%. 'Manures and slurries, 'arboricultural residues', 'wood product, and 'other' complete the remaining proportion. The 'other' feedstocks include blood and viscera, brewery and distillery wastes, DAF sludge/waste water, digestate, dairy waste and food, garden and plant waste.



Country of origin

4.18 As shown in **Figure 4.7**, during SY21 gasification and anaerobic digestion consignments were almost wholly sourced within the UK and the Republic of Ireland (ROI).⁴⁶ Solid biomass stations are the only type to have a significant proportion of consignments sourced from outside the UK and ROI.

Figure 4.7: The origin of fuels used for fuelled generating stations during SY21

Stacked column chart showing the origin of fuels used for fuelled generating stations. The portion of bioliquids sourced from overseas (non-EU) significantly decreased from 9.40% in SY20, reaching 0.001% in SY21. 37.08% of solid biomass burnt originated from overseas (non-EU) and 6.80% from the EU, making it the most diversely sourced fuel type.



⁴⁶ For the purposes of comparison with previous year's datasets, consignments from the UK and ROI have been grouped.

- 4.19 Gasification stations utilised 1,158.06 million m³ of syngas in SY21. The proportion of syngas derived from EU consignments has decreased by 99.86% when compared to SY20. The two consignments of wood pellets (0.10%) coming from overseas (non-EU) were both sourced from Brazil, and these are the only consignments to be sourced from outside the UK and ROI, and the EU.
- 4.20 Anaerobic digestion stations used 587.83 million m³ of biogas in SY21, 99.98% of which was produced using feedstocks sourced within the UK and ROI. This is consistent with the previous reporting periods. Outside the UK and ROI, feedstocks were sourced from one EU country (Romania, 0.0004%) and one overseas (non-EU) country (Canada, 0.02%).
- 4.21 Bioliquid stations used 96.17 million litres of bioliquid in SY21, 88.87% of this bioliquid was sourced within the UK and ROI. Outside the UK and ROI, bioliquid was sourced from Spain and France (11.12%) and Brazil and China (0.001%). The proportion of bioliquid from overseas (non-EU) has decreased since SY20 where it accounted for 9.4% of bioliquids used.
- 4.22 Solid biomass stations burnt (via direct combustion) 13.37 million tonnes of solid biomass. There has been a slight decrease in the quantity (900,000 tonnes) and proportion (56.12%) of biomass that was grown or obtained within the UK and ROI. The quantity of biomass sourced from overseas (non-EU) countries (Belarus, Brazil, Canada, Norway, Russia, and USA) increased slightly (4.9 million tonnes) and the proportion increased slightly to 37.08%. When looking at solid biomass sourced from within the EU (Estonia, Finland, Latvia, Lithuania, Poland, Portugal, Spain, and Sweden) both the quantity (909,000 tonnes) and proportion (6.80%) have slightly decreased since SY20.

5. Compliance by licensed suppliers

Chapter purpose

This chapter covers supplier compliance and enforcement activity in respect of the RO scheme during SY21. It provides an overview of the supplier obligation calculation and the compliance timeline. It also includes detailed information on the ROCs presented towards each UK obligation, the value of the scheme and the value of support per MWh for each technology type.

Supplier obligation

5.1 The obligation level is calculated and published by the relevant authorities six months before each obligation period begins.⁴⁷ On 29 September 2021, the SY21 (2022-23) obligation level applicable for suppliers was announced as shown in **Figure 5.1** below.⁴⁸

Figure 5.1: Obligation levels SY21

	England & Wales	Scotland	Northern Ireland
	(RO)	(ROS)	(NIRO)
Obligation level			
(ROCs to present per MWh	0.491	0.491	0.193
supplied to customers)			

5.2 The obligation level by RO jurisdiction⁴⁹ (expressed as the number of ROCs to be presented for each MWh of electricity supplied) is used by Ofgem to calculate the total UK obligation:

Obligation level by RO jurisdiction \mathbf{x} Electricity supplied per jurisdiction⁵⁰

⁴⁷ Articles 12 of the NIRO and ROS 2009 Orders and article 13 of the RO 2015 Order define the calculations used to set the obligation.

⁴⁸ The figures shown take account of the exemption for Energy Intensive Industries in Great Britain. <u>RO obligation level calculation for 2022-23:</u>

<https://www.gov.uk/government/publications/renewables-obligation-level-calculations-2022-to-2023> ⁴⁹ Breakdown of RO jurisdiction is as follows: RO (England & Wales), ROS (Scotland), and NIRO (Northern Ireland)

⁵⁰ Excluding 9.67 TWh of electricity supplied to EIIs in GB, which is exempted from the RO. See paragraph 5.20 for further information.

- 5.3 In SY21, the total relevant supply was calculated as 245.3 TWh to customers in GB and 7.34 TWh to those in NI. Using the SY21 obligation levels and the SY21 electricity supplied figures, this gave a total UK supplier obligation of 121.8 million ROCs. This is a decrease of six million ROCs (4.7%) from the total UK supplier obligation of 127.8 million ROCs in SY20.
- 5.4 We set the buy-out price before each obligation period by taking the buy-out price from the previous obligation period and adjusting it in line with the average percentage change in the Retail Price Index (RPI) over 12 months during the previous calendar year. For example, the calculation applied for setting the buy-out price of £52.88 applicable for SY21 is presented below:

[(Buy-out price for SY20) \pounds 50.80] **x** [1 + average RPI change over 12 months during the preceding 2021 calendar year (4.1%)] = \pounds 52.88

5.5 The obligation for all 92 suppliers that supplied electricity during the obligation period, which were not exempt from costs of the RO scheme, was set based on their overall supply volumes by RO jurisdiction. Not every supplier in the UK with a licence is obligated under the RO. Some licensed suppliers did not supply electricity in SY21 and so did not have an obligation.⁵¹

SY21 compliance

5.6 Suppliers in total had to meet 157 obligations across the three Orders; 83 on the RO, 65 on the ROS and nine on the NIRO. As outlined in Figure 5.2 below, 155 obligations were met; 82 on the RO, 64 on the ROS and nine on the NIRO.

RO Jurisdiction	Total number of obligations	Obligations met - ROCs alone	Obligations met - Buyout and/or Late Payments alone	Obligations met - Combination of ROCs and payments	Total number of obligations met
RO	83	25	37	20	82
ROS	65	30	30	4	64
NIRO	9	7	1	1	9
Total	157	62	68	25	155

Figure 5.2: Suppliers and obligations

⁵¹ A full list of all electricity supply licences in GB is available from the Electronic Public Register on our Licensing website. <u>List of GB supply licences</u>: https://epr.ofgem.gov.uk/Document>. An equivalent list for NI is on the NIAUR website. <u>List of NI supply licences</u>: https://www.uregni.gov.uk/electricity-licences: https://wwwwwwwwwwwwwwwww

Non-compliance

- 5.7 In SY21 one supplier (UK Energy Incubator Hub Ltd) with two obligations equating to 1,882 ROCs, did not present ROCs or make payments sufficient to meet their obligations. The supplier ceased trading during the 2022-23 compliance period (SY21).
- 5.8 We pursue outstanding balances for suppliers who have ceased trading through their administrators.
- 5.9 Additionally, three suppliers missed the final supply data deadline of 1 July but did subsequently submit their data.
- 5.10 All instances of non-compliance are added to the Supplier Performance Report (SPR).⁵²

Enforcement

- 5.11 We take non-compliance with scheme obligations very seriously. As in previous years, we took a robust and proactive approach to compliance and enforcement on the RO scheme. We maintained a high level of engagement with obligated suppliers to ensure deadlines and amounts due were clear, and to set out possible consequences of non-compliance to them, such as the making of Enforcement Orders and the issuing of financial penalties, as set out in our Enforcement Guidelines⁵³.
- 5.12 This included early engagement with suppliers to seek assurances that they would be able to discharge their obligations under the RO this compliance round. This was supplemented by requests in early-September to suppliers who failed to discharge their obligations by the 1 September 2023 deadline for assurances and evidence of their ability to meet their obligation in full by the 31 October 2023 late payment deadline.
- 5.13 UK Energy Incubator Hub failed to discharge their obligation by the 31st of October deadline. As they ceased trading during the 2022-23 compliance period (SY21) no enforcement action was required.

⁵² <u>Supplier Performance Report webpage</u>: https://www.ofgem.gov.uk/supplier-performance-report-spr

⁵³ <u>The Enforcement Guidelines:</u> <https://www.ofgem.gov.uk/publications/enforcement-guidelines>

SY21 Compliance Timeline

Calculating the obligation

Actions required by suppliers

5.14 After an obligation period (1 April – 31 March) each licensed supplier must provide us with an estimate of the electricity supplied to their customers (by 1 June) and final figures of electricity supply (by 1 July). Licensed electricity suppliers must comply with their obligations by presenting ROCs (by 1 September) or by paying into the buy-out fund (by 31 August), or into the late payment fund (by 31 October), or by using a combination of the three.⁵⁴ Payments into the late payment fund attract a daily interest charge.

Validation & submission of supply volumes

- 5.15 The 'Renewables Obligation: Guidance for suppliers' recommends a methodology for suppliers to follow when they report their supply volumes for an obligation period.⁵⁵ This states that they should use settlement reports from Elexon⁵⁶ for supply in GB, and from Northern Ireland Electricity Networks (NIE)⁵⁷ for supply in NI. Since 2015, we have obtained settlement reports from Elexon and NIE to validate submissions from suppliers and to mitigate the risk of inaccurate supply volume submissions.
- 5.16 There were no suppliers that submitted their estimated figures after the 1 June estimated data deadline, and there were none that failed to provide data. For the 1 July final supply data deadline, three suppliers submitted figures late⁵⁸ but none failed to provide data. These figures exclude the one supplier that entered administration during SY21 prior to both deadlines.

⁵⁵ Appendix 5 RO Guidance for Suppliers.

⁵⁴ For more information see section 4.1-4.30 of the RO Guidance for Suppliers. <u>RO guidance for suppliers</u>: https://www.ofgem.gov.uk/publications/renewables-obligation-guidance-suppliers

⁵⁶ <u>Elexon website</u>: <https://www.elexon.co.uk/>

⁵⁷ <u>NIE website</u>: <https://www.nienetworks.co.uk/home>

⁵⁸ The names of suppliers missing the supply volume submission deadlines can be found in Appendix 1.

Share of obligation by suppliers

- 5.17 Using the supply volumes provided by suppliers we calculated the share of the obligation for each supplier. Below, **Figure 5.3** shows how the total UK supplier obligation was split between suppliers. Each supplier with a 3% or more share of the obligation is shown individually, those with a share below 3% are grouped together under 'Other'.
- 5.18 The largest suppliers (EDF Energy Customers Ltd, British Gas Trading Ltd, Npower Commercial Gas Limited, E.ON Next Supply Ltd, Scottish Power Energy Retail Ltd, Drax Energy Solutions Ltd, TotalEnergies Gas & Power Limited, OVO Electricity Ltd, Octopus Energy Ltd, SSE PLC and ENGIE Power Ltd) shared 81.47% of the obligation between them. Full details of suppliers' obligations are included in **Appendix 1**.

Figure 5.3: Share of UK obligation SY21

Column chart presenting the share of the UK obligation between suppliers. With 17.51%, EDF Energy Customers Ltd had the highest share of total UK supplier obligation in SY21, followed by British Gas Trading Ltd (12.18%), Npower Commercial Gas Limited (8.80%), E.ON Next Supply Ltd (7.78%), Scottish Power Energy Retail Ltd (6.53%), Drax Energy Solutions Ltd (5.63%), TotalEnergies Gas & Power Limited (5.42%), OVO Electricity Ltd (4.92%), Octopus Energy Ltd (4.84%), SSE PLC (4.77%) and ENGIE Power Ltd (3.09%).



Energy Intensive Industries

- 5.19 An exemption for eligible Energy Intensive Industries (EIIs) from a proportion of the indirect costs of the RO has been in place on the scheme since SY17.
- 5.20 Eligible EIIs in GB could claim exemption from their energy supplier for up to 85% of the indirect costs of the RO. We use the suppliers' reduced supply volumes to calculate their obligations. Further information about eligible EII excluded electricity can be found in our guidance for suppliers.⁵⁹
- 5.21 Twenty-six suppliers supplied 11.70 TWh of EII electricity to their customers in GB 9.67 TWh of which was excluded from their total supply volumes for the purpose of determining their obligations. A summary of such electricity supplied in GB is given in Figure 5.4.

Figure 5.4: Summary of EIIs supplied in Great Britain

	England & Wales	Scotland	GB Total
Total EIIs supply (MWh)	10,495,069	1,200,190	11,695,259
Total excluded EII electricity (MWh)	8,686,454	988,438	9,674,892
Percentage of excluded EII Electricity from obligation	82.8%	82.4%	82.7%
Total Electricity Supply (inc EII supply) (MWh)	231,920,873	23,030,157	254,951,030
Percentage of excluded EII from Total Electricity supply	3.7%	4.3%	3.8%

ROCs presented

- 5.22 Figure 5.5 summarises the obligation and ROCs presented by suppliers across the Orders. This shows that suppliers presented 107.7 million ROCs to us in SY21. This is a decrease of 1.6 million ROCs, or 1.4%, on the 109.3 million presented in SY20.
- 5.23 Suppliers met 88.38% of the total obligation (121.8 million ROCs) by presenting ROCs to us. The remaining proportion of the obligation (14.2 million ROCs) was entirely met by suppliers making a buyout payment and/or late payment, for a total of £748.61 million

⁵⁹ Please see Sections 2.3-2.6 of the RO Guidance for Suppliers.

(including interest associated with the late payments). This is down on the \pm 820.55 million paid in SY20 by around \pm 72 million.

	RO	ROS	NIRO	UK Total
Electricity supplied (MWh)	223,234,419	22,041,719	7,340,303	252,616,442
Obligation (ROCs)	109,608,101	10,822,487	1,416,680	121,847,268
ROCs presented	97,321,958	8,964,258	1,403,352	107,689,568
Total number of obligations	83	65	9	157
% of obligation met with ROCs	88.8%	82.8%	99.1%	88.4%

Figure 5.5 Summary of ROCs presented towards each UK obligation in SY21

5.24 Suppliers can meet up to 25% of an obligation by presenting unused ROCs from the previous obligation period (banked ROCs).⁶⁰ **Figure 5.6** shows the trends in ROCs issued but not presented and banked ROCs redeemed each scheme year, starting from SY6.

Figure 5.6: Banked ROCs redeemed and ROCs issued but not presented each obligation period since SY6

Clustered column chart showing the number of banked ROCs presented, and ROCs issued but not presented since SY6. Suppliers presented around 0.9 million banked ROCs, a decrease from the 5.13 million presented last year. The number of ROCs issued but not presented rose from 0.8 million in SY20 to 1.41 million this year.



⁶⁰ Defined in article 14(2) of the 2015 RO Order and articles 13(2) of the 2009 ROS and NIRO Orders.

- 5.25 At the time of writing, of the 108.2 million ROCs issued that are based on generation between April 2022 and March 2023, 1.4 million ROCs were not presented by suppliers. These will be available as banked ROCs for the 2023-24 compliance period (SY22).
- 5.26 There is a cap on the number of ROCs from electricity generated from bioliquids that suppliers can present towards their obligations. This limits suppliers to meeting 4% of an obligation using bioliquid ROCs. Some bioliquid ROCs are exempt from the cap. Details of the exemptions are in section 4.5 of our Guidance for Suppliers.
- 5.27 In SY21 suppliers presented 245,095 bioliquid ROCs to us across the obligations, which qualified under the cap. This is 0.20% of the total obligation, well below the 4% cap. Suppliers also presented 2.9 million bioliquid ROCs towards their SY21 obligation that were exempt from the cap.⁶¹ This represents around a 5.09% decrease on exempt Bioliquid ROCs presented by suppliers in SY20. Figure A1.5 in Appendix 1 summarises all bioliquid ROCs presented by suppliers towards their obligations by RO year. This is effective from SY12, when the cap on the number of bioliquid ROCs a supplier can present towards its obligation was first introduced.

Payments made

- 5.28 The 59 suppliers who chose to make buy-out payments paid a total of \pm 741.4 million into the buy-out fund by the legislative deadline of 31 August 2023.
- 5.29 Across the schemes, four suppliers covering six obligations did not meet the deadline for either making buy-out payments, presenting ROCs or the combination of both, and therefore were required to utilise the late payment window to discharge their obligation. At the final late payment deadline of 31 October 2023, three suppliers complied with their full obligations. A total of £7.2 million was made in late payments by these suppliers.

⁶¹ Details on reasons for exemption from the bioliquid ROC cap can be found in section 4.5 of the RO Guidance for Suppliers.

5.30 **Figure 5.7** summarises the payments suppliers made towards each UK obligation in SY21. Full details of how all suppliers met their obligations are in **Appendix 1**.

Figure 5.7: Payments made by suppliers towards each UK obligation for SY21

	RO	ROS	NIRO	UK Total
Buy-out payments	£642,842,015.28	£97,888,759.12	£704,784.64	£741,435,559.04
Late payments	£6,802,874.21	£368,003.39	£0	£7,170,877.60
Total	£649,644,889.49	£98,256,762.51	£704,784.64	£748,606,436.64

^{5.31} **Figure 5.8** shows the trend in ROCs submitted and payments made (expressed as a number of ROCs) towards the UK obligation since SY7 (2008-09).

Figure 5.8: ROCs submitted and payments made towards the UK obligations since SY7

Stacked column chart presenting the number of ROCs submitted and the payments made towards the UK obligation since SY7. The proportion of the UK obligation met through ROCs in SY21 was 88.4% which is an increase compared to the 85.5% reported for SY20.



5.32 The increase in the proportion of the UK obligation met through ROCs was accompanied by a decrease in the proportion met through contributions to the buy-out fund (down from 11.96% in 2021-22 to 11.51%) and the late payment fund (down from 0.68% in 2020-21 to 0.13%). After interest on late payments have been taken into account, there was a shortfall of 0.0008% (or £52,739.12) of the obligation for SY21.⁶²

Value of the scheme

- 5.33 Suppliers who presented ROCs towards their SY21 obligation receive a share of the buyout and late payment funds. The total amount redistributed (as covered in paragraph 5.37) is divided by the 107.7 million ROCs redeemed to give the amount suppliers receive back for each ROC they presented. This is the ROC recycle value, which for SY21 was £6.88. When added to the ROC buy-out price of £52.88, the total notional worth of a ROC for this obligation period was £59.76.
- 5.34 Figure 5.9 below shows that the total value of the scheme in an obligation period is the worth of a ROC multiplied by the number of ROCs presented for compliance by suppliers. In SY21 suppliers presented 107.7 million ROCs each worth £59.76 giving a scheme value of £6.4 billion. The change in scheme value over time can be seen in Figure 5.10.

⁶² This year the shortfall after the late payment window was less than the mutualisation thresholds for both the RO and the ROS, as such mutualisation has not been triggered for the first time since 2017.

Total buy-out	Total ROCs	Recycle	Worth of a	Average	Support	Scheme
and late	presented	value per	ROC to a	ROCs	per MWh	value
payments	(m)	ROC	supplier	issued/MWh	supplied	(billion)
redistributed		presented				
£740m	£107.7	£6.88	£59.76	1.35	£80.58	£6.4

Figure 5.10: Change in scheme value since SY1

Line chart showing the change in scheme value since SY1. The value of the scheme was £0.3 billion in SY1 and grew until SY18 when it reached £6.3 billion. It fell for the first time in SY19 to £5.7 billion before rising again to around £6.4 billion over SY20 and SY21.



5.35 The average number of ROCs issued per MWh (from **Figure 5.9**) multiplied by the worth of a ROC gives the support (in \pounds) per MWh generated for an obligation period. As shown in the table this was \pounds 80.58 during SY21.

⁶³ For the determination of ROC recycle value since SY9 (2010-11) please see Appendix 3.

5.36 Figure 5.11 shows the cost of support (in £ per MWh) broken down by technology type. Due to banding, RO installations are eligible for support at differing rates (ROCs per MWh generated) depending on the characteristics of the generation station. The charts begin in SY6, before banding was introduced⁶⁴, when all technologies received one ROC per MWh generated. Further information on banding can be found in our guidance for generators⁶⁵.

Figure 5.11 (a-g): Value of support per MWh for each technology since SY6

Line charts showing the value of support per MWh for each technology (in order: offshore wind, solar PV, fuelled, hydro, onshore wind, landfill gas, sewage gas) shown against the average since SY6. All technology types saw an increase in the cost of support per MWh from the previous year, but the changes are relatively small and are at a similar level compared with the last two years' figures. Offshore wind stations received significantly more support per MWh than the average. However, hydro, onshore wind, landfill gas and sewage gas received significantly less support than the average. This variation being due to the differences in ROC banding between the technology types.



⁶⁴ Banding came into force on 1 April 2009.

⁶⁵ <u>RO Guidance for Generators</u>: <https://www.ofgem.gov.uk/publications/renewables-obligation-guidance-generators>









Redistribution

- 5.37 We redistribute the buy-out and late payment funds to suppliers using the single recycling mechanism. This means that we pay out the aggregate of the funds across the three obligations to suppliers in proportion to the number of ROCs each supplier presented across the three Orders.⁶⁶
- 5.38 As **Figure 5.12** below summarises, the combined sum redistributed to suppliers from the buy-out and late payment funds was approximately £740.4 million. Full information on payments made to individual supply licences is included in **Appendix 1**. Before making redistribution payments we withdrew £8.21 million for our and NIAUR's scheme administration costs⁶⁷ from the buy-out fund and rounded the redistribution payments on 19 October 2023 and 31 October 2023 in advance of the legislative deadline of 1 November 2023.⁶⁸

Figure 5.12: Summary of redistribution payments

	RO	ROS	NIRO	UK Total
Buy-out	£635,722,602	£96,804,652	£696,976	£733,224,230
Late payments	£6,802,910	£368,007	£0	£7,170,917
Total	£642,525,512	£97,172,659	£696,976	£740,395,147

- 5.39 We redistributed £7.2 million in late payments, on the same basis as the buy-out funds (though without the withdrawal of administration costs) on 5 December 2023. This was in advance of the legislative deadline of 1 January 2024.
- 5.40 **Figure 5.13** shows the amounts we have redistributed each year from the buy-out and late payment funds since the scheme's introduction in 2002.

⁶⁶ A supplier who presents 3% of the total ROCs across the three obligations will get back 3% of the amount we redistribute from the buy-out and late payment funds. This is the case regardless of the Order under which a supplier had its obligations. So, for example, a supplier who only has an obligation in England and Wales will still receive part of the Scotland and Northern Ireland payment funds. ⁶⁷ We withdraw our forecasted admin costs for SY22 (2023-24) from the SY21 buy-out fund. Ofgem's costs (leaving NIAUR's aside) were 7% higher than those forecasted for 2022-23 (SY21), however this cost remains at around 0.1% of the estimated scheme value. The overall administration cost of £8.21m includes GB costs of £6,389,902.00 and NIRO costs of £1,821,425.26. Further information on Ofgem's RO costs: https://www.ofgem.gov.uk/publications/ofgem-costs-administering-renewables-obligationro>

⁶⁸ Please see the Ofgem website for further details. <u>Renewables Obligation: ROCs presented and</u> <u>Redistribution of Buy-Out Fund 2022-23</u>: https://www.ofgem.gov.uk/publications/renewablesobligation-renewables-obligation-certificates-presented-and-redistribution-buy-out-fund-2022-23>



Column chart showing the total amount (in £ million) redistributed to suppliers since SY1. Amounts vary, with £740 million redistributed in SY21 being the third highest amount after SY17 and SY20. The total amount redistributed in SY21 is £73 million less than last year.



- 5.41 Ofgem has occasionally received late payments from defaulting suppliers after the Late Payment deadline of 31 October has passed. Following an open consultation⁶⁹ with suppliers and interested stakeholders, it was decided that when recycling these payments to eligible suppliers in years when mutualisation is triggered, it shall be in proportion to the total mutualisation payments each supplier is responsible for making.⁷⁰
- 5.42 As no supplier (which is still trading) has failed to discharge their obligation by the 31 October 2023 late payment deadline, this will not be required this year.

⁶⁹ Open Letter - Payments received after Renewables Obligation (RO) late payment deadline:

<https://www.ofgem.gov.uk/publications-and-updates/open-letter-payments-received-after-renewables-obligation-ro-late-payment-deadline>

⁷⁰ ie if supplier A is due to make 2% of the total years' worth of mutualisation payments, they will receive 2% of the payments received after the late payment deadline.

Mutualisation

- 5.43 If a supplier or suppliers are unable to meet their obligations under the RO or ROS, there may be a shortfall in the buy-out and late payment funds. The mutualisation provisions in RO and ROS legislation⁷¹ are designed to account for this. Mutualisation is triggered above a certain threshold, known as relevant shortfall⁷², the amount of which for SY21 is equal to or more than £65.8 million for the RO and £1.54 million for ROS. Mutualisation does not apply in Northern Ireland.
- 5.44 If mutualisation is triggered, suppliers that discharged their obligations in full or in part under the RO and ROS must make additional payments to make up the shortfall. These payments are capped at the mutualisation ceiling; we publish the amount every year before the start of the obligation period. We adjust this in the same way as the buy-out price, in line with the change in RPI from the previous calendar year. The mutualisation ceilings for SY21 were £318.5 million in England and Wales and £31.9 million in Scotland⁷³.
- 5.45 Mutualisation payments are redistributed to suppliers on the same basis as the buy-out and late payment funds, using the single recycling mechanism to compliant UK suppliers. These are suppliers who have presented ROCs within the relevant compliance period and have discharged their obligation in full by the late payment deadline of 31 October. Although mutualisation does not apply in NI, NI suppliers will receive a share of any mutualisation funds from the RO and ROS.
- 5.46 In SY21, one supplier did not meet its obligations in full. This resulted in a total shortfall of just £99,520.16, (excluding interest) distributed across the schemes, as follows:
 - RO: £90,160.40
 - ROS: £9,359.76
 - NIRO: £0.
- 5.47 This resulting shortfall is far below the mutualisation cap for both RO and ROS, as such mutualisation has not been triggered for the first time since SY16 (2017-18). The latest updates on all mutualisation activity are published on our 'RO Publication and updates'

 $^{^{71}}$ Mutualisation is described in articles 72 – 77 of the 2015 RO Order and articles 48 – 52 of the 2009 ROS Order.

⁷² Article 72 in the 2015 RO Order and Schedule 3 in the 2009 ROS Order define the amount of relevant shortfall.

⁷³ <u>Renewables Obligation (RO) Buy-out Price, Mutualisation Threshold and Mutualisation Ceilings for</u> <u>2022-23:</u> https://www.ofgem.gov.uk/publications/renewables-obligation-ro-buy-out-pricemutualisation-threshold-and-mutualisation-ceilings-2022-23>

webpage⁷⁴. Further information on mutualisation can be found within chapter 7 of our Renewables Obligation: Guidance for Suppliers.⁷⁵

Mutualisation payments and redistributions for previous compliance periods

- 5.48 During the obligated period from 1 April 2022 to 31 March 2023, relevant suppliers were required to make quarterly mutualisation payments for past compliance years, and we had an obligation to redistribute mutualisation payments received from suppliers. This process is set out in the RO Supplier Guidance⁷⁶.
- 5.49 The quarterly mutualisation payments required from suppliers during this period were for the fourth quarter of SY18 and the first, second and third quarters of SY19.
- 5.50 The mutualisation payments we redistributed during SY21 were in relation to the third and fourth quarters of SY18, and the first and second quarters of SY19.
- 5.51 To provide a clear picture of activity in this area, we have included a summary in Appendix 2 of mutualisation payments received and redistributed, in the relation to the complete SY18 and SY19 periods. Summaries of the payments received and redistributed are also published on our website.⁷⁷
- 5.52 In SY21 a number of suppliers failed to pay the mutualisation sums due as they had ceased trading. In these circumstances we seek to make a claim with the relevant administrators for the outstanding balances. Where there is a shortfall, all suppliers entitled to receive a payment receive a reduced sum. If further sums are received from an administrator, they are re-distributed to eligible suppliers as a standalone payment.

⁷⁷ 2019-20 Q3 mutualisation payments redistribution:

2019-20 Q4 mutualisation payments redistribution:

2020-21 Q1 mutualisation payments redistribution:

2020-21 Q2 mutualisation payments redistribution:

⁷⁴ <u>RO mutualisation publications:</u>

<https://www.ofgem.gov.uk/search?keyword=renewables%20obligation%20mutualisation>

⁷⁵ <u>RO guidance for suppliers</u>: <https://www.ofgem.gov.uk/publications/renewables-obligation-guidancesuppliers>

⁷⁶ Page 36 of RO guidance for suppliers (paragraph 7.9 and Table 6).

<https://www.ofgem.gov.uk/publications/renewables-obligation-quarter-3-mutualisation-payment-distribution-2019-20>

<https://www.ofgem.gov.uk/publications/renewables-obligation-quarter-4-mutualisation-payment-distribution-2019-20>

<https://www.ofgem.gov.uk/publications/renewables-obligation-quarter-1-mutualisation-payment-distribution-2020-21>

<https://www.ofgem.gov.uk/publications/renewables-obligation-quarter-2-mutualisation-payment-distribution-2020-21>

SY21 supplier audits

- 5.53 Supplier audits are conducted each year to gain assurance on the accuracy of the electricity figures submitted to us by suppliers (in this case covering SY21) and to ensure suppliers' internal processes are robust. The audits also aim to reduce or prevent the number of submissions with errors.
- 5.54 The audits were targeted to include those suppliers where we have concerns over internal processes and those where we have concerns over the accuracy of supply volumes being reported. We also generally include one of the larger suppliers and an off-grid supplier.
- 5.55 Each audit is given a rating⁷⁸ depending on the outcome of the audit based upon a risk assessment carried out by the auditor. For example:
 - **'Good'** audits either have no exceptions, or if there are any, they are minor shortcomings in operating procedures or meeting best practice. Any shortcomings are reported to the supplier to address.
 - **'Satisfactory'** audits identify a small number of exceptions, of which none are graded as 'major'. These are reported to the supplier to make improvements to their operating procedures.
 - **'Weak'** audits identify several exceptions which individually or collectively may impact negatively on the overall level of compliance. In such instances, suppliers are required to provide evidence that improvements are implemented in areas identified as requiring significant intervention.
 - **'Unsatisfactory'** audits identify numerous exceptions, including those graded as 'medium' or 'major', which individually or collectively may impact negatively on the overall level of compliance. In such instances, suppliers are required to provide evidence that improvements are implemented in areas identified as requiring significant intervention.
- 5.56 In relation to the SY21 (2022-23) compliance period, four suppliers were audited. A summary of supplier audit results from SY17 to SY21⁷⁹ is shown in **Figure 5.14**.

⁷⁸ The assurance ratings for the supplier audits vary slightly from the generator audits. Our generator audits look specifically for potential financial non-compliances and the assurance rating reflects this. The supplier audits look for "exceptions" which are graded, and this is the basis for the ratings.
⁷⁹ The information provided is for audits taking place in 2022-23 (SY21 audit programme) but looking at supplier activity in relation to 2021-22 (SY20 compliance period). The scheme years shown reflect the compliance period.

Figure 5.14: Supplier audit results SY17 to SY21

Stacked column chart presenting the results of supplier audits results between the SY17 and SY21 compliance periods. Of the four audits in SY21, two were rated 'Good', one 'Satisfactory' and one was rated 'Weak'. There were no suppliers rated 'Unsatisfactory' during SY21.





- Inaccuracies in processes
- The robustness of controls in place around compiling and checking the submission of data to us
- A lack of procedure reviews for processes relevant to RO.
- 5.58 Where audit findings give cause for concern or identify areas for improvement, Ofgem engages with the relevant suppliers to develop an action plan. All instances of non-compliance will be added to the SPR⁸⁰.

⁸⁰ Information on the SPR: https://www.ofgem.gov.uk/supplier-performance-report-spr

6. Compliance of RO generators

Chapter purpose

This chapter sets out the purpose of our audit programme for generating stations accredited under the scheme. It provides an overview of the results of targeted and statistical audits by country and technology type. Additionally, this chapter provides information on our generator compliance and counter fraud investigations.

Audit programme

- 6.1 Accredited generating stations are audited to ensure they remain compliant with scheme eligibility requirements. Audits also provide assurance that the correct number of ROCs have been issued and that the information we hold is current. Furthermore, audits help detect and prevent errors, and potentially fraudulent activity.
- 6.2 Each audit receives an assurance rating which is dependent on the findings. The ratings are as follows:
 - **Good** (no issues identified at audit)
 - **Satisfactory** (only minor issues identified or instances where best practice is not followed)
 - **Weak** (the audit identified moderate issues of non-compliance, with potential financial non-compliance(s) reported)
 - **Unsatisfactory** (major instances of non-compliance or suspected fraud identified, with a significant number of potential financial non-compliances reported).
- 6.3 Following an audit, the findings are issued to the generator. If the audit is rated as 'Good' or 'Satisfactory', the audit will be closed at this point. However, the generator is expected to make any amendments to their accreditation application or data submissions as detailed in the report. For 'Weak' and 'Unsatisfactory' audits, as potential financial non-compliance(s) have been reported, we open a compliance investigation. During this process the generator can provide further information or evidence to resolve the findings. Therefore, it's likely that once the compliance investigation has concluded, the level of non-compliance is lower than the initial audit rating suggests.
- 6.4 In the event of potential non-compliance, error or fraud being identified, we investigate thoroughly and, where appropriate, can withdraw accreditation, change a station's ROC

banding, and/or make amendments to ROC issue. Once all outstanding financial noncompliances have been resolved, the compliance investigation will be closed. Ofgem can temporarily suspend the issue of ROCs whilst awaiting further evidence or corrective actions to be taken. If fraudulent activity is suspected, we can refer cases to Action Fraud⁸¹ and law enforcement agencies.

- 6.5 The SY21 generator audit programme consisted of two types of audit:
 - **Targeted** Targeted audits are selected using data analysis that identifies highrisk generating stations displaying one or more risk indicators. For example, applications submitted in the run up to scheme closure. The selection may also include any high-risk or potentially non-compliant stations identified through our internal and external processes, such as via an internal referral or by whistleblowers.
 - **Statistical** To better understand the level and types of non-compliance on the RO scheme, accredited stations were randomly selected across the scheme population. The RO statistical audit programme was first introduced by us in SY19.

Targeted generator audits

- 6.6 In SY21, our external auditor carried out targeted audits on 50 generating stations (>50 kW DNC). Of the audited generating stations, 27 were based in England, seven in Scotland, two in Wales and 14 in Northern Ireland.
- 6.7 **Figure 6.1** shows the breakdown of the targeted audits by country and the rating given by the auditor. **Figure 6.2** shows the same information but broken down by technology type. Note that a high level of non-compliance is expected as these audits are targeted at known risk areas on the scheme.

⁸¹ <u>Action Fraud</u>: <https://www.actionfraud.police.uk/>

Figure 6.1 (a-e): Targeted audit ratings by country in SY21

Column charts showing the results of targeted audits by country. In the UK combined, none of the audits were rated 'Good', 16% of the audits were rated 'Satisfactory', 74% 'Weak' and 10% 'Unsatisfactory'. In total there were 27 audits conducted in England, 14 in Northern Ireland, seven in Scotland and two in Wales. The audit results in England closely mirror those across the UK, whereas in Northern Ireland there is a slightly lower proportion of 'Satisfactory' audits (7%) and 'Unsatisfactory' (7%) audits, and a slightly higher proportion of 'Weak' audits (86%). The lower volume of audits conducted in Wales and Scotland mean that it is more difficult to draw comparisons. The two audits in Wales were rated as 'Weak' and 'Unsatisfactory', while two of the seven audits in Scotland were rated as 'Satisfactory' and the remaining five were 'Weak'.





Figure 6.2 (a-d): Targeted audit ratings by technology in SY21

Column charts showing targeted audit ratings by technology (in order: fuelled, onshore wind, offshore wind, and solar PV). In total 22 audits were conducted on onshore wind stations, 22 on solar PV, five on fuelled and one on an offshore wind station. The proportion of audits in the 'Satisfactory' and 'Weak' categories followed a similar pattern for onshore wind and solar PV. Around 18% were rated as 'Satisfactory' and between 68% and 73% rated as 'Weak'. Onshore wind had two, and solar PV three 'Unsatisfactory' audit ratings, accounting for 9% and 14% of the respective totals. All audits for fuelled and offshore wind stations were rated as 'Weak', but due to the smaller sample sizes it is difficult to draw comparisons.


6.8 **Figure 6.3** provides an overview of targeted audit results from SY17 to SY21.

Figure 6.3: Targeted audit results SY17 to SY21

Stacked column chart presenting the proportions of 'Good, 'Satisfactory, 'Weak' and 'Unsatisfactory' audits since SY17. In SY21, the proportion of 'Weak' and 'Unsatisfactory' audit ratings was 84%, an increase from 79% in SY19. No 'Good' ratings were achieved in SY20 or SY21.



6.9 **Figure 6.4** presents findings from the targeted audit programme.

Figure 6.4: Top five findings from the targeted audit programme SY21

The chart below shows the top five findings (as % of all findings) from the targeted audit programme. 'Metering issues' are the most common making up 15.5% of all findings. The remaining top five reasons are: 'outstanding evidence/information – commissioning evidence discrepancy' (13.8%), 'address/contact detail issues' (12.3%), 'issues with the station description' (11.0%), and 'station capacity issues' (10.6%). Collectively these top five findings account for 63.2% of all findings.



Statistical generator audits

- 6.10 In SY21, our external auditor carried out 150 statistical audits of generating stations (>50 kW DNC). Of the audited generating stations, 72 were based in England, 24 in Scotland, 10 in Wales and 44 in Northern Ireland. Statistical audits were selected by taking a random sample of accredited stations from the scheme population. The proportion of stations audited in each country roughly corresponds to the distribution of stations between these regions.
- 6.11 Figure 6.5 shows the breakdown of the statistical audits by country and the rating given by the auditor. Figure 6.6 shows the same information but broken down by technology type.

Figure 6.5 (a-e): Statistical audit ratings by country SY21

Column charts showing the statistical audit ratings by country. Only one audited generating station (located in England) was rated as 'Good'. In all countries most audits were rated as 'Weak', with 'Satisfactory' audits accounting for a smaller proportion, and 'Unsatisfactory' ratings being awarded three times. Overall across the UK, 'Satisfactory' audits accounted for 36% of results, 'Weak', 61% and 'Unsatisfactory', 2%. The proportion of 'Weak' audit results in England and Scotland, and the proportion of 'Unsatisfactory' audit results in Scotland and Wales were higher compared to the combined UK results. Meanwhile, only Northern Ireland had a higher-than-average proportion of 'Satisfactory' audit results than the UK as a whole.





Figure 6.6 (a-g): Statistical audit ratings by technology SY21

Column charts showing the statistical audit ratings by technology (in order: fuelled, hydro, landfill gas, onshore wind, solar PV, tidal and sewage gas). 50% of hydro audits, and 49% of onshore wind, were rated as being 'Satisfactory', the two highest proportions of all technologies. The highest number of audits were conducted in relation to the onshore wind technology with 51% of these audits being rated as 'Weak'. Other than tidal, where the only audit conducted was rated 'Weak', sewage gas and fuelled stations had the largest proportion of 'Weak' audits, with 83.3% and 77.1% respectively.







6.12 The most common audit findings from the statistical audit programme are similar to those on the targeted programme, and are presented in **Figure 6.7** below.

Figure 6.7: Top five findings from the statistical audit programme SY21

The chart below shows the five most common findings (as % of all findings) from the statistical audit programme. 'Metering issues' were the most common accounting for 30.1% of the total. 'Outstanding evidence/information – commissioning evidence discrepancies' (13.7%), 'Station capacity issues' (11.9%), 'address/contact detail issues' (8.6%) and 'ROC/REGO claim issues' (7.9%) make up the rest of the top five findings. Collectively the top five reasons account for 72.2% of all statistical audit findings.



Statistical and targeted assurance rating definitions

- 6.13 This is the third year of the statistical audit programme. When compared to SY19, the number of audits rated 'Weak' or 'Unsatisfactory' has decreased by almost 15%, while the number of 'Satisfactory' audits has increased by just over 14%.
- 6.14 We conducted an analysis of the audit ratings and associated findings on our targeted and statistical audit programmes. This showed that some audits were receiving 'Weak' and 'Unsatisfactory' ratings, even when no financial non-compliances were being raised. Consequently, the proportion of 'Weak' and 'Unsatisfactory' audit results on these audit programmes was high.
- 6.15 Thus, we identified a need to amend our audit findings classifications to ensure that the audit ratings better reflect situations where potential financial non-compliances are identified. To achieve this, we reviewed our risk appetite to ensure that the correct audit findings were being marked as financial non-compliances and resulting in "Weak" or "Unsatisfactory" audit ratings.

- 6.16 This work was completed towards the end of SY21. As a result of implementing these changes during the third year of the RO statistical audit programme, participants may have experienced a temporary delay in receiving audit findings following the site visit taking place. We have since implemented the changes such that there should no longer be a delay to findings letters being sent to participants. For the targeted programme, the new ratings are being introduced for SY22 onwards.
- 6.17 We expect this change to positively impact future RO statistical and targeted audit programmes by allowing us to more accurately identify which audits require further compliance investigation.

SY21 Northern Ireland micro generator (Micro-NIRO) audits

- 6.18 Micro-generators⁸² are audited to verify information and documents provided in relation to configuration, commissioning, capacity and metering.
- 6.19 In SY21, a total of 115 micro-generators were audited, Ten of these were targeted audits, and the remaining 105 were randomly selected for our statistical audit programme.
- 6.20 A breakdown of the findings from the Micro-NIRO Statistical audit programme is presented in **Figure 6.8** below.

⁸² Micro installations are those with a DNC of 50kW or less. The vast majority of micro generators are located in NI and are referred to as micro-NIRO.

Figure 6.8: Findings from the Micro-NIRO statisticial audit programme

This bar chart shows that findings in relation to 'site capacity discrepancies', 'commissioning date discrepancies' and 'meter detail discrepancies' were the most common, accounting for 55.5%, 32.4% and 7.2% of findings respectively. Collectively these three reasons accounted for 95% of all findings.



6.21 Additionally, the key findings from the Micro-NIRO Targeted audit programme were:

- Site capacity discrepancies between the DNC stated in the application and the DNC determined by the auditor
- Commissioning date discrepancies between the stated commissioning date and the date determined by the auditor
- Meter detail discrepancies between the meters in the application and those found on-site.

SY21 Northern Ireland agent and 'Rent-a-Roof' audits

6.22 Agent⁸³ and rent-a-roof company⁸⁴ audits are conducted to ensure that:

- There are effective processes in place to validate accreditation data
- Generation data and meter readings are scrutinised to ensure accurate data submissions
- The companies have permission to act on behalf of the generating stations within their portfolios
- Recommendations from any previous audits have been acted upon.
- 6.23 The audits were targeted based on various criteria, including but not limited to, where we have concerns with a company's internal processes, the volume of stations in a company's portfolio, and where we have concerns over the accuracy of data being reported.
- 6.24 In SY21, three rent-a-roof companies were audited, with the auditors assigning one rating of 'Good' and two of 'Satisfactory'. Once reports have been issued, we work with the agents and rent-a-roof companies to address the findings. The audit reports also make recommendations for best practice, which companies are encouraged to implement.
- 6.25 The main findings related to:
 - A lack of documented procedures in place to support the process of recording and checking applications and submitting reports to Ofgem
 - Renewables and CHP Register account updates
 - Discrepancies regarding, or lack of, metering evidence from generating stations.
- 6.26 All audits undertaken in SY21 are now closed.

Generator compliance

6.27 We take compliance extremely seriously and we investigate matters where we have concerns, particularly where there could be a financial impact. There are a range of outcomes from such investigations, including serious consequences such as

 ⁸³ Agents represent multiple generators, and act on their behalf to submit data and receive ROCs.
 ⁸⁴ Rent-a-roof companies offered solar PV panels to homeowners in exchange for the income generated as a result of participation in the NIRO scheme.

recouping/withholding ROCs, withdrawal from the RO scheme, and referral to law enforcement agencies in cases of suspected fraud.

- 6.28 When issues are detected through our audit programme that may result in actions affecting a station's RO accreditation or ROC issuance, the case is referred for further compliance assessment. We assess the compliance of generating stations against RO legislation to determine if compliance action is required⁸⁵. Where appropriate, to prevent ROCs being issued incorrectly, we may decide to suspend ROC issue before a compliance decision has been finalised.
- 6.29 In SY21, 232 RO audits conducted in various scheme years were referred for compliance assessment to determine if further compliance investigation was required. Two of these relate to audits in SY18, 18 in SY19, 23 in SY20, and the remainder in SY21. Of those referred, 156 were statistical audits, 40 were targeted audits, and 36 were referrals from our data team.
- 6.30 A total of 160 compliance investigations pertaining to RO audits were closed in SY21. The operators of 159 generating stations submitted satisfactory evidence addressing the concerns raised during the investigation. Therefore, these were closed with no compliance action. Most of these will have required a range of remedial actions taken after closure however, such as updating the Renewables & CHP Register for accuracy, and ensuring meters used for ROC issuance continue to be within their calibration period.
- 6.31 For the remaining station, which is owned by Gravis Capital Limited ("Gravis"), Ofgem was no longer satisfied that the station met the RO definition of commissioned ahead of the relevant scheme closure date. This was due to a lack of evidence showing the generating station completed all the relevant industry standard tests on or before the stated commissioned date. This was corroborated by low levels of initial generation. As a result, we decided to withdraw the station's RO accreditation. 21,841 ROCs were withheld or revoked at an approximate value of £1 million. The total prevented error including projected lifetime value was approximately £10 million. Although Gravis was not the owner of the station at the time of the stated commissioned date, once the asset was transferred to their ownership, they were ultimately responsible for the site and its compliance under the relevant legislation.
- 6.32 To ensure an efficient compliance process, we set strict deadlines for generators when responding to our information requests. Where generators fail to comply with our request before the allocated deadline or are deemed to be uncooperative, this may result in

 $^{^{85}}$ The compliance actions that we are able to take are outlined in articles 24, 25 and 90 of the RO, articles 41 and 58 of the ROS and articles 37 and 50 of the NIRO.

compliance action, such as the suspension of payments. Going forward, we will have increasingly low tolerance for non-engagement from generators.

6.33 Generators are required to report certain information to Ofgem, in line with specific legislative requirements. Some of this information is used to inform ROC allocation while other information is primarily used to provide transparency around the scheme. Ofgem has an open enforcement investigation into whether Drax Power Limited (the UK's largest biomass generator) is in breach of annual profiling requirements relating to the Renewables Obligations scheme and other related matters.⁸⁶ The opening of this investigation does not imply that Ofgem has made any findings about possible non-compliance by Drax Power Limited.

Counter fraud

- 6.34 During 2022-23 we received one referral of suspected fraud committed by an operator accredited under the NIRO scheme. This is a decrease on the number of referrals (five) received during the previous year. Reviewing the referral, we were unable to find any evidence to support the allegation so we did not proceed with a fraud investigation.
- 6.35 One suspected fraud case opened in a previous reporting period was closed during 2022-23. The investigation focussed on applications submitted near to the NIRO scheme closure date. As a result of this investigation, eight applications were rejected as they were unable to provide the required evidence to demonstrate commissioning prior to the 31 March 2017 deadline.
- 6.36 During the investigation and as part of the application, evidence was obtained from the generators and their representatives that demonstrated the use of falsified commissioning documents. As a result, we made the decision to reject the applications for NIRO accreditation and also referred the case to Action Fraud. This prevented the generators from collectively benefiting from up to £40 million.
- 6.37 There remain ongoing investigations into several RO accredited sites. These investigations were opened as a direct result of referrals made in previous reporting periods by members of the public, whistle-blowers, industry professionals and other parties.

⁸⁶ Information on Ofgem's investigation into Drax Power Ltd:

<https://www.ofgem.gov.uk/publications/ofgem-investigating-drax-power-limiteds-compliance-reporting-requirements-relating-renewables-obligation>

- 6.38 We would encourage any reader of this report who suspects fraud is taking place on our environmental schemes to contact <u>CounterFraud@ofgem.gov.uk</u>. You can also find information for whistleblowers on our website⁸⁷.
- 6.39 Where sufficient evidence of suspected fraud is identified in our investigations, we refer the case to Action Fraud who review the case and may pass it on to the relevant prosecutor agency such as the Serious Fraud Office, Metropolitan Police or the Police Service of Northern Ireland.

Safeguarding public funds

- 6.40 As part of our commitment to safeguarding public funds and ensuring value for money in administering the RO scheme, we have a robust system of detection and prevention of error.
- 6.41 In the context of this report, 'error' is defined as the difference between what an installation could or have received in ROCs, and what they are eligible to receive.
- 6.42 We classify error as either being prevented or detected. Prevented error refers to any certificates which we have prevented from being issued because of our work. Detected error relates to any certificates which have been issued to a participant for which they were not eligible.
- 6.43 **Figure 6.9** shows the value of certificates protected in SY21. We identified more than £13.5 million in detected and prevented error during the scheme year. This is a decrease on the £76 million protected in SY20, mainly due to fewer applications being refused accreditation in SY21, and fewer compliance investigations resulting in compliance action being taken.
- 6.44 Ensuring the integrity of the RO scheme is upheld, the deterrence of both noncompliance and fraud is of key importance to Ofgem. In light of this, we strive to ensure our audit programmes and compliance investigations are effective in not only detecting non-compliance and fraud but deterring it. To support our deterrence activity, we are taking steps to increase our engagement with industry, whose assistance will help ensure only those eligible for support receive it, therefore providing value for money for the consumer.

⁸⁷ Information on whistleblowing: https://www.ofgem.gov.uk/about-us/contact-us/whistleblowing

Figure 6.9: Error protected SY19 to SY21

Combined column and line chart showing error protected against Ofgem's administration costs. In SY21 our administration costs were £8.06 million but through our work we identified £13.53 million in prevented and detected error. As such, for SY21 the value of ROCs protected was 168% of the total scheme administration cost. Although this is lower than previous years this is expected as fewer accreditation decisions are being made following the closure of the scheme.



7. Our administration

Chapter purpose

This chapter provides detail on our administration activity during SY21 not covered elsewhere in the report. We perform several functions as administrator of the scheme, including accrediting generating stations, issuing certificates, and ensuring the compliance of generators and electricity suppliers. Additionally, this chapter includes information on the performance of our enquiries team, updates to the Renewables and CHP Register, and summarises updates to scheme guidance.

Applications

- 7.1 Following the closure of the final grace period⁸⁸ for applications on 31 March 2019, our workload is primarily focused on processing amendments.
- 7.2 As of the end of November 2023, we had a queue of one application remaining which we expect to conclude assessment of during SY22. This is a complex application that has required in-depth assessment.

Amendments

- 7.3 As the scheme and the installations accredited to the scheme mature, we receive more amendments. Amendments can vary from simple meter replacements to substantial changes, including replacement of equipment and relocation of a generating station. We anticipate this area of work will continue to increase in coming years.
- 7.4 We processed 365 amendments during SY21. Of these amendments, 41.9% were for Micro NIRO installations.

⁸⁸ <u>Information on grace periods</u>: <https://www.ofgem.gov.uk/environmental-and-socialschemes/renewables-obligation-ro/ro-closure>

ROC issue

7.5 As shown in **Figure 7.1** below, we issued 97.7% ROCs in SY21 on time, compared to 98.4% in SY20.

Figure 7.1: ROCs issued on time SY21

Key Performance Indicator (KPI)	ROCs issued within KPI
Issue ROCs within 17 working days (Apr-Jun)* and 12 working days (Jul-Mar).	97.7%

*During the first three months of the scheme year an extra five days is allocated for ROC issue. This is due to increased workload including GB/NI Fuel Mix Disclosure⁸⁹.

Enquiries

7.6 We receive enquiries related to ongoing generator compliance, the processing of applications and amendments, and more general queries regarding the scheme. As seen in **Figure 7.2**, 202 telephone calls and 427 email enquiries were received in SY21.

Figure 7.2: RO scheme enquiry performance SY21

Enquiry	Key Performance Indicator (KPI)	Received	Met KPI	Performance against KPI
Telephone enquiries	85% calls answered/no more than 15% abandoned**	202	198	98.0%
Email enquiries	80% of email enquiries responded to within 10 working days	427	427	100%

**Abandoned calls are calls which are ended or disconnected by the caller before a conversation takes place.

⁸⁹ <u>Fuel Mix Disclosure (FMD):</u> <https://www.ofgem.gov.uk/environmental-and-socialschemes/renewables-energy-guarantees-origin-rego/energy-suppliers/fuel-mix-disclosure-fmd>

Register updates and process improvements

- 7.7 During SY21, a limited number of changes were made to the Register. All amendments were undertaken to ensure we continue to meet our legislative duties.
- 7.8 Ofgem is redeveloping the 'Renewables and CHP Register', currently used to administer the Renewables Obligation (RO), Feed-in Tariffs (specifically ROO-FIT) and Renewable Energy Guarantees of Origin (REGO) schemes. The new Register will be called the Renewable Electricity Register (RER) and is designed to provide a better user experience by using modern design principles. Once launched, the RER is planned to be in operation for the remainder of the RO scheme.

Guidance updates

- 7.9 Between April 2022 and November 2023, we published the following documents:
 - <u>'Renewables Obligation: Guidance for suppliers':</u>
 <https://www.ofgem.gov.uk/publications/renewables-obligation-guidance-suppliers> (Published April 2022)

This document was updated to provide further clarity on the recommended methodology for submissions of EII excluded electricity supply volumes.

 <u>'Audits of Renewables Obligation (RO) Generating Stations 2022-23':</u>
 <https://www.ofgem.gov.uk/publications/audits-renewables-obligation-rogenerating-stations-202223> (Published April 2022)

This document sets out our proposal to run both a targeted and a statistical audit programme during (SY21) under the RO.

<u>`Ofgem costs for administering the Renewables Obligation':</u>
 <https://www.ofgem.gov.uk/publications/ofgem-costs-administering-renewables-obligation-0> (Published October 2022)

This letter sets out our proposed administration costs for the Renewables Obligation for SY21.

<u>`Renewables Obligation: Guidance for suppliers':</u>

<https://www.ofgem.gov.uk/publications/renewables-obligation-guidancesuppliers>' (Published April 2023)

This document provides guidance for all GB and NI licensed electricity suppliers. It explains what licensed electricity suppliers need to do in order to comply with the RO. This document has been updated to reflect legislative changes to the calculation methodology for the RO (Scotland) mutualisation threshold.

 <u>'Guidance for generators: Co-location of electricity storage facilities with</u> renewable generation supported under the Renewables Obligation or Feed-in Tariff schemes':

<https://www.ofgem.gov.uk/publications/guidance-generators-co-locationelectricity-storage-facilities-renewable-generation-supported-under-renewablesobligation-or-feed-tariff-schemes-0> (Published May 2023)

This guidance is for participants of the RO and FIT schemes on co-locating storage with their accredited RO generating station or FIT installation.

<u>'Audits of Renewables Obligation (RO) Generating Stations 2023/24':</u>
 <'https://www.ofgem.gov.uk/publications/audits-renewables-obligation-ro-generating-stations-202324'> (Published June 2023)

This document sets out our proposal to run both a targeted and a statistical audit programme during (SY22) under the RO.

<u>'Ringfencing of RO receipts':</u>
 https://www.ofgem.gov.uk/publications/ringfencing-ro-receipts
 July 2023)

The guidance for suppliers in relation to RO ringfencing.

<u>`Ofgem costs for administering the RO':</u>
<https://www.ofgem.gov.uk/publications/ofgem-costs-administering-</p>
renewables-obligation-ro> (Published September 2023).

The letter sets out our proposed administration costs for the Renewables Obligation for SY22.

7.10 To provide transparency and to ensure that we are providing a good service we track our performance, and in addition to the information published here we publish performance metrics on our website each month.⁹⁰

⁹⁰ <u>Webpage on scheme performance indicators</u>: <https://www.ofgem.gov.uk/environmental-and-social-schemes>

8. Looking forward

Chapter purpose

This chapter introduces the changes to the scheme that are on the horizon, including some context from the broader policy landscape. It provides a summary of the significant changes which are or may be introduced to the scheme in SY21 and beyond.

RO Ringfencing

8.1 Last year, Ofgem took a decision to introduce a new obligation under Standard Licence Condition 30 (SL30) of the Standard Conditions of the Electricity Supply Licence⁹¹. For the 2023-24 scheme year onwards, licensed electricity suppliers in Great Britain need to protect their RO receipts attributable to domestic supply under a process called 'RO ringfencing'. On a quarterly basis it requires suppliers to meet their accruing Renewables Obligation by holding ROCs and/or protecting the funds equivalent to the buy-out price in one or more 'Credit Cover Mechanisms'. The new obligation is aimed at reducing the risk of misuse of RO receipts as cheap working capital. It formed part of a package of measures to ensure the recapitalisation of the sector and enhance resilience to external shocks.

RO exemption for Energy Intensive Industries (EIIs)

8.2 An exemption for certain electricity intensive businesses from 85% of the indirect costs of the RO and other renewable electricity schemes was introduced by the UK Government and applied to the RO from SY17 (2018-19). In 2022, the Department for Energy Security and Net Zero (DESNZ) and the Scottish Government separately consulted on increasing the RO⁹² and ROS⁹³ exemption levels for EIIs from 85% to 100%. The respective government responses were published in 2023⁹⁴ and announced the intention to deliver a 100% exemption for EIIs for 2024.

⁹¹ <u>Information on RO ringfencing</u>: <https://www.ofgem.gov.uk/publications/decision-strengthening-financial-resilience>

⁹² <u>Review of the energy intensive industries exemption scheme</u>:

<https://www.gov.uk/government/consultations/review-of-the-energy-intensive-industries-exemption-scheme>

⁹³ <u>Renewables Obligation (Scotland) - energy intensive industries: consultation</u>:

<https://www.gov.scot/publications/renewables-obligation-scotland-energy-intensive-industries/> ⁹⁴ The Department for Business and Trade's <u>Energy Intensive Industries: Consultation on the British</u> <u>Industry Supercharger package for strategic Energy Intensive Industries (EIIs)</u>'

<https://www.gov.uk/government/consultations/british-industry-supercharger-capacity-marketconsultation-and-eiis-government-response> included the government response to the

- 8.3 The level of the obligation for SY23 (2024-25) was published in September 2023.⁹⁵ It has been calculated to exempt up to 85% of electricity supplied to the EIIs from the RO and ROS. However, the publication also provides an indicative obligation level for SY23, should relevant legislation increasing the EII exemption to 100% and allowing for the obligation levels to be altered, is in place for 1 April 2024.
- 8.4 In Northern Ireland the Department for the Economy (DfE) consulted on whether relief from the indirect costs of the NIRO should continue for EIIs and, if so, how it should be implemented in Northern Ireland.⁹⁶ The consultation closed in April 2022 and a response is to be published in due course. The decision is a matter for the Northern Ireland Executive.

Fixed Price Certificates

- 8.5 In July 2023 DESNZ, the Scottish Government and the Northern Ireland Executive jointly issued a call for evidence on introducing Fixed-Price-Certificates (FPCs)⁹⁷. This call for evidence outlined proposals for how a FPC system could be designed and implemented, and sought views on potential FPC models, FPC issuing and pricing, and timing.
- 8.6 Although a response to the call for evidence is yet to be published, the Governments are expected to consult on detailed policy proposals in due course.

²⁰²² EII consultation. See the <u>Scottish Government's June 2023 response to their 2022 EII consultation</u>. <https://www.gov.scot/publications/renewables-obligation-scotland-energy-intensive-industriesconsultation-response-analysis-june-2023/documents/>

⁹⁵ Information on calculating the Renewables Obligation for 2024-25:

<https://www.gov.uk/government/publications/renewables-obligation-level-calculations-2024-to-2025/calculating-the-level-of-the-renewables-obligation-for-2024-to-2025>

⁹⁶ Energy Intensive Industries - relief from indirect costs of NI Renewables Obligation: <https://www.economy-ni.gov.uk/consultations/energy-intensive-industries-relief-indirect-costs-nirenewables-obligation>

⁹⁷ Introducing Fixed Price Certificates into Renewables Obligation schemes: call for evidence: <https://www.gov.uk/government/calls-for-evidence/introducing-fixed-price-certificates-intorenewables-obligation-schemes-call-for-evidence>

Appendix 1 – Compliance by licensed suppliers

Figure A1.1: Summary of compliance by supplier group in SY21 (all jurisdictions)

Supplier group	Total Obligation (ROCs)	Total ROCs presented	Total payments made	Total Redistributions
3T POWER LIMITED	11,624	5,217	£338,802.16	£35,865
Affect Energy Ltd	2	0	£105.76	£0
AXPO UK Ltd	324,291	307,832	£870,351.92	£2,116,428
BES Commercial Electricity Ltd	168,564	0	£8,949,960.03	£0
BGI trading Ltd	43	43	£0.00	£293
British Gas Trading Ltd	14,846,627	14,588,594	£13,644,785.04	£100,300,578
Brook Green Trading Ltd	843,406	832,511	£576,127.60	£5,723,739
Bryt Energy Ltd	1,362,971	1,361,000	£104,226.48	£9,357,245
Budget Energy Ltd	49,179	49,179	£0.00	£338,117
Business Power and Gas Ltd	398,914	0	£21,094,572.32	£0
Click Energy	26,944	26,944	£0.00	£185,246
Conrad Energy (Holdings) Ltd	14,272	14,272	£0.00	£98,121
Corona Energy Retail 4 Ltd	395,069	395,000	£3,648.72	£2,715,730
Coulomb Energy Supply Ltd	39,488	0	£2,088,125.44	£0
Crown Gas and Power2 Ltd	5	0	£264.40	£0
Delta Gas and Electricity	13,378	0	£707,428.64	£0
D-energi Trading Ltd	11,264	0	£595,640.32	£0
Dodo Energy Ltd	33	0	£1,745.04	£0
Drax Energy Solutions Ltd	6,856,717	6,856,717	£0.00	£47,141,806
Dyce Energy Limited	22	0	£1,163.36	£0
E (Gas and Electricity) Ltd	233,603	233,603	£0.00	£1,606,082
E.ON Energy Ltd	77,942	77,942	£0.00	£535,870
E.ON Next Supply Ltd	9,473,731	9,473,731	£0.00	£65,134,494
E.ON UK Plc	13,549	13,549	£0.00	£93,150
Eco Green Management Ltd	64,130	0	£3,391,194.40	£0
Ecotricity	541,340	192,489	£18,447,240.88	£1,323,411
EDF Energy Customers Ltd	21,330,305	20,928,107	£21,268,230.24	£143,886,465
Electricity Plus Supply Ltd	1,239,434	1,175,477	£3,382,046.16	£8,081,724
Eneco energy Trade BV	241,450	241,450	£0.00	£1,660,033
Energia	97,923	97,923	£0.00	£673,244
ENGIE Power Ltd	3,760,484	3,213,709	£28,913,462.00	£22,095,127
EPG Energy Ltd	27,738	10,576	£907,526.52	£72,712
Equinicity limited	727	0	£38,443.76	£0
ESB Energy Ltd	12	0	£634.56	£0
ESB Independent Energy (NI) Ltd	389,966	389,966	£0.00	£2,681,119
F & S Energy Ltd	54,631	378	£2,868,898.64	£2,596
Farringdon Energy Ltd	1,377	0	£72,815.56	£0
Flexitricity Ltd	4,971	0	£262,866.48	£0
Flogas Enterprise Solutions	6,921	0	£365,982.48	£0

Supplier group	Total Obligation (ROCs)	Total ROCs presented	Total payments made	Total Redistributions
Foxglove Energy Supply Ltd	213,945	0	£11,313,411.60	£0
Fuse Energy Supply Ltd	10	0	£528.80	£0
Go Power	109,319	109,319	£0.00	£751,595
Good Energy Ltd	292,905	292,905	£0.00	£2,013,800
Green Energy (UK) plc	57,572	57,572	£0.00	£395,820
HARTREE PARTNERS SUPPLY	9,332	0	£493,476.16	£0
(UK) Ltd Home Energy Trading Ltd	58	0	£3 067 04	fO
Limejumn Energy Itd	2 915	763	£113 797 76	£5 243
Marble Power I td	134 304	0	£7 112 480 85	£0
Maxen Power supply 1td	28.083	0	£1 485 029 04	£0
Mint	1 476	0	£78 050 88	£0
MVV Environment Services	5 /37	0	£287 508 56	£0
Ltd		10 711 005	£207,500.50	672 645 025
Limited	10,721,693	10,711,695	£528,694.24	£/3,645,835
Octopus Energy Ltd	5,898,683	4,762,481	£60,082,361.76	£32,743,360
Octopus Energy Operations Ltd	2,759,512	2,000,000	£40,162,994.56	£13,750,545
Opus Energy Group Limited	1,111,793	1,111,793	£0.00	£7,643,877
Orsted Power Sales (UK) Ltd	246,505	962	£12,984,313.84	£6,611
OVO Electricity Ltd	5,999,856	756,731	£277,256,450.00	£5,202,731
P3P ENERGY SUPPLY Ltd	3,794	0	£200,626.72	£0
Power NI Energy Ltd	429,786	429,786	£0.00	£2,954,893
Pozitive Energy Ltd	1,078,593	135,000	£49,897,197.84	£928,159
PX Supply Limited	8,262	0	£436,894.56	£0
Rebel Energy Supply Ltd	10,538	223	£545,457.20	£1,531
REGENT POWER Ltd	71	0	£3,754.48	£0
RWE	1,390	0	£73,503.20	£0
Scottish Power Energy Retail	7,959,367	7,959,367	£0.00	£54,722,826
SEFE Energy Limited	188,517	188,517	£0.00	£1,296,104
Shell Energy Retail Ltd	2,169,670	559,312	£85,155,731.04	£3,845,421
Shell Energy UK	949,616	949,616	£0.00	£6,528,868
Sinq Power Ltd	114,937	0	£6,077,868.56	£0
SmartestEnergy Business	338,482	338,482	£0.00	£2,327,154
SmartestEnergy Ltd	2,837,172	2,837,172	£0.00	£19,506,333
SO Energy Trading Ltd	565,825	0	£29,920,826.00	£0
Square1 Energy	520	0	£27,497.60	£0
Squeaky Clean Energy Ltd	133,444	3,359	£6,878,894.80	£23,092
SSE Energy Supply Ltd	295,018	295,018	£0.00	£2,028,327
SSE PLC	5,813,227	5,813,227	£0.00	£39,967,526
Statkraft Markets GmbH	6,088	0	£321,933.44	£0
Switch Business Gas and Power Ltd	612	0	£32,362.56	£0
Tomato Energy Limited	58,156	0	£3,075,289.28	£0
TotalEnergies Gas & Power Limited	6,604,647	6,604,647	£0.00	£45,408,756
Tradelink Solutions Ltd	62	62	£0.00	£424

Supplier group	Total Obligation (ROCs)	Total ROCs presented	Total payments made	Total Redistributions
Tru Energy Ltd	19,206	0	£1,015,613.28	£0
UK ENERGY INCUBATOR HUB LTD	1,882	0	£0.00	£0
UK Power Reserve Ltd	2,068	2,068	£0.00	£14,216
Unify Energy Ltd	39,349	0	£2,080,775.12	£0
United Gas & Power Ltd	128,490	0	£6,794,551.20	£0
Utilita Energy Ltd	1,190,700	1,190,700	£0.00	£8,186,387
Valda Energy Ltd	86,807	85,576	£65,095.28	£588,355
Vattenfall Energy Trading GmbH	773	773	£0.00	£5,312
Wilton Energy Ltd	6,233	6,233	£0.00	£42,851
Yu Energy Retail Ltd	287,521	0	£15,204,110.48	£0
TOTALS	121,847,268	107,689,568	£748,606,437	£740,395,147

Figure A1.2: Compliance by licensee⁹⁸ with an obligation in England & Wales

Licensee	RO Obligation (ROCs)	Total ROCs presented	Bioliquid ROCs presented	Banked ROCs presented	Buy-out Payment Made by Licensee	Late Payment Made by Licensee
Affect Energy Ltd	2	0	0	0	£105.76	£0.00
AXPO UK Ltd	302,096	285,637	0	4,201	£870,351.92	£0.00
BES Commercial	154,758	0	0	0	£4,091,801.52	£4,125,124.48
BGI trading Ltd	43	43	0	0	£0.00	£0.00
British Gas Trading Ltd	13,731,138	13,492,492	187,707	0	£12,619,600.48	£0.00
Brook Green Trading Ltd	802,738	802,738	0	0	£0.00	£0.00
Bryt Energy Ltd	1,293,224	1,291,253	0	0	£104,226.48	£0.00
Business Power and Gas Ltd	374,959	0	0	0	£19,827,831.92	£0.00
Conrad Energy (Trading) Ltd	14,235	14,235	0	0	£0.00	£0.00
Corona Energy Retail 4 Ltd	354,438	354,369	0	0	£3,648.72	£0.00
Coulomb Energy Supply Ltd	39,488	0	0	0	£2,088,125.44	£0.00
Crown Gas and Power2 Ltd	5	0	0	0	£0.00	£264.40
Delta Gas and Power Ltd	11,235	0	0	0	£594,106.80	£0.00
D-energi Trading	9,914	0	0	0	£524,252.32	£0.00
Dodo Energy Ltd	33	0	0	0	£1,745.04	£0.00
Drax Energy Solutions Ltd	6,409,549	6,409,549	0	0	£0.00	£0.00
Dyce Energy Limited	22	0	0	0	£1,163.36	£0.00
E (Gas and Electricity) Ltd	208,351	208,351	0	0	£0.00	£0.00
E.ON Energy Solutions Ltd	73,448	73,448	0	0	£0.00	£0.00
E.ON Next Supply Ltd	9,033,062	9,033,062	0	0	£0.00	£0.00
E.ON UK Plc	7,838	7,838	0	0	£0.00	£0.00
Eco Green Management Ltd (trading as Yorkshire Gas & Power)	59,186	0	0	0	£3,129,755.68	£0.00
Ecotricity	520,955	172,104	0	23	£18,447,240.88	£0.00
EDF Energy Customers Ltd	19,070,710	18,668,512	0	48,474	£21,268,230.24	£0.00
Edgware Energy Ltd	159	0	0	0	£8,407.92	£0.00
Electricity Plus Supply Ltd	1,166,891	1,102,934	0	0	£3,382,046.16	£0.00
Eneco energy Trade BV	231,664	231,664	0	30,828	£0.00	£0.00
ENGIE Power Ltd	3,507,311	2,960,536	0	3,645	£28,913,462.00	£0.00
EPG Energy Ltd	24,372	10,576	0	0	£729,532.44	£0.00
Equinicity limited	727	0	0	0	£38,443.76	£0.00
ESB Energy Ltd	10	0	0	0	£528.80	£0.00

⁹⁸ The name of each Licensee in Figures A1.2 to A1.4 refers to a Licence group that is owned by its parent company (Supplier Group). For a complete list of supplier groups and their licences, please contact: <u>REcompliance@ofgem.gov.uk</u>

Licensee	RO Obligation (ROCs)	Total ROCs presented	Bioliquid ROCs presented	Banked ROCs presented	Buy-out Payment Made by Licensee	Late Payment Made by Licensee
F & S Energy Ltd	52,149	378	0	0	£2,737,650.48	£0.00
Farringdon Energy Ltd	1,260	0	0	0	£66,628.60	£0.00
Flexitricity Ltd	4,315	0	0	0	£228,177.20	£0.00
Foxglove Energy Supply Ltd	196,763	0	0	0	£10,404,827.44	£0.00
Fuse Energy Supply Ltd	10	0	0	0	£528.80	£0.00
Good Energy Ltd	281,500	281,500	0	2,478	£0.00	£0.00
Green Energy (UK) Plc	55,206	55,206	0	84	£0.00	£0.00
HARTREE PARTNERS SUPPLY (UK) Ltd	9,332	0	0	0	£493,476.16	£0.00
Home Energy Trading Ltd	58	0	0	0	£3,067.04	£0.00
Limejump Energy Ltd	2,225	763	0	0	£77,310.56	£0.00
Marble Power Ltd	126,081	0	0	0	£4,000,163.28	£2,677,485.33
Maxen Power supply Ltd	25,705	0	0	0	£1,359,280.40	£0.00
MVV Environment Services Ltd	4,711	0	0	0	£249,117.68	£0.00
Npower Commercial Gas Limited	9,852,875	9,842,877	4,815	60,630	£528,694.24	£0.00
Octopus Energy Ltd	5,521,123	4,762,481	0	0	£40,116,988.96	£0.00
Octopus Energy Operations Ltd (holds Bulb licences)	2,449,441	2,000,000	0	117,853	£23,766,440.08	£0.00
Opus Energy (Corporate) Limited	293,760	293,760	0	0	£0.00	£0.00
Opus Energy Ltd	728,406	728,406	1,845	2,396	£0.00	£0.00
Orsted Power Sales (UK) Ltd	179,776	962	0	962	£9,455,684.32	£0.00
Ovo Energy	5,089,559	642,176	717	0	£235,177,613.04	£0.00
P3P ENERGY SUPPLY Ltd	3,794	0	0	0	£200,626.72	£0.00
Pozitive Energy Ltd	1,027,972	135,000	0	0	£47,220,359.36	£0.00
PX Supply Limited	8,262	0	0	0	£436,894.56	£0.00
Rebel Energy Supply Ltd	10,069	0	0	0	£532,448.72	£0.00
REGENT POWER Ltd	71	0	0	0	£3,754.48	£0.00
Scottish Power Energy Retail Ltd	6,585,701	6,585,701	0	180,178	£0.00	£0.00
SEFE Energy Limited	173,785	173,785	0	5,546	£0.00	£0.00
Shell Energy Retail Ltd	2,036,635	426,277	0	0	£85,155,731.04	£0.00
Shell Energy UK	873,906	873,906	955	1,403	£0.00	£0.00
Sinq Power Ltd	72,509	0	0	0	£3,834,275.92	£0.00
SmartestEnergy Business Ltd	308,786	308,786	0	0	£0.00	£0.00
SmartestEnergy Ltd	2,695,707	2,695,707	5,003	33,772	£0.00	£0.00
SO Energy Trading Ltd	512,579	0	0	0	£27,105,177.52	£0.00

Licensee	RO Obligation (ROCs)	Total ROCs presented	Bioliquid ROCs presented	Banked ROCs presented	Buy-out Payment Made by Licensee	Late Payment Made by Licensee
SQUARE1 ENERGY	520	0	0	0	£27,497.60	£0.00
Squeaky Clean Energy Ltd	120,919	3,359	0	3,359	£6,216,572.80	£0.00
SSE Energy Supply Ltd	5,051,878	5,051,878	0	0	£0.00	£0.00
Statkraft Markets GmbH	4,869	0	0	0	£257,472.72	£0.00
Switch Business Gas and Power Ltd	549	0	0	0	£29,031.12	£0.00
Tomato Energy Limited	52,962	0	0	0	£2,800,630.56	£0.00
TotalEnergies Gas & Power Limited	6,186,164	6,186,164	0	4,430	£0.00	£0.00
Toucan Energy Ltd	1,476	0	0	0	£78,050.88	£0.00
Tradelink Solutions Ltd	62	62	0	0	£0.00	£0.00
Tru Energy Ltd	19,067	0	0	0	£1,008,262.96	£0.00
UK ENERGY INCUBATOR HUB LTD	1,705	0	0	0	£0.00	£0.00
UK Power Reserve Ltd	2,068	2,068	0	0	£0.00	£0.00
Unify Energy Ltd	39,281	0	0	0	£2,077,179.28	£0.00
United Gas & Power Ltd	120,238	0	0	0	£6,358,185.44	£0.00
Utilita Energy Ltd	1,066,399	1,066,399	0	0	£0.00	£0.00
Valda Energy Ltd	79,387	78,156	0	0	£65,095.28	£0.00
Vattenfall Energy Trading GmbH	627	627	0	0	£0.00	£0.00
Wilton Energy Ltd	6,233	6,233	0	0	£0.00	£0.00
Yu Energy Retail Ltd	267,105	0	0	0	£14,124,512.40	£0.00
Totals	109,608,101	97,321,958	201,042	500,262	£642,842,015.28	£6,802,874.21

Figure A1.3: Compliance by licensee⁹⁹ with an obligation in Scotland

Licensee	RO Obligation (ROCs)	Total ROCs presented	Bioliquid ROCs presented	Banked ROCs presented	Buy-out Payment Made by Licensee	Late Payment Made by Licensee
AXPO UK Ltd	22,195	22,195	0	0	£0.00	£0.00
BES Commercial Electricity Ltd	13,806	0	0	0	£365,030.64	£368,003.39
British Gas Trading Ltd	1,115,489	1,096,102	43,235	188,460	£1,025,184.56	£0.00
Brook Green Trading Ltd	40,668	29,773	0	0	£576,127.60	£0.00
Bryt Energy Ltd	69,747	69,747	0	0	£0.00	£0.00
Business Power and Gas Ltd	23,955	0	0	0	£1,266,740.40	£0.00
Conrad Energy (Trading) Ltd	37	37	0	0	£0.00	£0.00
Corona Energy Retail 4 Ltd	40,631	40,631	0	0	£0.00	£0.00
Delta Gas and Power Ltd	2,143	0	0	0	£113,321.84	£0.00
D-energi Trading Ltd	1,350	0	0	0	£71,388.00	£0.00
Drax Energy Solutions Ltd	447,168	447,168	0	0	£0.00	£0.00
Dyce Energy Limited	0	0	0	0	£0.00	£0.00
E (Gas and Electricity) Ltd	25,252	25,252	0	0	£0.00	£0.00
E.ON Energy Solutions Ltd	4,494	4,494	0	0	£0.00	£0.00
E.ON Next Supply Ltd	440,669	440,669	0	0	£0.00	£0.00
E.ON UK Plc	5,711	5,711	0	0	£0.00	£0.00
Eco Green Management Ltd (trading as Yorkshire Gas & Power)	4,944	0	0	0	£261,438.72	£0.00
Ecotricity	20,385	20,385	0	0	£0.00	£0.00
EDF Energy Customers Ltd	2,259,595	2,259,595	0	160,757	£0.00	£0.00
Edgware Energy Ltd	1,231	0	0	0	£65,095.28	£0.00
Electricity Plus Supply Ltd	72,543	72,543	0	0	£0.00	£0.00
Eneco energy Trade BV	9,786	9,786	0	0	£0.00	£0.00
ENGIE Power Ltd	253,173	253,173	0	0	£0.00	£0.00
EPG Energy Ltd	3,366	0	0	0	£177,994.08	£0.00
ESB Energy Ltd	2	0	0	0	£105.76	£0.00
F & S Energy Ltd	2,482	0	0	0	£131,248.16	£0.00
Farringdon Energy Ltd	117	0	0	0	£6,186.96	£0.00
Flexitricity Ltd	656	0	0	0	£34,689.28	£0.00
Foxglove Energy Supply Ltd	17,182	0	0	0	£908,584.16	£0.00
Good Energy Ltd	11,405	11,405	0	0	£0.00	£0.00
Green Energy (UK) Plc	2,366	2,366	0	0	£0.00	£0.00
Limejump Energy Ltd	690	0	0	0	£36,487.20	£0.00
Marble Power Ltd	8,223	0	0	0	£434,832.24	£0.00
Maxen Power supply Ltd	2,378	0	0	0	£125,748.64	£0.00
MVV Environment Services Ltd	726	0	0	0	£38,390.88	£0.00
Npower Commercial Gas Limited	868,818	868,818	0	0	£0.00	£0.00
Octopus Energy Ltd	377,560	0	0	0	£19,965,372.80	£0.00

⁹⁹ The name of each Licensee in Figures A1.2 to A1.4 refers to a Licence group that is owned by its parent company (Supplier Group). For a complete list of supplier groups and their licences, please contact: <u>REcompliance@ofgem.gov.uk</u>

Licensee	RO Obligation (ROCs)	Total ROCs presented	Bioliquid ROCs presented	Banked ROCs presented	Buy-out Payment Made by Licensee	Late Payment Made by Licensee
Octopus Energy Operations Ltd (holds Bulb licences)	310,071	0	0	0	£16,396,554.48	£0.00
Opus Energy (Corporate) Limited	32,867	32,867	803	0	£0.00	£0.00
Opus Energy Ltd	56,760	56,760	0	0	£0.00	£0.00
Orsted Power Sales (UK) Ltd	66,729	0	0	0	£3,528,629.52	£0.00
Ovo Energy	910,297	114,555	0	0	£42,078,836.96	£0.00
Pozitive Energy Ltd	50,621	0	0	0	£2,676,838.48	£0.00
Rebel Energy Supply Ltd	469	223	0	0	£13,008.48	£0.00
Scottish Power Energy Retail Ltd	1,373,666	1,373,666	0	0	£0.00	£0.00
SEFE Energy Limited	14,732	14,732	0	0	£0.00	£0.00
Shell Energy Retail Ltd	133,035	133,035	0	1,535	£0.00	£0.00
Shell Energy UK	75,710	75,710	0	0	£0.00	£0.00
Sinq Power Ltd	42,428	0	0	0	£2,243,592.64	£0.00
SmartestEnergy Business Ltd	29,696	29,696	0	0	£0.00	£0.00
SmartestEnergy Ltd	141,465	141,465	15	0	£0.00	£0.00
SO Energy Trading Ltd	53,246	0	0	0	£2,815,648.48	£0.00
SQUARE1 ENERGY	0	0	0	0	£0.00	£0.00
Squeaky Clean Energy Ltd	12,525	0	0	0	£662,322.00	£0.00
SSE Energy Supply Ltd	761,349	761,349	0	44	£0.00	£0.00
Statkraft Markets GmbH	1,219	0	0	0	£64,460.72	£0.00
Switch Business Gas and Power Ltd	63	0	0	0	£3,331.44	£0.00
Tomato Energy Limited	5,194	0	0	0	£274,658.72	£0.00
TotalEnergies Gas & Power Limited	418,483	418,483	0	426	£0.00	£0.00
Tru Energy Ltd	139	0	0	0	£7,350.32	£0.00
UK ENERGY INCUBATOR HUB LTD	177	0	0	0	£0.00	£0.00
Unify Energy Ltd	68	0	0	0	£3,595.84	£0.00
United Gas & Power Ltd	8,252	0	0	0	£436,365.76	£0.00
Utilita Energy Ltd	124,301	124,301	0	0	£0.00	£0.00
Valda Energy Ltd	7,420	7,420	0	0	£0.00	£0.00
Vattenfall Energy Trading GmbH	146	146	0	0	£0.00	£0.00
Yu Energy Retail Ltd	20,416	0	0	0	£1,079,598.08	£0.00
Totals	10,822,487	8,964,258	44,053	351,222	£97,888,759.12	£368,003.39

Licensee	RO Obligation (ROCs)	Total ROCs presented	Bioliquid ROCs presented	Banked ROCs presented	Buy-out Payment Made by Licensee	Late Payment Made by Licensee
Electric Ireland	389,966	389,966	0	0	£0.00	£0.00
Viridian Energy Supply Ltd	97,923	97,923	0	1,577	£0.00	£0.00
Power NI Energy Ltd	429,786	429,786	0	25,511	£0.00	£0.00
SSE Airtricity Energy Supply Ltd	295,018	295,018	0	0	£0.00	£0.00
Budget Energy Ltd	49,179	49,179	0	5,547	£0.00	£0.00
LCC Power Ltd	109,319	109,319	0	1,431	£0.00	£0.00
Flogas Enterprise Solutions	6,921	0	0	0	£365,982.48	£0.00
Click Energy	26,944	26,944	0	0	£0.00	£0.00
3T POWER LIMITED	11,624	5,217	0	0	£338,802.16	£0.00
Totals	1,416,680	1,403,352	0	34,066	£704,784.64	£0.00

Figure A1.4: Compliance by licensee¹⁰⁰ with the RO (Northern Ireland)

Figure A1.5: Summary of qualifying and non-qualifying bioliquid ROCs presented by suppliers towards their obligations since SY12

Compliance Period (CP) / Scheme Year	No. of Bioliquid ROCs submitted by suppliers which are exempt from the 4% cap	No. of Bioliquid ROCs submitted by suppliers which are included in the 4% cap	Total qualifying and non- qualifying Bioliquid ROCs presented
CP12 - 2013-14	851,836	143,498	995,334
CP13 - 2014-15	874,999	29,301	904,300
CP14 - 2015-16	1,352,131	58,973	1,411,104
CP15 - 2016-17	1,707,067	87,290	1,794,357
CP16 - 2017-18	2,180,927	181,429	2,362,356
CP17 - 2018-19	2,659,159	254,106	2,913,265
CP18 - 2019-20	2,718,830	235,812	2,954,642
CP19 - 2020-21	2,853,221	256,848	3,110,069
CP20 - 2021-22	3,011,031	262,290	3,273,321
CP21 - 2022-23	2,857,898	245,095	3,102,993

¹⁰⁰ The name of each Licensee in Figures A1.2 to A1.4 refers to a Licence group that is owned by its parent company (Supplier Group). For a complete list of supplier groups and their licences, please contact: <u>REcompliance@ofgem.gov.uk</u>

Figure A1.6: Suppliers with an obligation who did not meet the 1 July 2023 deadline to submit estimate supply volumes

Supplier Group
PX Supply Limited
United Gas & Power Trading Ltd
Pozitive Energy Ltd

Appendix 2 – Mutualisation payments

Figure A2.1: RO mutualisation payments received¹⁰¹ SY18

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Affect Energy Ltd	£9,721.51	£2,435.68	£2,435.68	£2,435.68	£2,435.68	£9,742.72
Alabama Energy Ltd	£2.16	£2.16	£0.00	£0.00	£0.00	£2.16
Ampoweruk Ltd	£12,037.54	£3,015.95	£0.00	£0.00	£0.00	£3,015.95
Avro Energy Ltd	£174,817.75	£43,799.72	£0.00	£0.00	£0.00	£43,799.72
AXPO UK Ltd	£90,562.54	£22,690.00	£22,690.00	£22,690.00	£22,690.00	£90,760.00
BES Commercial Electricity Ltd	£50,544.39	£12,663.65	£12,663.65	£12,663.65	£12,663.65	£50,654.60
Blue Green Energy	£398.05	£398.92	£0.00	£0.00	£0.00	£398.92
Bristol Energy	£46,327.37	£46,428.37	£0.00	£0.00	£0.00	£46,428.37
British Gas Trading Ltd	£3,370,537.34	£844,471.52	£844,471.52	£844,471.52	£844,471.52	£3,377,886.08
Brook Green Trading Ltd	£87,047.50	£21,809.32	£21,809.32	£21,809.32	£21,809.32	£87,237.28
Bruntwood Energy Services Ltd	£13,899.69	£13,930.00	£0.00	£0.00	£0.00	£13,930.00
Bryt Energy Ltd	£150,259.94	£37,646.89	£37,646.89	£37,646.89	£37,646.89	£150,587.56
Bulb Energy Ltd	£753,918.31	£188,890.52	£188,890.52	£188,890.52	£188,890.52	£755,562.08
Business Power and Gas Ltd	£44,702.80	£11,200.07	£11,200.07	£11,200.07	£11,200.07	£44,800.28
CNG Electricity Ltd	£1,702.50	£426.55	£0.00	£0.00	£0.00	£426.55
Co-Operative Energy Ltd	£47,302.27	£11,851.35	£11,851.35	£11,851.35	£11,851.35	£47,405.40
Corona Energy Retail 4 Ltd	£51,177.33	£12,822.23	£12,822.23	£25,644.46	£0.00	£51,288.92
Coulomb Energy Supply Ltd	£9,326.96	£2,336.82	£2,336.82	£2,336.82	£2,336.82	£9,347.28
Delta Gas and Power Ltd	£1,591.93	£398.85	£398.85	£398.85	£398.85	£1,595.40
Dirac Energy Supply Ltd	£1,109.20	£1,111.62	£0.00	£0.00	£0.00	£1,111.62
Dual Energy Direct Ltd	£62,549.83	£15,671.55	£15,671.55	£15,671.55	£15,671.55	£62,686.20
E (Gas and Electricity) Ltd	£65,433.81	£16,394.12	£16,394.12	£16,394.12	£16,394.12	£65,576.48
E.ON Energy Solutions Ltd	£1,879,220.10	£470,829.33	£470,829.33	£470,829.33	£470,829.33	£1,883,317.32
E.ON UK Plc	£1,376,942.57	£344,986.17	£344,986.17	£344,986.17	£344,986.17	£1,379,944.68
Eco Green Management Ltd	£7,068.91	£1,771.08	£1,771.08	£1,771.08	£1,771.08	£7,084.32
Eddington Energy Supply Ltd	£31,199.81	£7,816.96	£7,816.96	£0.00	£0.00	£15,633.92
EDF Energy Customers Ltd	£5,109,805.30	£1,280,236.53	£1,280,236.53	£1,280,236.53	£1,280,236.53	£5,120,946.12

¹⁰¹ Payments made by suppliers. Where a supplier's licence has been revoked with payments due, we will seek to make a claim with the relevant administrators for the outstanding balances. Any suppliers which are active and fail to pay by the relevant deadline are referred to our Enforcement team for consideration. Any suppliers that have overpaid are refunded.

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Edgware Energy	£4,378.83	£1,097.09	£1,097.09	£1,097.09	£1,097.09	£4,388.36
Electricity Plus Supply Ltd	£261,819.94	£65,597.69	£65,597.69	£65,597.69	£65,597.69	£262,390.76
ElectroRoute Energy Ltd	£8,261.18	£8,279.20	£0.00	£0.00	£0.00	£8,279.20
Eneco Energy Trade BV	£57,986.27	£14,528.17	£14,528.17	£14,528.17	£14,528.17	£58,112.68
ENGIE Power Ltd	£917,698.50	£229,924.84	£229,924.84	£229,924.84	£229,924.84	£919,699.36
Enstroga Ltd	£12,773.23	£0.00	£0.00	£0.00	£0.00	£0.00
EPG Energy Ltd	£5,464.30	£1,369.05	£1,369.05	£1,369.05	£1,369.05	£5,476.20
ESB Energy Ltd	£32,733.49	£32,804.88	£0.00	£0.00	£0.00	£32,804.88
Euston Energy Ltd	£266.18	£266.76	£0.00	£0.00	£0.00	£266.76
F & S Energy Ltd	£17,479.19	£17,517.30	£0.00	£0.00	£0.00	£17,517.30
Flexitricity Ltd	£597.35	£149.66	£149.66	£149.66	£149.66	£598.64
Flow Energy Ltd	£13,297.49	£13,326.48	£0.00	£0.00	£0.00	£13,326.48
Foxglove Energy Supply Ltd	£47,296.06	£11,849.80	£11,849.80	£11,849.80	£11,849.80	£47,399.20
Gazprom Marketing & Trading Retail Ltd	£65,983.16	£16,531.75	£16,531.75	£16,531.75	£16,531.75	£66,127.00
Good Energy Ltd	£68,509.81	£17,164.80	£17,164.80	£17,164.80	£17,164.80	£68,659.20
GoTo Energy (UK) Ltd	£1,532.06	£383.85	£0.00	£0.00	£0.00	£383.85
Green Energy (UK) plc	£12,572.05	£3,149.86	£3,149.86	£3,149.86	£3,149.86	£12,599.44
Green Energy Supply Ltd	£6,122.60	£1,533.99	£0.00	£0.00	£0.00	£1,533.99
Green Network Energy Ltd	£140,817.55	£0.00	£0.00	£0.00	£0.00	£0.00
Hartree Partners Supply (UK) Ltd	£145.90	£36.55	£109.65	£0.00	£0.00	£146.20
Haven Power Ltd	£1,343,361.47	£336,572.59	£336,572.59	£336,572.59	£336,572.59	£1,346,290.36
Hawking Energy Supply Ltd	£1,538.27	£1,541.62	£0.00	£0.00	£0.00	£1,541.62
Hudson Energy Supply UK Ltd	£218,650.28	£54,781.75	£54,781.75	£54,781.75	£54,781.75	£219,127.00
Igloo Energy Supply Ltd	£38,638.46	£9,680.67	£0.00	£0.00	£0.00	£9,680.67
Kensington Power Ltd	£75,019.40	£18,795.74	£18,795.74	£18,795.74	£18,795.74	£75,182.96
Limejump Energy Ltd	£1,919.33	£480.88	£480.88	£480.88	£480.88	£1,923.52
MA Energy Ltd	£10,586.11	£2,652.30	£0.00	£0.00	£0.00	£2,652.30
Marble Power Ltd	£24,155.17	£24,207.83	£0.00	£0.00	£0.00	£24,207.83
Marigold Energy Supply Ltd	£22.11	£22.16	£0.00	£0.00	£0.00	£22.16
Mint	£401.02	£401.88	£0.00	£0.00	£0.00	£401.88
Mississippi Energy Ltd	£1.35	£1.35	£0.00	£0.00	£0.00	£1.35
MVV Environment Services Ltd	£1,103.54	£276.49	£276.49	£276.49	£276.49	£1,105.96
Neon Reef Ltd	£25.08	£6.28	£0.00	£0.00	£0.00	£6.28
Npower Direct Ltd	£33,027.99	£8,275.00	£8,275.00	£8,275.00	£8,275.00	£33,100.00

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Npower Ltd	£2,834,539.55	£710,179.91	£710,179.91	£710,179.91	£710,179.91	£2,840,719.64
Npower Northern Supply Ltd	£683,342.20	£171,208.02	£513,624.06	£0.00	£0.00	£684,832.08
NPower Yorkshire Supply Ltd	£78,328.67	£19,624.86	£58,874.58	£0.00	£0.00	£78,499.44
Octopus Energy Ltd	£487,775.10	£122,209.65	£122,209.65	£122,209.65	£122,209.65	£488,838.60
Opus Energy (Corporate) Ltd	£248,089.06	£62,157.49	£62,157.49	£62,157.49	£62,157.49	£248,629.96
Opus Energy Ltd	£267,541.52	£67,031.21	£67,031.21	£67,031.21	£67,031.21	£268,124.84
Oreba Energy Supply Ltd	£566.60	£0.00	£0.00	£0.00	£0.00	£0.00
Orsted Power Sales (UK) Ltd	£547,834.42	£137,257.21	£137,257.21	£137,257.21	£137,257.21	£549,028.84
OVO Electricity Ltd	£836,608.83	£209,608.22	£209,608.22	£209,608.22	£209,608.22	£838,432.88
People's Energy (Supply) Ltd	£32,081.67	£8,037.90	£0.00	£0.00	£0.00	£8,037.90
PFP Energy Supplies Ltd	£24,427.55	£0.00	£0.00	£0.00	£0.00	£0.00
Power4All Ltd	£129,793.48	£32,519.12	£32,519.12	£32,519.12	£32,519.12	£130,076.48
Pozitive Energy Ltd	£126,504.17	£31,695.00	£31,695.00	£31,695.00	£31,695.00	£126,780.00
Pure Planet Ltd	£66,034.13	£16,544.52	£0.00	£0.00	£0.00	£16,544.52
PX Supply Ltd	£313.91	£78.65	£78.65	£78.65	£78.65	£314.60
Renewable Energy Company Ltd	£135,916.89	£34,053.31	£34,053.31	£34,053.31	£34,053.31	£136,213.24
Rose Energy Supply Ltd	£5,757.45	£0.00	£0.00	£0.00	£0.00	£0.00
Scottish Power Energy Retail Ltd	£1,859,143.61	£465,799.27	£465,799.27	£465,799.27	£465,799.27	£1,863,197.08
Shell Energy Retail Ltd	£304,541.38	£76,301.34	£76,301.34	£76,301.34	£76,301.34	£305,205.36
Shell Energy Supply UK Ltd	£52,107.47	£13,055.28	£39,165.81	£0.00	£0.00	£52,221.09
Simplicity Energy Ltd	£17,016.41	£0.00	£0.00	£0.00	£0.00	£0.00
Sing Power Ltd	£18,289.58	£4,582.36	£4,582.36	£4,582.36	£4,582.36	£18,329.44
SmartestEnergy Ltd	£921,025.30	£230,758.35	£230,758.35	£230,758.35	£230,758.35	£923,033.40
SO Energy Trading Ltd	£82,189.98	£20,592.29	£20,592.29	£20,592.29	£20,592.29	£82,369.16
South Wales Electricity Ltd	£950,486.20	£238,139.63	£238,139.63	£238,139.63	£238,139.63	£952,558.52
Spalt Energy Ltd	£16.45	£0.00	£4.12	£4.12	£8.24	£16.48
Squeaky Clean Energy Ltd	£35,199.74	£8,819.12	£8,819.12	£8,819.12	£8,819.12	£35,276.48
SSE Energy Supply Ltd	£1,932,656.83	£484,217.64	£484,217.64	£484,217.64	£484,217.64	£1,936,870.56
Statkraft Markets GmbH	£304.47	£305.14	£0.00	£0.00	£0.00	£305.14
Supply Energy Ltd	£493.52	£247.30	£0.00	£0.00	£155.05	£402.35
Switch Business Gas and Power Ltd	£632.67	£158.51	£158.51	£158.51	£158.51	£634.04
Symbio Energy	£9,192.39	£2,303.11	£0.00	£0.00	£0.00	£2,303.11

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Thistle Energy Supply Ltd	£15,396.97	£3,857.63	£0.00	£0.00	£0.00	£3,857.63
Tillicum Energy Ltd	£15.64	£3.92	£11.76	£0.00	£0.00	£15.68
Total Gas & Power Ltd	£1,286,094.98	£322,224.76	£322,224.76	£322,224.76	£322,224.76	£1,288,899.04
Tradelink Solutions Ltd	£74.70	£18.72	£18.72	£18.72	£18.72	£74.88
Tru Energy Ltd	£3,489.15	£874.19	£874.19	£874.19	£874.19	£3,496.76
UK Power Reserve Ltd	£789.63	£791.35	£0.00	£0.00	£0.00	£791.35
United Gas & Power Ltd	£15,202.26	£3,808.85	£3,808.85	£3,808.85	£3,808.85	£15,235.40
Utilita Energy Ltd	£334,137.12	£83,716.41	£83,716.41	£83,716.41	£83,716.41	£334,865.64
Valda Energy Ltd	£787.20	£197.23	£197.23	£197.23	£197.23	£788.92
Vattenfall Energy Trading GmbH	£4,846.73	£1,214.32	£1,214.32	£1,214.32	£1,214.32	£4,857.28
Washington Energy Ltd	£50,340.51	£0.00	£0.00	£0.00	£0.00	£0.00
Wilton Energy Ltd	£2,607.02	£2,612.70	£0.00	£0.00	£0.00	£2,612.70
Zebra Power Ltd	£7,234.50	£1,812.57	£0.00	£0.00	£0.00	£1,812.57
Total	£31,283,159.74	£7,897,861.25	£8,047,470.54	£7,440,689.95	£7,415,204.66	£30,801,226.40
Figure A2.2: ROS mutualisation payments received¹⁰² SY18

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Ampoweruk Ltd	£569.04	£142.57	£0.00	£0.00	£0.00	£142.57
Avro Energy Ltd	£4,076.71	£1,021.40	£0.00	£0.00	£0.00	£1,021.40
AXPO UK Ltd	£3,866.32	£968.69	£968.69	£968.69	£968.69	£3,874.76
BES Commercial Electricity Ltd	£2,907.33	£728.42	£728.42	£728.42	£728.42	£2,913.68
Blue Green Energy	£2.43	£2.44	£0.00	£0.00	£0.00	£2.44
Bristol Energy	£1,235.00	£1,237.69	£0.00	£0.00	£0.00	£1,237.69
British Gas Trading Ltd	£163,469.81	£40,956.55	£40,956.55	£40,956.55	£40,956.55	£163,826.20
Tillicum Energy Ltd	£1.06	£0.27	£0.81	£0.00	£0.00	£1.08
Brook Green Trading Ltd	£3,686.92	£923.74	£923.74	£923.74	£923.74	£3,694.96
Bruntwood Energy Services Ltd	£8.51	£8.53	£0.00	£0.00	£0.00	£8.53
Bryt Energy Ltd	£5,307.91	£1,329.87	£1,329.87	£1,329.87	£1,329.87	£5,319.48
Bulb Energy Ltd	£50,520.22	£12,657.59	£12,657.59	£12,657.59	£12,657.59	£50,630.36
Business Power and Gas Ltd	£1,934.83	£484.76	£484.76	£484.76	£484.76	£1,939.04
CNG Electricity Ltd	£41.32	£10.35	£0.00	£0.00	£0.00	£10.35
Co-Operative Energy Ltd	£1,345.74	£337.17	£337.17	£337.17	£337.17	£1,348.68
Corona Energy Retail 4 Ltd	£3,461.49	£867.26	£867.26	£1,734.52	£0.00	£3,469.04
Delta Gas and Power Ltd	£175.15	£43.88	£43.88	£43.88	£43.88	£175.52
Dual Energy Direct Ltd	£4,242.74	£1,063.00	£1,063.00	£1,063.00	£1,063.00	£4,252.00
E (Gas and Electricity) Ltd	£3,898.98	£976.87	£976.87	£976.87	£976.87	£3,907.48
E.ON Energy Solutions Ltd	£56,878.41	£14,250.60	£14,250.60	£14,250.60	£14,250.60	£57,002.40
E.ON UK Plc	£41,958.78	£10,512.57	£10,512.57	£10,512.57	£10,512.57	£42,050.28
Renewable Energy Company Ltd	£2,607.77	£653.37	£653.37	£653.37	£653.37	£2,613.48
EDF Energy Customers Ltd	£340,358.25	£85,275.08	£85,275.08	£85,275.08	£85,275.08	£341,100.32
Eneco energy Trade BV	£2,335.10	£585.05	£585.05	£585.05	£585.05	£2,340.20
ENGIE Power Ltd	£37,091.25	£9,293.03	£9,293.03	£9,293.03	£9,293.03	£37,172.12
Enstroga Ltd	£767.13	£0.00	£0.00	£0.00	£0.00	£0.00
EPG Energy Ltd	£67.75	£16.70	£16.97	£16.97	£16.97	£67.61
ESB Energy Ltd	£1,002.73	£1,004.92	£0.00	£0.00	£0.00	£1,004.92
F & S Energy Ltd	£489.44	£490.51	£0.00	£0.00	£0.00	£490.51
Foxglove Energy Supply Ltd	£2,713.05	£679.74	£679.74	£679.74	£679.74	£2,718.96
Flow Energy Ltd	£749.81	£751.44	£0.00	£0.00	£0.00	£751.44

¹⁰² Payments made by suppliers. Where a supplier's licence has been revoked with payments due, we will seek to make a claim with the relevant administrators for the outstanding balances. Any suppliers which are active and fail to pay by the relevant deadline are referred to our Enforcement team for consideration. Any suppliers that have overpaid are refunded.

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Gazprom Marketing & Trading Retail Ltd	£2,751.63	£689.41	£689.41	£689.41	£689.41	£2,757.64
Good Energy Ltd	£2,503.87	£627.33	£627.33	£627.33	£627.33	£2,509.32
GoTo Energy	£136.72	£34.25	£0.00	£0.00	£0.00	£34.25
Green Energy (UK) Plc	£290.75	£72.85	£72.85	£72.85	£72.85	£291.40
Green Energy Supply Ltd	£128.66	£32.24	£0.00	£0.00	£0.00	£32.24
Green Network Energy Ltd	£6,737.50	£0.00	£0.00	£0.00	£0.00	£0.00
Rose Energy Supply Ltd	£313.53	£0.00	£0.00	£0.00	£0.00	£0.00
Haven Power Ltd	£44,176.46	£11,068.20	£11,068.20	£11,068.20	£11,068.20	£44,272.80
Spalt Energy Ltd	£0.30	£0.00	£0.00	£0.08	£0.24	£0.32
Hudson Energy Supply UK Ltd	£9,279.50	£2,324.96	£2,324.93	£2,324.93	£2,324.93	£9,299.75
Igloo Energy Supply Ltd	£458.45	£114.86	£0.00	£0.00	£0.00	£114.86
Limejump Energy Ltd	£5.16	£1.29	£1.29	£1.29	£1.29	£5.16
MA Energy Ltd	£842.02	£210.96	£0.00	£0.00	£0.00	£210.96
Marble Power Ltd	£1,891.54	£1,895.68	£0.00	£0.00	£0.00	£1,895.68
Hawking Energy Supply Ltd	£122.13	£122.40	£0.00	£0.00	£0.00	£122.40
Oreba Energy Supply Ltd	£51.80	£0.00	£0.00	£0.00	£0.00	£0.00
MVV Environment Services Ltd	£34.03	£8.53	£8.53	£8.53	£8.53	£34.12
Neon Reef Ltd	£1.82	£0.46	£0.00	£0.00	£0.00	£0.46
Affect Energy Ltd	£19.44	£4.87	£4.87	£4.87	£4.87	£19.48
Octopus Energy Ltd	£20,816.93	£5,215.58	£5,215.58	£5,215.58	£5,215.58	£20,862.32
Opus Energy (Corporate) Ltd	£10,009.10	£2,507.73	£2,507.73	£2,507.73	£2,507.73	£10,030.92
Opus Energy Ltd	£13,132.75	£3,290.35	£3,290.35	£3,290.35	£3,290.35	£13,161.40
Thistle Energy Supply Ltd	£667.78	£167.21	£0.00	£0.00	£0.00	£167.21
Orsted Power Sales (UK) Ltd	£28,249.25	£7,077.71	£7,077.71	£7,077.71	£7,077.71	£28,310.84
OVO Electricity Ltd	£57,473.42	£14,399.68	£14,399.68	£14,399.68	£14,399.68	£57,598.72
People's Energy (Supply) Ltd	£2,530.76	£634.07	£0.00	£0.00	£0.00	£634.07
PFP Energy Supplies Ltd	£2,589.85	£0.00	£0.00	£0.00	£0.00	£0.00
Power4All Ltd	£9,733.54	£2,438.69	£2,438.69	£2,438.69	£2,438.69	£9,754.76
Pozitive Energy Ltd	£2,865.41	£717.91	£717.91	£717.91	£717.91	£2,871.64
Pure Planet Ltd	£4,385.08	£1,098.66	£0.00	£0.00	£0.00	£1,098.66
Edgware Energy Ltd	£35.39	£8.87	£8.87	£8.87	£8.87	£35.48
Npower Direct Ltd	£1,225.28	£306.99	£306.99	£306.99	£306.99	£1,227.96
Npower Ltd	£139,378.23	£34,920.53	£34,920.53	£34,920.53	£34,920.53	£139,682.12
Npower Northern Supply Ltd	£19,851.11	£4,973.60	£0.00	£0.00	£0.00	£4,973.60
NPower Yorkshire Supply Ltd	£8.35	£2.09	£6.27	£0.00	£0.00	£8.36

Licensee	Amount due	2019-20 Q1 Payment received	2019-20 Q2 Payment received	2019-20 Q3 Payment received	2019-20 Q4 Payment received	2019-20 Total received
Scottish Power Energy Retail Ltd	£245,636.96	£61,543.13	£61,543.13	£61,543.13	£61,543.13	£246,172.52
Shell Energy Retail Ltd	£9,137.77	£2,289.42	£2,289.42	£2,289.42	£2,289.42	£9,157.68
Shell Energy Supply UK Ltd	£13,267.49	£3,324.10	£9,972.30	£0.00	£0.00	£13,296.40
Supply Energy Ltd	£16.56	£8.30	£0.00	£0.00	£8.30	£16.60
SmartestEnergy Ltd	£25,499.59	£6,388.80	£6,388.80	£6,388.80	£6,388.80	£25,555.20
SO Energy Trading Ltd	£4,790.21	£1,200.16	£1,200.16	£1,200.16	£1,200.16	£4,800.64
Dirac Energy Supply Ltd	£11.39	£11.42	£0.00	£0.00	£0.00	£11.42
Squeaky Clean Energy Ltd	£2,385.84	£597.76	£597.76	£597.76	£597.76	£2,391.04
SSE Energy Supply Ltd	£144,561.58	£36,219.19	£36,219.19	£36,219.19	£36,219.19	£144,876.76
South Wales Electricity Ltd	£125,525.30	£31,449.74	£31,449.74	£31,449.74	£31,449.74	£125,798.96
Statkraft Markets GmbH	£65.17	£65.31	£0.00	£0.00	£0.00	£65.31
Switch Business Gas and Power Ltd	£36.00	£9.02	£9.02	£9.02	£9.02	£36.08
Symbio Energy	£363.82	£364.61	£0.00	£0.00	£0.00	£364.61
Eddington Energy Supply Ltd	£2,251.86	£564.19	£564.19	£0.00	£0.00	£1,128.38
Total Gas & Power Ltd	£46,491.06	£11,648.11	£11,648.11	£11,648.11	£11,648.11	£46,592.44
Tru Energy Ltd	£3.95	£0.99	£0.99	£0.99	£0.99	£3.96
United Gas & Power Ltd	£345.74	£86.62	£86.62	£86.62	£86.62	£346.48
Utilita Energy Ltd	£22,049.34	£5,524.35	£5,524.35	£5,524.35	£5,524.35	£22,097.40
Washington Energy Ltd	£2,309.13	£0.00	£0.00	£0.00	£0.00	£0.00
Electricity Plus Supply Ltd	£6,838.52	£1,713.36	£1,713.36	£1,713.36	£1,713.36	£6,853.44
Valda Energy Ltd	£72.16	£18.08	£18.08	£18.08	£18.08	£72.32
Vattenfall Energy Trading GmbH	£8.81	£2.21	£2.21	£2.21	£2.21	£8.84
Sinq Power Ltd	£6,004.09	£1,504.30	£1,504.30	£1,504.30	£1,504.30	£6,017.20
Eco Green Management Ltd	£396.78	£99.41	£99.41	£99.41	£99.41	£397.64
Kensington Power Ltd	£1,922.22	£481.60	£481.60	£481.60	£481.60	£1,926.40
Zebra Power Ltd	£225.28	£56.44	£0.00	£0.00	£0.00	£56.44
Total	£1,780,685.14	£447,412.64	£439,605.48	£429,929.25	£428,203.19	£1,745,150.56

Figure A2.3: RO mutualisation payments received¹⁰³ SY19

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Affect Energy Ltd	£19,597.52	£4,899.38	£4,899.38	£4,899.38	£4,899.38	£19,597.52
BES Commercial Electricity						
Ltd Bryt Energy	£254,417.72	£63,604.43	£63,604.43	£63,604.43	£63,604.43	£254,417.72
Ltd	£1,534,267.80	£383,566.95	£383,566.95	£383,566.95	£383,566.95	£1,534,267.80
AXPO UK Ltd	£644,057.76	£161,014.44	£161,014.44	£161,014.44	£161,014.44	£644,057.76
Coulomb Energy Supply Ltd	£80,444.48	£20,111.12	£20,111.12	£20,111.12	£20,111.12	£80,444.48
E (Gas and Electricity) Ltd	£476,955,72	£119.238.93	£119.238.93	£119,238.93	£119,238.93	£476 <i>.</i> 955.72
E.ON Energy	£13.296.662.16	£3.324.165.54	£3.324.165.54	£3.324.165.54	£3.324.165.54	£13.296.662.16
British Gas Trading Ltd	£24,042,951.84	£6,010,737.96	£6,010,737.96	£6,010,737.96	£6,010,737.96	£24,042,951.84
Brook Green Trading Ltd	£770,500.52	£192,625.13	£192,625.13	£192,625.13	£192,625.13	£770,500.52
E.ON Next Supply Ltd	£1,797,439.08	£449,359.77	£449,359.77	£449,359.77	£449,359.77	£1,797,439.08
Build UK Operations Limited	£6,439,225.48	£1,609,806.37	£4,829,419.11	£0.00	£0.00	£6,439,225.48
Power and Gas Ltd	£346,700.32	£86,675.08	£86,675.08	£86,675.07	£86,675.08	£346,700.31
E.ON UK Plc	£8,649,954.88	£2,162,488.72	£2,162,488.72	£2,162,488.72	£2,162,488.72	£8,649,954.88
EDF Energy Customers Ltd	£34,157,980.08	£8,539,495.02	£8,539,495.02	£8,539,495.02	£8,539,495.02	£34,157,980.08
Conrad Energy (Trading)						
Ltd Co-	£3,528.64	£3,528.64	£0.00	£0.00	£0.00	£3,528.64
Operative Energy Ltd	£498.08	£498.08	£0.00	£0.00	£0.00	£498.08
Corona Energy Retail 4 Ltd	£381,420.56	£381,420.56	£0.00	£0.00	£0.00	£381,420.56
RWE	£60,084.80	£15,021.20	£15,021.20	£15,021.20	£15,021.20	£60,084.80
Eneco energy Trade BV	£394,792.96	£98,698.24	£98,698.24	£98,698.24	£98,698.24	£394,792.96
EPG Energy Ltd	£35,652,40	£8,913.10	£8,913.10	£8,913.00	£8,913.10	£35,652.30
D-energi Trading Ltd	£54.00	£54.00	£0.00	£0.00	£0.00	£54.00
Farringdon Energy Ltd	£1,874.32	£468.58	£468.58	£468.58	£468.58	£1,874.32
Flexitricity Ltd	£5,230.96	£1,307.74	£1,307.74	£1,307.74	£1,307.74	£5,230.96

¹⁰³ Payments made by suppliers. Where a supplier's licence has been revoked with payments due, we will seek to make a claim with the relevant administrators for the outstanding balances. Any suppliers which are active and fail to pay by the relevant deadline are referred to our Enforcement team for consideration. Any suppliers that have overpaid are refunded.

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Foxglove Energy		Teceiveu	received	Teceiveu	received	
Supply Ltd Gazprom	£383,390.92	£95,847.73	£95,847.73	£95,847.73	£95,847.73	£383,390.92
Marketing &						
Retail Ltd	£370,516.60	£92,629.15	£92,629.15	£92,629.15	£92,629.15	£370,516.60
Yorkshire Gas & Power	£48,738.76	£12,184.69	£12,184.69	£12,184.69	£12,184.69	£48,738.76
Ecotricity	£1,016,656.76	£254,164.19	£254,164.19	£254,164.19	£254,164.19	£1,016,656.76
Green Energy (UK) Plc	£82.454.84	£20.613.71	£20.613.71	£20.613.71	£20.613.71	£82.454.84
Yu Energy trading as						
Kensington Power Ltd	£442,247.48	£110,561.87	£110,561.87	£110,561.87	£110,561.87	£442,247.48
Toucan Energy Ltd	£2,898.52	£724.63	£724.63	£724.63	£724.63	£2,898.52
Ovo Energy	£12,202,835.52	£3,050,708.88	£3,050,708.88	£3,050,708.88	£3,050,708.88	£12,202,835.52
Electricity Plus Supply Ltd	£1,977,885.52	£0.00	£988,942.76	£494,471.38	£494,471.38	£1,977,885.52
ElectroRoute Energy						
Pozitive	£28,287.08	£28,287.08	£0.00	£0.00	£0.00	£28,287.08
Energy Ltd	£851,305.04	£212,826.26	£212,826.26	£212,826.26	£212,826.26	£851,305.04
Power Ltd	£5,184,623.96	£1,296,155.99	£1,296,155.99	£1,296,155.99	£1,296,155.99	£5,184,623.96
PX Supply Limited	£2,292.40	£573.10	£573.10	£573.10	£573.10	£2,292.40
Scottish Power						
Energy Retail Ltd	£13,055,870.88	£3,263,967.72	£3,263,967.72	£3,263,967.72	£3,263,967.72	£13,055,870.88
ESB Energy	£337 260 64	£84 315 16	£252 945 48	£0.00	£0.00	£337 260 64
SmartestEne rgy Ltd	£5,332,902.60	£1,333,225.65	£1,333,225.65	£1,333,225.65	£1,333,225.65	£5,332,902.60
F & S Energy Ltd	£102.616.44	£102.616.44	£0.00	£0.00	£0.00	£102.616.44
SO Energy Trading Ltd	£817,576.96	£204,394.24	£204,394.24	£204,394.24	£204,394.24	£817,576.96
SSE PLC	£10,643,795.28	£2,660,948.82	£2,660,948.82	£2,660,948.82	£2,660,948.82	£10,643,795.28
Flow Energy Ltd	£4.00	£4.00	£0.00	£0.00	£0.00	£4.00
Total Gas & Power Ltd	£8,024,752.48	£2,006,188.12	£2,006,188.12	£2,006,188.12	£2,006,188.12	£8,024,752.48
Unify Energy Ltd	£92,184.56	£23,046.14	£23,046.14	£23,046.14	£23,046.14	£92,184.56
Utilita Energy Ltd	£2,417,292.52	£604,323.13	£604,323.13	£604,323.13	£604,323.13	£2,417,292.52
Energy Ltd	£17,075.08	£4,268.77	£4,268.77	£4,268.77	£4,268.77	£17,075.08
Good Energy Ltd	£491,852.40	£122,963.10	£122,963.10	£122,963.10	£122,963.10	£491,852.40
Sinq Power Ltd	£135,002.28	£33,750.57	£33,750.57	£33,750.57	£33,750.57	£135,002.28
HARTREE PARTNERS						
Ltd	£6,875.24	£1,718.81	£1,718.81	£3,437.62	£0.00	£6,875.24

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Haven Power Ltd	£9,310,999.72	£2,327,749.93	£2,327,749.93	£2,327,749.93	£2,327,749.93	£9,310,999.72
Home						
Trading Ltd	£88.00	£0.00	£88.00	£0.00	£0.00	£88.00
Limejump Energy Ltd	£6,301.12	£1,575.28	£1,575.28	£1,575.28	£1,575.28	£6,301.12
Logicor Energy Ltd	£358.08	£358.08	£0.00	£0.00	£0.00	£358.08
Marble Power Ltd	£239,145.00	£59,786.25	£59,786.25	£59,786.25	£59,786.25	£239,145.00
Maxen Power						
supply Ltd	£20,971.76	£5,242.94	£5,242.94	£5,242.94	£5,242.94	£20,971.76
Energy Ltd	£10.00	£10.00	£0.00	£0.00	£0.00	£10.00
MVV Environment Services Ltd	£14,462.60	£3,615.65	£3,615.65	£3,615.65	£3,615.65	£14,462.60
Octopus Energy Ltd	£6 112 162 68	£1 528 040 67	£1 528 040 67	£1 528 040 67	£1 528 040 67	£6 112 162 68
Opus Energy	20,112,102.00	21,520,040.07	21,520,040.07	21,520,040.07	21,520,040.07	20,112,102.00
(Corporate) Ltd	£1,433,619.72	£358,404.93	£358,404.93	£358,404.93	£358,404.93	£1,433,619.72
Opus Energy Ltd	£1,523,081.80	£380,770.45	£380,770.45	£380,770.45	£380,770.45	£1,523,081.80
Orsted Power Sales (UK) Ltd	£3,059,447,96	£764,861.99	£764.861.99	£764.861.99	£764.861.99	£3.059.447.96
P3P ENERGY	£3 960 72	£990.18	£990.18	£990.18	£990.18	£3 960 72
Power4All	23/3001/2	2550110	2550110	2550110	2330110	23/300172
Ltd Npower	£816,356.76	£204,089.19	£204,089.19	£408,178.38	£0.00	£816,356.76
Yorkshire	(262 567 16	COO 641 70	COO 641 70	COO 641 70	COD 641 70	(262 567 16
Npower	£302,307.10	290,041.79	290,041.79	290,041.79	290,041.79	2302,307.10
Northern Ltd	£3,081,283.88	£770,320.97	£770,320.97	£770,320.97	£770,320.97	£3,081,283.88
Npower Ltd	£17,022,809.96	£4,255,702.49	£4,255,702.49	£4,255,702.49	£4,255,702.49	£17,022,809.96
Retail Ltd	£2,552,106.76	£638,026.69	£638,026.69	£638,026.69	£638,026.69	£2,552,106.76
UK	£919,767.32	£229,941.83	£229,941.83	£229,941.83	£229,941.83	£919,767.32
SmartestEne rgy Business Ltd	£388,891.92	£97,222.98	£97,222.98	£97,222.98	£97,222.98	£388,891.92
SQUARE1	£68.00	£68.00	£0.00	£0.00	£0.00	£68.00
Squeaky	200.00	200.00	20.00	20.00	20.00	208.00
Clean Energy Ltd	£213.774.44	£53.443.61	£53.443.61	£53.443.61	£53.443.61	£213.774.44
Statkraft		2007.10101	2007.10101	2007.0001	2007.10101	
Markets GmbH	£3,104.56	£3,104.56	£0.00	£0.00	£0.00	£3,104.56
Switch Business						
Gas and Power I td	£3 880 68	£970 17	£970 17	£970 17	£970 17	£3 880 68
Tradelink				2,70.17		20,000.00
Solutions Ltd Tru Energy	£466.08	£116.52	£233.04	£0.00	±116.52	£466.08
Ltd	£32,175.80	£8,043.95	£8,043.95	£8,043.95	£8,043.95	£32,175.80
Reserve Ltd	£4,596.84	£4,596.84	£0.00	£0.00	£0.00	£4,596.84
United Gas & Power Ltd	£141.839.48	£35.459.87	£35.459.87	£35.459.87	£35.459.87	£141.839.48

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Vattenfall Energy Trading GmbH	£28 551 12	£28 551 12	£0.00	£0.00	£0.00	£28 551 12
Wilton Energy Ltd	£11,388.04	£11,388.04	£0.00	£0.00	£0.00	£11,388.04
Total	£204,771,724.80	£51,121,801.90	£54,934,706.80	£49,563,357.68	£49,151,858.31	£204,771,724.69

Figure A2.4: ROS mutualisation payments received¹⁰⁴ SY19

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Affect Energy Ltd	£39.40	£9.85	£9.85	£9.85	£9.85	£39.40
AXPO UK Ltd	£24,732.12	£6,183.03	£6,183.03	£6,183.03	£6,183.03	£24,732.12
BES Commercial Electricity Ltd	£15,963.96	£3,990.99	£3,990.99	£3,990.99	£3,990.99	£15,963.96
British Gas Trading Ltd	£1,276,425.56	£319,106.39	£319,106.39	£319,106.39	£319,106.39	£1,276,425.56
Brook Green Trading Ltd	£28,452.16	£7,113.04	£7,113.04	£7,113.04	£7,113.04	£28,452.16
Bryt Energy Ltd	£56,942.44	£14,235.61	£14,235.61	£14,235.61	£14,235.61	£56,942.44
Business Power and Gas Ltd	£15,861.48	£3,965.37	£3,965.37	£3,965.37	£3,965.37	£15,861.48
E (Gas and Electricity) Ltd	£35,557.32	£8,889.33	£8,889.33	£8,889.33	£8,889.33	£35,557.32
E.ON Energy Ltd	£453,988.24	£113,497.06	£113,497.06	£113,497.06	£113,497.06	£453,988.24
E.ON Next Supply Ltd	£37,806.20	£9,451.55	£9,451.55	£9,451.55	£9,451.55	£37,806.20
Bulb UK Operations Limited	£527,646.00	£131,911.50	£395,734.50	£0.00	£0.00	£527,646.00
E.ON UK Plc	£277,128.92	£69,282.23	£69,282.23	£69,282.23	£69,282.23	£277,128.92
Yorkshire Gas & Power	£2.754.60	£688.65	£688.65	£688.65	£688.65	£2,754.60
Ecotricity	£22,777,52	£5,694,38	£5,694,38	£5,694,38	£5,694,38	£22,777,52
Co-Operative Energy Ltd	£7.88	£7.88	£0.00	£0.00	£0.00	£7.88
Corona Energy Retail 4 Ltd	£25,337.68	£25,337.68	£0.00	£0.00	£0.00	£25,337.68
EDF Energy Customers Ltd	£2,510,933.44	£627,733.36	£627,733.36	£627,733.36	£627,733.36	£2,510,933.44
RWE	£1,857.40	£464.35	£464.35	£464.35	£464.35	£1,857.40
Eneco energy Trade BV	£22,241.56	£5,560.39	£5,560.39	£5,560.35	£5,560.39	£22,241.52
ENGIE Power Ltd	£259,582.12	£64,895.53	£64,895.53	£64,895.53	£64,895.53	£259,582.12
EPG Energy Ltd	£367.80	£91.95	£91.95	£91.95	£91.95	£367.80
Farringdon Energy Ltd	£161.56	£40.39	£40.39	£40.39	£40.39	£161.56
Foxglove Energy Supply Ltd	£24,441.80	£6,110.45	£6,110.45	£6,110.45	£6,110.45	£24,441.80
Gazprom Marketing & Trading Retail Ltd	£14 986 64	£3 746 66	£3 746 66	£3 746 66	£3 746 66	£14 986 64
Good Energy Ltd	£17 213 16	£4 303 29	£4 303 29	£4 303 29	£4 303 29	£17 213 16
Green Energy (UK) Plc	£2,188.44	£547.11	£547.11	£547.11	£547.11	£2,188,44
Haven Power I td	£332.743.32	£83,185,83	£83,185,83	£83.185.83	£83,185,83	£332.743.32
Electricity Plus Supply Ltd	£62,491.00	£0.00	£31,245.50	£15,622.75	£15,622.75	£62,491.00
Yu Energy trading as Kensington Power Ltd	£12,557.84	£3,139.46	£3,139.46	£3,139.46	£3,139.46	£12,557.84

¹⁰⁴ Where a supplier's licence has been revoked with payments due, we will seek to make a claim with the relevant administrators for the outstanding balances. Any suppliers which are active and fail to pay by the relevant deadline are referred to our Enforcement team for consideration. Any suppliers that have overpaid are refunded.

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Limejump Energy Ltd	£114.28	£28.57	£28.57	£28.57	£28.57	£114.28
Marble Power Ltd	£22,062.92	£5,515.73	£5,515.73	£5,515.73	£5,515.73	£22,062.92
MVV Environment Services Ltd	£5,624.76	£1,406.19	£1,406.19	£1,406.19	£1,406.19	£5,624.76
ESB Energy Ltd	£12,997.88	£3,249.47	£9,748.41	£0.00	£0.00	£12,997.88
Octopus Energy Ltd	£305,359.12	£76,339.78	£76,339.78	£76,339.78	£76,339.78	£305,359.12
F & S Energy Ltd	£2,507.64	£2,507.64	£0.00	£0.00	£0.00	£2,507.64
Opus Energy Ltd	£79,023.76	£19,755.94	£19,755.94	£19,755.94	£19,755.94	£79,023.76
Opus Energy (Corporate) Ltd	£83,346.76	£20,836.69	£20,836.69	£20,836.69	£20,836.69	£83,346.76
Ovo Energy	£1,432,867.88	£358,216.97	£358,216.97	£358,216.97	£358,216.97	£1,432,867.88
Pozitive Energy Ltd	£20,317.16	£5,079.29	£5,079.29	£5,079.29	£5,079.29	£20,317.16
Scottish Power Energy Retail Ltd	£1,957,863.08	£489,465.77	£489,465.77	£489,465.77	£489,465.77	£1,957,863.08
Retail Ltd	£98,494.96	£24,623.74	£24,623.74	£24,623.74	£24,623.74	£98,494.96
Shell Energy UK	£41,806.04	£10,451.51	£10,451.51	£10,451.51	£10,451.51	£41,806.04
SmartestEnergy Business Ltd	£25,668.68	£6,417.17	£6,417.17	£6,417.17	£6,417.17	£25,668.68
SmartestEnergy Ltd	£192,334.60	£48,083.65	£48,083.65	£48,083.65	£48,083.65	£192,334.60
SO Energy Trading Ltd	£56,344.76	£14,086.19	£14,086.19	£14,086.19	£14,086.19	£56,344.76
Squeaky Clean Energy Ltd	£16,912.36	£4,228.09	£4,228.09	£4,228.09	£4,228.09	£16,912.36
Trading Ltd	£1.32	£0.00	£1.32	£0.00	£0.00	£1.32
SSE PLC	£1,002,847.24	£250,711.81	£250,711.81	£250,711.81	£250,711.81	£1,002,847.24
Switch Business Gas and Power	6200.04	(52.21	(52.21	(52.21	(52.21	6200.04
Total Gas & Power	£208.84	£52.21	£52.21	£52.21	£52.21	£208.84
Ltd	£344,134.72	£86,033.68	£86,033.68	£86,033.68	£86,033.68	£344,134.72
Tru Energy Ltd	£47.28	£11.82	£11.82	£11.82	£11.82	£47.28
Ltd	£7.88	£7.88	£0.00	£0.00	£0.00	£7.88
Power Ltd	£6,539.00	£1,634.75	£1,634.75	£1,634.75	£1,634.75	£6,539.00
Utilita Energy Ltd	£182,017.72	£45,504.43	£45,504.43	£45,504.43	£45,504.43	£182,017.72
supply Ltd	£2,036.04	£509.01	£1,527.03	£0.00	£0.00	£2,036.04
Valda Energy Ltd	£1,322.76	£330.69	£330.69	£330.69	£330.69	£1,322.76
Sinq Power Ltd	£47,338.84	£11,834.71	£11,834.71	£11,834.71	£11,834.71	£47,338.84
Orsted Power Sales (UK) Ltd	£287,369.60	£71,842.40	£71,842.40	£71,842.40	£71,842.40	£287,369.60
Power4All Ltd	£72,035.48	£18,008.87	£18,008.87	£36,017.74	£0.00	£72,035.48
Npower Yorkshire Ltd	£34.16	£8.54	£8.54	£8.54	£8.54	£34.16
Npower Northern Ltd	£97,810.60	£24,452.65	£24,452.65	£24,452.65	£24,452.65	£97,810.60
Npower Ltd	£1,051,507.56	£262,876.89	£262,876.89	£262,876.89	£262,876.89	£1,051,507.56
SQUARE1 ENERGY	£1.32	£1.32	£0.00	£0.00	£0.00	£1.32
Statkraft Markets GmbH	£840.68	£840.68	£0.00	£0.00	£0.00	£840.68

License	Amount due	2020-21 Q1 Payment received	2020-21 Q2 Payment received	2020-21 Q3 Payment received	2020-21 Q4 Payment received	2020-21 Total received
Unify Energy Ltd	£21.00	£21.00	£0.00	£0.00	£0.00	£21.00
Vattenfall Energy Trading GmbH	£207.56	£207.56	£0.00	£0.00	£0.00	£207.56
Total	£13,513,163.80	£3,384,366.60	£3,658,021.74	£3,253,396.56	£3,217,378.86	£13,513,163.76

Figure A2.5: RO mutualisation payment redistribution SY18

Licensee	2019-20 Q1 Redistributions	2019-20 Q2 Redistributions	2019-20 Q3 Redistributions	2019-20 Q4 Redistributions	2019-20 Total redistributed
3T Power Ltd	£1,187	£1,041	£1,066	£1,008	£4,302
Ampoweruk Ltd	£1,493	£0	£0	£0	£1,493
AXPO UK Ltd	£26,724	£23,433	£24,000	£22,676	£96,833
Bristol Energy	£0	£0	£0	£0	£0
British Gas Trading Ltd	£1,000,313	£877,134	£898,376	£848,826	£3,624,649
Brook Green Trading Ltd	£16,866	£14,789	£15,147	£14,312	£61,114
Bruntwood Energy Services Ltd	£394	£345	£354	£334	£1,427
Bryt Energy Ltd	£43,801	£38,407	£39,337	£37,167	£158,712
Budget Energy Ltd	£3,660	£3,210	£3,287	£3,106	£13,263
Bulb Energy Ltd	£17,153	£15,041	£15,405	£14,555	£62,154
Business Power and Gas Ltd	£419	£367	£376	£355	£1,517
Click Energy	£1,546	£1,355	£1,388	£1,312	£5,601
Co-Operative Energy Ltd	£5,502	£4,824	£4,941	£4,668	£19,935
Corona Energy Retail 4 Ltd	£15,723	£13,787	£14,121	£13,342	£56,973
Dual Energy Direct Ltd	£19,223	£16,856	£17,264	£16,312	£69,655
E (Gas and Electricity) Ltd	£19,847	£17,403	£17,824	£16,841	£71,915
E.ON Energy Solutions Ltd	£543,167	£476,281	£487,815	£460,910	£1,968,173
E.ON UK Plc	£398,127	£349,101	£357,556	£337,835	£1,442,619
Eco Green Management Ltd	£2,131	£1,868	£1,913	£1,808	£7,720
EDF Energy Customers Ltd	£1,428,699	£1,252,769	£1,283,108	£1,212,339	£5,176,915
Edgware Energy Ltd	£221	£194	£199	£188	£802
Electric Ireland	£20,235	£17,744	£18,173	£17,171	£73,323
Electricity Plus Supply Ltd	£74,983	£65,749	£67,342	£63,627	£271,701
Eneco energy Trade BV	£17,042	£14,944	£15,305	£14,461	£61,752
Energia	£14,472	£12,690	£12,997	£12,280	£52,439
ENGIE Power Ltd	£264,123	£231,599	£237,208	£224,125	£957,055
Enstroga Ltd	£0	£0	£0	£0	£0
EPG Energy Ltd	£236	£207	£212	£200	£855
ESB Energy Ltd	£9,467	£8,301	£8,502	£8,033	£34,303
F & S Energy Ltd	£529	£463	£475	£449	£1,916
Gazprom Marketing & Trading Retail Ltd	£19,439	£17,045	£17,458	£16,495	£70,437
Go Power	£5,499	£4,822	£4,939	£4,666	£19,926
Good Energy Ltd	£20,011	£17,547	£17,972	£16,980	£72,510
GoTo Energy (UK) Ltd	£0	£0	£0	£0	£0
Green Energy (UK) plc	£3,590	£3,148	£3,224	£3,046	£13,008

Licensee	2019-20 Q1 Redistributions	2019-20 Q2 Redistributions	2019-20 Q3 Redistributions	2019-20 Q4 Redistributions	2019-20 Total redistributed
Hartree Partners Supply (UK) Ltd	£19	£17	£17	£16	£69
Haven Power Ltd	£388,986	£341,086	£349,347	£330,079	£1,409,498
Hudson Energy Supply UK Ltd	£64,494	£56,552	£57,922	£54,727	£233,695
I Supply Energy Ltd	£0	£0	£0	£0	£0
Kensington Power Ltd	£2,958	£2,594	£2,657	£2,510	£10,719
Limejump Energy Ltd	£528	£463	£475	£448	£1,914
MVV Environment Services 1td	£319	£279	£286	£270	£1,154
Npower Direct Ltd	£9,246	£8,108	£8,304	£7,846	£33,504
Npower Ltd	£843,610	£739,727	£757,642	£715,854	£3,056,833
Npower Northern Supply Ltd	£196,679	£172,460	£176,636	£166,894	£712,669
NPower Yorkshire Supply Ltd	£21,440	£18,800	£19,255	£18,193	£77,688
Octopus Energy Ltd	£74,011	£64,898	£66,469	£62,803	£268,181
Opus Energy (Corporate) Ltd	£72,924	£63,944	£65,493	£61,881	£264,242
Opus Energy Ltd	£79,781	£69,957	£71,651	£67,699	£289,088
Orsted Power Sales (UK) Ltd	£164,027	£143,828	£147,312	£139,187	£594,354
OVÓ Electricity Ltd	£257,469	£225,764	£231,231	£218,478	£932,942
People's Energy (Supply) Ltd	£0	£0	£0	£0	£0
PFP Energy Supplies Ltd	£0	£0	£0	£0	£0
Power NI Energy Ltd	£33,872	£29,701	£30,420	£28,742	£122,735
Pozitive Energy Ltd	£36,095	£31,650	£32,417	£30,629	£130,791
Pure Planet Ltd	£0	£0	£0	£0	£0
Renewable Energy Company Ltd	£25,882	£22,695	£23,245	£21,963	£93,785
Saphir Energy Ltd	£13	£11	£12	£11	£47
Scottish Power Energy Retail Ltd	£629,579	£552,053	£565,422	£534,236	£2,281,290
Shell Energy Retail Ltd	£87,985	£77,150	£79,019	£74,660	£318,814
Shell Energy Supply UK Ltd	£20,753	£18,198	£18,638	£17,610	£75,199
Sinq Power Ltd	£2,816	£2,470	£2,529	£2,390	£10,205
SmartestEnergy Ltd	£265,054	£232,415	£238,043	£224,914	£960,426
SO Energy Trading Ltd	£24,877	£21,813	£22,342	£21,109	£90,141
South Wales Electricity Ltd	£158,115	£138,644	£142,002	£134,170	£572,931
Squeaky Clean Energy Ltd	£10,207	£8,950	£9,167	£8,661	£36,985
SSE Airtricity Energy Supply 1td	£20,698	£18,149	£18,589	£17,564	£75,000
SSE Energy Supply Ltd	£600,413	£526,478	£539,228	£509,487	£2,175,606
Thistle Energy	£4,548	£0	£0	£0	£4,548
Tonik Energy Ltd	£0	£0	£0	£0	£0

Licensee	2019-20 Q1 Redistributions	2019-20 Q2 Redistributions	2019-20 Q3 Redistributions	2019-20 Q4 Redistributions	2019-20 Total redistributed
Total Gas & Power Ltd	£375,414	£329,186	£337,158	£318,562	£1,360,320
Tradelink Solutions Ltd	£20	£17	£18	£17	£72
Utilita Energy Ltd	£61,028	£53,513	£54,809	£51,786	£221,136
Valda Energy Ltd	£251	£220	£225	£213	£909
Vattenfall Energy Trading GmbH	£1,333	£1,169	£1,197	£1,131	£4,830
Washington Energy Ltd	£0	£0	£0	£0	£0
Wilton Energy Ltd	£715	£627	£642	£606	£2,590
Total	£8,531,981	£7,476,050	£7,657,103	£7,234,773	£30,899,907

Figure A2.6: ROS mutualisation payment redistribution SY18

Licensee	2019-20 Q1 Redistributions	2019-20 Q2 Redistributions	2019-20 Q3 Redistributions	2019-20 Q4 Redistributions	2019-20 Total redistributed
3T Power Ltd	£55	£61	£59	£59	£234
Ampoweruk Ltd	£70	£0	£0	£0	£70
AXPO UK Ltd	£1,255	£1,378	£1,349	£1,341	£5,323
Bristol Energy	£0	£0	£0	£0	£0
British Gas Trading Ltd	£46,996	£51,600	£50,513	£50,223	£199,332
Brook Green Trading Ltd	£792	£870	£851	£846	£3,359
Bruntwood Energy Services Ltd	£18	£20	£19	£19	£76
Bryt Energy Ltd	£2,057	£2,259	£2,211	£2,199	£8,726
Budget Energy Ltd	£171	£188	£184	£183	£726
Bulb Energy Ltd	£805	£884	£866	£861	£3,416
Business Power and Gas Ltd	£19	£21	£21	£21	£82
Click Energy	£72	£79	£78	£77	£306
Co-Operative Energy Ltd	£258	£283	£277	£276	£1,094
Corona Energy Retail 4 Ltd	£738	£811	£793	£789	£3,131
Dual Energy Direct Ltd	£903	£991	£970	£965	£3,829
E (Gas and Electricity) Ltd	£932	£1,023	£1,002	£996	£3,953
E.ON Energy Solutions Ltd	£25,518	£28,018	£27,428	£27,271	£108,235
E.ON UK Plc	£18,704	£20,536	£20,104	£19,989	£79,333
Eco Green Management Ltd	£100	£109	£107	£106	£422
EDF Energy Customers Ltd	£67,122	£73,697	£72,145	£71,731	£284,695
Edgware Energy Ltd	£10	£11	£11	£11	£43
Electric Ireland	£950	£1,043	£1,021	£1,016	£4,030
Electricity Plus Supply Ltd	£3,522	£3,867	£3,786	£3,764	£14,939
Eneco energy Trade BV	£800	£879	£860	£855	£3,394
Energia	£679	£746	£730	£726	£2,881
ENGIE Power Ltd	£12,408	£13,624	£13,337	£13,261	£52,630
Enstroga Ltd	£0	£0	£0	£0	£0
EPG Energy Ltd	£11	£12	£11	£11	£45
ESB Energy Ltd	£444	£488	£478	£475	£1,885
F & S Energy Ltd	£24	£27	£26	£26	£103
Gazprom Marketing & Trading Retail Ltd	£913	£1,002	£981	£975	£3,871
Go Power	£258	£283	£277	£276	£1,094
Good Energy Ltd	£940	£1,032	£1,010	£1,004	£3,986
GoTo Energy (UK) Ltd	£0	£0	£0	£0	£0
Green Energy (UK) plc	£168	£185	£181	£180	£714

Licensee	2019-20 Q1 Redistributions	2019-20 Q2 Redistributions	2019-20 Q3 Redistributions	2019-20 Q4 Redistributions	2019-20 Total redistributed
Hartree Partners Supply (UK) Ltd	£0	£1	£0	£0	£1
Haven Power Ltd	£18,275	£20,065	£19,642	£19,530	£77,512
Hudson Energy Supply UK Ltd	£3,030	£3,326	£3,256	£3,238	£12,850
I Supply Energy Ltd	£0	£0	£0	£0	£0
Kensington Power Ltd	£139	£152	£149	£148	£588
Limejump Energy Ltd	£24	£27	£26	£26	£103
MVV Environment Services Ltd	£14	£16	£16	£16	£62
Npower Direct Ltd	£434	£476	£466	£464	£1,840
Npower Ltd	£39,634	£43,516	£42,600	£42,355	£168,105
Npower Northern Supply Ltd	£9,240	£10,145	£9,931	£9,874	£39,190
NPower Yorkshire Supply Ltd	£1,007	£1,105	£1,082	£1,076	£4,270
Octopus Energy Ltd	£3,477	£3,817	£3,737	£3,715	£14,746
Opus Energy (Corporate) Ltd	£3,426	£3,761	£3,682	£3,661	£14,530
Opus Energy Ltd	£3,748	£4,115	£4,028	£4,005	£15,896
Orsted Power Sales (UK) Ltd	£7,706	£8,461	£8,282	£8,235	£32,684
OVO Electricity Ltd	£12,096	£13,281	£13,001	£12,926	£51,304
People's Energy (Supply) Ltd	£0	£0	£0	£0	£0
PFP Energy Supplies Ltd	£0	£0	£0	£0	£0
Power NI Energy Ltd	£1,591	£1,747	£1,710	£1,700	£6,748
Pozitive Energy Ltd	£1,695	£1,861	£1,822	£1,812	£7,190
Pure Planet Ltd	£0	£0	£0	£0	£0
Renewable Energy Company Ltd	£1,216	£1,335	£1,307	£1,299	£5,157
Saphir Energy Ltd	£0	£0	£0	£0	£0
Scottish Power Energy Retail Ltd	£29,578	£32,476	£31,792	£31,609	£125,455
Shell Energy Retail Ltd	£4,133	£4,538	£4,443	£4,417	£17,531
Shell Energy Supply UK Ltd	£975	£1,070	£1,048	£1,042	£4,135
Sing Power Ltd	£132	£145	£142	£141	£560
SmartestEnergy Ltd	£12,452	£13,672	£13,384	£13,307	£52,815
SO Energy Trading Ltd	£1,168	£1,283	£1,256	£1,249	£4,956
South Wales Electricity Ltd	£7,428	£8,156	£7,984	£7,938	£31,506
Squeaky Clean Energy Ltd	£479	£526	£515	£512	£2,032
SSE Airtricity Energy Supply Ltd	£972	£1,067	£1,045	£1,039	£4,123
SSE Energy Supply	£28,208	£30,971	£30,319	£30,145	£119,643
Thistle Energy Supply Ltd	£213	£0	£0	£0	£213
Tonik Energy Ltd	£0	£0	£0	£0	£0

Licensee	2019-20 Q1 Redistributions	2019-20 Q2 Redistributions	2019-20 Q3 Redistributions	2019-20 Q4 Redistributions	2019-20 Total redistributed
Total Gas & Power Ltd	£17,637	£19,365	£18,957	£18,848	£74,807
Tradelink Solutions Ltd	£0	£1	£1	£1	£3
Utilita Energy Ltd	£2,867	£3,148	£3,081	£3,064	£12,160
Valda Energy Ltd	£11	£12	£12	£12	£47
Vattenfall Energy Trading GmbH	£62	£68	£67	£66	£263
Washington Energy Ltd	£0	£0	£0	£0	£0
Wilton Energy Ltd	£33	£36	£36	£35	£140
Total	£400,812	£439,768	£430,505	£428,037	£1,699,122

Figure A2.7: RO mutualisation payment redistribution SY19

License	2020-21 Q1 Redistributions	2020-21 Q2 Redistributions	2020-21 Q3 Redistributions	2020-21 Q4 Redistributions	2020-21 Total Redistributed
3T Power Ltd	£6,545	£7,030	£6,359	£6,296	£26,230
AXPO UK Ltd	£165,980	£178,294	£161,267	£159,675	£665,216
BES Commercial Electricity Ltd	£67,862	£72,897	£65,935	£65,284	£271,978
Bright Energy	£25	£27	£25	£24	£101
British Gas Trading Ltd	£6,327,050	£6,796,469	£6,147,400	£6,086,722	£25,357,641
Brook Green Trading Ltd	£146,109	£156,949	£141,961	£140,559	£585,578
Bryt Energy Ltd	£393,266	£422,443	£382,099	£378,328	£1,576,136
Budget Energy Ltd	£29,413	£31,595	£28,578	£28,296	£117,882
Bulb UK Operations Limited	£1,140,206	£1,224,801	£1,107,831	£1,096,896	£4,569,734
4 Ltd	£102,259	£109,846	£99,356	£98,375	£409,836
E (Gas and Electricity) Ltd	£129,309	£138,902	£125,637	£124,397	£518,245
E.ON Energy Ltd	£3,405,693	£3,658,370	£3,308,992	£3,276,330	£13,649,385
E.ON Next Supply Ltd	£451,643	£485,152	£438,820	£434,488	£1,810,103
E.ON UK Plc	£2,208,775	£2,372,649	£2,146,059	£2,124,876	£8,852,359
Ecotricity	£138,929	£149,237	£134,985	£133,652	£556,803
EDF Energy Customers Ltd	£8,938,306	£9,601,461	£8,684,512	£8,598,791	£35,823,070
Electric Ireland	£160,121	£172,001	£155,575	£154,039	£641,736
Electricity Plus Supply Ltd	£504,730	£542,177	£490,398	£485,558	£2,022,863
ElectroRoute Energy Trading Ltd	£117	£126	£114	£112	£469
Eneco energy Trade BV	£104,367	£112,110	£101,404	£100,403	£418,284
ENGIE Power Ltd	£1,358,556	£1,459,351	£1,319,982	£1,306,953	£5,444,842
ESB Energy Ltd	£86,932	£93,382	£84,464	£83,630	£348,408
F & S Energy Ltd	£3,260	£3,502	£3,167	£3,136	£13,065
Gazprom Marketing & Trading Retail Ltd	£95,767	£102,872	£93,047	£92,129	£383,815
Good Energy Ltd	£126,134	£135,492	£122,553	£121,343	£505,522
Green Energy (UK) Plc	£20,886	£22,436	£20,293	£20,093	£83,708
HARTREE PARTNERS SUPPLY (UK) Ltd	£1,673	£1,798	£1,626	£1,610	£6,707
Haven Power Ltd	£2,390,341	£2,567,686	£2,322,469	£2,299,545	£9,580,041
LCC Power Ltd	£49,985	£53,694	£48,566	£48,086	£200,331
Limejump Energy Ltd	£1,576	£1,693	£1,531	£1,516	£6,316
Npower Ltd	£4,496,448	£4,830,051	£4,368,776	£4,325,654	£18,020,929
Npower Northern Ltd	£779,593	£837,434	£757,458	£749,981	£3,124,466

License	2020-21 Q1 Redistributions	2020-21 Q2 Redistributions	2020-21 Q3 Redistributions	2020-21 Q4 Redistributions	2020-21 Total Redistributed
Npower Yorkshire Ltd	£87,478	£93,968	£84,994	£84,155	£350,595
Octopus Energy Ltd	£394,834	£424,127	£383,623	£379,836	£1,582,420
Opus Energy (Corporate) Ltd	£379,948	£408,138	£369,160	£365,516	£1,522,762
Opus Energy Ltd	£400,127	£429,814	£388,766	£384,929	£1,603,636
Orsted Power Sales (UK) Ltd	£851,438	£914,608	£827,262	£819,096	£3,412,404
Ovo Energy	£3,502,312	£3,762,158	£3,402,868	£3,369,280	£14,036,618
Power NI Energy Ltd	£215,366	£231,345	£209,251	£207,186	£863,148
Pozitive Energy Ltd	£5,041	£5,415	£4,898	£4,849	£20,203
Scottish Power Energy Retail Ltd	£3,904,653	£4,194,350	£3,793,785	£3,756,338	£15,649,126
Shell Energy Retail Ltd	£657,886	£706,696	£639,206	£632,896	£2,636,684
Shell Energy UK	£239,438	£257,202	£232,639	£230,343	£959,622
Sinq Power Ltd	£50,420	£54,161	£48,989	£48,505	£202,075
SmartestEnergy Business Ltd	£104,201	£111,932	£101,242	£100,243	£417,618
SmartestEnergy Ltd	£1,369,725	£1,471,348	£1,330,833	£1,317,697	£5,489,603
SO Energy Trading Ltd	£1,754	£1,884	£1,704	£1,688	£7,030
Squeaky Clean Energy Ltd	£58,275	£62,598	£56,620	£56,061	£233,554
SSE Airtricity Energy Supply Ltd	£126,478	£135,862	£122,887	£121,674	£506,901
SSE PLC	£2,359,925	£2,535,014	£2,292,917	£2,270,285	£9,458,141
Total Gas & Power Ltd	£2,081,399	£2,235,823	£2,022,299	£2,002,338	£8,341,859
Tradelink Solutions Ltd	£113	£121	£110	£109	£453
UK Power Reserve Ltd	£1,119	£1,202	£1,087	£1,076	£4,484
Unify Energy Ltd	£2,683	£2,882	£2,606	£2,581	£10,752
Utilita Energy Ltd	£297,089	£319,131	£288,654	£285,804	£1,190,678
Valda Energy Ltd	£4,647	£4,992	£4,515	£4,471	£18,625
Vattenfall Energy Trading GmbH	£7,028	£7,549	£6,828	£6,761	£28,166
Viridian Energy Supply Ltd	£58,063	£62,370	£56,414	£55,857	£232,704
Wilton Energy Ltd	£2,772	£2,978	£2,693	£2,667	£11,110
Yorkshire Gas & Power	£12,887	£13,844	£12,521	£12,398	£51,650
Vu Enorgy trading as					
Kensington Power Ltd	£84,130	£90,372	£81,741	£80,934	£337,177
Totals	£51 093 085	£54 883 811	£49 642 351	£49 152 350	£204 771 597

Figure A2.8: ROS mutualisation payment redistribution SY19

License	2020-21 Q1 Redistributions	2020-21 Q2 Redistributions	2020-21 Q3 Redistributions	2020-21 Q4 Redistributions	2020-21 Total Redistributed
3T Power Ltd	£433	£463	£421	£412	£1,729
AXPO UK Ltd	£10,994	£11,762	£10,690	£10,451	£43,897
BES Commercial	64.405	C4 000	64.270	64.272	C17 0 17
Electricity Ltd	£4,495	£4,809	£4,370	£4,273	£17,947
Bright Energy British Gas Trading	£1	±1	±1	£1	±4
Ltd	£419,098	£448,362	£407,511	£398,419	£1,673,390
Brook Green Trading Ltd	£9,678	£10,353	£9,410	£9,200	£38,641
Bryt Energy Ltd	£26,049	£27,868	£25,329	£24,764	£104,010
Budget Energy Ltd	£1,948	£2,084	£1,894	£1,852	£7,778
Bulb UK Operations Limited	£75,526	£80,799	£73,438	£71,799	£301,562
Corona Energy Retail 4 Ltd	£6,773	£7,246	£6,586	£6,439	£27,044
E (Gas and		60.162	co 220	60.142	624 100
	£8,303	£9,103	£8,328	£8,142	£34,198
E.ON Energy Ltd	£225,590	£241,342	£219,353	£214,459	£900,744
Ltd	£29,916	£32,005	£29,089	£28,440	£119,450
E.ON UK Plc	£146,307	£156,523	£142,262	£139,088	£584,180
Ecotricity	£9,202	£9,845	£8,948	£8,748	£36,743
EDF Energy	£502.066	£633 407	575 696	1562 853	£2 364 022
Electric Ireland	£10,606	£11 346	£10 313	£10.082	£2,504,022 £42 347
Electricity Plus Supply Ltd	£33,432	£35.767	£32,508	£31,783	£133,490
ElectroRoute	£7	£8	£7	£7	£29
Eneco energy	27	20	2,	27	
Trade BV	£6,913	£7,395	£6,722	£6,572	£27,602
ENGIE Power Ltd	£89,989	£96,273	£87,501	£85,549	£359,312
ESB Energy Ltd	£5,758	£6,160	£5,599	£5,474	£22,991
F & S Energy Ltd	£215	£231	£209	£205	£860
Marketing &					
Trading Retail Ltd	£6,343	£6,786	£6,168	£6,030	£25,327
Good Energy Ltd	£8,355	£8,938	£8,124	£7,942	£33,359
Green Energy (UK) Plc	£1,383	£1,480	£1,345	£1,315	£5,523
HARTREE PARTNERS SUPPLY					
(UK) Ltd	£110	£118	£107	£105	£440
Haven Power Ltd	£158,334	£169,389	£153,956	£150,521	£632,200
LCC Power Ltd	£3,311	£3,542	£3,219	£3,147	£13,219
Limejump Energy Ltd	£104	£111	£101	£99	£415
Npower Ltd	£297,841	£318,637	£289,606	£283,145	£1,189,229
Npower Northern Ltd	£51,639	£55,245	£50,211	£49,091	£206,186
Npower Yorkshire Ltd	£5,794	£6,199	£5,634	£5,508	<u>£23,13</u> 5
Octopus Energy Ltd	£26.153	£27.979	£25.430	£24.863	£104.425

License	2020-21 Q1 Redistributions	2020-21 Q2 Redistributions	2020-21 Q3 Redistributions	2020-21 Q4 Redistributions	2020-21 Total Redistributed
Opus Energy (Corporate) Ltd	£25,167	£26,924	£24,471	£23,925	£100,487
Opus Energy Ltd	£26,504	£28,354	£25,771	£25,196	£105,825
Orsted Power Sales (UK) Ltd	£56,398	£60,336	£54,839	£53,615	£225,188
Ovo Energy	£231,990	£248,189	£225,576	£220,543	£926,298
Power NI Energy Ltd	£14,265	£15,261	£13,871	£13,561	£56,958
Pozitive Energy Ltd	£333	£357	£324	£317	£1,331
Scottish Power Energy Retail Ltd	£258,641	£276,700	£251,490	£245,879	£1,032,710
Shell Energy Retail Ltd	£43,577	£46,620	£42,372	£41,427	£173,996
Shell Energy UK	£15,860	£16,967	£15,421	£15,077	£63,325
Sing Power Ltd	£3,339	£3,573	£3,247	£3,175	£13,334
SmartestEnergy Business Ltd	£6,902	£7,384	£6,711	£6,561	£27,558
SmartestEnergy Ltd	£90,729	£97,064	£88,220	£86,252	£362,265
SO Energy Trading Ltd	£116	£124	£113	£110	£463
Squeaky Clean Energy Ltd	£3,860	£4,129	£3,753	£3,669	£15,411
SSE Airtricity Energy Supply Ltd	£8,377	£8,962	£8,146	£7,964	£33,449
SSE PLC	£156,319	£167,234	£151,997	£148,606	£624,156
Total Gas & Power Ltd	£137,870	£147,496	£134,058	£131,067	£550,491
Tradelink Solutions Ltd	£7	£8	£7	£7	£29
UK Power Reserve Ltd	£74	£79	£72	£70	£295
Unify Energy Ltd	£177	£190	£172	£168	£707
Utilita Energy Ltd	£19,678	£21,053	£19,134	£18,708	£78,573
Valda Energy Ltd	£307	£329	£299	£292	£1,227
Vattenfall Energy Trading GmbH	£465	£498	£452	£442	£1,857
Viridian Energy Supply Ltd	£3,846	£4,114	£3,739	£3,656	£15,355
Wilton Energy Ltd	£183	£196	£178	£174	£731
Yorkshire Gas & Power	£853	£913	£830	£811	£3,407
Yu Energy trading as Kensington Power Ltd	£5 572	£5 961	£5 418	£5 297	£77 748
Totals	£3, <u>384,33</u> 7	£3, <u>620,651</u>	£3,290,767	£3, <u>217,347</u>	£13,513,102

Appendix 3 – ROC recycle value

Scheme year	Total of buy- out and late payments redistributed	Total ROCs presented (m)	Recycle value per ROC presented	Worth of a ROC to a supplier	Average ROCs issued/MWh	Support per MWh supplied
SY9	£358m	25.0m	£14.35	£51.34	1.07	£54.93
SY10	£123m	34.4m	£3.58	£42.27	1.12	£47.34
SY11	£164m	44.8m	£3.67	£44.38	1.27	£56.36
SY12	£42m	60.8m	£0.70	£42.72	1.27	£54.25
SY13	£25m	71.3m	£0.35	£43.65	1.28	£55.87
SY14	£0m	84.4m	£0	£44.33	1.31	£58.07
SY15	£460m	90.2m	£5.10	£49.87	1.32	£65.83
SY16	£604m	103.2m	£5.85	£51.43	1.34	£68.92
SY17	£842m	107.6m	£7.82	£55.04	1.34	£73.75
SY18	£655m	115.9m	£5.65	£54.43	1.35	£73.48
SY19	£466m	105.3m	£4.42	£54.47	1.36	£74.03
SY20	£813m	109.3m	£7.44	£58.24	1.35	£78.48
SY21	£740m	107.7m	£6.88	£59.76	1.35	£80.58

Figure A3.1 - Determination of ROC recycle value since SY9

Appendix 4 – Using the public reports

Several reports on the Renewables Obligation scheme are publicly available via the Renewables and CHP Register. To assist readers who may wish to analyse the data upon which chapters 2 and 3 are largely based, this section gives further information on the two reports used – the 'Accredited Stations' and 'Certificates' reports. Please note that there are several other reports available, but these are not used in the production of the RO annual report and so are not covered.

The public reports can be accessed via the Renewables and CHP login page which is shown in **Figure A4.1**.¹⁰⁵ The link to view the public reports is highlighted.

Please note that a replacement for the Renewables and CHP Register is currently in development. Once launched the advice in the section will no longer apply. For more information, please refer to the information available on our website.¹⁰⁶

ofgem	Accessit	vility Contact us Site map Links
Welcome to the Ofgem F	enewables and CHP Register	
	You are not logged in. What would you li	ke to do?
Renewables & CHP Register News	 Log in Forgotten details Username Password Register >> Go 	ew reports that are blicly available Previously the ROC Register <u>View Public Reports</u>

Figure A4.1: The Renewables and CHP login page

 ¹⁰⁵ <u>Renewables and CHP login page</u>: <https://www.renewablesandchp.ofgem.gov.uk/>
 ¹⁰⁶ <u>Information on the new Renewable Electricity Register</u>:

<https://www.ofgem.gov.uk/publications/redevelopment-renewables-and-chp-register-timeline-and-project-progress-update>

Clicking the 'View Public Reports' link takes you to the Public Reports homepage as shown in **Figure A4.2**. The links to the 'Accredited Stations' and 'Certificates' reports are highlighted.

Figure	A4.2:	The	Public	Reports	homepage
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ofgem	Accessibility Contact us	Site map Links
🛞 back to home page	Report Accredited Stations	View
	Certificates	View
	Certificates by Technology and Month of Issue	View
	Certificates by Technology and Order (RO Only) Organisations	<u>View</u>
	ROC's Claimed but not Issued	View
	Preliminary Accreditation Conditions Grants	<u>View</u>
	REGO Certificate Investment Report	View
	Compliance Certificates Report	View

Accredited Stations report

The accredited stations report provides data on the stations which have been granted accreditation on the Renewables Obligation scheme. The table below gives information on the fields available in the report.

Figure A4.3: Accredited stations report - field descriptions

Field name	Description
Accreditation Number	The unique accreditation number given to a generating station
Status	Denoted either 'Live' or 'Preliminary' accreditation. Only stations that are live or have been granted full accreditation are included in the annual report
Generating Station	The unique name of the generating station
Scheme	The name of the support scheme. For the data in this report this is the Renewables Obligation (RO)
Station DNC	The Declared Net Capacity of the generating station
Country	The country where the generating station is located
Technology	The renewable technology installed. Please note that for the purposes of the annual report the technology types have been simplified to: • Fuelled

	Hydro	
	Landfill gas	
	Offshore wind	
	Onshore wind	
	Sewage gas	
	Solar PV	
	Wave Power	
	Tidal stream	
Contract Type	Where shown as 'NFPA' this field identifies stations with both NFFO and RO accreditation. The 'General' label identifies all other stations on the RO scheme.	
Accreditation Date	The date from which the station is eligible to receive support under the RO scheme	
Commission Date	The date on which the station commissioned	
Organisation	The name of the organisation as recorded on the Renewables and CHP Register	
Organisation Contact Address	The organisation's contact address	
Organisation Contact Fax	The organisation's fax number	
Generating Station Address	The generating station's address	

Certificates report

The certificates report provides data on the ROCs which have been generated by the Renewables and CHP Register. The table below gives information on the fields available in the report.

Figure A4.4: Certificates report - field descriptions

Field name	Description
Accreditation No.	The unique accreditation number given to a generating station.
Generating Station / Agent Group	The unique name of the generating station.
Station TIC	The Total Installed Capacity of the generating station.
Scheme	The name of the support scheme. For the data in this report this is the Renewables Obligation (RO).
Country	The country where the generating station is located.
Technology Group	The renewable technology installed. Please note that for the purposes of the annual report the technology types have been simplified to:
	• Fuelled
	• Hydro
	Landfill gas

	Offshore wind
	Onshore wind
	Sewage gas
	Solar PV
	Wave Power
	Tidal stream
Generation Type	Where the technology type is 'Fuelled' or 'Biomass 50kW DNC or less' this field gives further information about the renewable technology used.
Output Period	The month and year when the generation took place.
No. Of Certificates	The number of certificates generated in relation to the renewable generation.
Start Certificate No.	The start certificate reference number for the certificates generated.
End Certificate No.	The end certificate reference number for the certificates generated.
MWh Per Certificate	The number of MWh of generation the station needs to generate to earn one ROC.
Issue Date	The date on which the ROCs were generated by the Renewables & CHP Register.
Certificate Status	Identifies the current status of the certificates. This can be either: Issued Revoked Retired Redeemed Expired
Status Date	The date of the most recent certificate status change. This will usually be the date when the ROCs changed to the status shown in the previous field.
Current Holder Organisation Name	The name of the organisation currently holding the ROCs.
Company Registration Number	The company registration number of the current holder organisation.

Appendix 5 – Associated documents

Annual reports for all previous obligation periods are published in the publications library:

<u>Ofgem RO publications library</u> <https://www.ofgem.gov.uk/environmental-programmes/ro/contacts-publications-anddata/publications-library-renewables-obligation-ro>

Up-to-date data on scheme activity is published on the public reports and data page within the RO section of the Ofgem website:

Ofgem RO public reports and data webpage

<https://www.ofgem.gov.uk/environmental-programmes/ro/contacts-publications-anddata/public-reports-and-data-ro>

Data reports are available to download from the Renewables and CHP Register:

<u>Renewables and CHP Register</u> <https://renewablesandchp.ofgem.gov.uk/>

Information for agents carrying out all the functions of the operator:

<u>Information for agents</u> <https://www.ofgem.gov.uk/environmental-and-social-schemes/renewables-obligationro/agents>

Information for generators accredited under the RO is available on our website:

Information for generators <https://www.ofgem.gov.uk/environmental-and-social-schemes/renewables-obligationro/generators>

Information for licensed UK electricity suppliers on how to comply with the RO is

available on our website:

Information for suppliers

<https://www.ofgem.gov.uk/environmental-and-social-schemes/renewables-obligationro/suppliers>

The Renewables Obligation legislation which underpins the RO (England & Wales), ROS (Scotland) and NIRO (Northern Ireland) schemes can be viewed on the legislation.gov.uk website:

RO section of the legislation.gov.uk website

<https://www.legislation.gov.uk/all?title=%22Renewables%20Obligation%22>

Appendix 6 – Glossary of terms

Α

Anaerobic Digestion (AD) – Natural process in which micro-organisms break down organic matter (e.g. animal manure or waste food) within a contained environment. This produces biogas which can then be used as fuel to generate electricity.

Authority - The Gas and Electricity Markets Authority (GEMA) (the Authority) is the statutory body responsible for administering the RO and ROS in Great Britain (GB). The Authority's day-to-day functions are performed by Ofgem, the office of the Authority.

В

Banked ROCs – Banked ROCs are ROCs issued against electricity generation in the previous compliance period that were not presented to fulfil a supplier obligation within that compliance period. These banked ROCs remain eligible for use towards supplier obligations in the period following the one when they were issued.

BEIS - Department for Business, Energy and Industrial Strategy. At the time of writing, BEIS has been dissolved, and its functions in relation to the RO scheme have been allocated to the Department for Energy Security and Net-Zero.

Biogas – Biogas is a renewable fuel produced by the breakdown of organic matter and is used for electricity generation under the RO in anaerobic digestion (AD) and gasification generating stations.

Buy-out fund – Is the sum collected from suppliers making payments towards fulfilment of their Renewables Obligation by the 31 August deadline.

Buy-out price - The buy-out price is the sum that suppliers must pay for each ROC not presented towards their obligation.

С

Combined Heat and Power (CHP) – The process of capturing and using heat which is created as a by-product of the electricity generation process.

Contracts for Difference (CfD) – The CfD scheme is the government's main mechanism for supporting new low-carbon electricity generation. CfDs incentivise investment in renewable energy by providing developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale prices, and they protect consumers from paying increased support costs when electricity prices are high.

D

Digestate – Material remaining after anaerobic digestion process.

Declared Net Capacity (DNC) – The maximum capacity an installation can be operated at over a sustained period without damaging it (assuming the source of power used by it to generate electricity was available to it without interruption) minus the amount of electricity that is consumed by the installation.

DfE – Department for the Economy (Northern Ireland).

Ε

Energy Intensive Industries (EIIs) – Industries which consume large amounts of energy in their industrial processes.

England & Wales Renewables Obligation Certificates (EWROCs) – EWROCs are certificates issued to operators of accredited renewable generating stations in England & Wales for the eligible renewable electricity they generate. One of three types of certificates which collectively make up all ROCs issued under the RO scheme.

F

FIT (Feed-in-Tariffs) scheme – The FIT scheme is a government scheme designed to promote the uptake of small-scale renewable and low-carbon electricity generation technologies.

G

Gasification – Gasification converts fuel into a synthetic gas by partial combustion. This can then be burnt in a generating station to produce electricity. 'Gasification' is defined in Article 2 of the scheme legislation the (RO Order 2015 (as amended), ROS Order 2009 (as amended) and NIRO Order 2009 (as amended)).

GEMA – The Gas and Electricity Markets Authority (GEMA) (the Authority) is the statutory body responsible for administering the RO and ROS in Great Britain (GB). The Authority's day-to-day functions are performed by Ofgem, the office of the Authority.

GHG - Greenhouse Gas.

GW – Gigawatt, equal to one billion watts.

GWh – Gigawatt hour, equivalent to one billion watt hours of electricity output.

Κ

kW – Kilowatt, equal to one thousand watts.

kWh – Kilowatt hour, equivalent to one thousand watt hours of electricity output.

L

Late payment fund – Is the sum collected from suppliers making payment to fulfil their obligation after the 31 August buy-out payment deadline, but before the late payment deadline of 31 October.

Μ

Mutualisation - A mechanism to account for shortfalls in suppliers' obligations. If a supplier or suppliers are unable to meet their obligations under the RO or ROS, and the shortfall is above a certain threshold, mutualisation is triggered. If mutualisation is triggered, suppliers that discharged their obligations in full or in part under the RO and ROS must make additional payments to make up the shortfall. Mutualisation does not apply in Northern Ireland.

MW – Megawatt, equal to one million watts.

MWh – Megawatt hour, equivalent to one million watt hours of electricity output.

Ν

Non-Fossil Fuel Obligation (NFFO) – Before the introduction of the Renewables Obligation (RO), the Non-Fossil Fuel Obligation was one of the government's primary instruments of renewable energy policy.

Non-Fossil Fuel Purchasing Agency (NFPA) – The public body responsible for administering the NFFO.

Northern Ireland Authority for Utility Regulation (NIAUR) - Ofgem administer the NIRO on behalf of the Northern Ireland Authority for Utility Regulation (NIAUR); however, NIAUR retains the statutory responsibility for administering the NIRO. The Authority's day-to-day functions are performed by Ofgem, the office of the Authority.

Northern Ireland Electricity Networks (NIE) - The owner of the electricity transmission and distribution networks in Northern Ireland.

Northern Ireland Renewables Obligation (NIRO) - Northern Ireland Renewables Obligation (NIRO) is an environmental scheme to encourage the generation of renewable electricity in Northern Ireland. Ofgem administer the NIRO in accordance with the NIRO Order on behalf of UREGNI.

Northern Ireland Renewables Obligation Certificate (NIROCs) – NIROCs are certificates issued to operators of accredited renewable generating stations in Northern Ireland for the eligible renewable electricity they generate. One of three types of certificates which collectively make up all ROCs issued under the RO scheme.

Ρ

Photovoltaic (Solar PV) – Solar electricity panels.

R

Renewables and CHP Register (R&CHP Register) (The Register) – A web-based system used to manage several schemes that we administer on behalf of government, including the RO.

Renewables Obligation (RO) – One of the main support mechanisms for large-scale renewable electricity projects in Great Britain and large-scale as well as smaller scale renewable electricity projects in Northern Ireland. Where the term is used in this report, unless clear from the context, it refers to the England & Wales, Scotland, and Northern Ireland schemes collectively.

Renewables Obligation Certificate (ROC) – ROCs are certificates issued to operators of accredited renewable generating stations for the eligible renewable electricity they generate. When using the term ROC this refers to England & Wales Renewables Obligation Certificates (EWROCs), Northern Ireland Renewables Obligation Certificate (NIROCs) and Scottish Renewables Obligation Certificates (SROCs) collectively.

Retail Price Index (RPI) – A measure of inflation published monthly by the Office for National Statistics which measures the change in the cost of a representative sample of retail goods and services.

S

Scottish Renewables Obligation (SRO) – An environmental scheme to encourage the generation of renewable electricity in Scotland.

Scottish Renewables Obligation Certificates (SROCs) – SROCs are certificates issued to operators of accredited renewable generating stations in Scotland for the eligible renewable electricity they generate. One of three types of certificates which collectively make up all ROCs issued under the RO scheme.

Т

Total Installed Capacity (TIC) – The maximum capacity an installation can be operated at over a sustained period without damaging it (assuming the source of power used by it to generate electricity was available to it without interruption).

TW – Terawatt, equal to one trillion watts.

TWh – Terawatt hour, equivalent to one trillion watt hours of electricity output.