

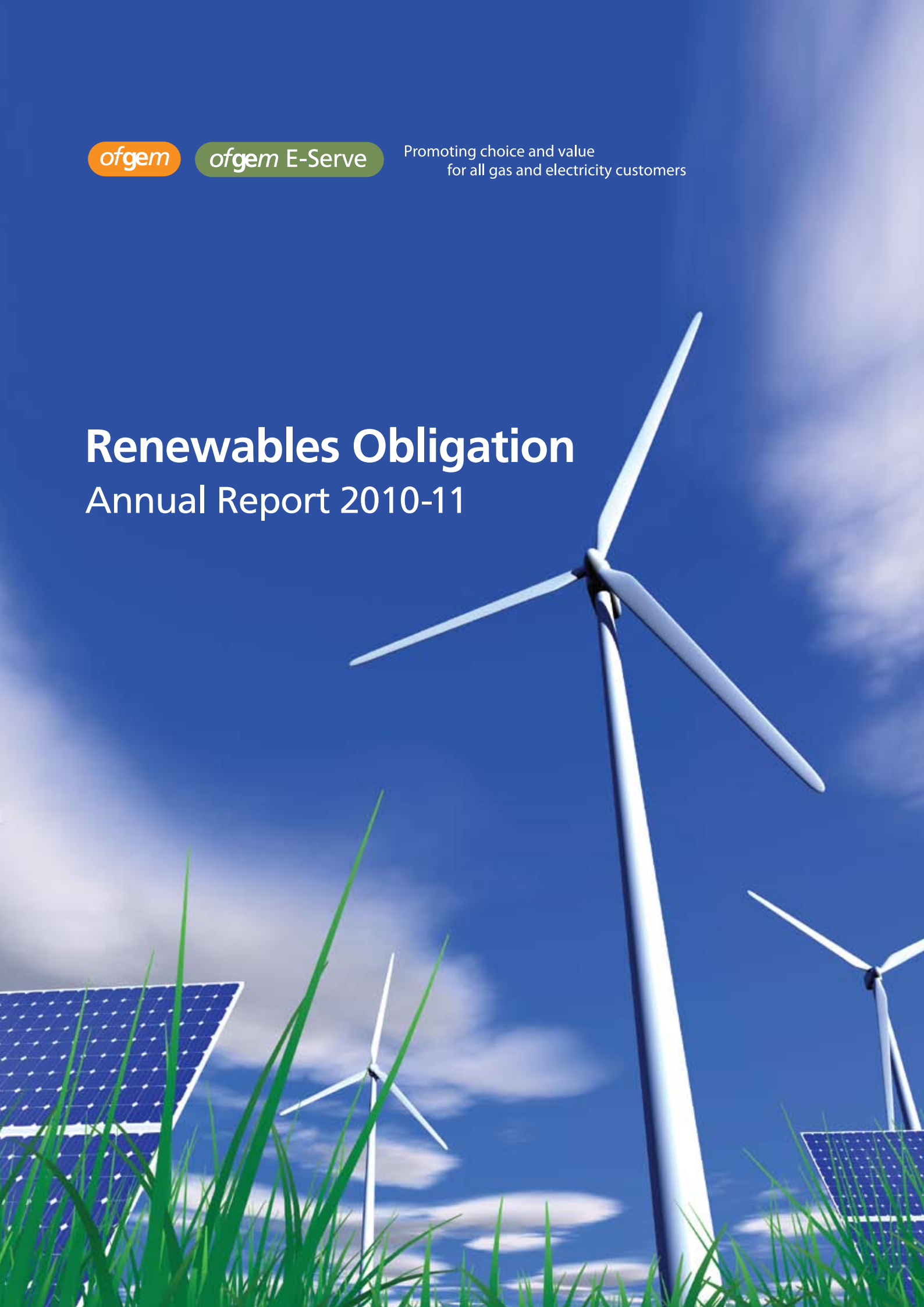
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Renewables Obligation

Annual Report 2010-11



Executive Summary

The Renewables Obligation (RO) is currently the main mechanism for supporting large scale deployment of renewable electricity in the UK. The scheme came into effect in England and Wales and Scotland in 2002 and Northern Ireland in 2005 and is governed by three separate Orders to reflect the responsibilities of the devolved administrations. In the main, there is consistency between the obligations in the view that there is a UK-wide market for Renewables Obligation Certificates (ROCs).

The Renewables Obligation Orders¹ ('the Orders') place an obligation on licensed electricity suppliers in the UK to source a proportion of their supply to customers from eligible renewable sources. The obligation is set on an annual basis by the UK and devolved governments, based on a prediction of the amount of electricity that will be supplied in the UK and the number of ROCs that will be issued to eligible renewable generators.

The scheme has been subject to various amendments over the years, the most significant being in April 2009 through the introduction of 'banding' where different levels of financial support was awarded to generators based on their generation technology. Further changes in April 2010 included extending the scheme, from 31 March 2027, in England and Wales and Scotland until 31 March 2037 and in Northern Ireland until 31 March 2033.

The RO schemes are administered by the Gas and Electricity Markets Authority ('the Authority') with its day to day functions performed by its office ("Ofgem"). Each

year an annual report is published to meet requirements set out in the Orders, as well as addressing the duties in Ofgem's 'Corporate Strategy and Plan' towards "delivery of government programmes for a sustainable energy sector".

Renewables Obligation 2010-11

This report provides information for the 2010-11 obligation period on how licensed electricity suppliers complied with their obligations, the number of ROCs that were issued and the eligible generators we accredited under the Orders.

The obligation level is set each year by the Department of Energy and Climate Change (DECC) using a fixed target or a headroom calculation. In 2010-11 the headroom calculation was applied to take account of the prediction of a large amount of new renewable generation coming online.

The obligation in England and Wales and Scotland was set at 11.1 ROCs per 100MWh and 4.27 ROCs per 100 MWh in Northern Ireland. This compares to an obligation of 10.4 ROCs per 100 MWh in England and Wales and Scotland and 4.0 ROCs per 100 MWh in Northern Ireland, had the levels been set using the fixed target calculation.

¹ The Renewables Obligation Order 2009 (as amended) (RO), Renewables Obligation (Scotland) Order 2009 (as amended) (ROS) and Renewables Obligation Order (Northern Ireland) 2009 (as amended) (NIRO). See Appendix 1 for a full list of recent RO legislation.

Supplier compliance with the obligation

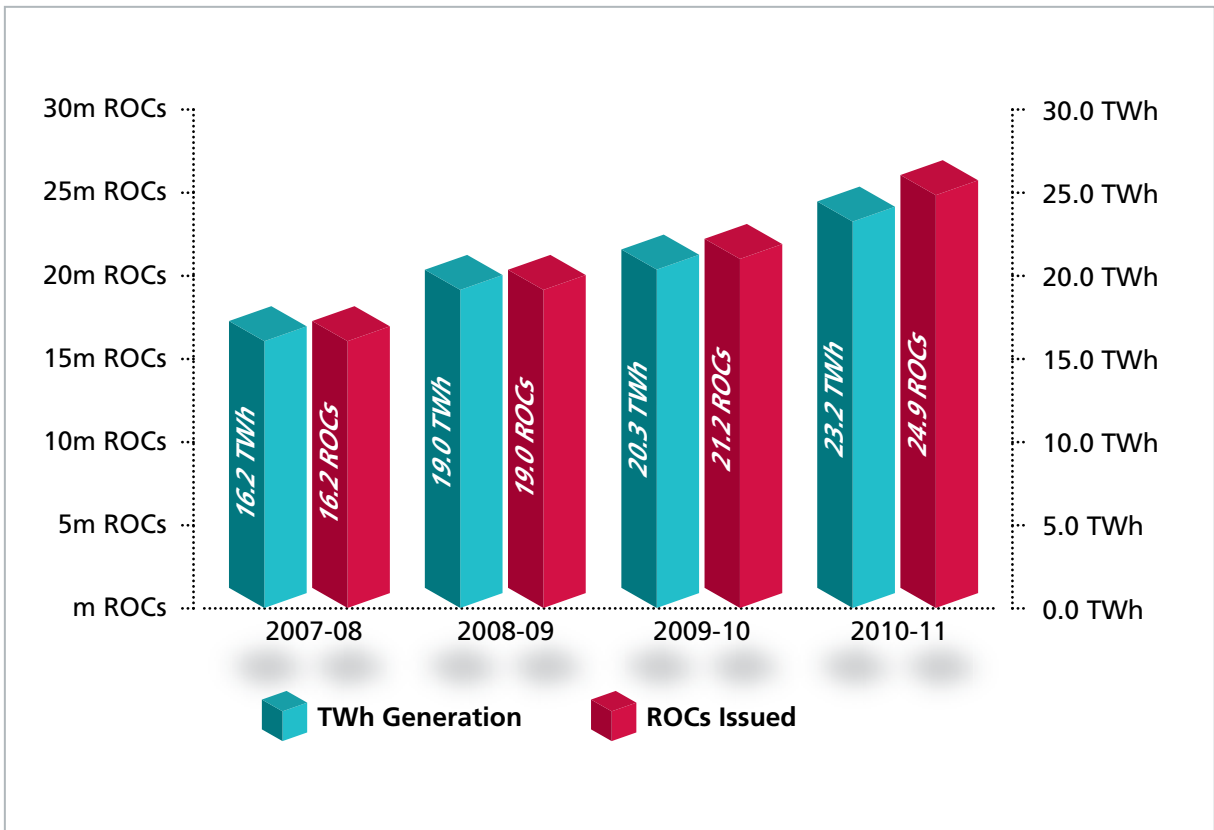
All of the suppliers with an obligation under the RO in 2010-11 complied by presenting ROCs, making a buy-out payment, or through a combination of both. The buy-out fund across the UK totalled £361.1 million, an increase of £35.5 million from the previous year. In total, 25 million ROCs were presented for compliance, an increase of 3.6 million from the previous year.

The total value of the ROCs presented for compliance was £1.3 billion, based on the value of a ROC of £51.34. Based on this value of a ROC, the cost of CO₂ saved under the scheme in 2010-11 was £106.62 per tonne².

ROCs and generation accreditation trends

During 2010-11 we issued 24.9 million ROCs and the total output from accredited renewable generating stations was 23.2 TWh. Figure A shows the ROCs issued and renewable output from eligible generators (TWh) over the past four years and demonstrates the divergence that is emerging between the two; since the introduction of banding in April 2009, one ROC no longer necessarily represents one MWh of renewable generation.

Figure A: Total number of ROCs issued and corresponding TWh generation



²This calculation is based on a Grid Rolling Average conversion factor of 0.48152 kg CO₂/kWh from DEFRA's guide to GHG conversion factors for company reporting (2011) <http://www.defra.gov.uk/environment/economy/business-efficiency/reporting/>

There was an increase in renewable deployment across the UK during 2010-11, including the accreditation of 1,055 MW of new off and onshore wind generation sites; the majority of new onshore being in Scotland and new offshore in England.

The most prevalent technology in 2010-11 across the UK, in terms of ROCs issued, was onshore wind with 7.7 million ROCs. This was followed by offshore wind and landfill gas which were issued circa 5 million ROCs each during 2010-11.

Changes to the RO

Several legislative amendments were implemented during the 2010-11 and 2011-12 obligation periods. These included the transfer of support for photovoltaic (PV), hydro and wind micro generation (with capacity less than 50kW) in Great Britain (GB) from the RO to the new Feed-in Tariff (FIT) scheme, with effect from 1 April 2010, and the introduction of sustainability requirements for bioliquids in April 2011.

As a result of such legislative changes, and to ensure the RO scheme continues to be managed effectively, Ofgem has amended or produced new guidance documents and carried out upgrades to the Renewables and CHP Register.

Further significant changes, arising from the recent UK wide consultations on a review of ROC bands, are expected to be confirmed later this year and will come into force from 1 April 2013.

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Chapter 1

Introduction

1. Introduction

Status of this document

- 1.1.** RO legislation³, collectively referred to as ‘the Orders’ in this report, sets out that the Authority must publish, by 1 April each year, a report in relation to the obligation period ending on 31 March of the previous year (the ‘relevant period’). The Orders state the minimum information this report must include is⁴:
- details of the compliance of each designated electricity supplier with its renewables obligation and the recycle payments received by each supplier in relation to its obligation
 - ROCs issued by the Authority broken down by generation technology
 - full details of any mutualisation triggered
 - the outcome of any investigations conducted by the Authority into monitoring the compliance of suppliers and generators with the Orders.
- 1.2.** Additional information not stipulated in the legislation, but which may be of interest to stakeholders, is also provided in this report.
- 1.3.** Unless apparent from the context, where ‘RO’ is used in this report it denotes the Renewables Obligation England and Wales (RO), Renewables Obligation Scotland (ROS) and the Northern Ireland Renewables Obligation (NIRO). Similarly, where ‘ROC’ is used it denotes Renewables Obligation Certificates (ROCs) England and Wales, Scottish Renewables Obligation Certificates (SROCs) and Northern Ireland Renewables Obligation Certificates (NIROCs).

- 1.4.** The use of ‘Ofgem’, ‘us’, ‘our’ and ‘we’ are used interchangeably when referring to the exercise of the Authority’s powers and functions under the Orders.
- 1.5.** The data used to produce this report was downloaded on 6 December 2011 from the Renewables and CHP Register, referred to in this report as ‘the Register’. Data downloaded from the Register after the 6 December 2011 may vary slightly from the data in this report, as Ofgem may since have updated or amended data where necessary.

Ofgem’s responsibilities

- 1.6.** The Orders detail Ofgem’s powers and functions in respect of each obligation. Those functions include:
- accrediting generating stations as being capable of generating electricity from eligible renewable energy sources
 - publishing a list of accredited and preliminary accredited generating stations
 - issuing and revoking (where necessary) ROCs
 - establishing and maintaining a register of ROCs
 - monitoring compliance with the requirements of the Orders
 - calculating annually the buy-out price and mutualisation ceiling resulting from the adjustments made to reflect changes in the Retail Price Index (RPI)
 - receiving buy-out payments and late payments from suppliers and redistributing these funds.

³ See Appendix 1 for a full list of current RO legislation.

⁴ See article 57 of the RO and ROS, Article 49 of the NIRO.

- 1.7. By virtue of section 121 of the Energy Act 2004, the Authority and the Northern Ireland Authority for Utility Regulation (NIAUR) can enter into an arrangement for the Authority to act on behalf of NIAUR in respect of the NIRO. This arrangement is facilitated by an Agency Services Agreement (ASA) with NIAUR. Under this agreement, Ofgem is required to carry out the functions listed above in respect of NIROCs however, NIAUR retains the Statutory responsibility for administering the NIRO.
- 1.8. Ofgem and NIAUR recover the cost to administer the RO from the buy-out fund. In September 2011 the total recovered was £3.6 million, which represents 0.22%⁵ of the total value of the scheme for 2011-12. This is a small percentage increase from the 2010-11 costs of £2.3 million (0.18% of the value for that year) and mainly reflects the additional work needed following the introduction of sustainability criteria requirements to the RO in April 2011.

Associated documents

Annual reports for all the previous obligation periods are published on the Environmental Programmes section of the Ofgem website: <http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Archive/Pages/Archive.aspx>

Guidance for licensed electricity suppliers and generators that are seeking or currently hold accreditation under the RO can be found here:

<http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx>

We also have data reports available to download from our Renewables and CHP Register: <https://www.renewablesandchp.ofgem.gov.uk>

⁵The value of the RO scheme is calculated at £1.487 billion by multiplying the estimated supply of electricity in the UK in 2011/12 (310 TWh – DECC prediction) by the obligation level (12.4 ROCs per 100 MWh) and then multiplying by the 2011/12 ROC buy-out price (£38.69).



Chapter 2

Compliance by licensed electricity suppliers

2. Compliance by licensed electricity suppliers

Chapter Summary

This chapter, when read with Appendix 2, provides information on:

- how each licensed electricity supplier ('supplier') complied with its obligation under the Orders for the 2010-11 obligation period
- the total number of ROCs presented against each supplier's obligation
- the money each supplier received from the redistribution of the buy-out and late payment funds
- details of any late provision of information by suppliers under the Orders.

- 2.1.** The Orders require each supplier to source a proportion of the electricity that it supplies to customers in the UK from eligible renewable sources⁶. The obligation level is set by DECC six months in advance of each obligation period⁷; for 2010-11, the obligation in England and Wales and Scotland was 11.1 ROCs per 100MWh and in Northern Ireland 4.27 ROCs per 100 MWh.
- 2.2.** Suppliers can meet their obligation by presenting ROCs, making a buy-out payment to cover any shortfall in the number of ROCs required, or by a combination of both.
- 2.3.** The total RO is determined by multiplying the obligation level (set by DECC), by the total megawatt-hours (MWh) of electricity supplied in the UK (from data provided by each supplier). In 2010-11 the total RO was 34.7 million ROCs, an increase of 4.6 million ROCs (13%) from the previous year.
- 2.4.** The number of ROCs submitted for 2010-11 compliance across the UK was 24.9 million, an increase of 3.6 million ROCs from the previous year, and represents a marginal increase (of 1%) in the total UK obligation being met by the presentation of ROCs from the previous year.
- 2.5.** ROCs issued during 2010-11 that were not presented for compliance remain on the Register. As at 6 December 2011 these 'banked' ROCs numbered 97,635. Suppliers have the option to present these banked ROCs for compliance with the 2011-12 obligation, beyond this they cannot be presented⁸.
- 2.6.** The total number of ROCs redeemed by suppliers for compliance with the Orders in 2010-11 was 24,969,364 ROCs. The total generation represented by these redeemed ROCs was 23,284,428 TWh.

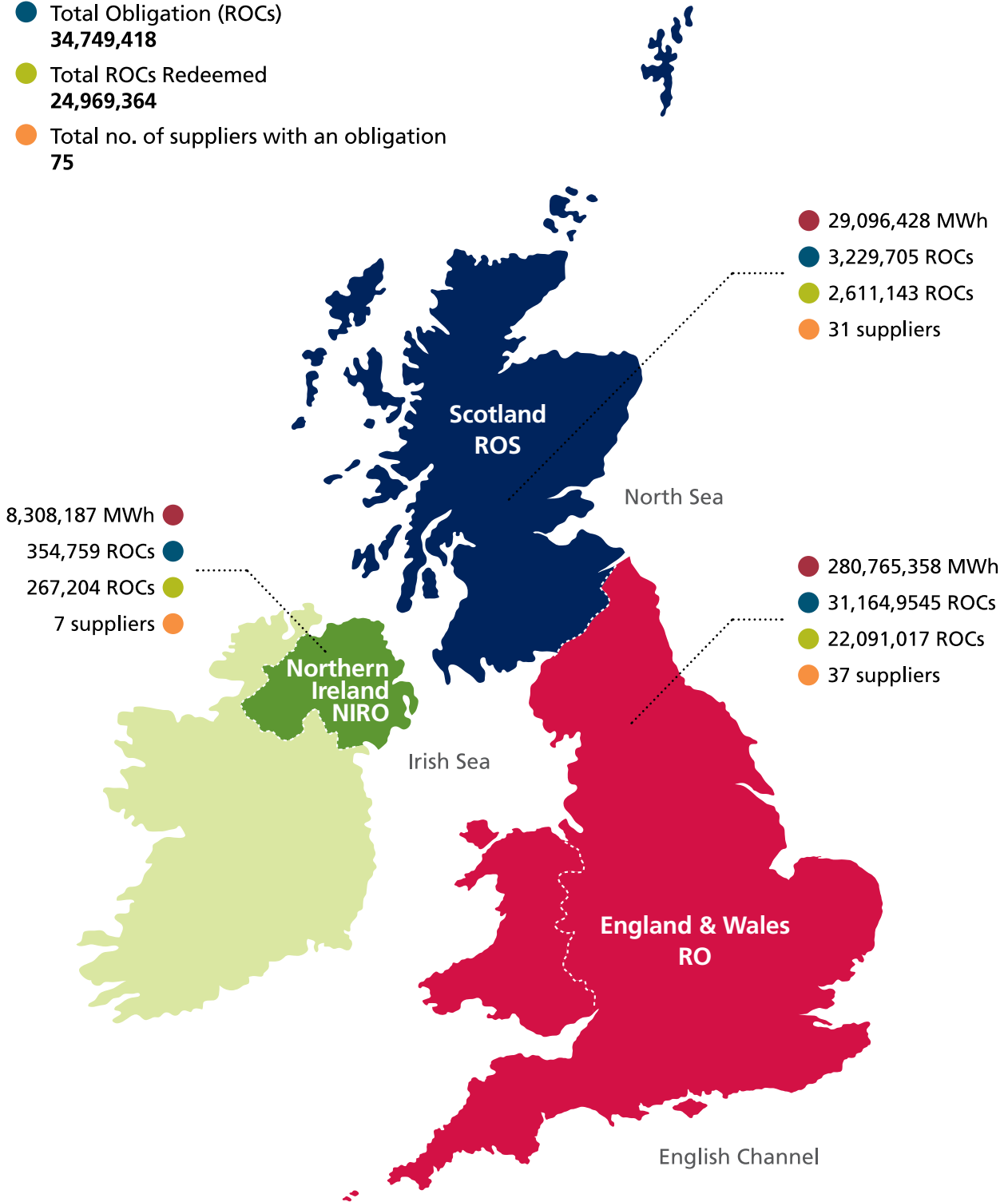
⁶ See Article 2(1) of the Orders for the definition of renewable output.

⁷ See Article 12 of the Orders or DECC's annual publication 'calculating the obligation' - http://www.decc.gov.uk/en/content/cms/meeting_energy/renewable_ener/renew_obs/renew_obs.aspx

⁸ ROCs can only be carried forward for one obligation year. See Article 13 of the Orders.

Map 1: Compliance by licensed electricity suppliers against each obligation in the UK in 2010-11

- Total electricity supplied (MWh)
318,169,973
- Total Obligation (ROCs)
34,749,418
- Total ROCs Redeemed
24,969,364
- Total no. of suppliers with an obligation
75



Details of ROCs presented and buy-out payments made by suppliers

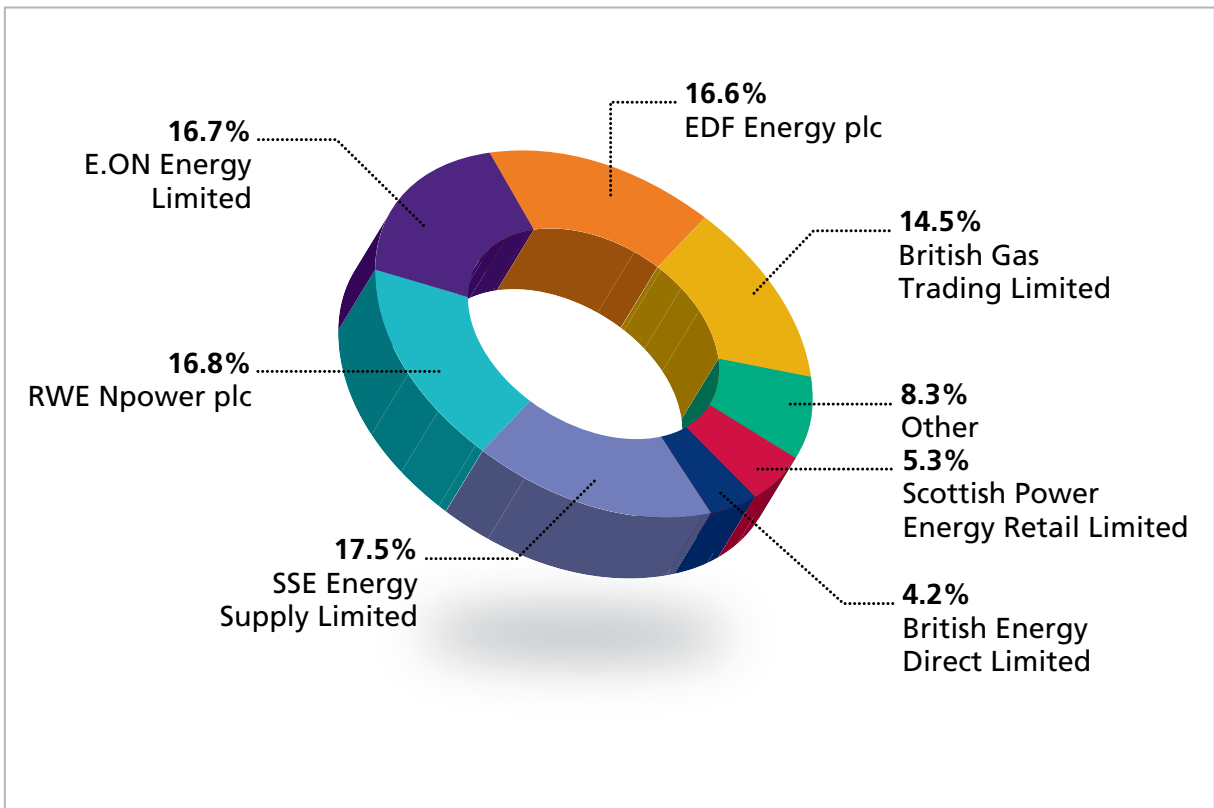
2.7. In total, 75 suppliers had an obligation under the Orders. These suppliers complied by presenting their total obligation in ROCs, making a full buy-out payment or by a combination of ROCs and buy-out payment. In summary:

- ten suppliers complied with the RO by presenting the full amount of ROCs
- twelve suppliers presented the full amount of ROCs towards the ROS
- five suppliers presented the full amount of ROCs towards the NIRO

- eleven suppliers made full buy-out payments to comply with the RO
- seven complied with the ROS by presenting a full buy-out payment
- two made a full buy-out payment for the NIRO.

2.8. Figures 1, 2 and 3 show the proportion of each obligation attributed to each supplier group⁹. These proportions have remained fairly consistent with the share of the obligation from the previous year.

Figure 1: Proportion of the total size of the RO by supplier group



⁹Some suppliers have more than one licence with an obligation under the RO so we 'group' together their licences under one name. For a list of supplier groups and their licences see Appendix 2.

Figure 2: Proportion of the total size of the ROS by supplier group

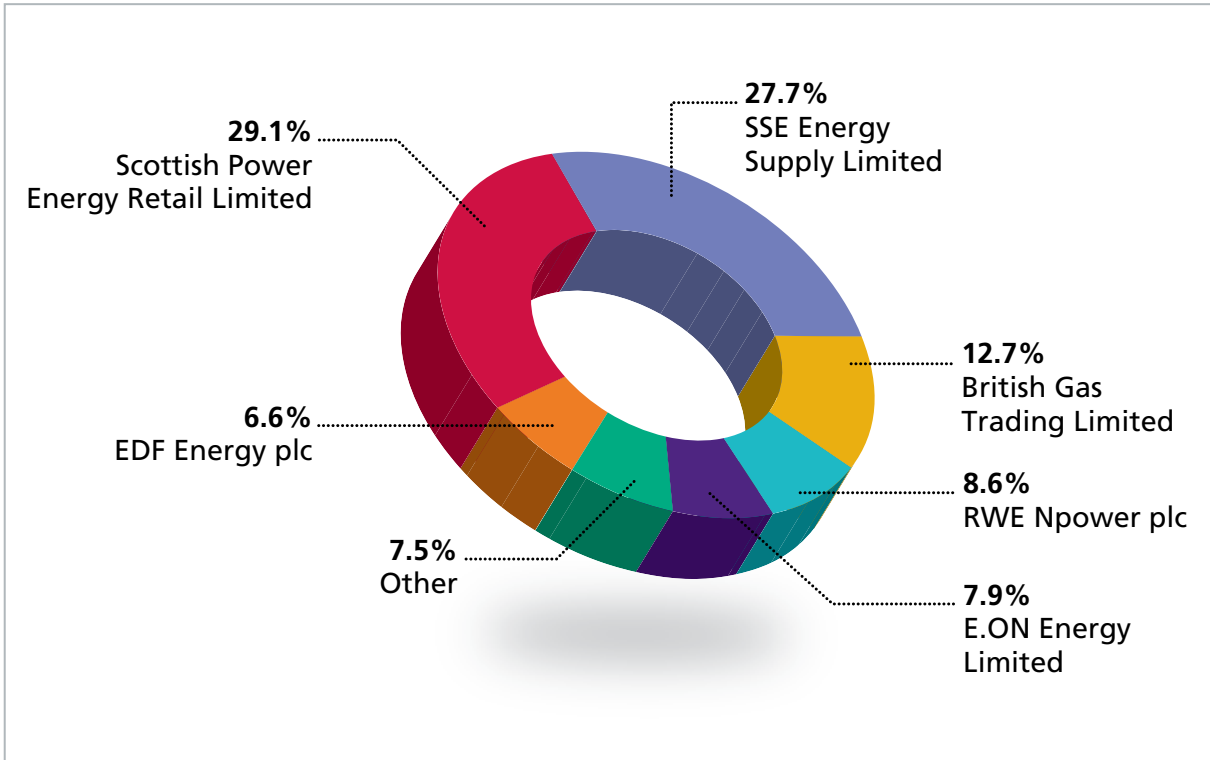
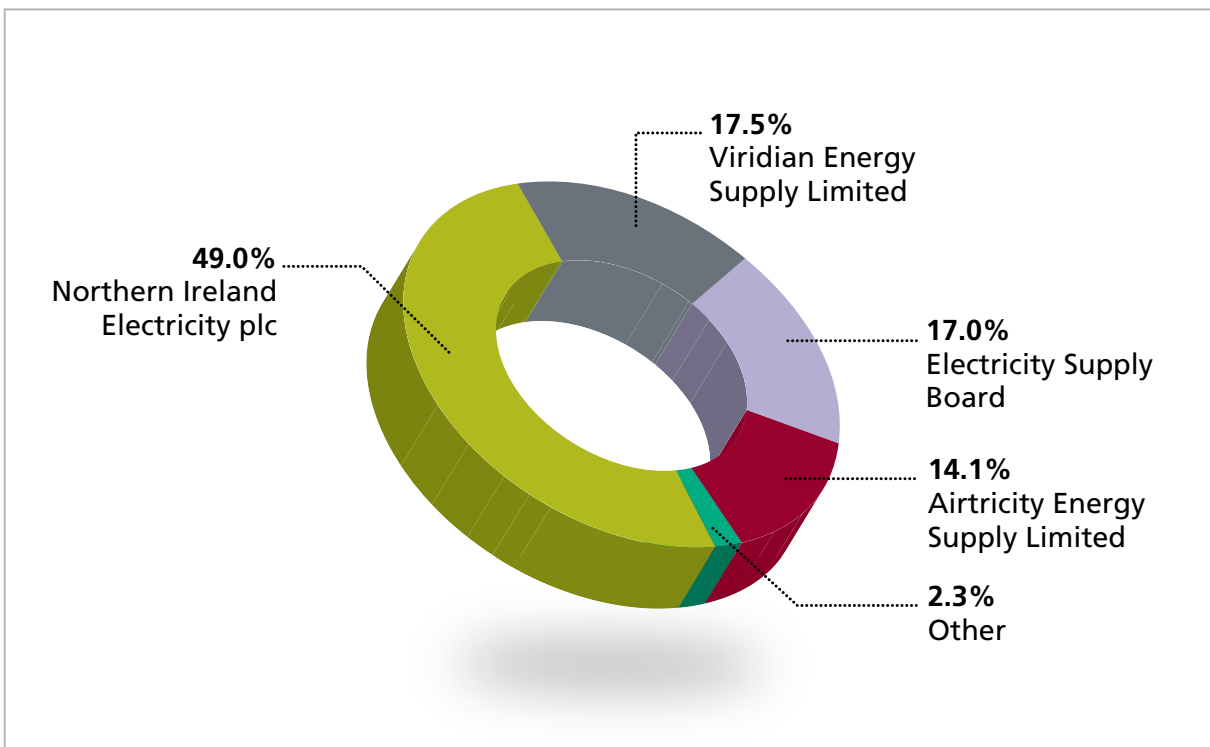


Figure 3: Proportion of the total size of the NIRO by supplier group



- 2.9.** Suppliers paid a total of £361.1 million into the buy-out fund by the statutory deadline of 30 August 2011.
- 2.10.** Three licensed suppliers did not meet the 30 August 2011 deadline. Instead they complied with their obligation by making late payments, totalling £688,295, by 31 October 2011.
- 2.11.** The buy-out price is set by Ofgem in advance of the obligation period and is amended annually in line with RPI¹⁰. In 2010-11 the price was set at £36.99 per ROC. This increased to £38.69 for the 2011-12 obligation period.
- 2.12.** Tables 1, 2 and 3 summarise supplier compliance under each Order over the last four obligation periods¹¹.

Table 1: Supplier compliance with the RO (England and Wales)

	2007-08	2008-09	2009-10	2010-11
Total obligation (ROCs)	22,857,584	25,944,763	26,971,916	31,164,954
Total ROCs presented	14,562,876	16,813,731	18,747,129	22,091,017
Of which GB ROCs	14,202,823	16,295,070	18,236,598	21,613,132
Of which NI ROCs	360,053	518,661	510,531	477,885
Percentage met by ROCs	64%	65%	70%	71%
Total buy-out paid	£278,789,611	£320,568,079	£305,566,094	£335,012,068
Total late payments paid	£46,712	£260,027	£330,618	£638,258
Shortfall in buy-out and late payment fund	£5,759,907	£5,750,734	£0	£0
Buy-out fund for redistribution	£280,171,493	£320,673,766	£303,427,603	£331,800,438
Late payments fund for redistribution	£54,491	£260,162	£330,683	£638,470
Redistribution per ROC presented	£18.65	£18.61	£15.17	£14.35
'Worth' of a ROC to a supplier	£52.95	£54.37	£52.36	£51.34

¹⁰ RPI from the Office of National Statistics (<http://www.ons.gov.uk>)¹¹ For previous obligation years please see the Renewables Obligation Annual Reports for those years, found on the Ofgem website.

Table 2: Supplier compliance with the ROS (Scotland)

	2007-08	2008-09	2009-10	2010-11
Total obligation (ROCs)	2,456,391	2,774,881	2,835,827	3,229,705
Total ROCs presented	1,864,676	2,094,125	2,406,063	2,611,143
Of which GB ROCs	1,832,964	2,045,785	2,336,392	2,539,242
Of which NI ROCs	31,712	48,340	69,671	71,901
Percentage met by ROCs	76%	75%	85%	81%
Total buy-out paid	£19,976,934	£23,935,455	£15,952,316	£22,830,931
Total late payments paid	£47,451	£82,546	£30,875	£50,038
Shortfall in buy-out and late payment fund	£276,335	£329,021	£0	£0
Buy-out fund for redistribution	£20,072,617	£23,943,338	£15,841,285	£22,611,671
Late payments fund for redistribution	£47,737	£82,587	£30,883	£50,065
Redistribution per ROC presented	£18.65	£18.61	£15.17	£14.35
'Worth' of a ROC to a supplier	£52.95	£54.37	£52.36	£51.34

Table 3: Supplier compliance with the NIRO (Northern Ireland)

	2007-08	2008-09	2009-10	2010-11
Total obligation (ROCs)	237,382	256,034	293,349	354,759
Total ROCs presented	39,199	41,022	184,013	267,204
Of which GB ROCs	4,523	0	0	0
Of which NI ROCs	34,676	41,022	184,013	267,204
Percentage met by ROCs	17%	16%	63%	75%
Total buy-out paid	£5,927,829	£6,858,732	£4,067,656	£3,238,659
Total late payments paid	£870,092	£830,232	£0	£0
Shortfall in buy-out and late payment fund	£0	£0	£0	£0
Buy-out fund for redistribution	£5,958,966	£6,860,976	£4,037,864	£3,207,729
Late payments fund for redistribution	£875,435	£830,747	£0	£0
Redistribution per ROC presented	£18.65	£18.61	£15.17	£14.35
'Worth' of a ROC to a supplier	£52.95	£54.37	£52.36	£51.34

Co-fired ROCs

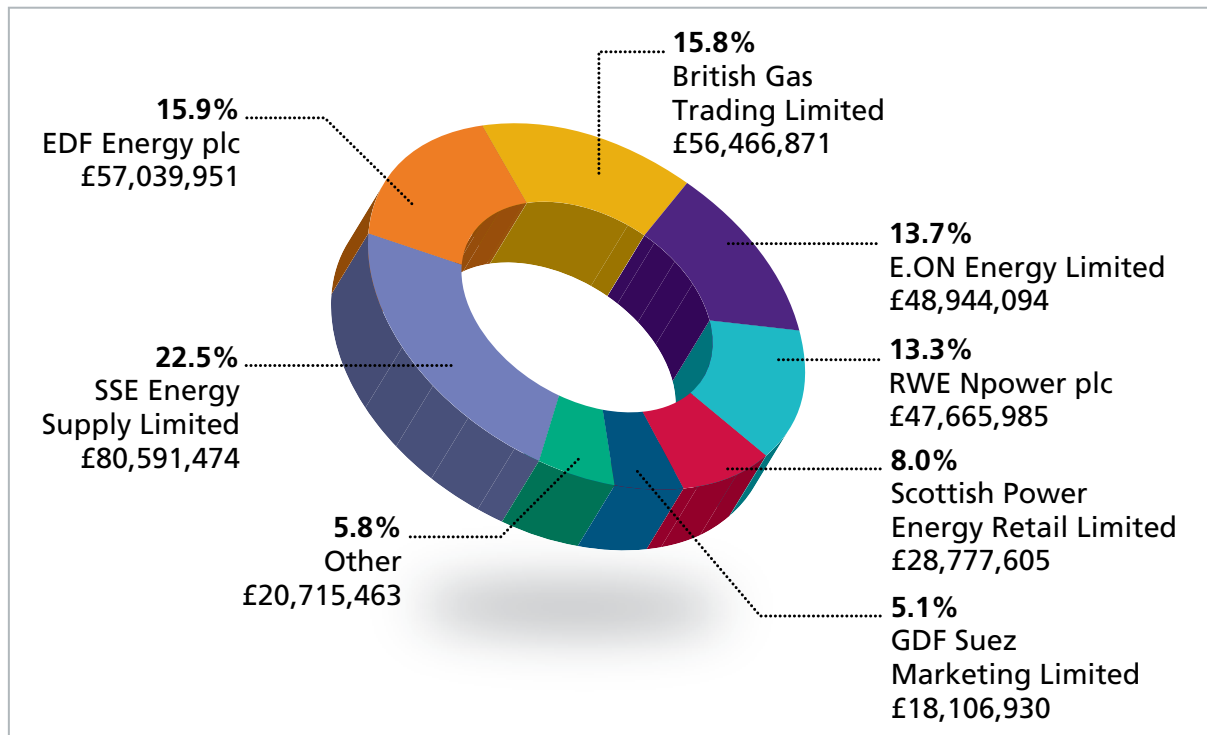
- 2.13.** Each supplier is permitted to meet up to 12.5% of its total obligation under the Orders by presenting ROCs that have been issued for co-firing of fossil fuels and biomass.
- 2.14.** There was a slight reduction in the number of suppliers presenting co-fired ROCs towards their obligations in 2010-11. Eight suppliers presented co-fired ROCs for the England and Wales Obligation (the same number as last year), but only three did so for the Scotland Obligation (compared to five last year). No suppliers presented co-fired ROCs towards their Northern Ireland Obligation in this, or the previous obligation year.
- 2.15.** There has been a notable increase, however, in the actual amount of co-fired ROCs presented for compliance by suppliers. For the 2010-11 obligation period a total of 1.3 million co-fired ROCs were presented for compliance, compared to 826,700 the previous year. This can be mainly attributed to increased co-firing activity by two large co-fired generators, who were issued with more than double the amount of co-fired ROCs compared to last year.
- 2.16.** Two suppliers presented the maximum amount of co-fired ROCs, up to the 12.5% limit, to meet their obligations; Haven Power Limited did so for both the RO and ROS, and Scottish Power Energy Retail Limited did so for the RO only. Further information on co-fired ROCs presented for compliance can be found in Appendix 2.
- ROCs that each has presented across the three obligations. For example, a supplier that presented ROCs representing 3% of the total number of ROCs would get back 3% of the total sum of the three buy-out and any late payment funds, irrespective of where these ROCs were redeemed.
- 2.18.** The single recycling mechanism ensures the funds are redistributed to suppliers in proportion to the total number of ROCs that each has presented across the three obligations. For example, a supplier that presented ROCs representing 3% of the total number of ROCs across all three obligations would get back 3% of the total sum of the three buy-out and any late payment funds. That would still be the case if that supplier had only presented these ROCs in respect of one of the obligations.
- 2.19.** Ofgem and NIAUR administration costs were deducted from the buy-out funds prior to redistribution; these totalled £3.6 million, resulting in £357.6 million being recycled back to suppliers. Recycle payments were made on 30 September 2011, well in advance of the statutory deadline of 1 November 2011.
- 2.20.** We redistributed the late payment funds on the same basis as the buy-out funds on 30 November 2011, well in advance of the legislative deadline of 1 January 2012. There were no late payments made towards the NIRO and therefore no Northern Ireland late payment fund to recycle.
- 2.21.** Table 4 and Figure 4 show the proportion of the total ROCs that each supplier presented towards the obligations and hence the proportion of the buy-out and late payment funds they received.

Redistribution of the buy-out and late payment funds

- 2.17.** The single recycling mechanism ensures the funds are redistributed to suppliers in proportion to the total number of

Table 4: Total ROCs presented by each licence

Licence	ROCs presented				
	RO	ROS	NIRO	Total	% of ROCs
SSE Energy Supply Limited	4,823,079	793,082	0	5,616,161	22.5%
EDF Energy Customers Plc	3,974,931	0	0	3,974,931	15.9%
British Gas Trading Limited	3,607,804	327,191	0	3,934,995	15.8%
Npower Limited	2,349,352	133,668	0	2,483,020	9.9%
Scottish Power Energy Limited	1,066,148	939,271	0	2,005,419	8.0%
E.ON Energy Limited	1,855,254	137,259	0	1,992,513	8.0%
E.ON UK Plc	1,301,296	116,948	0	1,418,244	5.7%
GDF Suez Marketing Limited	1,203,219	58,595	0	1,261,814	5.1%
Npower Northern Supply Limited	515,625	23,100	0	538,725	2.2%
Total Gas & Power Limited	283,440	30,324	0	313,764	1.3%
SmartestEnergy Limited	203,459	6,797	0	210,256	0.8%
Haven Power Limited	196,140	12,114	0	208,254	0.8%
Npower Direct Limited	176,504	9,689	0	186,193	0.7%
Opus Energy Limited	126,758	2,175	0	128,933	0.5%
Npower Yorkshire Supply Limited	113,728	24	0	113,752	0.5%
Electricity Plus Supply Limited	96,253	5,058	0	101,311	0.4%
NIE Energy Limited	0	0	90,201	90,201	0.4%
Gazprom Marketing & Trading Retail Limited	61,603	4,058	0	65,688	0.3%
Opus Energy (Corporate) Limited	55,347	7,444	0	62,791	0.3%
Viridian Energy Supply Limited	0	0	62,142	62,142	0.2%
ESB Independent Energy NI Limited	0	0	60,244	60,244	0.2%
Airtricity Energy Supply Limited	0	0	50,123	50,123	0.2%
IPM Energy Retail Limited	38,036	2,918	0	40,954	0.2%
The Renewable Energy Company Limited	29,376	841	0	30,217	0.1%
Good Energy Limited	13,596	586	0	14,182	0.1%
Quinn Energy Supply Limited	0	0	4,494	4,494	0.0%
The Co-operative Energy Limited	40	1	0	41	0.0%
Statkraft Markets GmbH	2	0	0	2	0.0%
TOTAL	22,091,017	2,611,143	267,204	24,969,364	100%

Figure 4: Redistribution of buy-out and late payment funds by supplier group

- 2.22.** The total recycle value of a ROC, after redistribution of all buy-out and late payment funds, was £14.35. When combined with the buy-out price of £36.99 the total worth of a ROC for the 2010-11 obligation period was £51.34.
- 2.23.** The total value of ROCs presented for compliance in 2010-11 was just under £1.3 billion (based on the worth of a ROC and total ROCs presented).
- 2.24.** The residual balances of the RO bank accounts after all funds were redistributed can be found in Appendix 2.
- Mutualisation**
- 2.25.** In the event of a supplier being unable to meet its obligation under the RO and/or ROS, for example if the supplier has gone into administration during the obligation period, there may be a shortfall in the buy-out fund. Where the shortfall qualifies as a 'relevant shortfall'¹², a mutualisation process applies.
- 2.26.** If mutualisation is triggered by a relevant shortfall in the buy-out and/or late payment funds, all suppliers with an obligation under the RO and ROS are required to make additional payments to make up this shortfall. These payments are capped at the 'mutualisation ceiling', an amount published annually by Ofgem¹³.
- 2.27.** Mutualisation payments are redistributed to suppliers on the same basis as the buy-out and late payment funds via the single recycling mechanism. Mutualisation does not apply in Northern Ireland, however, suppliers in Northern Ireland will receive a share of any mutualisation funds from the RO and ROS.
- 2.28.** There was no shortfall in the buy-out or late payment funds in 2010-11 and mutualisation has not been triggered to date under any of the Orders.

¹² See Schedule 3 of the RO and ROS Orders for the amount of relevant shortfall for the relevant obligation period.

¹³ As with the buy-out price, this mutualisation ceiling is amended annually in line with RPI.

Provision of information under the Renewables Obligation

2.29. The Orders place a number of obligations on suppliers including a requirement to:

- provide an estimate of the amount of electricity that they have supplied during the obligation period to DECC by 1 June each year (and copy to Ofgem)
- provide Ofgem with the actual amount of electricity that they have supplied during the obligation period by 1 July each year
- make a buy-out payment on or before 31 August in each year in partial or total fulfilment of its obligation
- present ROCs on or before 1 September each year in partial or total fulfilment of its obligation
- make a late payment, where required, to meet any outstanding obligation by 31 October each year.

2.30. All suppliers with an obligation under the Orders in 2010-11 complied with their obligation. However, there were some instances where the legislative deadlines for provision of information were not met. A summary of those suppliers who did not meet the deadlines for submission of information are as follows.

2.31. Twenty-two licensees did not provide the relevant supply estimate by 1 June 2011. These licensees were:

Abacus Financial Limited
AMRECS LLC
At Cost Energy Limited
Better Business Energy Limited
BizzEnergy Limited
BizzEnergy@home
Caboodle Energy Limited
Ecotrade Solutions Limited
Electricity Supply Board
Eucalyptus Worldwide Limited

Finotec Trading (Cyprus) Limited
Finotec Trading UK Limited
K O Brokers Limited
Lovely Energy Limited
McMillian Limited
ONI Electricity Limited
R Electrics Limited
S. C. Isramart SRL
SEEBOARD Energy Limited
SWEB Energy Limited
Team Gas and Electricity Limited
Winnington Networks Limited

2.32. The majority of these suppliers responded and provided information by 17 June 2011.

2.33. Twenty-five licensees did not provide the relevant total supply information by 1 July 2011. These licensees were:

Abacus Financial Limited
AMRECS LLC
At Cost Energy Limited
Better Business Energy Limited
BizzEnergy@home
BizzEnergy Limited
Blizzard Utilities Limited
Brilliant Energy Limited
Caboodle Energy Limited
Energy CO₂ Limited
Ecotrade Solutions Limited
Eucalyptus Worldwide Limited
Finotec Trading (Cyprus) Limited
Finotec Trading UK Limited
International Power Plc
International Power Retail Supply Company Ltd
K O Brokers Limited
Lourdes Associates Limited
McMillian Limited
Metonomi Limited
Primary Connections Limited
R Electrics Limited
Team Gas and Electricity Limited
The Utilities Intermediaries Association
Winnington Networks Limited

2.34. The majority of these suppliers responded and provided information by 4 August 2011.

2.35. Eleven licensees (listed below) failed to respond to our repeated requests for information regarding their electricity supply to customers in 2010-11. Those licences that have since dissolved* are marked.

At Cost Energy Limited (licence revoked)

Caboodle Energy Limited (licence revoked)

Eucalyptus Worldwide Limited (licence revoked)

Brokers Limited (licence revoked)

BizzEnergy Limited (in the process of being revoked)

BizzEnergy@home Limited*

McMillian Limited*

Team and Gas Electricity Limited

Ecotrader Solutions Limited

Abacus Financial Limited

AMRECS LLC

2.36. The four licences that have not dissolved or been revoked were granted in 2010 before the introduction of changes to the revocation conditions within the licence terms. As such, we are required to wait five years from the date of issue until these licences can be revoked.

2.37. Data obtained from ELEXON¹⁴ confirmed that all of the non responding licensees made no supply to UK customers during the 2010-11 obligation period and therefore had no obligation under the Orders.

Supplier audit process

2.38. Each year a selection of suppliers are audited to determine the accuracy of the electricity supply figures submitted to us for compliance purposes. This selection

includes one large supplier, a small supplier, a Northern Ireland supplier and a supplier that declared zero supply. We contracted the audit division of Deloitte to perform the audit in 2010-11.

2.39. As a result of the audit, some discrepancies in supplier procedures and supply figures were noted. Most of these were minor and all were remedied within the scope of statutory deadlines for compliance with the Orders.

2.40. One supplier was found to have significantly over reported their electricity supply figures under the RO and ROS and were obliged to revise these to reconcile with ELEXON data. We received written confirmation that this supplier has implemented appropriate procedures to prevent such errors in the future, and we will follow up with them to determine this in due course.

2.41. No follow up visits were required for suppliers audited for compliance with the 2009-10 obligation. However, supplier audits conducted by Deloitte during 2009-10 found inconsistencies in the methods used by suppliers to calculate their total electricity supply figures. As a result, we consulted with suppliers in early 2011 outlining a recommended methodology to provide consistency when undertaking this process.

2.42. Our recommended methodology for calculating electricity supply figures was published in May 2011. In order to allow for any amendments to current systems and processes the methodology was optional for the 2010-11 obligation period. However, from 2011-12 onwards we expect suppliers to use this approach, unless they can provide us with a comparable alternative delivering the same level of consistency.

2.43. We intend to follow up with all suppliers in July 2012 to establish their progress in using the methodology from the 2011-12 obligation period onwards.

¹⁴ ELEXON delivers the Balancing and Settlement Code (BSC) for the electricity industry.

Chapter 3

Renewables Obligation Certificates



3. Renewables Obligation Certificates

Chapter Summary

This chapter, together with Appendix 3, provides information on the number of ROCs issued by Ofgem to generating stations for the 2010-11 obligation period, including:

- the total number of ROCs issued
- the total ROCs issued broken down by generation technology.

- 3.1.** The Authority are required to issue ROCs to operators of accredited generating stations that have generated electricity from eligible renewable sources. ROCs are electronic certificates that are issued directly into a generator's account on the Register. ROCs may only be issued where all necessary eligibility criteria have been met and are issued only on the renewable output of the accredited station in question.
- 3.2.** We cannot issue ROCs before the end of the second month after the month of generation, this time-frame reflects the deadline for the provision of gross output and input electricity data required to be provided to us by accredited generating stations.
- 3.3.** The introduction of banding in April 2009 resulted in different support levels for different renewable technologies. This means that one ROC no longer necessarily represents one MWh of renewable generation for stations accredited after 11 July 2006¹⁵.
- 3.4.** Map 2 illustrates the total ROCs issued in each country in the 2010-11 obligation period. Figure 5 illustrates the total amount of ROCs issued in each country over the past four obligation periods. It demonstrates the divergence that we are beginning to see, in the last two obligation periods, between the total numbers of ROCs issued in the UK and the corresponding generation for those ROCs.
- 3.5.** The effect of banding means that, on average, more than one ROC was issued per MWh of renewable electricity produced. In the 2010-11 obligation period the ROC to MWh ratio was 1.073 ROCs to 1 MWh, in the previous year it was 1.044 ROCs to 1MWh.
- 3.6.** We anticipate that this divergence will grow over the next few years, particularly as new offshore wind comes online, where capacity accredited between 1 April 2010 and 31 March 2014 will receive 2 ROCs per MWh of renewable electricity generated.

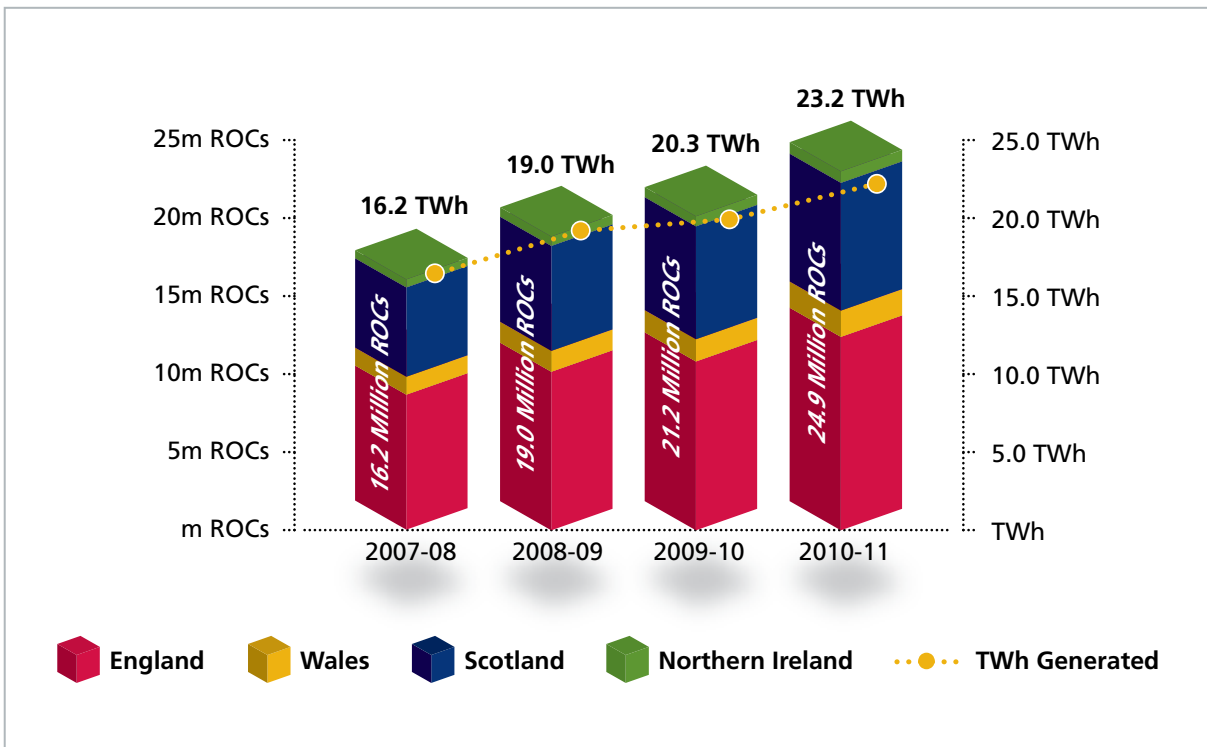
¹⁵See Article 27 of the RO and ROS Orders and Article 25 of the NIRO.

Map 2: ROCs issued across the UK in 2010-11

England	Wales	Scotland	Northern Ireland
ROCs Issued			
13.4m ROCs	1.8m ROCs	8.8m ROCs	787,050 ROCs
Renewable Generation (TWh/MWh)			
12.7 TWh	1.6 TWh	8.1 TWh	780 MWh
Technology generating the most ROCs			
Landfill gas 4.3m ROCs	Onshore wind 669,932 ROCs	Onshore wind 4.8m ROCs	Onshore wind 694,828 ROCs
Total			
ROCs issued 24.9m ROCs		Renewable Generation (TWh) 23.2 TWh	



Figure 5: Total number of ROCs issued and corresponding TWh generation¹⁶



¹⁶ For total ROCs issued prior to 2007 please see RO Annual Reports for those years.

3.7. Of the 24.9 million ROCs issued in 2010-11, renewable generators in England received 53.9% of the total, Scotland 35.6%, Wales 7.3% and Northern Ireland 3.2%. There is no notable difference in the proportion of ROCs issued across each of the countries when compared with the previous obligation year (as seen in Figure 5).

Trends in ROCs issued

3.8. ROCs are issued to renewable generators on a monthly basis. Although the general trend is for more ROCs to be issued over the winter period, there are occasions when this trend is reversed, for example when there is a low wind yield or rain fall in a particular winter month. Figure 6 demonstrates the trend in the total number of ROCs issued monthly over the last four obligation years.

3.9. Figure 7 breaks this down further to compare the total number of ROCs issued per month by generation technology over the last four obligation years.

Total ROCs issued by generation technology

3.10. Figure 8 displays the ROCs issued to each eligible renewable generation technology across the UK in relation to the 2010-11 obligation period.

3.11. Overall, onshore wind has remained the dominant technology in terms of ROCs issued (6% increase from previous year). There has, however, been a significant increase (85%) in the amount of ROCs issued to offshore wind from the previous year. This is due to the accreditation of 571MW of offshore wind sites during 2010-11 which received 2 ROCs per MWh.

Figure 6: Total monthly issue of ROCs

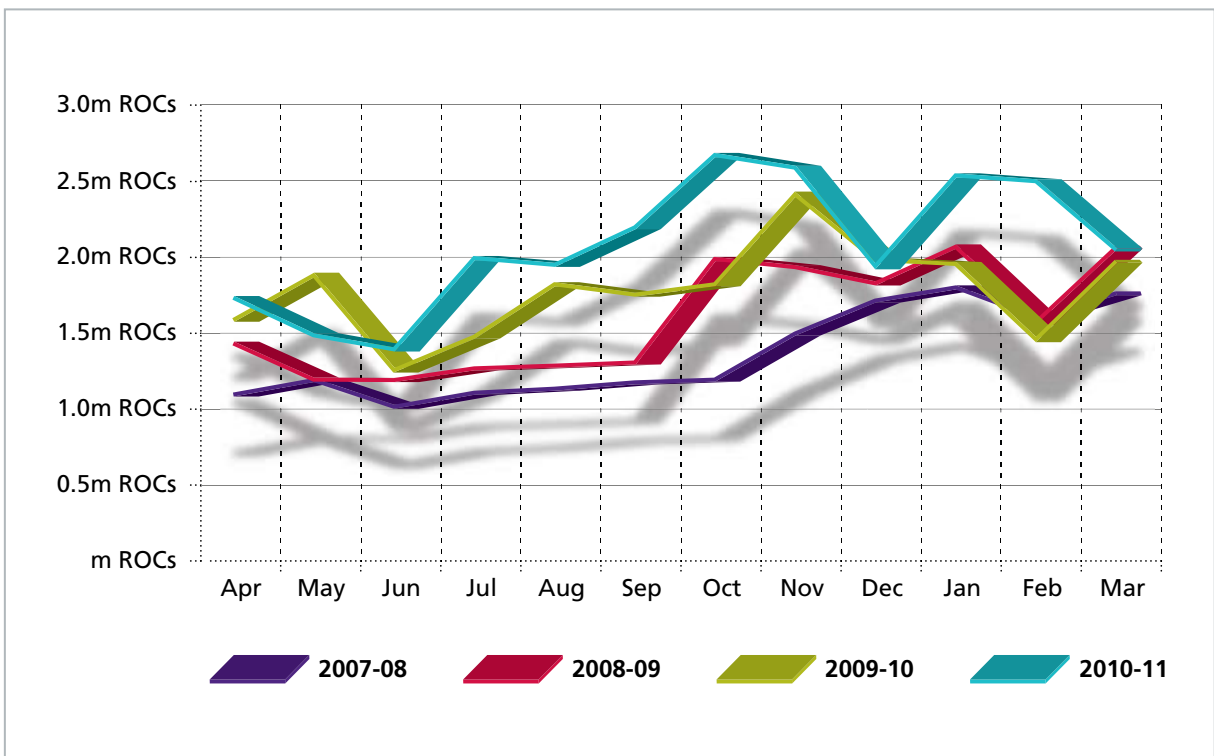


Figure 7: Total monthly issue of ROCs by generation technology

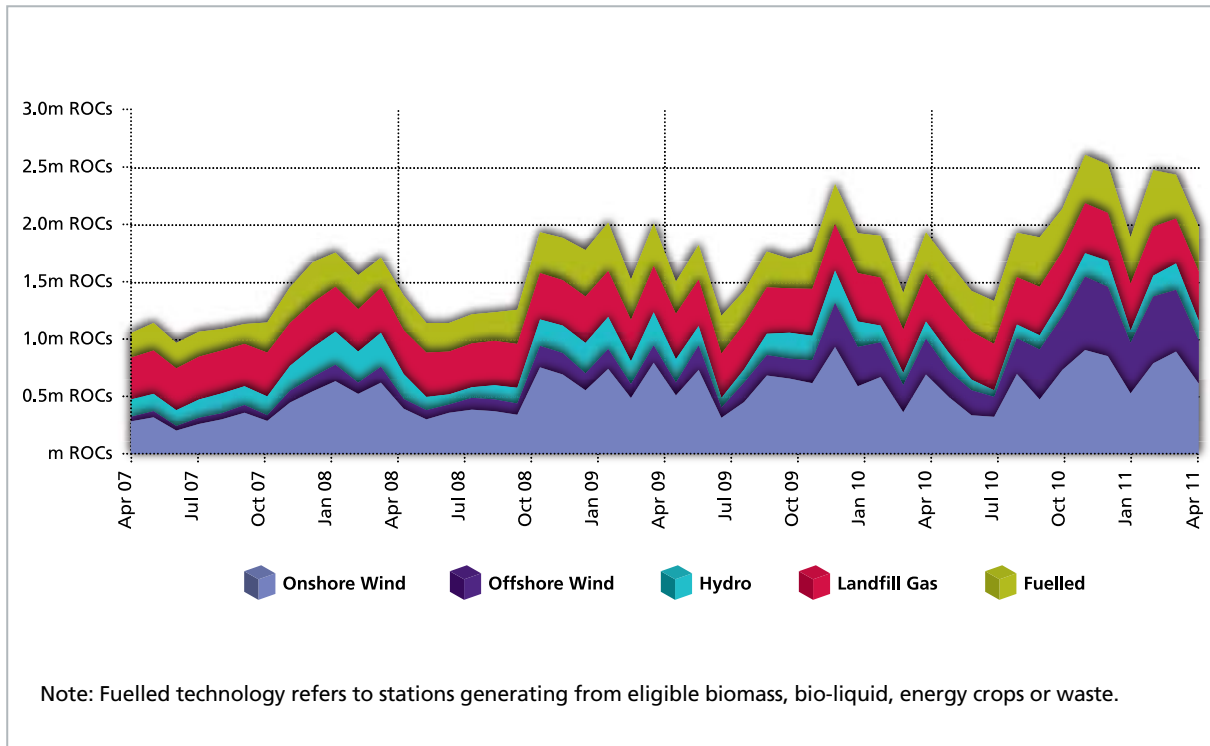
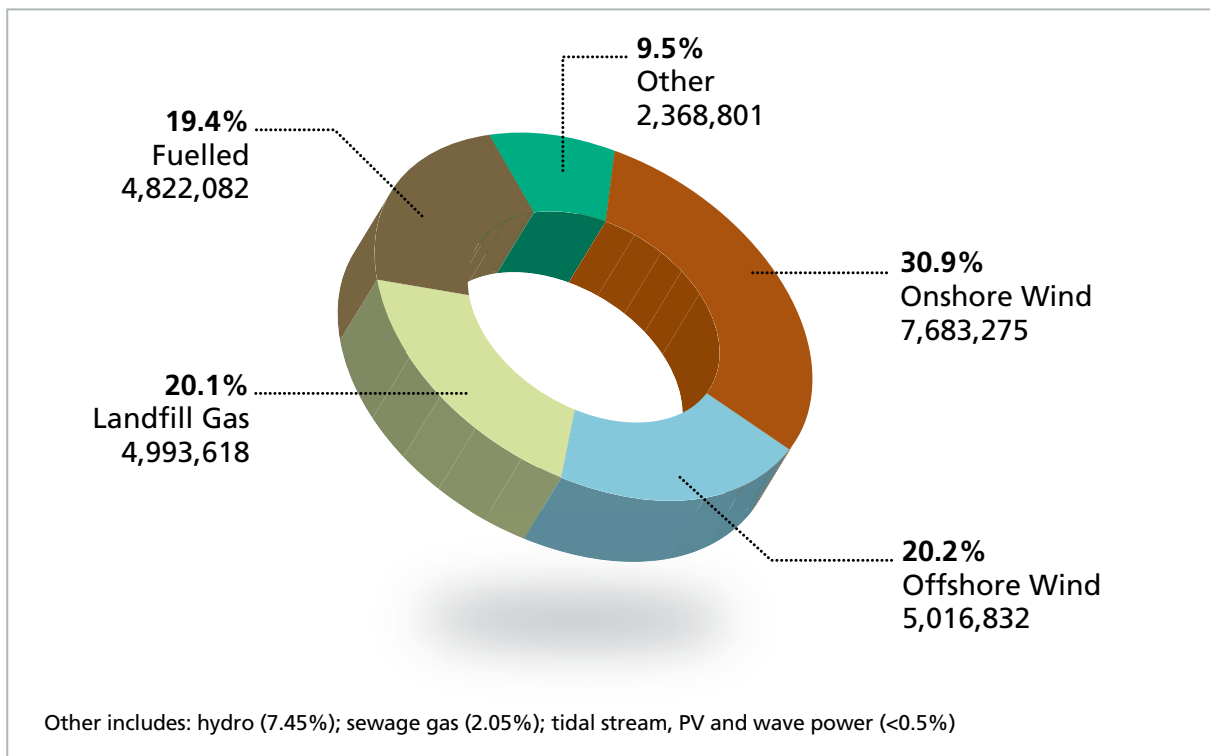


Figure 8: Total ROCs issued in the UK by generation technology



3.12. Figures 9 to 12 provide a breakdown of the ROCs issued to each generation technology in each country during the 2010-11 obligation period.

Figure 9: ROCs issued in England by generation technology

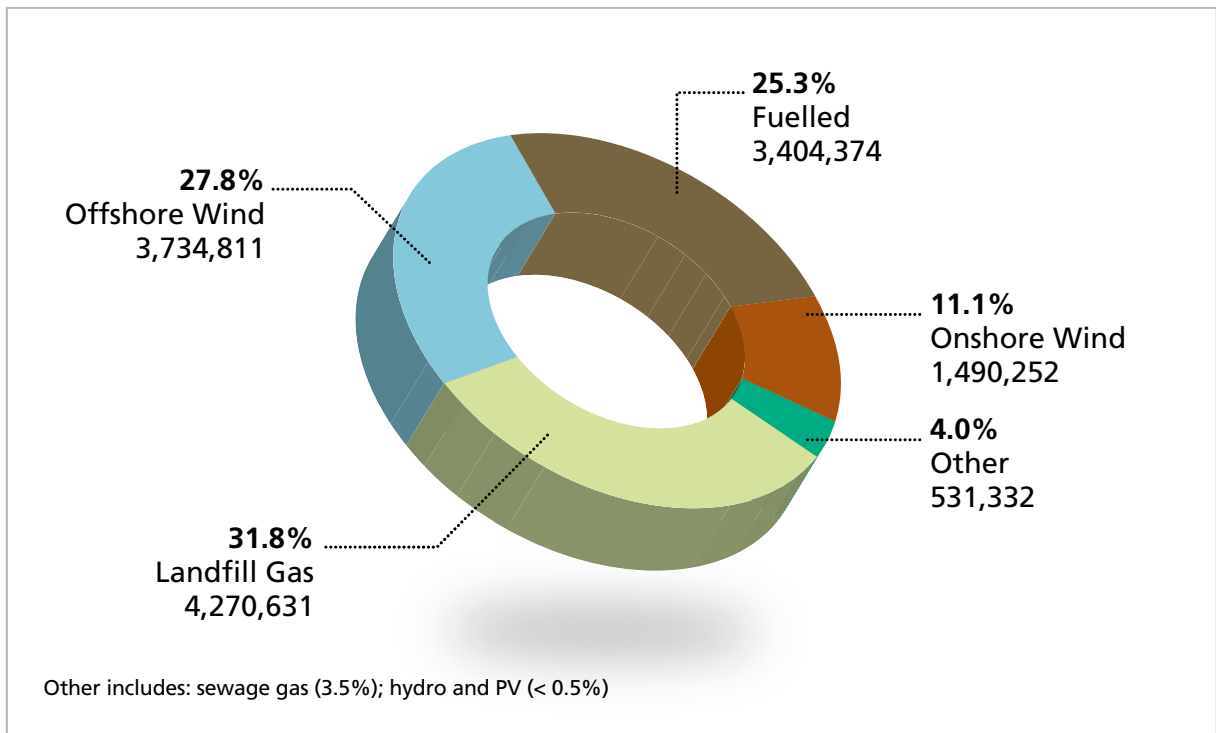


Figure 10: ROCs issued in Wales by generation technology

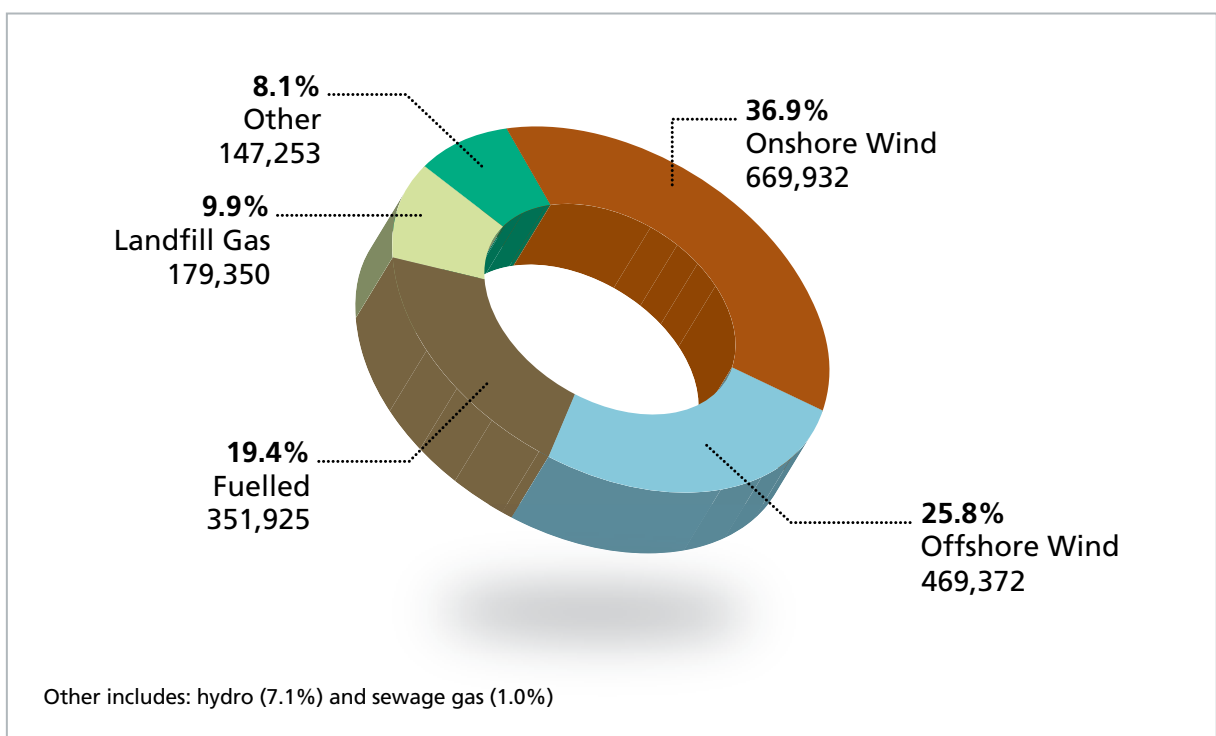


Figure 11: SROCs issued in Scotland by generation technology

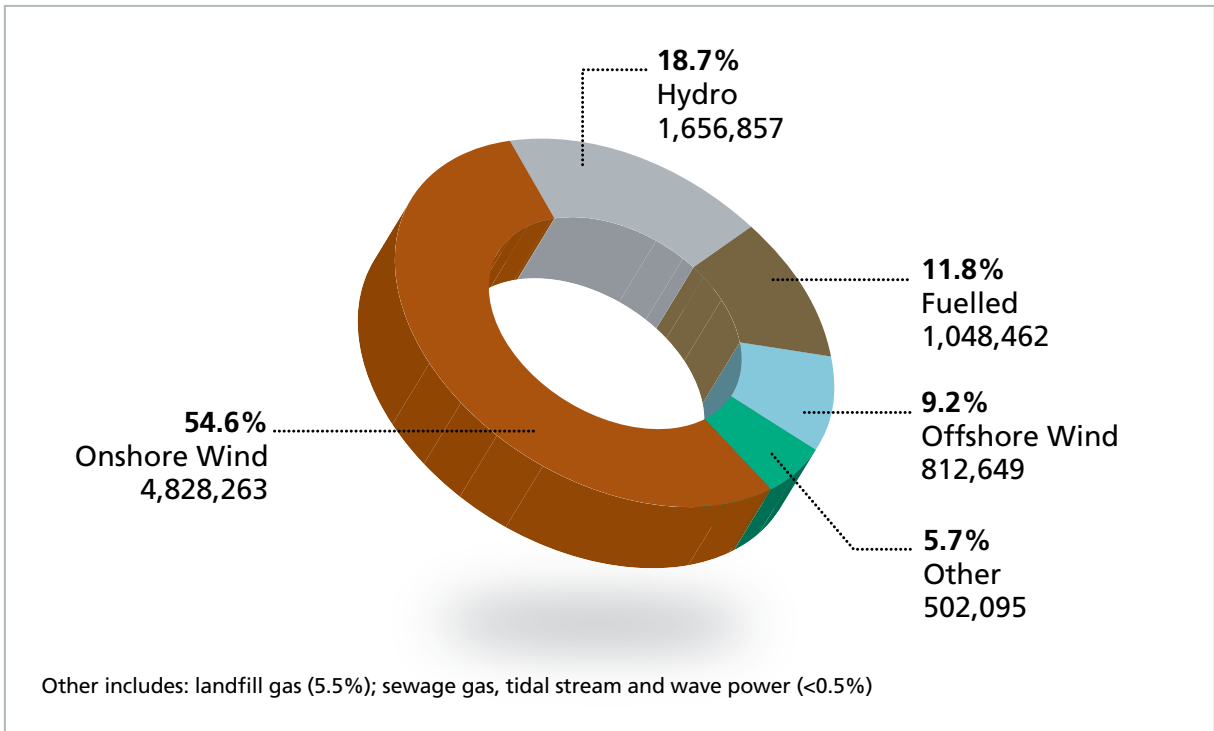
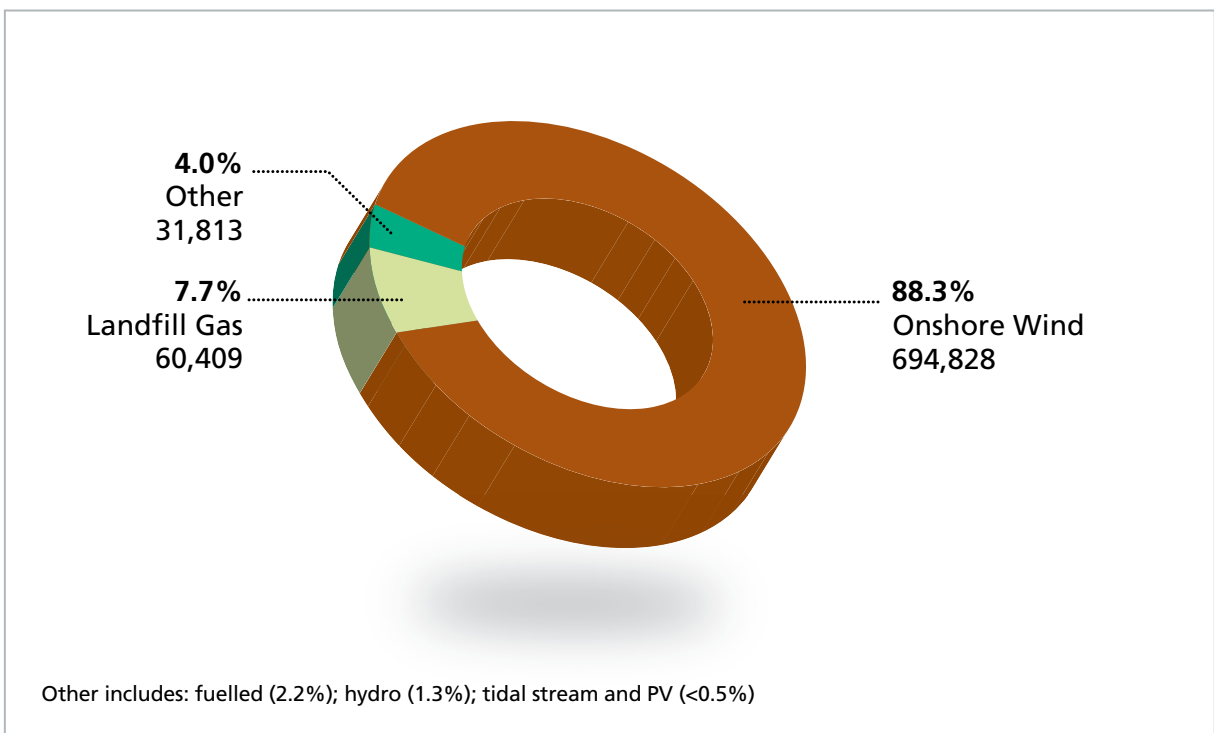


Figure 12: NIROCs issued in Northern Ireland by generation technology



Revoked ROCs

- 3.13.** Where a ROC has yet to be redeemed, the Orders provide for us to revoke that ROC under certain circumstances. This is usually on the basis (but not limited to the fact) that we have reasonable doubts as to the accuracy or reliability of the information on which the ROC issue was based.
- 3.14.** The number of ROCs revoked by us tends to be minimal in terms of the total volume of ROCs issued to renewable generators. A total of 34,265 ROCs were revoked in relation to the 2010-11 obligation period, an increase of 16,557 ROCs from those revoked in the previous obligation year. Further detail on revoked ROCs can be found in Appendix 3.

Retired ROCs

- 3.15.** The owner of a ROC on the Register may at any time retire this ROC, rendering it unable to be submitted towards compliance with the RO.
- 3.16.** A total of 89,883 ROCs were retired from the 2010-11 obligation period. This is a notable increase from the 7,788 ROCs retired during 2009-10. A large proportion of these ROCs were retired by British Gas as part of their actions to redress the market as a result of misreporting their electricity supply figures¹⁷.

¹⁷ Press release (July 2011) relating to this case and the penalty announced by Ofgem can be found on our website <http://www.ofgem.gov.uk/Media/PressRel/Pages/PressRel.aspx>

Chapter 4

Generators accredited under the Renewables Obligation



4. Generators accredited under the Renewables Obligation

Chapter Summary

This chapter, together with Appendix 4, provides information on the number and type of generating stations accredited¹⁸ under the Orders, including:

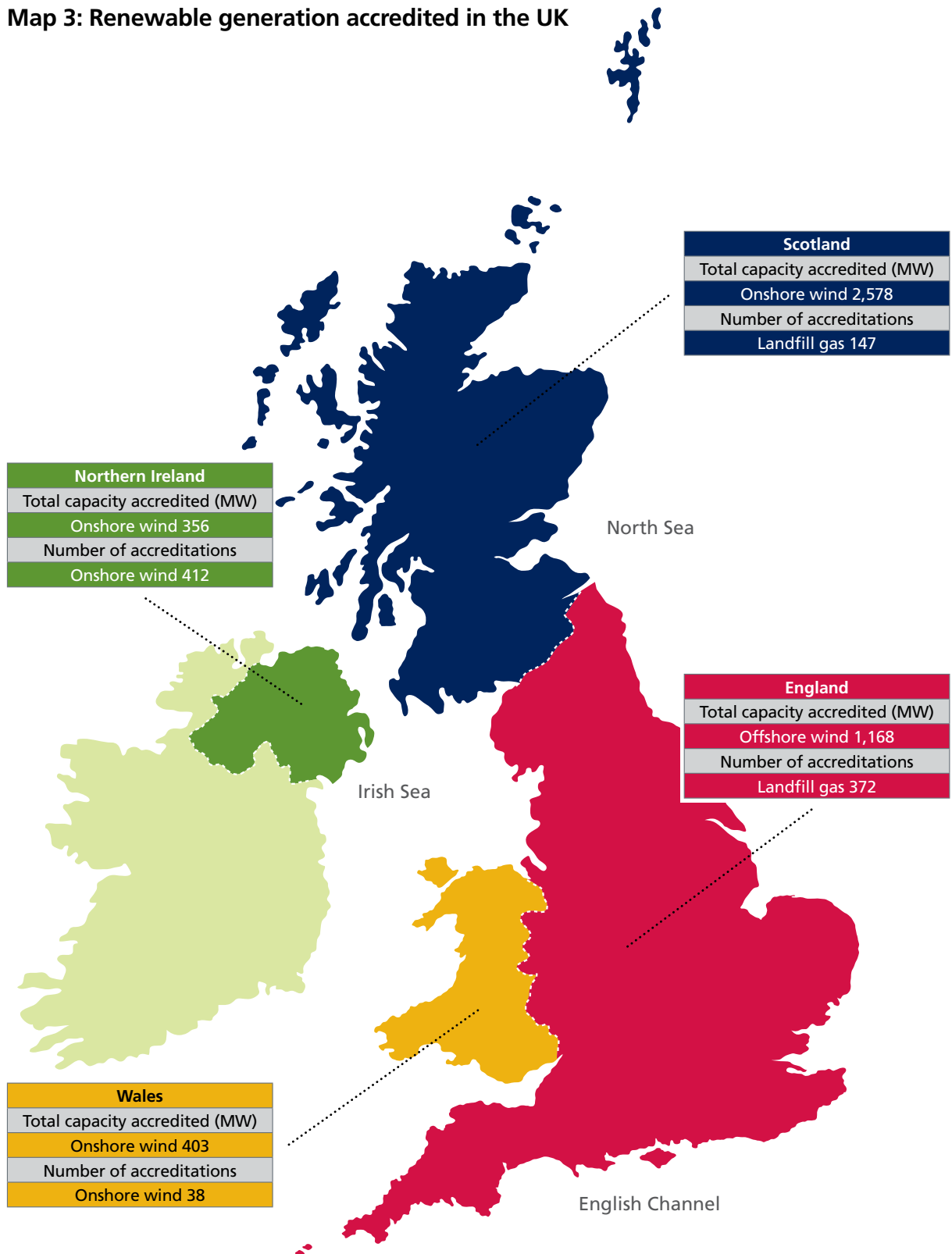
- the number of generating stations accredited during 2010-11 and the overall number accredited as of 31 March 2011
- the total generating capacity and different technologies accredited during 2010-11 and overall as of 31 March 2011.

- 4.1.** The Orders require Ofgem to accredit eligible renewable generating stations where they satisfy the criteria for accreditation. This process is facilitated by the Register, where generators can make and submit accreditation applications to us for review.
- 4.2.** The number of stations accredited, as at the 31 March 2011, totalled 1,981¹⁹. This is a significant decrease from the number of accredited stations at the same time last year (7,228) as a result of wind, PV, hydro and AD micro generation stations in GB (with a capacity of 50kW or less) being transferred from the RO to the FIT scheme.
- 4.3.** The generating stations accredited under the RO, as at the 31 March 2011, had a combined total capacity of 8,528MW. This has increased from 7,625MW, the total capacity of generating stations accredited as at 31 March 2010.
- 4.4.** The most prominent generation technology accredited, either in terms of combined total capacity or in terms of total number of stations accredited, varies in each country of the UK. This can be seen in Map 3.

¹⁸ Accredited generating stations only refer to 'full' and not 'preliminary' accreditations.

¹⁹ This total includes micro generation stations with a capacity of 50kW or less that remain in the RO (predominantly located in Northern Ireland).

Map 3: Renewable generation accredited in the UK



Generation accredited during 2010-11

- 4.5. During the 2010-11 obligation period, 203 generating stations were accredited under the Orders. This represents a significant decrease from the 3,348 stations accredited during 2009-10, where we experienced a surge of applications by micro generators in the lead up to the introduction of the FIT scheme on 1 April 2010.
- 4.6. Northern Ireland did not introduce a FIT scheme and therefore still accredits micro generation under the RO. This explains the relatively high number of stations accredited in Northern Ireland during 2010-11 compared to the rest of the UK, as shown in Figure 13.
- 4.7. Figure 13a excludes generating stations with a capacity of 50kW or less and demonstrates that a large proportion of the stations accredited in Northern Ireland were micro generators. All but one of the total micro generators accredited during 2010-11 were in Northern Ireland.
- 4.8. The total capacity of stations accredited in the UK during 2010-11 was 1,112.5MW, Figure 14 shows how this capacity is split across each country. The majority of capacity accredited was in England, as this was largely where new accredited offshore wind sites were located. Scotland still continues to see the highest volume of onshore wind accreditations.

Figure 13: Total number of generating stations accredited during 2010-11 including stations with a capacity of 50kW or less

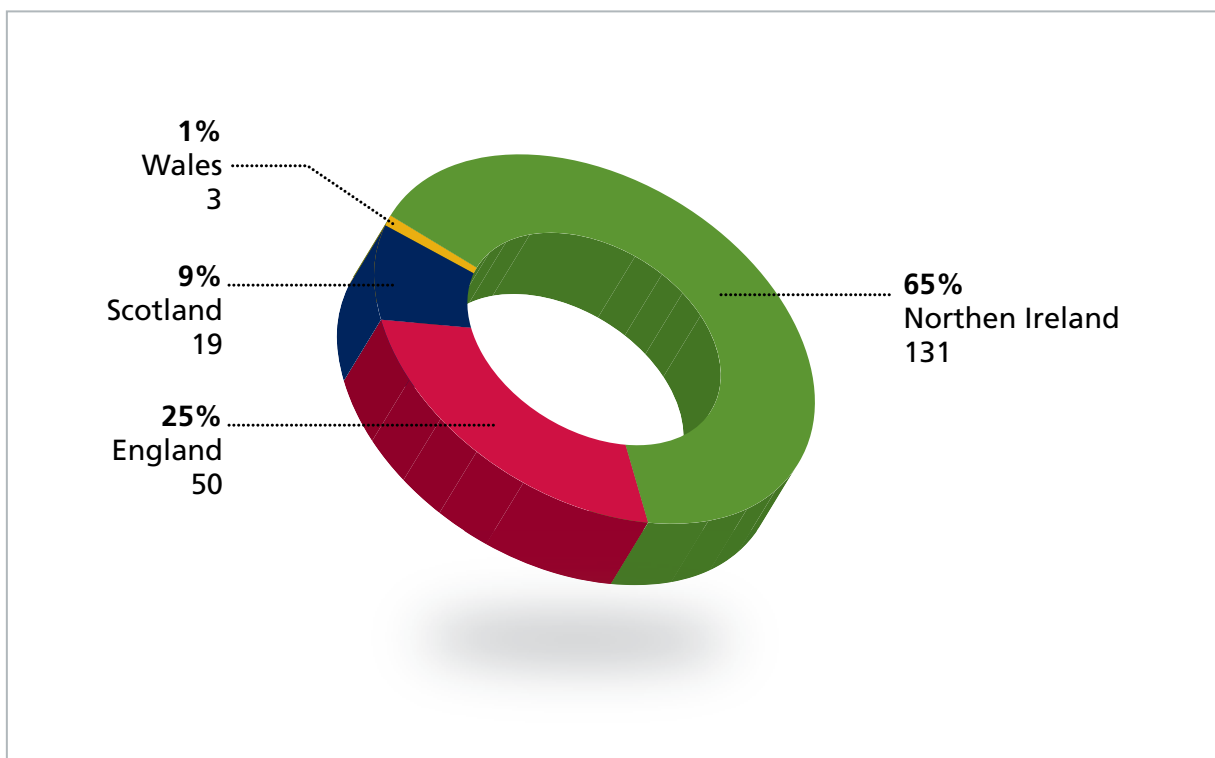


Figure 13a: Total number of generating stations accredited during 2010-11 excluding stations with a capacity 50kW or less

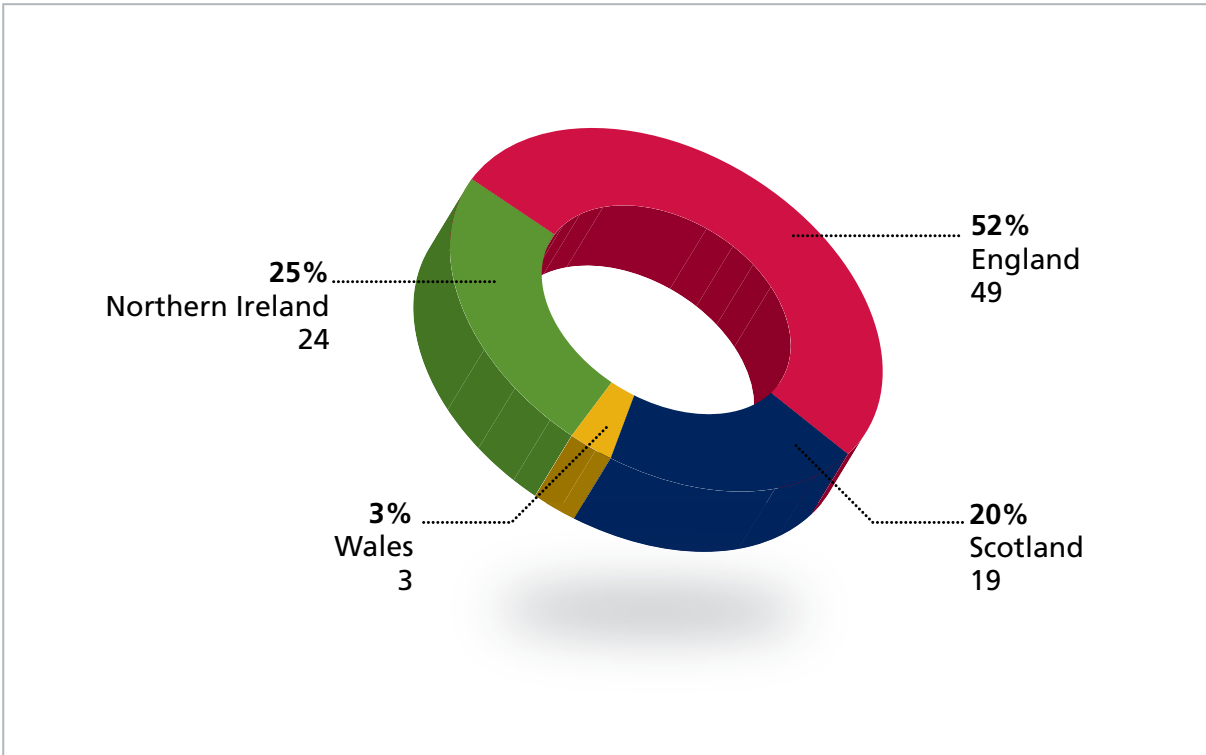
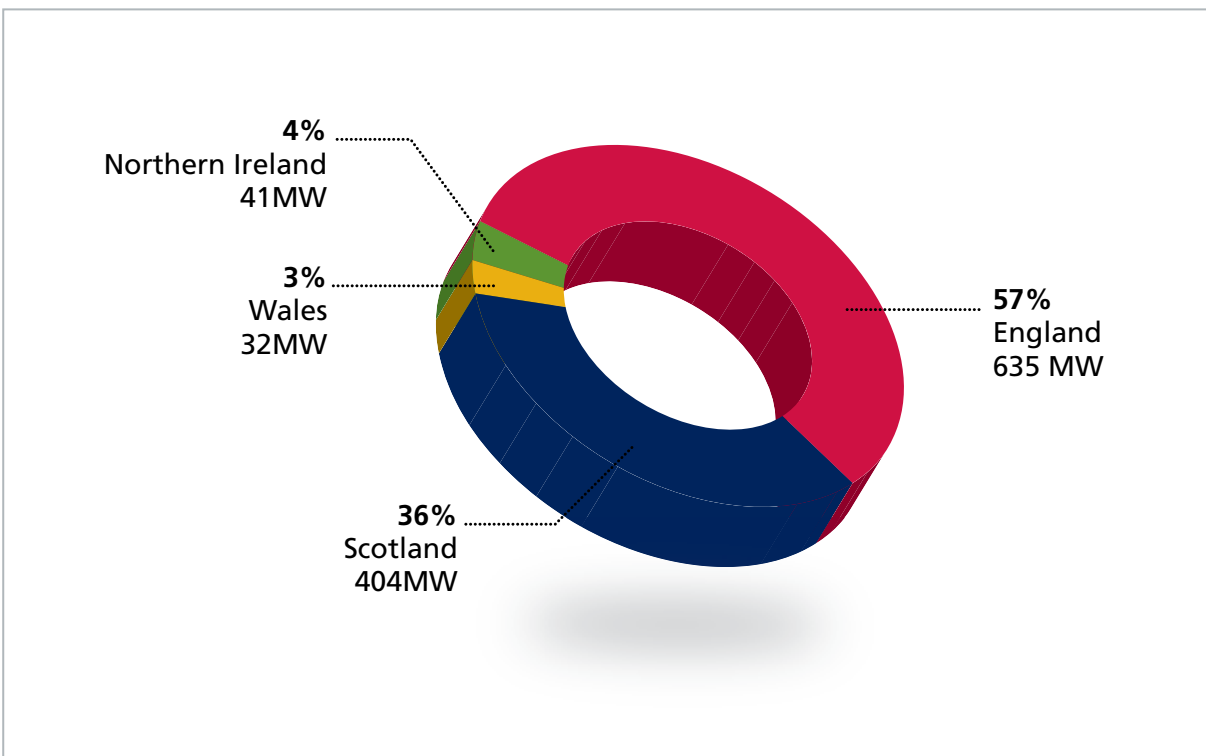


Figure 14: Total capacity (MW) accredited during 2010-11



4.9. Figure 15 shows the total number of stations accredited each month by Ofgem, it also displays the cumulative total of stations accredited to date. The cumulative total does not include any stations that have since transferred to the FIT scheme; virtually all stations that remain accredited under the RO and ROS have a declared net capacity (DNC) of over 50kW.

Generation technologies accredited

4.10. The proportion of different generation technologies under the RO has changed considerably over the course of the schemes. When first introduced, landfill

gas made up the bulk of capacity accredited. In recent years it is wind, both off and onshore, that has seen the largest increase in accreditations. This can be seen in Figure 16.

4.11. The fastest growing technology in terms of capacity accredited in 2010-11 was offshore wind. Offshore wind stations tend to be very large installations, for example Thanet, a 298MW offshore wind farm off the coast of Kent, which was accredited in 2010.

4.12. The technology with the most accredited capacity to date is onshore wind, this can be seen in Figure 17.

Figure 15: Number of generating stations accredited under the Orders over the last four years

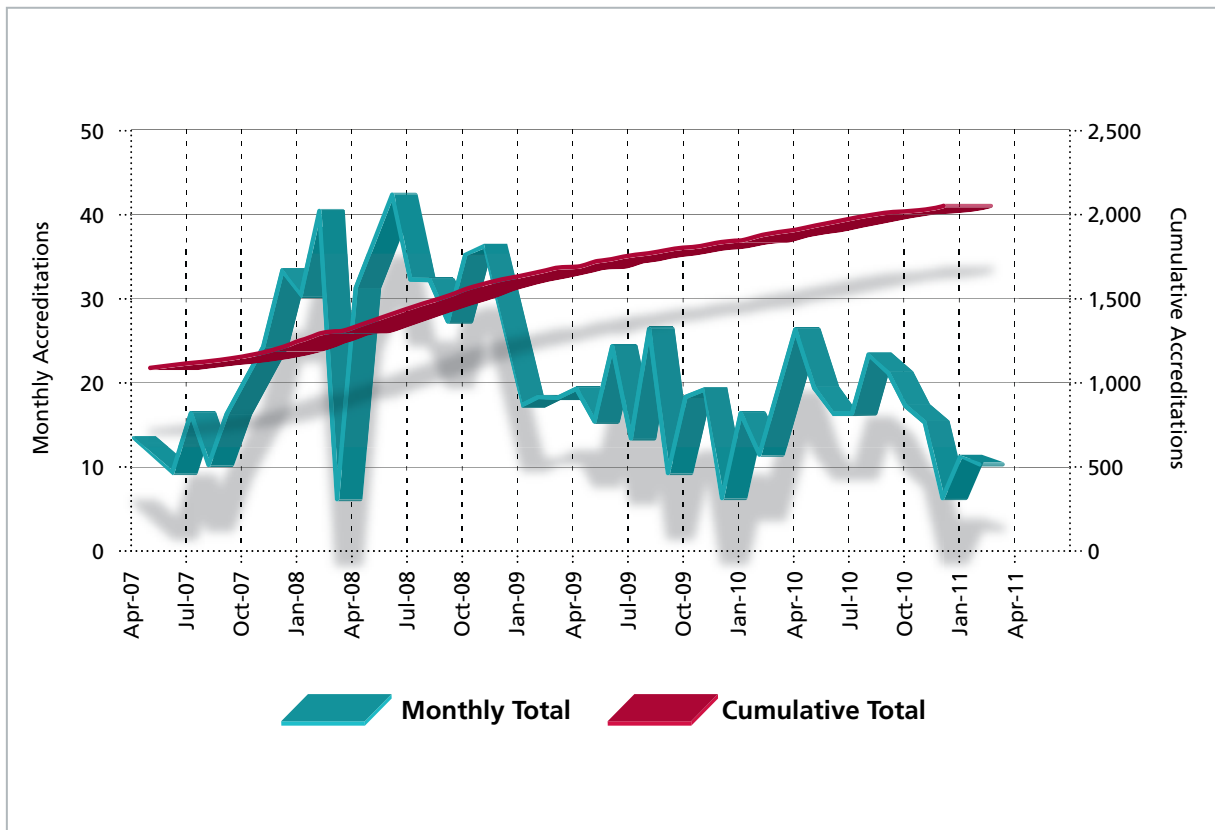


Figure 16: Total capacity (MW) of generation technologies accredited over the last four years

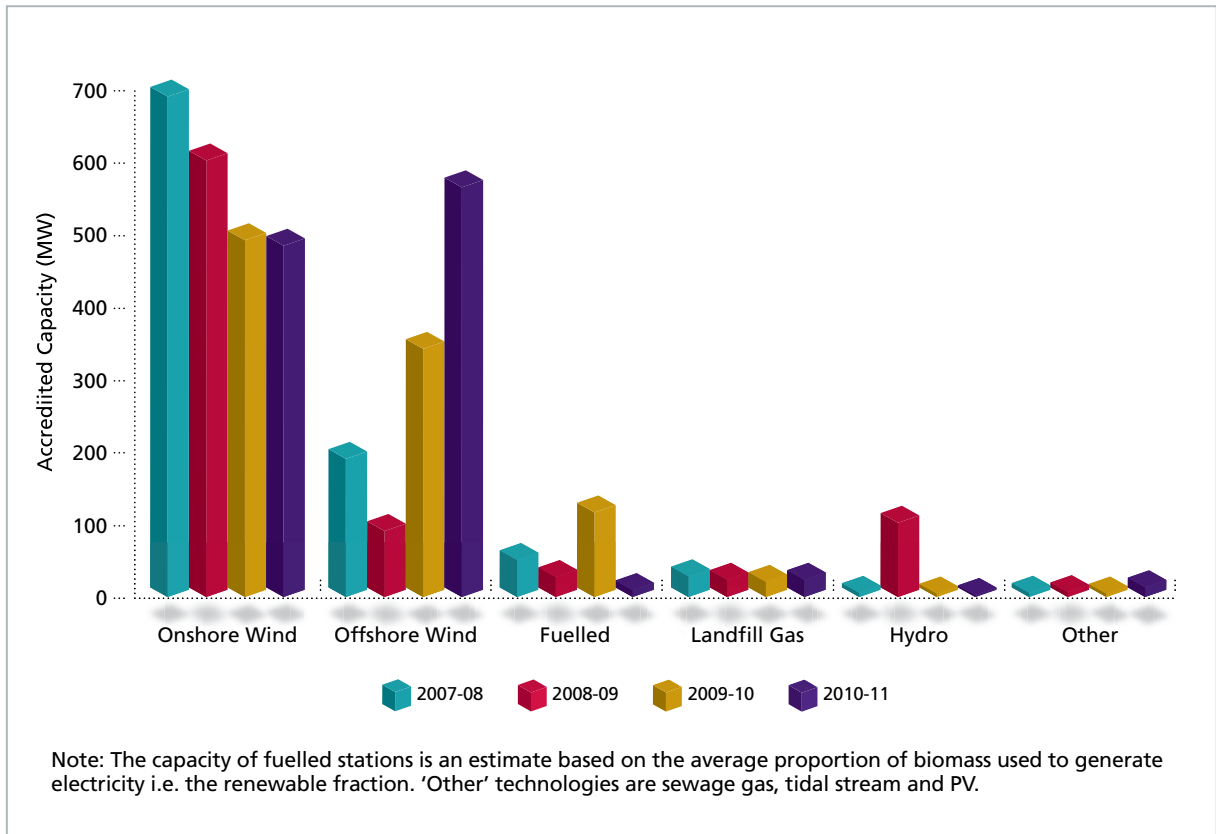
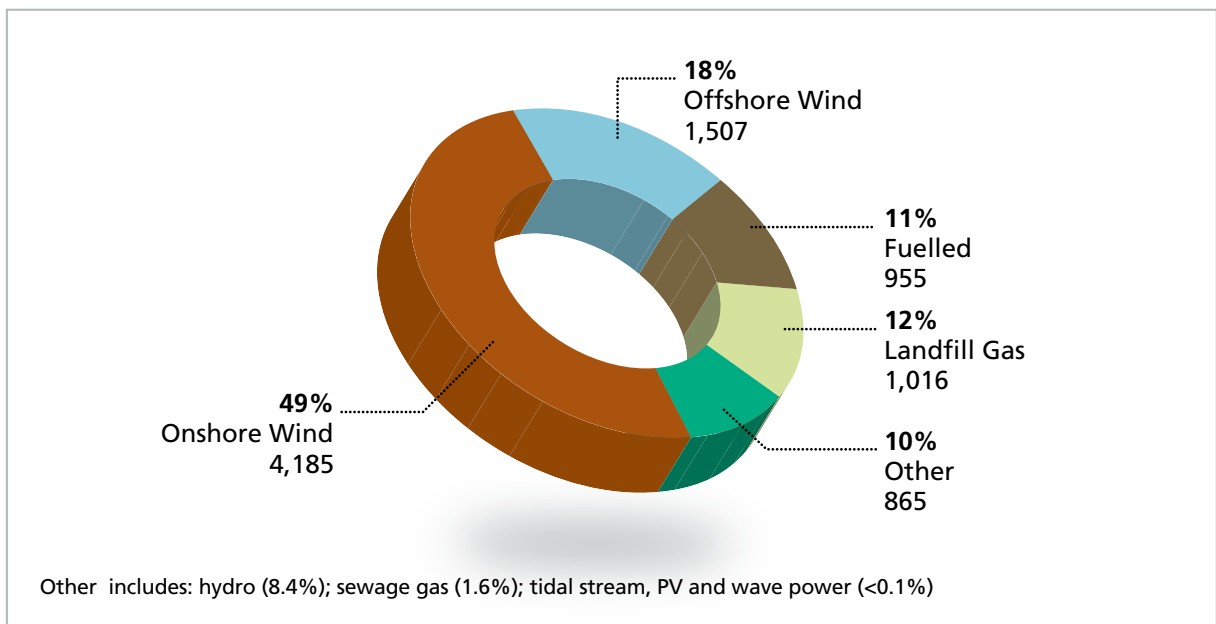


Figure 17: Total capacity (MW) accredited as at 31 March 2011 by generation technology



NFFO generating stations

- 4.13.** Prior to the RO, the Non-Fossil Fuel Orders required the Regional Electricity Companies to contract for certain amounts of electricity generating capacity from renewable sources. These Orders are known as the Non-Fossil Fuel Obligations (NFFO and Northern Ireland NFFO) and the Scottish Renewables Obligation (SRO)²⁰. Collectively known as the 'NFFO Orders' these set out specific eligibility requirements in respect of generating stations situated at locations where a NFFO contract exists²¹.
- 4.14.** During the 2010-11 obligation period there were no generating stations accredited that received support under the NFFO Orders. This is attributed to the declining number of contracts that would be viable if commissioned under this scheme.
- 4.15.** As at 31 March 2011, NFFO generating stations represented 7.2% of the total accredited RO capacity in England and Wales (compared to 16.1% last year). SRO generating stations represented 1.7% of the accredited capacity in Scotland (compared to 5.4% last year) and NI NFFO generating stations represented 0.4% of the accredited capacity in Northern Ireland (compared to 9.7% last year).
- 4.16.** There is an annual reduction in the number of stations receiving support under the NFFO Orders, this is because the NFFO contracts have either come to an end or have been terminated on economic grounds. Further information on NFFO stations accredited under the RO Orders can be found in Appendix 4.

²⁰ See the Electricity (Non-Fossil Fuel Sources) (England and Wales) Order 1994, the Electricity (Non-Fossil Fuel Sources) (Northern Ireland) Order 1996 and the Electricity (Non-Fossil Fuel Sources) (Scotland) Order 1994 and subsequent orders.

²¹ See Articles 20 and 21 of the RO and ROS, Articles 19 and 20 of the NIRO for further details.

Chapter 5

Generator audits



5. Generator audits

Chapter Summary

The Orders require that for Ofgem to issue ROCs on renewable generation we must be sure that the issue is based on accurate and reliable information provided by the generator. We also set certain conditions for accreditation under the RO that must be met. Our audit process for generating stations checks that generators are adhering to these conditions. This chapter summarises the results of the 2010-11 audit round, including the main findings and issues identified.

Audit process for generating stations

- 5.1.** We expect operators of generating stations applying for accreditation to submit complete and accurate information. They are also required to inform us of any subsequent changes that might affect their accredited status. This helps us to ensure that accreditation remains valid and to make certain that we issue the correct number of ROCs. A programme of audits gives us assurance that accreditations are valid and output data submissions for ROC issue are correct and in compliance with the Orders.
- 5.2.** During the 2010-11 obligation period we carried out technical audits of 26 accredited generating stations across England and Wales, Scotland and Northern Ireland; similar issues were identified in all countries. Table 5 summarises the audit results. Most of the findings were satisfactory but some revealed irregularities that called into question:
- the number of ROCs that the operator received
 - departures from agreed procedures for fuel measurement and sampling
 - failures to report modifications at the generating station.

Table 5: Summary of technical audit results

Generating technology	Number of stations audited	Types of irregularity reported
Fuelled	6	<ul style="list-style-type: none"> • Fuel used for 'permitted ancillary purposes' not accounted for in monthly submissions. • Discrepancies in renewable heat contribution in monthly submissions. • Discrepancies in metered data submitted. • Fuel measurement and sampling methodology not accurate. • Methodology for carryover fuel not robust. • Lack of evidence regarding quality of fuel/contamination. • Calibration certificates for weighbridges not provided. • Information regarding generation process and meter records not made available to Ofgem's auditor. • 'Input electricity' from the diesel generator not reported. • Carryover of fuels not measured and re-sampled. • Discrepancies in the total installed capacity and declared net capacity reported. • Lack of valid calibration certificates. • No fuel measurement and sampling procedures for fossil fuel. • Main meter not in line with the current requirements of COP 1²².
Hydro	4	<ul style="list-style-type: none"> • Discrepancies in the total installed capacity reported. • Lack of meter calibration certificates.
Landfill gas	5	<ul style="list-style-type: none"> • Inconsistencies in output submissions. • Lack of valid calibration certificates. • Lack of information regarding on-site loads. • Incorrect description of generator sets. • Discrepancies in metered data submitted. • Meter details not updated on the accreditation application. • Discrepancies in the total installed capacity and declared net capacity reported.
Offshore wind	3	<ul style="list-style-type: none"> • Auxiliary meter faulty and data not reported in monthly submissions. • Output from diesel generator not metered and reported as 'input electricity'. • Discrepancies in metered data submitted. • Single line diagram incorrect. • Station can be electrically connected at the substation to a nearby offshore wind farm. There are no interlocks or procedures that prevent electricity imported by one station being exported by the other.
Onshore wind	7	<ul style="list-style-type: none"> • Standby diesel generator not reported. • Discrepancies in metered data submitted. • Single line diagram incorrect. • Evidence regarding commissioning date and meter records not made available to Ofgem's auditor. • Auxiliary supply meter not declared on application. • Lack of valid calibration certificates. • Information about the rating of diesel generator not made available to the auditor. • Commissioning date incorrect. • LV auxiliary supply not metered and declared as input electricity.
Sewage gas	1	<ul style="list-style-type: none"> • Input electricity incorrectly reported. • Inconsistent meter reading process. • Rating of diesel generator incorrect.

²² 'Code of Practice' refers to the Balancing and Settlement Code and details the technical requirements for metering systems. Please refer to www.ELEXON.co.uk for more information regarding COP meters and metering systems.

Main issues identified

- 5.3.** The audit findings did not identify any issues that threatened accreditation. The most common findings were in relation to the accuracy of the information submitted for ROC claims due to issues with the incorrect reporting of meter data or of the renewable heat contribution of fuelled stations. The audits also highlighted minor discrepancies with information provided on accreditation applications. Other issues relate to 'best practice' employed at the generating station, for example failure to provide evidence as requested by the auditor.
- 5.4.** We notified each operator of the issues identified by the audit and requested that the operator provide assurances that the issues would be rectified. We also carry out a follow-up exercise to ensure that the issues have been addressed.
- 5.5.** With the introduction the FIT scheme we have discontinued the micro generator audit programme under the RO. Micro generators located in Northern Ireland and accredited for the NIRO continue to be audited as part of our normal generator audit programme. We have introduced a dedicated audit programme for stations accredited under the FIT scheme.
- 5.6.** In the Renewables Obligation Annual Report 2009-2010 we highlighted two audit issues that called into question the validity of two stations accreditations. The first issue was where a station exceeded the 20MW DNC limit set for certain hydro stations. On investigation, it was established that one of the two turbines installed at this plant was driven by a compensation flow and thus each should be considered separate hydro generating stations for the purposes of the RO. Ofgem decided that each turbine must be regarded as separate hydro generating stations in accordance with Article 2(1) of the RO and are now accredited as such, both with a DNC of less than 20MW.
- 5.7.** The second issue was in relation to a fuelled station where the fuel used did not meet the definition of a biomass fuel. Unfortunately, we were unable to complete our investigations as the operator company had changed ownership and the generating station was no longer operational. We have currently suspended the accreditation for this station.

Chapter 6

Changes in legislation

legislation
laws, written
parliament

6. Changes in legislation

Chapter Summary

There have been several RO Orders and amendments to these since the introduction of the RO in 2002. Significant changes were made in the 2009 Orders when banding provisions were introduced. This chapter sets out the key changes introduced by the most recent amendments, in 2010 and 2011, and what the main proposals are for the 2012 amendment order currently being considered by DECC.

RO amendment 2010

- 6.1. Amendment orders for the RO, ROS and NIRO came into force on 1 April 2010.
- 6.2. A key feature of the 2010 amendments was to make PV, hydro, wind and AD micro generation technologies (with capacity 50kW or less) ineligible for support under the RO and ROS. As of 1 April 2010 these technologies are now supported through the FIT scheme. The FIT scheme does not include generation in Northern Ireland, therefore increased levels of support were introduced under the NIRO for these technologies (with capacity 50kW or less) accredited after 31 March 2010.
- 6.3. The amendment orders extended the RO and ROS to 2037, and the NIRO to 2033. Generating stations receiving full accreditation on or after 26 June 2008 can receive only 20 years support from the date they are first accredited, subject to the 2037 (or 2033) end date. Additional capacity also receives 20 years support from the date it is first accredited, subject to the end dates.
- 6.4. The obligation level was amended to remove the 20 ROCs per 100MWh renewables obligation cap and increase the headroom provision to 10% with effect from 1 April 2011.
- 6.5. An increased level of support for offshore wind projects was also introduced. This came about as a result of an emergency banding review initiated in April 2009

and saw support increase from 1.5 ROCs per MWh to 2 ROCs per MWh, for stations that receive full RO accreditation between 1 April 2010 and 31 March 2014.

RO amendment 2011

- 6.6. Amendment orders for the RO, ROS and NIRO came into force on 1 April 2011.
- 6.7. A definition of 'fossil derived bioliquid' was introduced to include bioliquids produced directly or indirectly from coal, lignite, natural gas, crude liquid petroleum or petroleum products. As a result, generation using bioliquids produced directly or indirectly from these products can now be considered as eligible for ROCs. Clearly, ROCs cannot be issued in respect of the generation of electricity attributed to the fossil portion of the fuel.
- 6.8. The Orders were amended to align with the requirements of the European Renewable Energy Directive 2009 (RED). The amendments meant that electricity generated using bioliquids must meet certain sustainability criteria if ROCs are to be issued. In practice, this meant that generators must produce evidence of compliance with these requirements to Ofgem in the form of an independent audit report. In addition, where electricity is generated from solid or gaseous biomass, operators were obliged to report against the sustainability criteria.

- 6.9.** Additional provisions were introduced for offshore wind generating stations. These changes meant that operators of any stations accredited on or after 1 April 2011 may register turbines with Ofgem for ROCs to be issued on their renewable output. This change came about as the government recognised the fact that offshore installations are often deployed over long periods of time and hence, prior to the amendments, this would impact on the length of time that the turbines realised RO support. Operators are able to register five “phases” of turbines and all applications for registration of “phases” must be received within 5 years of the accreditation date.
- 6.10.** Changes specific to the NIRO included increased levels of support for electricity generated from AD. Operators of onshore wind, hydro and PV generating stations (with capacity 50kW or less) accredited before 1 April 2010 receive higher ROC levels for any additional capacity added after this date, subject to the banding thresholds. In addition, in order to align with the FIT scheme, onshore wind and hydro micro generators in NI were required to use equipment and installers certified under the Micro generation Certification Scheme (MCS) or equivalent.
- 6.11.** It is proposed that two new bands are to be created for enhanced co-firing and conversion stations (for former fossil fuel generating stations that convert to run on biomass). Some changes are also being proposed to the bands for standard and advanced gasification and pyrolysis to encourage development and deployment of advanced conversion technologies.
- 6.12.** It is proposed that the definition of energy crops is to be amended to prevent the use of food crops in electricity generation.
- 6.13.** The consultation proposed that a cap is to be introduced to limit the number of bioliquid ROCs that a supplier can use to meet their obligation and that the existing co-firing cap is removed.
- 6.14.** In light of the decrease in bands, ‘grace periods’ may be introduced so that generators can, in certain situations, realise pre-1 April 2013 ROC levels even if the stations were commissioned after this date.
- 6.15.** The NIRO is proposed to be extended to 2037, in line with the RO and ROS schemes.

Future of the Renewables Obligation

- RO amendment 2012 - ‘Banding review’**
- 6.11.** The government and the devolved administrations closed their consultations on the first major banding review in January 2012. The new bands and associated rules are expected to come into effect on 1 April 2013. The following is a summary of the proposals as they currently stand.
- 6.12.** Based on the proposals, support will be reduced where possible without significantly affecting deployment. This is with the exception of wave technologies and a new band that is being introduced for enhanced co-firing (stations co-firing at least 15% of biomass by energy content).
- 6.18.** In its White Paper of 12 July 2011 the government set out its proposals for the Electricity Market Reform (EMR). It committed to maintaining the RO (in its current banded format) until 31 March 2037 but will close the scheme to new entrants from 31 March 2017. Renewable generation already accredited under the RO will continue to receive support under a ‘vintaged’ scheme.
- 6.19.** New renewable electricity generation will be supported through a new ‘Contract for Difference’ scheme, further details of this and the EMR will be released by DECC.



Chapter 7

Implementation update

7. Implementation update

Chapter Summary

This chapter gives an update on the implementation work done by Ofgem during the 2010-11 obligation period and outlines work we have been undertaking in 2011-12.

2010-11 obligation period

Feed-in Tariff scheme

- 7.1.** The FIT scheme was introduced in April 2010 to promote the uptake of small-scale renewable electricity generation in GB. Renewable generators (PV, hydro, wind and AD) with a capacity of 50kW or less were excluded from the RO and given the option to migrate to the FIT scheme. Generators with a capacity over 50kW and up to 5MW had the option to remain in the RO or migrate to the new FIT scheme.
- 7.2.** Ofgem developed and built a bespoke migration database to enable the transfer of generators between the two schemes. In addition, significant numbers of generators were contacted to provide further information with regards to their migration into the FIT scheme. The project was a success and to date approximately 5,000 installations accredited under the RO have been migrated into FIT.

Renewables and CHP register

- 7.3.** Changes brought in through the RO amendment orders in April 2010 meant that a number of upgrades were required to the Register. These included updated functionality for fuel burning stations, particularly around fuel maintenance and output data, and improving the functionality of viewing and amending all other output data. Further notification emails for tasks carried out on the register were added and the public certificate reports were improved with new filters.

Guidance documents

- 7.4.** A number of reports and guidance documents were produced during 2010-11 to support fuelled generating stations operating under the RO. These included: an update to the 'Fuel Measuring and Sampling (FMS) guidance' to provide clarity on the requirements for CHP ROCs, the publication of the 'Annual Sustainability Report' on biomass fuelled generating stations for the 2009-10 obligation period and a report on gross calorific value (GCV) calculations and methodology issues for syngas.
- 7.5.** In addition, all documents were updated to reflect the requirements of the 2010 amendment orders. The 'Register User Guide', was also updated to provide guidance on the new functionality within our IT system.

2011-12 obligation period

Renewables and CHP register

- 7.6.** The RO amendment orders enacted in April 2011 required further changes to the Register. These changes included a new function for reporting the sustainability criteria for bioliquids, further changes to NIROC bands, and the capability to accommodate phased RO support for new offshore wind generation. In December 2011 work was completed on the initial phase functionality to facilitate the 20 years support provisions, introduced into the Orders in April 2010.

Guidance documents

- 7.7.** We published a revised 'Fuel Measurement and Sampling (FMS) guidance' document in April 2011. A number of new FMS templates for fuelled stations, including gasification, pyrolysis, biomass declaration and AD feedstock have also been published.
- 7.8.** We published a recommended methodology for calculating total electricity supply figures for suppliers with an obligation under the RO. This was as a result of inconsistencies found during supplier audits of the 2009-10 obligation period. Suppliers were given the option to apply this methodology for 2010-11 reporting, however, we expect this new approach to be applied from 2011-12 onwards unless a comparable alternative can be provided that would deliver the same levels of consistency.
- 7.9.** Updated guidance documents for electricity suppliers and renewable generators operating under the RO were published in May 2011. These documents reflected changes introduced via the 2011 amendment orders.

Customer satisfaction survey

- 7.10.** In October 2011 we conducted a web-based survey of customer satisfaction in relation to our administration of the RO. This was followed up with a number of telephone interviews with a selection of respondents to discuss their views. The key findings from this exercise, along with what steps need to be taken to address any issues identified, are currently being analysed. We are aiming to publish a summary of our findings in late March 2012.

Appendices - Index

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Appendix 1 - Renewables Obligation Legislation

England and Wales

The Renewables Obligation Order 2002 for England and Wales
<http://www.legislation.gov.uk/uksi/2002/914/contents/made>

The Renewables Obligation Order 2009 for England and Wales
<http://www.legislation.gov.uk/uksi/2009/785/contents/made>

The Renewables Obligation (Amendment) Order 2010 for England and Wales
<http://www.legislation.gov.uk/uksi/2010/1107/contents/made>

The Renewables Obligation (Amendment) Order 2011 for England and Wales
http://www.legislation.gov.uk/ukdsi/2011/9780111507353/pdfs/ukdsi_9780111507353_en.pdf

Scotland

The Renewables Obligation (Scotland) Order 2002
<http://www.legislation.gov.uk/ssi/2002/163/contents/made>

The Renewables Obligation (Scotland) Order 2009
<http://www.legislation.gov.uk/sdsi/2009/9780111003268/contents>

The Renewables Obligation (Scotland) Amendment Order 2010
<http://www.legislation.gov.uk/sdsi/2010/9780111007860/contents>

The Renewables Obligation (Scotland) Amendment Order 2011
<http://www.legislation.gov.uk/sdsi/2011/9780111012352/contents>

Northern Ireland

The Renewables Obligation Order (Northern Ireland) 2005
<http://www.legislation.gov.uk/nisr/2005/38/contents/made>

The Renewables Obligation Order (Northern Ireland) 2009
<http://www.legislation.gov.uk/nisr/2005/38/contents/made>

The Renewables Obligation (Amendment) Order (Northern Ireland) 2010
<http://www.legislation.gov.uk/nisr/2010/134/contents/made>

The Renewables Obligation (Amendment) Order (Northern Ireland) 2011
<http://www.legislation.gov.uk/nidsr/2011/9780337983696/contents>

Appendix 2 - Compliance by licensed electricity suppliers

Table A1: Supplier groups and their licences

Supplier Group	Supply Licences
BizzEnergy Limited	BizzEnergy Limited
	BizzEnergy@home
British Gas Trading Limited	British Gas Trading Limited
	Electricity Direct (UK) Limited
E.ON Energy Limited	Citigen (London) Limited
	E.ON Energy Limited
	E.ON UK Plc
	Economy Power Limited
EDF Energy plc	EDF Energy Customers Plc
	SEEBBOARD Energy Limited
	SWEB Energy Limited
Electricity Supply Board	Electricity Supply Board
	ESB Independent Energy NI Limited
International Power Plc	International Power Plc
	International Power Retail Supply Company Limited
	IPM Energy Retail Limited
Opus Energy Limited	Farmoor Energy Limited
	Donnington Energy Limited
	Evenlode Energy Limited
	Opus Energy (Corporate) Limited
	Opus Energy Limited
RWE Npower Plc	Electricity Plus Supply Limited
	Npower Direct Limited
	Npower Limited
	Npower Limited (NI)
	Npower Northern Limited
	Npower Northern Supply Limited
	Npower Yorkshire Limited
	Npower Yorkshire Supply Limited
Scottish Power Energy Retail Limited	Scottish Power Energy Retail Limited
	Scottish Power Energy Retail Limited (NI)
SSE Energy Supply Limited	Slough Energy Supplies Limited
	South Wales Electricity Limited
	SSE (Ireland) Limited
	SSE Energy Supply Limited
	SSE Energy Supply Limited (NI)
The Royal Bank of Scotland Plc	J.P. Morgan Energy Europe Ltd
	The Royal Bank of Scotland Public Limited Company
Tradelink Solutions Limited	Tradelink Solutions Limited
	Tradelink Solutions Limited (NI)
Utilitis Consulting	730 Energy Limited
	Affinity Power Limited
	SME Energy Limited
	Utilitease Limited

Table A2: Summary of supplier compliance 2010-11

Supplier (group)	Total obligation (ROCs)	Total ROCs presented	Total payments	Total redistributed to suppliers	Percentage of funds
Abacus Financial Limited	0	0	£0.00	£0.00	0.00%
Airtricity Energy Supply Ltd	50,123	0	£0.00	£719,259.00	0.20%
AMRECS LLC	0	0	£0.00	£0.00	0.00%
At Cost Energy	0	0	£0.00	£0.00	0.00%
BES Commercial Electricity Ltd	4,367	0	£161,535.33	£0.00	0.00%
Better Business Energy Ltd	0	0	£0.00	£0.00	0.00%
BizzEnergy Ltd	0	0	£0.00	£0.00	0.00%
Blizzard Utilities Ltd	0	0	£0.00	£0.00	0.00%
Bord Gais Eireann	0	0	£0.00	£0.00	0.00%
BP Power Trading Ltd	325	0	£12,021.75	£0.00	0.00%
Brilliant Energy Ltd	0	0	£0.00	£0.00	0.00%
British Energy Direct Ltd	1,400,785	50,123	£51,815,037.15	£0.00	0.00%
British Gas Trading Ltd	4,931,060	3,934,995	£36,844,444.35	£56,466,871.00	15.76%
Budget Energy Ltd	0	0	£0.00	£0.00	0.00%
Business Energy Solutions Ltd	0	0	£0.00	£0.00	0.00%
Caboodle Energy Ltd	0	0	£0.00	£0.00	0.00%
Candela Energy Supply Ltd	0	0	£0.00	£0.00	0.00%
ConocoPhillips (U.K.) Ltd	36,507	0	£1,350,393.93	£0.00	0.00%
ContourGlobal Solutions (Northern Ireland) Ltd	904	0	£33,438.96	£0.00	0.00%
Dual Energy Direct Ltd	1,937	0	£71,649.63	£0.00	0.00%
E.ON Energy Ltd	5,456,867	3,410,757	£75,685,608.90	£48,944,094.00	13.66%
Ecotrade Solutions Ltd	0	0	£0.00	£0.00	0.00%
Ecotricity Group Ltd	30,217	30,217	£0.00	£433,608.00	0.12%
EDF Energy plc	5,399,365	3,974,931	£52,689,813.66	£57,039,951.00	15.92%
Electricity for Business	0	0	£0.00	£0.00	0.00%
Electricity Supply Board	60,244	0	£0.00	£864,494.00	0.24%
Eneco energy Trade BV	0	0	£0.00	£0.00	0.00%
Energy 2 Sell Ltd	0	0	£0.00	£0.00	0.00%
Energy CO-OP Ltd	0	0	£0.00	£0.00	0.00%
Energy Data Company Ltd	1,480	0	£54,745.20	£0.00	0.00%
Essential Power Ltd	0	0	£0.00	£0.00	0.00%
Eucalyptus Worldwide Ltd	0	0	£0.00	£0.00	0.00%
Finotec Trading (Cyprus) Ltd	0	0	£0.00	£0.00	0.00%
Finotec Trading UK Ltd	0	0	£0.00	£0.00	0.00%
Firmus Energy Supply Ltd	2,882	0	£106,605.18	£0.00	0.00%
First Utility Ltd	38,984	60,244	£1,442,018.16	£0.00	0.00%
Gazprom Marketing & Trading Retail Ltd	65,688	65,688	£0.00	£942,614.00	0.26%
GDF Suez Marketing Ltd	1,272,384	1,261,814	£390,984.30	£18,106,930.00	5.05%
Good Energy Ltd	14,182	14,182	£0.00	£203,507.00	0.06%
Green Energy (UK) Ltd	0	0	£0.00	£0.00	0.00%
Haven Power Ltd	208,254	208,254	£0.00	£2,988,427.00	0.83%
Home Counties Energy Plc	0	0	£0.00	£0.00	0.00%
Ineos Chlor Energy Ltd	0	0	£0.00	£0.00	0.00%
International Power Plc	41,600	131,155	£23,895.54	£587,686.00	0.16%
K O Brokers Ltd	0	0	£0.00	£0.00	0.00%
Lourdes Associates Ltd	0	0	£0.00	£0.00	0.00%

Table A2: Summary of supplier compliance 2010-11 continued

Supplier (group)	Total obligation (ROCs)	Total ROCs presented	Total payments	Total redistributed to suppliers	Percentage of funds
Lovely Energy Ltd	0	0	£0.00	£0.00	0.00%
Lumen Energy Supply Ltd	0	0	£0.00	£0.00	0.00%
MA Energy Ltd	6,252	0	£232,869.37	£0.00	0.00%
McMillian Ltd	0	0	£0.00	£0.00	0.00%
Metonomi Ltd	0	0	£0.00	£0.00	0.00%
Morgan Stanley Capital Group Inc	0	0	£0.00	£0.00	0.00%
Northern Ireland Electricity plc	173,970	0	£3,098,615.31	£1,294,374.00	0.36%
ONI Electricity Ltd	0	0	£0.00	£0.00	0.00%
Opus Energy Ltd	203,442	191,724	£433,448.82	£2,751,218.00	0.77%
OVO Electricity Ltd	18,880	0	£698,371.20	£0.00	0.00%
Pan-Utility Ltd	0	0	£0.00	£0.00	0.00%
Power & Gas Ventures Ltd	0	0	£0.00	£0.00	0.00%
Power4All Ltd	144,155	0	£5,332,293.45	£0.00	0.00%
Premier Power Ltd	0	0	£0.00	£0.00	0.00%
Primary Connections Ltd	0	0	£0.00	£0.00	0.00%
Quinn Energy Supply Ltd	4,494	0	£0.00	£64,486.00	0.02%
R Electrics Ltd	0	0	£0.00	£0.00	0.00%
Regent Electricity (NI) Ltd	0	0	£0.00	£0.00	0.00%
Reuben Power Supply Ltd	0	0	£0.00	£0.00	0.00%
Rocpower Fuel Ltd	0	0	£0.00	£0.00	0.00%
RWE Npower Plc	5,509,962	3,423,001	£77,196,687.39	£49,119,788.00	13.71%
S. C. Isramart SRL	0	0	£0.00	£0.00	0.00%
Scottish Power Energy Retail Ltd	2,600,812	2,005,419	£22,023,587.07	£28,777,605.00	8.03%
SembCorp Utilities (UK) Ltd	10,306	4,494	£381,218.94	£0.00	0.00%
Smartest Energy	210,256	210,256	£0.00	£3,017,155.00	0.84%
Spark Energy Supply Ltd	5,543	0	£206,920.21	£0.00	0.00%
SSE Energy Supply Ltd	6,333,323	5,616,161	£26,527,822.38	£80,591,474.00	22.49%
Statkraft Markets GmbH	2	2	£0.00	£27.00	< 0.00%
Team Gas and Electricity Ltd	0	0	£0.00	£0.00	0.00%
Telecom Plus Plc	0	0	£0.00	£0.00	0.00%
The Nuclear Decommissioning Authority	1,450	0	£53,635.50	£0.00	0.00%
The Royal Bank of Scotland Plc	0	0	£0.00	£0.00	0.00%
The Utilities Intermediaries Association	0	0	£0.00	£0.00	0.00%
Ther Co-operative Energy Ltd	41	41	£0.00	£587.00	< 0.00%
Total Gas & Power Ltd	439,576	313,764	£4,653,785.88	£4,502,487.00	1.26%
Tradelink Solutions Ltd	0	62,142	£0.00	£0.00	0.00%
UK Healthcare Corporation Ltd	0	0	£0.00	£0.00	0.00%
Universal Bioenergy Ltd	0	0	£0.00	£0.00	0.00%
Utilita Electricity Ltd	6,657	0	£248,505.84	£0.00	0.00%
Utilitis Consulting	0	0	£0.00	£0.00	0.00%
Uttily (UK) Ltd	0	0	£0.00	£0.00	0.00%
Viridian Energy Supply Ltd	62,142	0	£0.00	£891,731.00	0.25%
Winnington Networks Ltd	0	0	£0.00	£0.00	0.00%
Totals:	34,749,418	24,969,364	£361,769,953	£358,308,373	100%

Table A3: Supplier compliance with RO (England and Wales)²³

Licence	RO Obligation	GB ROCs presented	NIROCs presented	Total ROCs presented	Co-fired	Banked (09-10)	Other	Co-fired	Banked (09-10)	Other	Buyout Payment received	Late payment received
BES Commercial Electricity Ltd	3,840	0	0	0	0	0	0	0.00%	0.00%	0.00%	£142,041.60	£0.00
BP Power Trading Ltd	325	0	0	0	0	0	0	0.00%	0.00%	0.00%	£12,021.75	£0.00
British Energy Direct Ltd	1,318,242	0	0	0	0	0	0	0.00%	0.00%	0.00%	£48,761,771.58	£0.00
British Gas Trading Ltd	4,521,032	3,607,804	0	3,607,804	350,000	659	3,257,145	7.74%	0.01%	72.04%	£33,780,303.72	£0.00
Dual Energy Direct Ltd	1,757	0	0	0	0	0	0	0.00%	0.00%	0.00%	£64,991.43	£0.00
E.ON Energy Limited	3,053,204	1,847,000	8,254	1,855,254	81,800	81,955	1,691,499	2.68%	2.68%	55.40%	£44,312,170.50	£0.00
E.ON UK Plc	2,149,456	1,301,296	0	1,301,296	0	2,331	1,298,965	0.00%	0.11%	60.43%	£31,373,438.40	£0.00
EDF Energy Customers Plc	5,187,465	3,875,155	99,776	3,974,931	115,938	61,147	3,797,846	2.23%	1.18%	73.21%	£44,851,632.66	£0.00
Electricity Plus Supply Ltd	155,696	96,253	0	96,253	16,301	0	79,952	10.47%	0.00%	51.35%	£2,198,796.57	£0.00
Energy Data Company Ltd	1,480	0	0	0	0	0	0	0.00%	0.00%	0.00%	£54,745.20	£0.00
First Utility Ltd	37,086	0	0	0	0	0	0	0.00%	0.00%	0.00%	£1,371,811.14	£0.00
Gazprom Marketing & Trading Retail Ltd	61,630	61,630	0	61,630	0	0	61,630	0.00%	0.00%	100.00%	£0.00	£0.00
GDF Suez Marketing Ltd	1,213,789	1,189,568	13,651	1,203,219	2,625	333	1,200,261	0.22%	0.03%	98.89%	£390,984.30	£0.00
Good Energy Ltd	13,596	13,596	0	13,596	0	3,399	10,197	0.00%	25.00%	75.00%	£0.00	£0.00
Haven Power Ltd	196,140	132,658	63,482	196,140	24,517	2	171,621	12.50%	0.00%	87.50%	£0.00	£0.00
Immingham CHP LLP	36,507	0	0	0	0	0	0	0.00%	0.00%	0.00%	£1,350,393.93	£0.00
IPM Energy Retail Ltd	38,036	38,036	0	38,036	0	0	38,036	0.00%	0.00%	100.00%	£0.00	£0.00
MA Energy Ltd	5,819	0	0	0	0	0	0	0.00%	0.00%	0.00%	£0.00	£216,802.02
Npower Direct Ltd	285,507	176,504	0	176,504	29,893	0	146,611	10.47%	0.00%	51.35%	£4,032,020.97	£0.00
Npower Ltd	3,773,262	2,282,063	67,289	2,349,352	395,062	62,094	1,895,062	10.47%	1.65%	50.22%	£52,670,430.90	£0.00
Npower Northern Supply Ltd	834,057	515,625	0	515,625	87,326	0	428,299	10.47%	0.00%	51.35%	£11,778,799.68	£0.00
Npower Yorkshire Supply Ltd	183,963	113,728	0	113,728	19,261	0	94,467	10.47%	0.00%	51.35%	£2,597,992.65	£0.00
Opus Energy (Corporate) Ltd	55,347	49,895	5,452	55,347	0	0	55,347	0.00%	0.00%	100.00%	£0.00	£0.00
Opus Energy Ltd	126,758	118,737	8,021	126,758	0	1,332	125,426	0.00%	1.05%	98.95%	£0.00	£0.00
OVO Electricity Ltd	18,227	0	0	0	0	0	0	0.00%	0.00%	0.00%	£674,216.73	£0.00
Power4All Ltd	125,713	0	0	0	0	0	0	0.00%	0.00%	0.00%	£4,650,123.87	£0.00
Scottish Power Energy Retail Ltd	1,661,541	1,011,713	54,435	1,066,148	40,935	18,776	1,006,437	2.46%	1.13%	60.57%	£22,023,587.07	£0.00
SmartestEnergy Ltd	203,459	203,459	0	203,459	0	13,607	189,852	0.00%	6.69%	93.31%	£0.00	£0.00
Spark Energy Supply Ltd	4,676	0	0	0	0	0	0	0.00%	0.00%	0.00%	£0.00	£174,555.10
SSE Energy Supply Ltd	5,440,304	4,665,554	157,525	4,823,079	100,621	6,676	4,715,782	1.85%	0.12%	86.68%	£22,831,152.75	£0.00
Statkraft Markets GmbH	2	2	0	2	0	0	2	0.00%	0.00%	100.00%	£0.00	£0.00
The Co-operative Energy Ltd	40	40	0	40	0	0	40	0.00%	0.00%	100.00%	£0.00	£0.00
The Nuclear Decommissioning Authority	1,450	0	0	0	0	0	0	0.00%	0.00%	0.00%	£53,635.50	£0.00
The Renewable Energy Company Ltd	29,376	29,376	0	29,376	0	10	29,366	0.00%	0.03%	99.97%	£0.00	£0.00
Total Gas & Power Ltd	409,252	283,440	0	283,440	0	0	283,440	0.00%	0.00%	69.26%	£4,653,785.88	£0.00
Utilita Electricity Ltd	6,614	0	0	0	0	0	0	0.00%	0.00%	0.00%	£0.00	£246,900.65
Wilton Energy Ltd	10,306	0	0	0	0	0	0	0.00%	0.00%	0.00%	£381,218.94	£0.00
Totals	31,164,954	21,613,132	477,885	22,091,017	1,264,279	252,321	20,577,283	4.06%	0.81%	66.03%	£335,012,067.72	£638,258

²³The % totals represent the proportion of the overall obligation met by each type of ROCs

Table A4: Supplier compliance with the ROS (Scotland)²⁴

Licence	ROS Obligation	GB ROCs presented	NIROCs presented	Total ROCs presented	Co-fired	Banked (09-10)	Other	Co-fired	Banked (09-10)	Other	Buyout Payment received	Late payment received
BES Commercial Electricity Ltd	527	0	0	0	0	0	0	0.00%	0.00%	0.00%	£19,493.73	£0.00
British Energy Direct Ltd	82,543	0	0	0	0	0	0	0.00%	0.00%	0.00%	£3,053,265.57	£0.00
British Gas Trading Ltd	410,028	327,191	0	327,191	0	2,300	324,891	0.00%	0.56%	79.24%	£3,064,140.63	£0.00
Dual Energy Direct Ltd	180	0	0	0	0	0	0	0.00%	0.00%	0.00%	£6,658.20	£0.00
E.ON Energy Ltd	137,259	137,259	0	137,259	0	4,119	133,140	0.00%	3.00%	97.00%	£0.00	£0.00
E.ON UK Plc	116,948	116,948	0	116,948	0	0	116,948	0.00%	0.00%	100.00%	£0.00	£0.00
EDF Energy Customers Plc	211,900	0	0	0	0	0	0	0.00%	0.00%	0.00%	£7,838,181.00	£0.00
Electricity Plus Supply Ltd	8,182	5,058	0	5,058	857	0	4,201	10.47%	0.00%	51.34%	£115,556.76	£0.00
First Utility Ltd	1,898	0	0	0	0	0	0	0.00%	0.00%	0.00%	£70,207.02	£0.00
Gazprom Marketing & Trading Retail Ltd	4,058	4,058	0	4,058	0	0	4,058	0.00%	0.00%	100.00%	£0.00	£0.00
GDF Suez Marketing Ltd	58,595	58,595	0	58,595	0	0	58,595	0.00%	0.00%	100.00%	£0.00	£0.00
Good Energy Ltd	586	586	0	586	0	146	440	0.00%	24.91%	75.09%	£0.00	£0.00
Haven Power Ltd	12,114	5,909	6,205	12,114	1,514	61	10,539	12.50%	0.50%	87.00%	£0.00	£0.00
IPM Energy Retail Ltd	3,564	2,918	0	2,918	0	0	2,918	0.00%	0.00%	81.87%	£23,895.54	£0.00
MA Energy Ltd	433	0	0	0	0	0	0	0.00%	0.00%	0.00%	£0.00	£16,067.35
Npower Direct Ltd	15,673	9,689	0	9,689	1,641	0	8,048	10.47%	0.00%	51.35%	£221,348.16	£0.00
Npower Ltd	216,217	133,668	0	133,668	22,638	0	111,030	10.47%	0.00%	51.35%	£3,053,487.51	£0.00
Npower Northern Supply Ltd	37,366	23,100	0	23,100	3,912	0	19,188	10.47%	0.00%	51.35%	£527,699.34	£0.00
Npower Yorkshire Supply Ltd	39	24	0	24	4	0	20	10.26%	0.00%	51.28%	£554.85	£0.00
Opus Energy (Corporate) Ltd	7,444	522	6,922	7,444	0	0	7,444	0.00%	0.00%	100.00%	£0.00	£0.00
Opus Energy Ltd	13,893	2,175	0	2,175	0	10	2,165	0.00%	0.07%	15.58%	£433,448.82	£0.00
OVO Electricity Ltd	653	0	0	0	0	0	0	0.00%	0.00%	0.00%	£24,154.47	£0.00
Power4All Ltd	18,442	0	0	0	0	0	0	0.00%	0.00%	0.00%	£682,169.58	£0.00
Scottish Power Energy Retail Ltd	939,271	939,271	0	939,271	0	0	939,271	0.00%	0.00%	100.00%	£0.00	£0.00
Smartest Energy Ltd	6,797	6,797	0	6,797	0	0	6,797	0.00%	0.00%	100.00%	£0.00	£0.00
Spark Energy Supply Ltd	867	0	0	0	0	0	0	0.00%	0.00%	0.00%	£0.00	£32,365.11
SSE Energy Supply Ltd	893,019	734,610	58,472	793,082	14,179	408	778,495	1.59%	0.05%	87.18%	£3,696,669.63	£0.00
The Co-operative Energy Ltd	1	1	0	1	0	0	1	0.00%	0.00%	100.00%	£0.00	£0.00
The Renewable Energy Company Ltd	841	841	0	841	0	0	841	0.00%	0.00%	100.00%	£0.00	£0.00
Total Gas & Power Ltd	30,324	30,022	302	30,324	0	302	30,022	0.00%	1.00%	99.00%	£0.00	£0.00
Utilita Electricity Ltd	43	0	0	0	0	0	0	0.00%	0.00%	0.00%	£0.00	£1,605.19
Totals	3,229,705	2,539,242	71,901	2,611,143	44,745	7,346	2,559,052	1.39%	0.23%	79.23%	£22,830,930.81	£50,037.65

²⁴ The % totals represent the proportion of the overall obligation met by each type of ROCs

Table A5: Supplier compliance with the NIRO (Northern Ireland)²⁵

Licence	NIRO Obligation	GB ROCs presented	NIROCs presented	Total ROCs presented	Co-fired	Banked (2009-10)	Other	Co-fired	Banked (2009-10)	Other	Buyout Payment received	Late Payment received
Airtricity Energy Supply Ltd	50,123	0	50,123	50,123	0	0	50,123	0%	0.00%	100.00%	£0.00	£0.00
ContourGlobal Solutions (Northern Ireland) Ltd*	904	0	0	0	0	0	0	0%	0.00%	0.00%	£33,438.96	£0.00
ESB Independent Energy NI Ltd	60,244	0	60,244	60,244	0	102	60,142	0%	0.17%	99.83%	£0.00	£0.00
Firmus Energy Supply Ltd	2,882	0	0	0	0	0	0	0%	0.00%	0.00%	£106,605.18	£0.00
NIE Energy Ltd	173,970	0	90,201	90,201	0	702	89,499	0%	0.40%	51.45%	£3,098,615.31	£0.00
Quinn Energy Supply Ltd	4,494	0	4,494	4,494	0	0	4,494	0%	0.00%	100.00%	£0.00	£0.00
Viridian Energy Supply Ltd	62,142	0	62,142	62,142	0	11,803	50,339	0%	18.99%	81.01%	£0.00	£0.00
Totals	354,759	0	267,204	267,204	0	12,607	254,597	0.00%	3.55%	71.77%	£3,238,659.45	£0.00

Table A6: Late payments and interest

Licence	Obligation	Outstanding buy-out	Days late	Interest due	Late payment due	Late payment received
Spark Energy Supply Ltd	RO	£172,965.24	61	£1,589.86	£174,555.10	£174,555.10
MA Energy Ltd	RO	£215,244.81	58	£1,557.21	£216,802.02	£216,802.02
Utilita Electricity Ltd	RO	£244,651.86	61	£2,248.79	£246,900.65	£246,900.65
Spark Energy Supply Ltd	ROS	£32,070.33	61	£294.78	£32,365.11	£32,365.11
MA Energy Ltd	ROS	£16,016.67	21	£50.68	£16,067.35	£16,067.35
Utilita Electricity Ltd	ROS	£1,590.57	61	£14.62	£1,605.19	£1,605.19
Totals		£682,539.48		£5,755.94	£688,295.42	£688,295.42

Table A7: Residual balances of RO buy-out and late-payment accounts

RO buy-out fund (as at: 04.10.11)	£15.55
ROS buy-out fund (as at: 04.10.11)	£11.94
NIRO buy-out fund (as at: 04.10.11)	£14.57
RO late payment fund (as at: 30.11.11)	£13.86
ROS late payment fund (as at: 30.11.11)	£13.30
NIRO late payment fund (as at: 30.11.11)	£16.09

²⁵The % totals represent the proportion of the overall obligation met by each type of ROCs

Table A8: Distribution of the buy-out and late payment funds to suppliers

Licence	England and Wales		Scotland		Northern Ireland		Total
	Buy-out	Late payment	Buy-out	Late payment	Buy-out	Late payment	
Airtricity Energy Supply Limited	£666,049	£1,281	£45,390	£100	£6,439	£0	£719,259
British Gas Trading Limited	£52,289,402	£100,620	£3,563,441	£7,891	£505,517	£0	£56,466,871
E.ON Energy Limited	£26,477,114	£50,949	£1,804,374	£3,996	£255,972	£0	£28,592,405
E.ON UK Plc	£18,846,054	£36,265	£1,284,329	£2,844	£182,197	£0	£20,351,689
EDF Energy Customers Plc	£52,820,084	£101,641	£3,599,606	£7,972	£510,648	£0	£57,039,951
Electricity Plus Supply Limited	£1,346,251	£2,590	£91,744	£203	£13,015	£0	£1,453,803
ESB Independent Energy NI Limited	£800,540	£1,540	£54,555	£120	£7,739	£0	£864,494
Gazprom Marketing & Trading Retail Limited	£872,881	£1,679	£59,485	£131	£8,438	£0	£942,614
GDF Suez Marketing Limited	£16,767,365	£32,265	£1,142,669	£2,530	£162,101	£0	£18,106,930
Good Energy Limited	£188,454	£362	£12,842	£28	£1,821	£0	£203,507
Haven Power Limited	£2,767,342	£5,325	£188,590	£417	£26,753	£0	£2,988,427
IPM Energy Retail Limited	£544,209	£1,047	£37,087	£82	£5,261	£0	£587,686
NIE Energy Limited	£1,198,618	£2,306	£81,683	£180	£11,587	£0	£1,294,374
Npower Direct Limited	£2,474,188	£4,761	£168,612	£373	£23,919	£0	£2,671,853
Npower Limited	£32,995,120	£63,492	£2,248,565	£4,979	£318,986	£0	£35,631,142
Npower Northern Supply Limited	£7,158,740	£13,775	£487,857	£1,080	£69,208	£0	£7,730,660
Npower Yorkshire Supply Limited	£1,511,570	£2,908	£103,011	£228	£14,613	£0	£1,632,330
Opus Energy (Corporate) Limited	£834,385	£1,605	£56,862	£125	£8,066	£0	£901,043
Opus Energy Limited	£1,713,300	£3,296	£116,758	£258	£16,563	£0	£1,850,175
Quinn Energy Supply Limited	£59,717	£114	£4,069	£9	£577	£0	£64,486
Scottish Power Energy Retail Limited	£26,648,613	£51,279	£1,816,061	£4,022	£257,630	£0	£28,777,605
SmartestEnergy Limited	£2,793,945	£5,376	£190,403	£421	£27,010	£0	£3,017,155
SSE Energy Supply Limited	£74,629,244	£143,609	£5,085,866	£11,263	£721,492	£0	£80,591,474
Statkraft Markets GmbH	£26	£0	£1	£0	£0	£0	£27
The Co-operative Energy Limited	£544	£1	£37	£0	£5	£0	£587
The Renewable Energy Company Limited	£401,532	£772	£27,363	£60	£3,881	£0	£433,608
Total Gas & Power Limited	£4,169,390	£8,023	£284,137	£629	£40,308	£0	£4,502,487
Viridian Energy Supply Limited	£825,761	£1,589	£56,274	£124	£7,983	£0	£891,731
Total	£331,800,438	£638,470	£22,611,671	£50,065	£3,207,729	£0	£358,308,373

Table A9: Licences with zero supply under the Orders

Licence	Zero supply under the RO (England and Wales)	Zero supply under the ROS (Scotland)	Zero supply under the NIRO (Northern Ireland)
730 Energy Ltd	✓	✓	x
Affinity Power Ltd	✓	✓	x
Better Business Energy Ltd	✓	✓	x
Blizzard Utilities Ltd	✓	✓	x
Bord Gais Eireann	x	x	✓
Brilliant Energy Ltd	✓	✓	x
Budget Energy Ltd	x	x	✓
Business Energy Solutions Ltd	✓	✓	x
Candela Energy Supply Ltd	✓	✓	x
Citigen (London) Ltd	✓	✓	x
Donnington Energy Ltd	✓	✓	x
Economy Power Ltd	✓	✓	x
Electricity Direct (UK) Ltd	✓	✓	x
Electricity Supply Board	x	x	✓
Eneco energy Trade BV	✓	✓	x
Energy 2 Sell Ltd	✓	✓	x
Energy Co2 Ltd	✓	✓	x
Energy CO-OP Ltd	✓	✓	x
Energy Data Company Ltd	x	✓	x
Essential Power Ltd	✓	✓	x
Evenlode Energy Ltd	✓	✓	x
Farmoor Energy Ltd	✓	✓	x
Finotec Trading (Cyprus) Ltd	✓	✓	x
Finotec Trading UK Ltd	✓	✓	x
Garsington Energy Ltd	✓	✓	x
Home Counties Energy Plc	✓	✓	x
Ineos Chlor Energy Ltd	✓	✓	x
International Power Plc	✓	✓	x
International Power Retail Supply Company Ltd	✓	✓	x
J.P. Morgan Energy Europe Ltd	✓	✓	x
Lourdes Associates Ltd	✓	✓	x
Lovely Energy Ltd	✓	✓	x
Lumen Energy Supply Ltd	✓	✓	x
Metonomi Ltd	✓	✓	x
Morgan Stanley Capital Group Inc	✓	✓	x

Table A9: Licences with zero supply under the Orders continued

Licence	Zero supply under the RO (England and Wales)	Zero supply under the ROS (Scotland)	Zero supply under the NIRO (Northern Ireland)
Npower Ltd	x	x	✓
Npower Northern Ltd	✓	✓	x
Npower Yorkshire Ltd	✓	✓	x
ONI Electricity Ltd	x	x	✓
Pan-Utility Ltd	✓	✓	x
Power & Gas Ventures Ltd	x	x	✓
Premier Power Ltd	x	x	✓
Primary Connections Ltd	✓	✓	x
R Electrics Ltd	✓	✓	x
Regent Electricity (NI) Ltd	x	x	✓
Reuben Power Supply Ltd	✓	✓	x
Rocpower Ltd	✓	✓	x
S. C. Isramart SRL	✓	✓	x
Scottish Power Energy Retail Ltd	x	x	✓
SEEBOARD Energy Ltd	✓	✓	x
Slough Energy Supplies Ltd	✓	✓	x
SME Energy Ltd	✓	✓	x
South Wales Electricity Ltd	✓	✓	x
SSE (Ireland) Ltd	x	x	✓
SSE Energy Supply Ltd	x	x	✓
Statkraft Markets GmbH	x	✓	x
SWEB Energy Ltd	✓	✓	x
Telecom Plus Plc	✓	✓	x
The Nuclear Decommissioning Authority	x	✓	x
The Royal Bank of Scotland Public Limited Company	✓	✓	x
The Utilities Intermediaries Association	✓	✓	x
Tradelink Solutions Ltd	✓	✓	✓
UK Healthcare Corporation Ltd	✓	✓	x
Universal Bioenergy Ltd	✓	✓	x
Utilitease Ltd	✓	✓	x
Uttily (UK) Ltd	✓	✓	x
Wilton Energy Ltd	x	✓	x
Winnington Networks Ltd	✓	✓	x

Key:

Zero supply	✓
No obligation under the Order	x

Appendix 3 - Renewables Obligation Certificates

Table B1: Total ROCs issued during 2010-11 by country and generation technology

Generation Technology	ROCs/SROCs/NIROCs issued				
	England	Wales	Scotland	N. Ireland	Total
Fuelled	3,404,374	351,925	1,048,462	17,321	4,822,082
Anerobic Digestion	183,889	0	43,036	0	226,925
Advanced gasification	127	0	0	0	127
Co-firing of biomass	1,270,262	1,432	40,935	0	1,312,629
Co-firing of energy crops	30,156	0	0	0	30,156
Dedicated biomass	1,347,805	109,964	495,940	16,273	1,969,982
Dedicated biomass with CHP	407,707	240,529	465,588	1,048	1,114,872
Dedicated energy crops	58,025	0	2,963	0	60,988
Electricity generated from sewage gas ²⁶	105,628	0	0	0	105,628
Standard gasification	775	0	0	0	775
Hydro 20MW DNC or less	49,008	125,766	1,602,558	7,677	1,785,009
Hydro 50kW DNC or less	0	0	0	1,599	1,599
Micro Hydro	8,512	2,963	54,299	808	66,582
Landfill Gas	4,270,631	179,350	483,228	60,409	4,993,618
Offshore Wind	3,734,811	469,372	812,649	0	5,016,832
Onshore Wind	1,490,252	669,932	4,828,263	690,280	7,678,727
Wind 50kW DNC or less	0	0	0	4,548	4,548
Photovoltaic	626	0	0	0	626
Photovoltaic 50kW DNC or less	0	0	0	1,698	1,698
Sewage Gas ²⁷	473,186	18,524	18,705	0	510,415
Tidal Stream	0	0	91	2,710	2,801
Wave Power	0	0	71	0	71
Total	13,431,400	1,817,832	8,848,326	787,050	24,884,608

²⁶ Issued to stations using sewage gas, which may have used other types of fuel to generate electricity.

²⁷ Issued to stations solely using sewage gas to generate electricity.

Table B2: ROCs, SROCs and NIROCs issued each month of 2010-11

Month	ROCs	SROCs	NIROCs	Total
	April 2010	1,024,541	649,492	46,194
May 2010	955,603	470,082	48,736	1,474,421
June 2010	907,068	433,563	41,752	1,382,383
July 2010	1,100,195	810,154	70,516	1,980,865
August 2010	1,309,745	570,563	57,745	1,938,053
September 2010	1,322,008	786,944	75,078	2,184,030
October 2010	1,532,212	1,036,372	90,455	2,659,039
November 2010	1,542,442	950,622	81,562	2,574,626
December 2010	1,296,258	575,369	56,763	1,928,390
January 2011	1,583,384	868,282	72,786	2,524,452
February 2011	1,439,027	962,326	83,565	2,484,918
March 2011	1,236,643	734,557	54,397	2,025,597
Annually ²⁸	106	0	7,501	7,607
Total	15,249,232	8,848,326	787,050	24,884,608

²⁸ Annual ROCs for micro generation that remains under the RO schemes

Table B3: Total ROCs issued each month of 2010-11 by generation technology

Generation Technology	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Annual ²⁹	Total
Fuelled	373,044	356,150	377,849	391,135	432,657	373,046	424,297	422,438	404,443	495,943	382,197	388,777	106	4,822,082
Anerobic Digestion	12,673	13,876	14,382	15,163	17,258	17,510	19,608	23,546	23,281	23,302	22,328	23,916	82	226,925
Advanced gasification	0	0	0	0	0	0	0	21	0	44	46	16	0	127
Co-firing of biomass	76,109	65,030	80,408	92,836	111,987	125,913	117,039	129,879	104,170	178,603	117,706	112,949	0	1,312,629
Co-firing of energy crops	2,502	2,676	3,430	4,904	3,572	2,813	2,336	2,008	1,638	1,246	947	2,084	0	30,156
Dedicated biomass	180,832	166,107	166,806	162,540	178,236	123,560	178,492	159,965	169,467	192,386	139,799	151,768	24	1,969,982
Dedicated biomass with CHP	83,551	82,570	82,949	100,681	105,640	92,358	97,161	99,173	96,733	91,237	92,841	89,978	0	1,114,872
Dedicated energy crops	7,970	16,216	20,957	6,091	7,194	1,950	2	80	528	0	0	0	0	60,988
Sewage gas ³⁰	9,407	9,675	8,917	8,920	8,770	8,942	9,555	7,637	8,510	8,842	8,510	7,943	0	105,628
Standard gasification	0	0	0	0	0	0	104	129	116	283	20	123	0	775
Hydro 20MW DNC or less	157,979	90,610	57,638	115,539	119,590	155,697	199,219	221,805	99,717	176,676	226,372	164,167	0	1,785,009
Hydro 50kW DNC or less	34	20	15	19	13	32	23	35	28	33	29	33	1,285	1,599
Micro Hydro	5,760	2,826	1,694	5,383	5,130	5,642	6,508	7,255	4,423	7,088	7,918	6,955	0	66,582
Landfill Gas	413,910	419,373	402,188	411,490	422,840	406,704	435,028	419,766	411,179	427,064	392,557	431,519	0	4,993,618
Offshore Wind	223,230	220,405	172,096	314,938	438,026	468,843	642,414	602,259	441,353	580,283	537,720	375,265	0	5,016,832
Onshore Wind	501,303	338,103	327,238	698,199	476,985	734,915	909,346	857,802	531,264	794,971	896,163	612,438	0	7,678,727
Wind 50kW DNC or less	3	2	2	3	2	3	3	3	2	3	2	2	4,518	4,548
Photovoltaic	74	69	98	111	73	53	42	21	5	11	22	47	0	626
Photovoltaic 50kW DNC or less	0	0	0	0	0	0	0	0	0	0	0	0	1,698	1,698
Sewage Gas ³¹	44,497	46,406	43,202	43,925	41,691	39,017	42,148	43,080	35,975	42,195	41,914	46,365	0	510,415
Tidal Stream	392	457	361	118	1,044	73	5	154	1	181	0	15	0	2,801
Wave Power	1	0	2	5	2	5	6	8	0	4	24	14	0	71
Total	1,720,227	1,474,421	1,382,383	1,980,865	1,938,053	2,184,030	2,659,039	2,574,626	1,928,390	2,524,452	2,484,918	2,025,597	7,607	24,884,608

²⁹ Annual ROCs for micro generation that remains under the RO schemes³⁰ Issued to stations using sewage gas, which may have used other types of fuel to generate electricity.³¹ Issued to stations solely using sewage gas to generate electricity.

Table B4: ROCs issued under the RO (England and Wales) each month of 2010-11 by generation technology

Generation Technology	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Annual ³²	Total
Fuelled	271,624	249,958	282,098	286,148	328,346	311,976	323,705	348,409	325,187	396,302	306,782	325,658	106	3,756,299
Aerobic Digestion	9,685	10,589	10,705	11,740	13,312	13,545	16,244	19,419	19,495	19,991	19,264	19,818	82	183,889
Advanced gasification	0	0	0	0	0	0	0	21	0	44	46	16	0	127
Co-firing of biomass	72,971	60,917	76,281	89,277	107,733	121,808	113,298	126,950	101,847	175,568	115,352	109,692	0	1,271,694
Co-firing of energy crops	2,502	2,676	3,430	4,904	3,572	2,813	2,336	2,008	1,638	1,246	947	2,084	0	30,156
Dedicated biomass	126,611	110,814	113,786	107,645	124,575	107,708	124,886	134,418	136,604	135,755	107,911	127,032	24	1,457,769
Dedicated biomass with CHP	44,435	39,545	48,022	58,103	63,190	55,210	57,280	57,747	56,449	54,573	54,732	58,950	0	648,236
Dedicated energy crops	6,013	15,742	20,957	5,559	7,194	1,950	2	80	528	0	0	0	0	58,025
Sewage gas ³³	9,407	9,675	8,917	8,920	8,770	8,942	9,555	7,637	8,510	8,842	8,510	7,943	0	105,628
Standard gasification	0	0	0	0	0	0	104	129	116	283	20	123	0	775
Hydro 20MW DNC or less	14,554	5,868	5,257	9,208	13,731	15,509	15,356	24,438	9,230	24,443	25,696	11,484	0	174,774
Micro Hydro	839	692	607	796	880	1,079	1,052	1,220	768	1,252	1,407	883	0	11,475
Landfill Gas	368,761	372,681	357,815	364,338	375,557	360,980	386,787	374,990	368,330	381,780	351,399	386,563	0	4,449,981
Offshore Wind	189,022	174,577	135,818	225,825	379,190	395,928	523,759	506,620	398,804	499,640	457,421	317,579	0	4,204,183
Onshore Wind	137,215	107,608	84,088	171,476	172,201	199,212	240,377	246,282	158,732	238,669	255,217	149,107	0	2,160,184
Photovoltaic	74	69	98	111	73	53	42	21	5	11	22	47	0	626
Sewage Gas ³⁴	42,452	44,150	41,287	42,293	39,767	37,271	41,134	40,462	35,202	41,287	41,083	45,322	0	491,710
Total	1,024,541	955,603	907,068	1,100,195	1,309,745	1,322,008	1,532,212	1,542,442	1,296,258	1,583,384	1,439,027	1,236,643	106	15,249,232

³² Annual ROCs for micro generation that remains under the RO schemes³³ Issued to stations using sewage gas, which may have used other types of fuel to generate electricity.³⁴ Issued to stations solely using sewage gas to generate electricity.

Table B5: SROCs issued under the ROS (Scotland) each month of 2010-11 by generation technology

Generation Technology	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Total
Fuelled	99,303	104,280	93,830	103,650	102,213	59,244	98,462	72,527	77,356	99,370	75,221	63,006	1,048,462
Aerobic Digestion	2,988	3,287	3,677	3,423	3,946	3,965	3,364	4,127	3,786	3,311	3,064	4,098	43,036
Co-firing of biomass	3,138	4,113	4,127	3,559	4,254	4,105	3,741	2,929	2,323	3,035	2,354	3,257	40,935
Dedicated biomass	52,104	53,381	51,099	53,558	51,563	14,026	51,727	24,093	31,134	56,631	31,888	24,736	495,940
Dedicated biomass with CHP	39,116	43,025	34,927	42,578	42,450	37,148	39,630	41,378	40,113	36,393	37,915	30,915	465,588
Dedicated energy crops	1,957	474	0	532	0	0	0	0	0	0	0	0	2,963
Hydro 20MW DNC or less	142,831	84,400	52,317	106,034	105,443	139,323	183,356	196,499	89,705	151,191	199,578	151,881	1,602,558
Micro Hydro	4,839	2,115	1,077	4,565	4,232	4,520	5,404	5,940	3,556	5,720	6,368	5,963	54,299
Landfill Gas	40,495	41,681	39,580	41,837	41,809	40,761	42,824	39,556	38,102	40,454	36,426	39,703	483,228
Offshore Wind	34,208	45,828	36,278	89,113	58,836	72,915	118,655	95,639	42,549	80,643	80,299	57,686	812,649
Onshore Wind	325,770	189,522	208,564	463,318	256,104	468,430	586,646	537,750	323,327	489,992	563,579	415,261	4,828,263
Sewage Gas	2,045	2,256	1,915	1,632	1,924	1,746	1,014	2,618	773	908	831	1,043	18,705
Tidal Stream	0	0	0	0	0	0	5	85	1	0	0	0	91
Wave Power	1	0	2	5	2	5	6	8	0	4	24	14	71
Total	649,492	470,082	433,563	810,154	570,563	786,944	1,036,372	950,622	575,369	868,282	962,326	734,557	8,848,326

Table B6: NIROCs issued under the NIRO (Northern Ireland) each month of 2010-11 by generation technology

Generation Technology	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Annual ³⁵	Total
Fuelled	2,117	1,912	1,921	1,337	2,098	1,826	2,130	1,502	1,900	271	194	113	0	17,321
Dedicated biomass	2,117	1,912	1,921	1,337	2,098	1,826	1,879	1,454	1,729	0	0	0	0	16,273
Dedicated biomass with CHP	0	0	0	0	0	0	251	48	171	271	194	113	0	1,048
Hydro 20MW DNC or less	594	342	64	297	416	865	507	868	782	1,042	1,098	802	0	7,677
Hydro 50kW DNC or less	34	20	15	19	13	32	23	35	28	33	29	33	1,285	1,599
Micro Hydro	82	19	10	22	18	43	52	95	99	116	143	109	0	808
Landfill Gas	4,654	5,011	4,793	5,315	5,474	4,963	5,417	5,220	4,747	4,830	4,732	5,253	0	60,409
Onshore Wind	38,318	40,973	34,586	63,405	48,680	67,273	82,323	73,770	49,205	66,310	77,367	48,070	0	690,280
Wind 50kW DNC or less	3	2	2	3	2	3	3	3	2	3	2	2	4,518	4,548
Photovoltaic 50kW DNC or less	0	0	0	0	0	0	0	0	0	0	0	0	1,698	1,698
Tidal Stream	392	457	361	118	1,044	73	0	69	0	181	0	15	0	2,710
Total	46,194	48,736	41,752	70,516	57,745	75,078	90,455	81,562	56,763	72,786	83,565	54,397	7,501	787,050

³⁵ Annual ROCs for micro generation that remains under the RO schemes

Table B7: Total ROCs revoked during 2010-11

Generation Technology	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Total
Fuelled	1,363	6,559	785	604	4	1	1,261	15	28	0	92	0	10,712
Anaerobic Digestion	0	0	0	0	0	0	0	0	3	0	92	0	95
Co-firing of biomass	0	44	0	0	0	0	0	0	24	0	0	0	68
Co-firing of energy crops	0	0	0	0	0	0	0	3	0	0	0	0	3
Dedicated biomass	1,363	847	785	604	4	1	1,261	12	1	0	0	0	4,878
Dedicated biomass with CHP	0	5,668	0	0	0	0	0	0	0	0	0	0	5,668
Hydro 20MW DNC or less	2,226	2,224	0	70	0	0	0	0	0	0	0	0	4,520
Landfill Gas	277	196	252	234	317	275	289	0	0	0	0	0	1,840
Offshore Wind	0	0	0	0	0	0	0	0	0	0	0	7,572	7,572
Onshore Wind	2,521	1,793	1,274	18	13	0	224	174	771	1,973	291	212	9,264
Sewage Gas	0	0	357	0	0	0	0	0	0	0	0	0	357
Total	6,387	10,772	2,668	926	334	276	1,774	189	799	1,973	383	7,784	34,265

Appendix 4 - Accredited generating stations

Table C1: Generating stations accredited during 2010-11

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)
Fuelled	13	10,744	0	0	0	0	1	1,275	14	12,019
Landfill Gas	18	27,542	0	0	2	2,675	3	1,647	23	31,864
Offshore Wind	2	481,600	0	0	1	89,239	0	0	3	570,839
Onshore Wind	11	108,570	1	25,424	15	311,670	20	37,355	47	483,019
Photovoltaic	1	72	0	0	0	0	0	0	1	72
Sewage Gas	4	6,514	2	6,997	0	0	0	0	6	13,511
Tidal Stream	0	0	0	0	1	500	0	0	1	500
Sub-Total DNC >50kW	49	635,042	3	32,421	19	404,084	24	40,277	95	1,111,824
Fuelled	1	2	0	0	0	0	0	0	1	2
Hydro	0	0	0	0	0	0	1	20	1	20
Onshore Wind	0	0	0	0	0	0	55	496	55	496
Photovoltaic	0	0	0	0	0	0	51	219	51	219
Sub-Total DNC <= 50kW	1	2	0	0	0	0	107	734	108	736
Total	50	635,044	3	32,421	19	404,084	131	41,011	203	1,112,560

Table C2: Total generating stations accredited as at 31 March 2011

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)
Fuelled	103	793,732	5	41,529	12	114,907	5	5,101	125	955,269
Hydro	51	25,863	31	77,617	147	613,742	15	2,975	244	720,197
Landfill Gas	372	868,967	18	34,399	39	102,184	6	10,402	435	1,015,952
Offshore Wind	12	1,168,200	2	150,000	3	188,478	0	0	17	1,506,678
Onshore Wind	122	847,241	38	403,385	108	2,578,182	56	353,530	324	4,182,338
Photovoltaic	15	1,071	0	0	0	0	0	0	15	1,071
Sewage Gas	132	122,391	15	11,558	5	5,297	0	0	152	139,246
Tidal Stream	0	0	0	0	2	700	1	1,200	3	1,900
Wave Power	0	0	0	0	2	1,250	0	0	2	1,250
Sub-Total DNC >50kW	807	3,827,465	109	718,488	318	3,604,740	83	373,208	1,317	8,523,901
Fuelled	10	168	0	0	0	0	0	0	10	168
Hydro	0	0	0	0	0	0	10	228	10	228
Onshore Wind	4	22	0	0	1	2	356	2,884	361	2,908
Photovoltaic	5	12	0	0	0	0	277	1,096	282	1,109
Sewage Gas	1	30	0	0	0	0	0	0	1	30
Sub-Total DNC <= 50kW	20	232	0	0	1	2	643	4,208	664	4,443
Total	827	3,827,697	109	718,488	319	3,604,742	726	377,416	1,981	8,528,344

Table C3: Generating stations accredited as at 31 March 2011 under a NFFO contract

Generation Technology	England and Wales NFFO		Scotland SRO		Northern Ireland NFFO		Total	
	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)	Quantity	Capacity (kW)
Fuelled	1	11,688	0	0	0	5,101	1	16,789
Hydro	18	14,088	10	11,363	3	2,518	31	27,969
Landfill Gas	113	318,769	10	28,295	0	10,402	123	357,466
Offshore Wind	1	1,800	0	0	0	0	1	1,800
Onshore Wind	47	270,101	12	100,681	7	324,634	66	695,416
Photovoltaic	0	0	0	0	0	1,096	0	1,096
Sewage Gas	0	0	0	0	0	0	0	0
Tidal Stream	0	0	0	0	0	1,200	0	1,200
Wave Power	0	0	1	500	0	0	1	500
Total	180	616,446	33	140,839	10	344,950	223	1,102,235

Appendix 5 - Glossary

A

Act	Electricity Act 1989
AD	Anaerobic Digestion
ASA	Agency Services Agreement

C

CHP	Combined Heat and Power
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D

DECC	Department of Energy and Climate Change
DETI	Department of Enterprise, Trade and Investment
DNC	Declared Net Capacity

E

EU	European Union
EMR	Electricity Market Reform

F

FMS	Fuel Measurement and Sampling
FIT	Feed in Tariff

G

GB	Great Britain
GHG	Greenhouse Gas
GCV	Gross Calorific Value

K

kW	Kilowatt
kWh	Kilowatt-hour

M

MW	Megawatt
MWh	Megawatt-hour
MCS	Micro generation Certification Scheme

N

NI	Northern Ireland
NIAUR	Northern Ireland Authority for Utility Regulation
NIRO	Northern Ireland Renewables Obligation
NIROC	Northern Ireland Renewables Obligation Certificate
NFFO	Non-Fossil Fuel Obligation
NI NFFO	Northern Ireland Non-Fossil Fuel Obligation

O

Ofgem	Office of Gas and Electricity Markets
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P

PV	Photovoltaic
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R

RED	Renewable Energy Directive 2009
RO	Renewables Obligation
ROC	Renewables Obligation Certificate
ROS	Renewables Obligation Scotland
RPI	Retail Price Index

S

SRO	Scottish Renewables Obligation (NFFO)
SROC	Scottish Renewables Obligation Certificate

T

TW	Terawatt
TWh	Terawatt-hour

U

UK	United Kingdom
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Notes

Appendix 6 - Feedback Questionnaire

We would welcome your feedback on this report, on anything from the content to the length of the document and the design. Please address your feedback to Peter Collins rocompliance@ofgem.gov.uk. You may wish to respond to the following questions in giving your feedback:

Overall

Is the report of sufficient length? Yes No

Is the report easy to read and understand? If not, what you would suggest changing?

Is the report structured in a way that you can easily find what you are looking for? If not, what can we do to improve this?

Main document

What part of this report do you find most helpful?

What part of this report do you find least helpful?

Do you think the graphs and tables in the report convey information clearly? If not, what do you dislike about them? Do you have any suggestions for improvement?

Appendices

We publish a number of tables in the appendices to this document. Is the level of detail in the appendices sufficient, too little, or too much?

If too much, which tables are least helpful?

If too little, what other information would you like to see contained in the appendices?

How we will deal with your feedback

This annual report is published under the requirements set out in the RO legislation. It contains the information that we are required to publish, but also additional information that we believe stakeholders will find useful.

We will endeavour to incorporate as many comments as possible into the report. However, in ensuring the content of the report meets the requirements of the RO legislation we may not be able to incorporate all of them.

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