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Renewables Obligation: Annual Report 2008-2009

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Target audience: Any parties with an interest in the Renewables Obligation

Overview:

The Government has introduced a number of schemes to encourage the development of renewable generation in the UK.

The Renewables Obligation [RO], the Renewables Obligation (Scotland) [ROS] and the Northern Ireland Renewables Obligation [NIRO] are designed to incentivise renewable generation into the electricity generation market. These schemes require licensed electricity suppliers to source an increasing proportion of their electricity from renewable sources.

This report provides information in respect of the 2008-09 obligation period. It includes information on how licensed electricity suppliers complied with their obligations in this period, the number of ROCs we issued and detail on generators we accredited for the schemes.

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Context

The UK has signed up to the EU Renewable Energy Directive which includes a UK target of 15 per cent of energy from renewables by 2020. The Government has published the Renewable Energy Strategy (RES) which describes the UK's climate change programme and explains how this legally-binding target will be met. The precise breakdown of the 2020 renewable energy target between technologies will depend on the response of investors to the separate government schemes and incentives; however, the Government have estimated that renewables could provide more than 30 per cent of electricity generation.

The renewables obligation schemes are designed to incentivise renewable generation into the electricity generation market. The first Renewables Obligation Order came into force in April 2002, as did the first Renewables Obligation (Scotland) Order. These Orders were subject to amendment in 2004, 2005, 2006, 2007 and 2009. The first Renewables Obligation Order (Northern Ireland) came into force in April 2005. New Orders came into force on 1 April 2006, 1 April 2007 and 1 April 2009. The Renewables Obligation Order (Northern Ireland) 2007 was amended on 19 October 2007 to allow for its continued effective operation within the new Single Electricity Market arrangements for Ireland with effect from 1 November 2007.

These Orders place an obligation on licensed electricity suppliers in England and Wales, Scotland and Northern Ireland to source an increasing proportion of electricity from renewable sources. In 2008-09 it was 9.1 per cent in England and Wales and Scotland and 3.0 per cent in Northern Ireland. Suppliers meet their obligations by presenting sufficient Renewables Obligation Certificates (ROCs) to cover their obligations. Where suppliers do not have sufficient ROCs to meet their obligation, they must pay an equivalent amount into a fund known as buy-out, the proceeds of which are paid back on a pro-rated basis to those suppliers that have presented ROCs. The Government policy intent in the draft 2010 amendment orders is that Great Britain suppliers will be subject to a renewables obligation until at least 31 March 2037, and those in Northern Ireland until at least 31 March 2033.

Each year this Annual Report is published by Ofgem to meet the requirements of the Renewables Obligation legislation, as well as addressing the duties under "Helping to Achieve Sustainable Development" in Ofgem's Corporate Strategy and Plan.

Associated Documents

Annual reports for all the previous obligation periods are published in the Environmental Programmes section of the Ofgem website http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx
We also have reports available on our Renewables & CHP Register website (https://www.renewablesandchp.ofgem.gov.uk) which provides information on:

- A list of stations accredited under the Renewables Obligations
- Details on the number of ROCs issued by technology, country and Order.
- A list of ROCs that have been revoked by us.

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Summary

Chapter Summary

This summary briefly provides the highlights for the 2008-09 obligation period

Compliance by licensed electricity suppliers

Overall, the total Renewables Obligation across the UK for 2008-09 was 28,975,678 MWh, up from 25,551,357 MWh in 2007-08 (an increase of 13 per cent). The percentage of the total UK obligations met by ROCs increased slightly from 64 per cent to 65 per cent. In previous years, renewable generation has not kept pace with an increasing target (the obligation level), but this year the gap has stabilised.

As renewable generation kept pace with the increasing obligation, the recycle value per ROC has stabilised at £18.61 per ROC (compared with £18.65 per ROC in 2007-08). Therefore the ROC 'worth' has only seen a modest increase from £52.95 last year to £54.37[1] this year because of an increase in the buy-out price. Based on this figure, the cost of CO_2 saved under the scheme is £101 per tonne[2].

The actual number of ROCs submitted for compliance increased by 15 per cent from 16,466,751 in 2007-08 to 18,948,878 in 2008-09. These ROCs equate to a value of just over £1billion (assuming a value of £54.37 per ROC).

All suppliers, except two which went into administrative receivership or liquidation (BizzEnergy Ltd and Electricity4Business Ltd), complied with their 2008-09 obligations. The shortfall in the buy-out funds arising from the non-compliance is £5,750,734.04 for the Renewables Obligation and £329,020.66 for the Renewables Obligation Scotland. This did not trigger mutualisation for the 2008-09 period, and therefore no further payments were required from suppliers to make up the shortfall.

Of the 31 suppliers with an obligation under the RO, five complied using just ROCs and seven entirely through buy-out payments; of the 26 suppliers with an obligation under the ROS, eight complied using just ROCs and five entirely through buy-out payments; of the six suppliers with an obligation under the NIRO, two complied using just ROCs and two entirely through buy-out payments. The remainder of suppliers provided a combination of ROCs and buy-out payments[3].

[1] This assumes that the value of a ROC is made up of the buyout payment that is avoided by presenting the ROC, plus the portion of the buyout fund redistributed to the supplier that presented the ROC.
[2] The calculation is based on a Grid Rolling Average conversion factor of 0.54055 kg CO_2/kWh (Source: 2009 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting).
[3] This is with the exception of Bizz Energy Ltd and Electricity4Business Ltd who did not meet their obligations under the RO and ROS

Over a third of supplier groups under the RO and the ROS made maximum use of their allowable limit on co-firing ROCs, and actually have met exactly (or are very close to) 10 per cent of their obligation from co-fired ROCs.

Renewables Obligation Certificates

The Authority issued 18,996,453 ROCs in total between 1 April 2008 and 31 March 2009. This total was made up of 11,677,480 ROCs, 6,699,848 SROCs and 619,125 NIROCs. The number of ROCs issued in England & Wales and Scotland increased by approximately 17 per cent, with an even larger increase (approximately 44 per cent) in Northern Ireland, compared to the previous obligation period. The RO schemes have been successful in incentivising the generation of more renewable energy, with an average year-on-year increase of twenty-three per cent since 2003.

The number of ROCs issued for on-shore wind (across all three schemes) has more than doubled in three years, and in 2008-09 accounted for nearly a third of all ROCs issued. This is the second (consecutive) year that on-shore wind is the renewable technology that has produced the most ROCs.

For the first time in an obligation period the number of ROCs issued in England for off-shore wind exceeded those issued for on-shore wind. The number of ROCs issued for off-shore wind in England was 1,316,000 which was a 68.7 per cent increase on the 2007-08 obligation period. This figure is anticipated to increase markedly in future years due to the Government's plans to source large amounts of renewable generation from off-shore wind[4].

Generators accredited under the Renewables Obligation

We [Ofgem] accredited 1,396 generating stations during the 2008-09 obligation period. There were a total of 3,801 generating stations accredited for the RO as of 31 March 2009, which was an increase of 58 per cent from the previous period. The majority by number (over 60 per cent) of the generating stations accredited in 2008-09 were photovoltaic, with most of the remainder being on-shore wind generating stations.

An additional 793,423 kW of renewable capacity was accredited in 2008-09. The most prevalent technology was on-shore wind with 545,046 kW capacity, followed by hydro with 107,409 kW; despite the number of stations accredited, photovoltaic only contributed an additional 2,414 kW capacity.

[4] Further information on the plans for further off-shore wind farms and Ofgem E-Serve's role in administering the tender process for off-shore transmission can be found at: http://www.ofgem.gov.uk/Media/PressRel/Documents1/Final%20shortlist%20press%20notice.pdf

Implementation issues

Microgenerators now make up over 70 per cent of the number of generators accredited under the RO. It is anticipated that a large number of these microgenerators will transfer to the Feed-in-Tariffs scheme which the Government intend to come into effect on 1 April 2010.

Changes in legislation

Due to the introduction of banding of the RO in the new Orders on 1 April 2009, this will be the last Annual Report where one ROC is equivalent to one MWh of renewable electricity.

1. Introduction

Status of this document

1.1. This annual report satisfies the requirements placed on the Authority under the Renewables Obligation Order 2006 ["RO"], Renewables Obligation (Scotland) Order 2007 ["ROS"] and Renewables Obligation Order (Northern Ireland) 2007 ["NIRO"][5]. The RO, ROS and NIRO are collectively referred to as "the Orders" in this report. Additional information which may be of interest to stakeholders is also provided.

1.2. Unless apparent from the context, where "RO" is used it denotes the RO, ROS and NIRO and where "ROC" is used it denotes ROCs, SROCs and NIROCs.

1.3. 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.

Ofgem's responsibilities

1.4. The Renewables Obligation Order 2006 (RO) and the Renewables Obligation (Scotland) Order 2007 (ROS) detail Ofgem's powers and functions in respect of the Renewables Obligation in England and Wales and in Scotland, respectively. Those functions include:

- accrediting generating stations as being capable of generating electricity from eligible renewable energy sources
- issuing Renewable Obligation Certificates (ROCs) and Scottish Renewable Obligation Certificates (SROCs)
- establishing and maintaining a register of ROCs and SROCs
- publishing a list of accredited and preliminary accredited generating stations
- revoking ROCs and SROCs where necessary
- 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 RPI
- receiving buy-out payments and redistributing the buy-out fund, and
- receiving late payments and redistributing the late payment fund.

1.5. We administer the Northern Ireland Renewables Obligation (NIRO) on behalf of the Northern Ireland Authority for Utility Regulation (NIAUR) under an Agency Services Agreement. Under this agreement Ofgem is required to carry out the

[5] See Article 30 of the RO, Article 37 of the ROS and Article 29 of the NIRO for the requirements for the Annual Report

functions listed above in respect of Northern Ireland Renewables Obligation Certificates (NIROCs). However the NIAUR continues to retain legislative responsibility for administering the NIRO.

1.6. Ofgem's costs of exercising its functions under the Orders were £988,500 in 2008-09, representing less than 0.1% of the scheme value. These costs included:

- staffing costs
- IT system development costs
- technical, legal and IT support
- undertaking audits of generating stations
- undertaking audits of suppliers, and
- the maintenance of bank accounts.

1.7. These costs do not include all overhead costs such as IT running costs. In future Annual Reports these figures will be included, and will aligned with our proposed new system for cost allocation for the RO that we will be consulting on shortly.

1.8. The decrease of 27 per cent in Ofgem's costs for the 2008-09 obligation period was due to reduced IT costs compared to the previous obligation period. In 2007-08 we undertook a major IT project, introducing the new Renewables and CHP Register. The new system enables us to take on the increasing numbers of generators under our schemes with a minimal change in staff numbers.

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 in terms of ROCs presented, buy-out and/or late payment made, or a combination of these
- The total number of ROCs correctly presented against each supplier's obligation
- The money each supplier received from the redistribution of the buy-out and/or late payment funds, and
- The total number of ROCs that remain on the ROC Register for use in the next obligation period (2008-09).

We are required to publish this information under the Orders.

Total Renewables Obligation for England & Wales, Scotland and Northern Ireland

2.1. The RO and ROS require each supplier to source a proportion of the electricity that it has supplied in Great Britain from eligible renewable sources[6]. The NIRO requires each supplier to source a proportion of the electricity that it has supplied in Northern Ireland from eligible renewable sources[7]. The proportion for the 2008-09 obligation period was 9.1 per cent in England & Wales and Scotland and 3.0 per cent in Northern Ireland. This proportion increases each year as set out in the Orders.

2.2. Suppliers can meet their obligation by presenting ROCs or making buy-out payments to cover any shortfall in the presentation of sufficient ROCs or by a combination of both.

Headline figures

2.3. The headline figures for supplier compliance in 2008-09 in England & Wales, Scotland and Northern Ireland are set out in Tables 1, 2 and 3 respectively. Further details can be found in Appendix 2.

2.4. In summary, 31 suppliers had an obligation under the RO, 26 had an obligation under the ROS, and six had an obligation under the NIRO.

[6] See Article 2(1) of the RO and ROS for the definition of eligible renewable sources.
[7] See Article 2(1) of the NIRO for the definition of eligible renewable sources.

2.5. There were 37 suppliers that did not have an obligation under the RO, 42 that did not have an obligation under the ROS, and 14 that did not have an obligation under the NIRO. This was because they either had no sales to customers or all their sales were to transmission connected customers where exceptions apply[8].

2.6. Using the percentage obligation levels, combined with sales data from suppliers, we determined that the total Renewables Obligation on electricity supplied to customers across the UK for 2008-09 was 28,975,678 MWh. On electricity supplied in England & Wales the obligation was 25,944,763 MWh, on electricity supplied in Scotland it was 2,774,881 MWh and on electricity supplied in Northern Ireland it was 256,034 MWh.

2.7. The buy-out price for the 2008-09 obligation period was £35.76.

2.8. The amount of buy-out paid per ROC presented for the 2008-09 obligation period was £18.61. The buy-out paid per ROC was equal across all three obligations due to the single recycling mechanism.[9]

2.9. The percentage of the total obligations met by ROCs increased marginally from 64 per cent in 2007-08 to 65 per cent. In previous years, the proportion of the obligation met by renewable generation has fallen. However, this year the gap has stabilised. Recent DECC projections[10] suggest that the gap will narrow between the amount of renewable generation and the target in future years.

2.10. The actual number of ROCs submitted for compliance increased by 15 per cent from 16,466,751 in 2007-08 to 18,948,878 in 2008-09.

2.11. A total of 225,240 ROCs[11] issued during the 2008-09 obligation period were not presented back to us for compliance purposes. This number consisted of 161,512 ROCs, 52,230 SROCs and 11,498 NIROCs. These ROCs remain on the ROC Register for use in the 2009-10 obligation period.

[8] Article 3(2) of the Energy Act 2004 (Commencement No 6) Order 2005 (SI 2965) refers.
[9] Further information about the single recycling mechanism can be found in our Guidance for licensed electricity suppliers at:
http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Documents1/Supplierguidance.pdf
[10] "Calculating the level of the Renewables Obligation" published by DECC on 1 October 2009. Further details are available at:
http://decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/renew_obs/renew_obs.aspx
[11] This excludes ROCs that have been revoked or retired from the system

2.12. Tables 1, 2 and 3 summarise the headline figures and make comparisons to earlier obligation periods.[12] More detailed information can be found in Appendix 2.

Table 1: How suppliers complied with their obligations in England & Wales (2008-09)[13,14,15]

	2005-06	2006-07	2007-08	2008-09
Total obligation (MWh)	16,175,906	19,390,016	22,857,584	25,944,763
Total ROCs presented	12,232,153	12,868,408	14,562,876	16,813,731
Of which GB ROCs	11,986,983	12,581,262	14,202,823	16,295,070
Of which NI ROCs	245,170	287,146	360,053	518,661
Percentage met by ROCs	76%	66%	64%	65%
Total buy-out paid	£126,704,565	£216,778,249	£278,789,611	£320,568,079
Total late payments paid	£32.36	£0	£46,712	£260,027
Shortfall in buy-out and late payment fund	£809,920	£0	£5,759,907	£5,750,734
Buy-out fund for redistribution	£127,167,900	£217,888,311	£280,171,493	£320,673,766
Late payments fund for redistribution	£34	£2	£54,491	£260,162
Redistribution per ROC presented	£10.21	£16.04	£18.65	£18.61
'Worth' of a ROC to a supplier	£42.54	£49.28	£52.95	£54.37

[12] For 2002-03, 2003-04 & 2004-05 please see previous Renewables Obligation: Annual reports

[13] If a supplier does not meet its obligation in full before 1 September, it can make a late payment up until 31 October. Late payments are subject to an interest charge in addition to the amount owed. Interest is charged at 5 percentage points above the Bank of England base rate as at the first day of the late payment period, i.e. 1 September.

[14] The "shortfall in buy-out and late payment fund" includes interest charged during the late payment period

[15] Buy-out paid per ROC includes sums redistributed from the buy-out and late payment funds. When combined with the buy-out price that suppliers effectively avoid paying by presenting ROCs, a ROC produced against the RO was "worth" £54.37 to suppliers in 2008-09.

Table 2: How suppliers complied with their obligations in Scotland (2008-09)

	2005-06	2006-07	2007-08	2008-09
Total obligation (MWh)	1,648,679	2,022,791	2,456,391	2,774,881
Total ROCs presented	1,425,869	1,725,781	1,864,676	2,094,125
Of which GB ROCs	1,418,183	1,721,685	1,832,964	2,045,785
Of which NI ROCs	7,686	4,096	31,712	48,340
Percentage met by ROCs	86%	85%	76%	75%
Total buy-out paid	£7,086,897	£9,613,938	£19,976,934	£23,935,455
Total late payments paid	£114,767	£258,978	£47,451	£82,546
Shortfall in buy-out and late payment fund	£2,004	£0	£276,335	£329,021
Buy-out fund for redistribution	£7,112,617	£9,662,865	£20,072,617	£23,943,338
Late payments fund for redistribution	£115,070	£259,815	£47,737	£82,587
Redistribution per ROC presented	£10.21	£16.04	£18.65	£18.61
'Worth' of a ROC to a supplier	£42.54	£49.28	£52.95	£54.37

Table 3: How suppliers complied with their obligations in Northern Ireland (2008-09)

	2005-06	2006-07	2007-08	2008-09
Total obligation (MWh)	208,319	216,869	237,382	256,034
Total ROCs presented	41,295	18,465	39,199	41,022
Of which GB ROCs	20,868	12,039	4,523	0
Of which NI ROCs	20,427	6,426	34,676	41,022
Percentage met by ROCs	20%	9%	17%	16%
Total buy-out paid	£5,354,333	£6,594,948	£5,927,829	£6,858,732
Total late payments paid	£45,614	£0	£870,092	£830,232
Shortfall in buy-out and late payment fund	£0	£0	£0	£0
Buy-out fund for redistribution	£5,373,877	£6,628,093	£5,958,966	£6,860,976
Late payments fund for redistribution	£45,697	£5	£875,435	£830,747
Redistribution per ROC presented	£10.21	£16.04	£18.65	£18.61
'Worth' of a ROC to a supplier	£42.54	£49.28	£52.95	£54.37

Supplier obligations

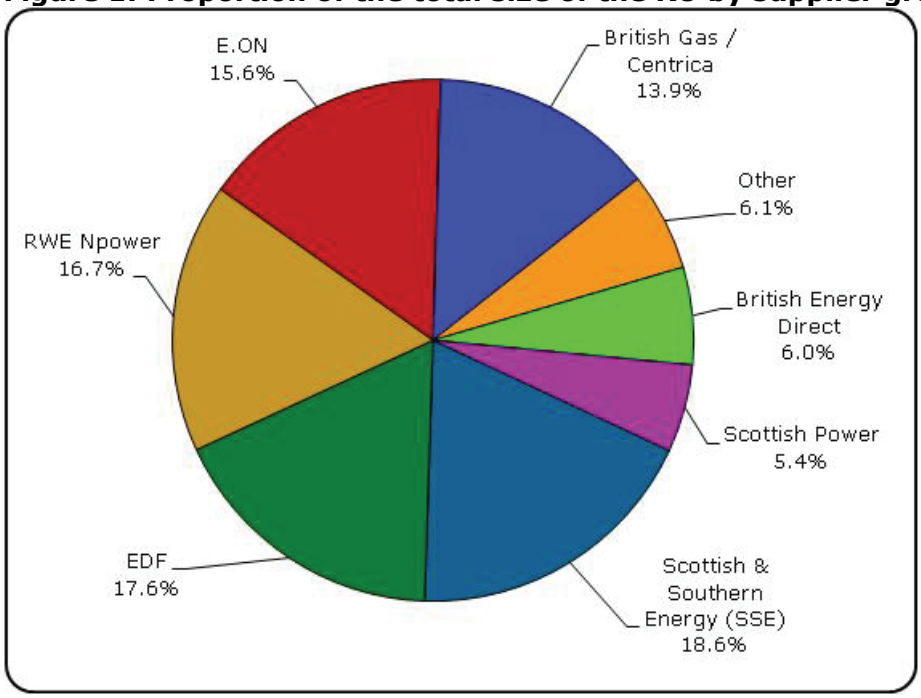
2.13. Scottish & Southern Energy (SSE) had the largest obligation in England and Wales (4,817,035 MWh) followed by EDF Energy and RWE Npower with obligations of 4,566,300 MWh and 4,337,980 MWh respectively.

2.14. Scottish & Southern Energy (SSE) had the largest obligation in Scotland (828,937 MWh) followed by Scottish Power and British Gas/Centrica with obligations of 794,374 MWh and 322,797 MWh respectively.

2.15. NIE Energy had the largest obligation in Northern Ireland (144,328 MWh) followed by Viridian Energy Supply Ltd (Energia) and ESB Independent Energy with obligations of 50,224 MWh and 44,552 MWh respectively.

2.16. Figures 1, 2 and 3 show the breakdown of the total obligation by supplier group.

Figure 1: Proportion of the total size of the RO by supplier group[16]



[16] A list of supplier groups and their individual supply licences can be found in table A13 in Appendix 2

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

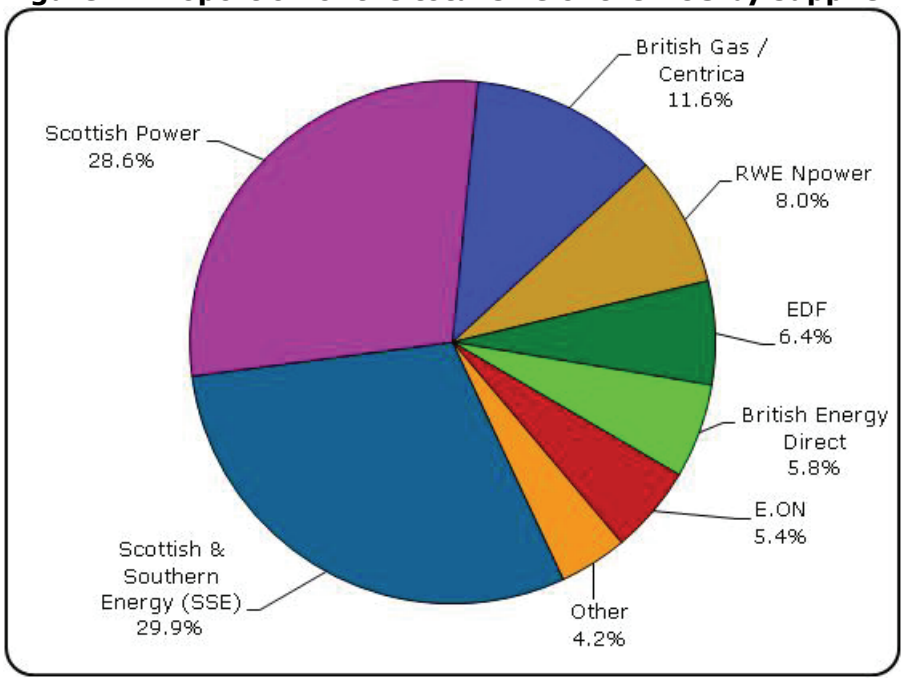
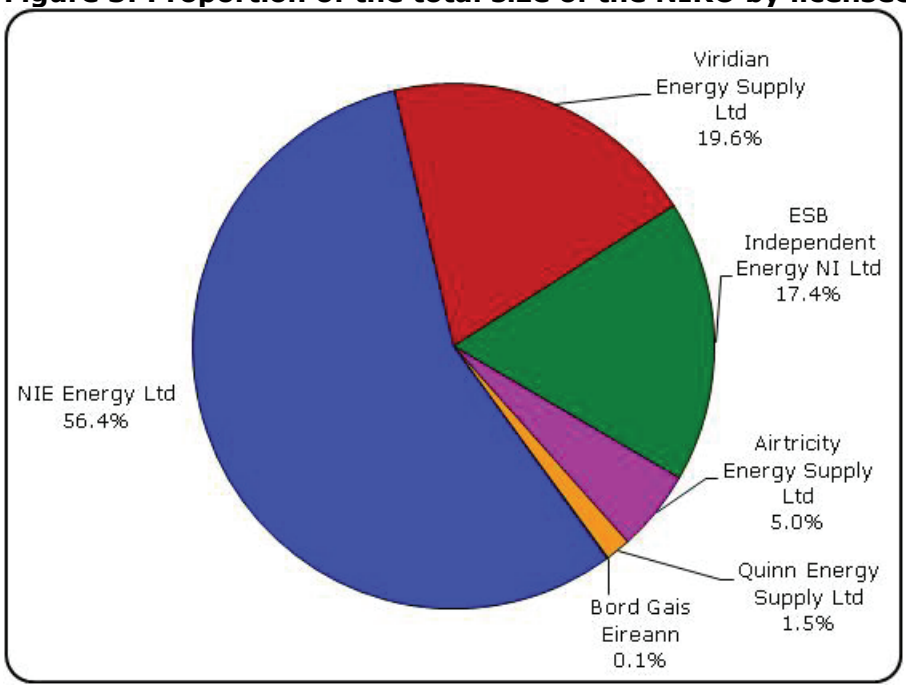


Figure 3: Proportion of the total size of the NIRO by licensee[17]



[17] Due to small number of suppliers in Northern Ireland, figure 3 is shown by licensee rather than supplier group

Details of ROCs presented

2.17. Five suppliers (compared with four for the previous obligation period) fulfilled their obligations under the RO *entirely* by presenting ROCs. These were:

- Good Energy Ltd
- The Renewable Energy Company Ltd
- Slough Energy Supplies Ltd
- Smartestenergy Ltd
- Tradelink Solutions Ltd

2.18. Eight suppliers (the same as for the previous obligation period) fulfilled their obligations under the ROS *entirely* by presenting ROCs. These were:

- British Energy Direct Ltd
- EDF Energy Customers Plc
- Gaz de France Marketing Ltd
- Good Energy Ltd
- Opus Energy Ltd
- The Renewable Energy Company Ltd
- Scottish Power Energy Retail Ltd
- Smartestenergy Ltd

2.19. Two suppliers (compared with one for the previous obligation period) fulfilled their obligations under the NIRO *entirely* by presenting ROCs. These were:

- Airtricity Energy Supply Ltd
- Quinn Energy Supply Ltd

2.20. In terms of the volume of ROCs presented, EDF presented the most ROCs under the RO (3,170,306), which made up 69.4 per cent of its obligation. Scottish Power Energy Retail Ltd presented the most ROCs under the ROS (794,374); this made up 100 per cent of its obligation. ESB Independent Energy presented the most ROCs under the NIRO (21,473). This made up 48.2 per cent of its obligation.

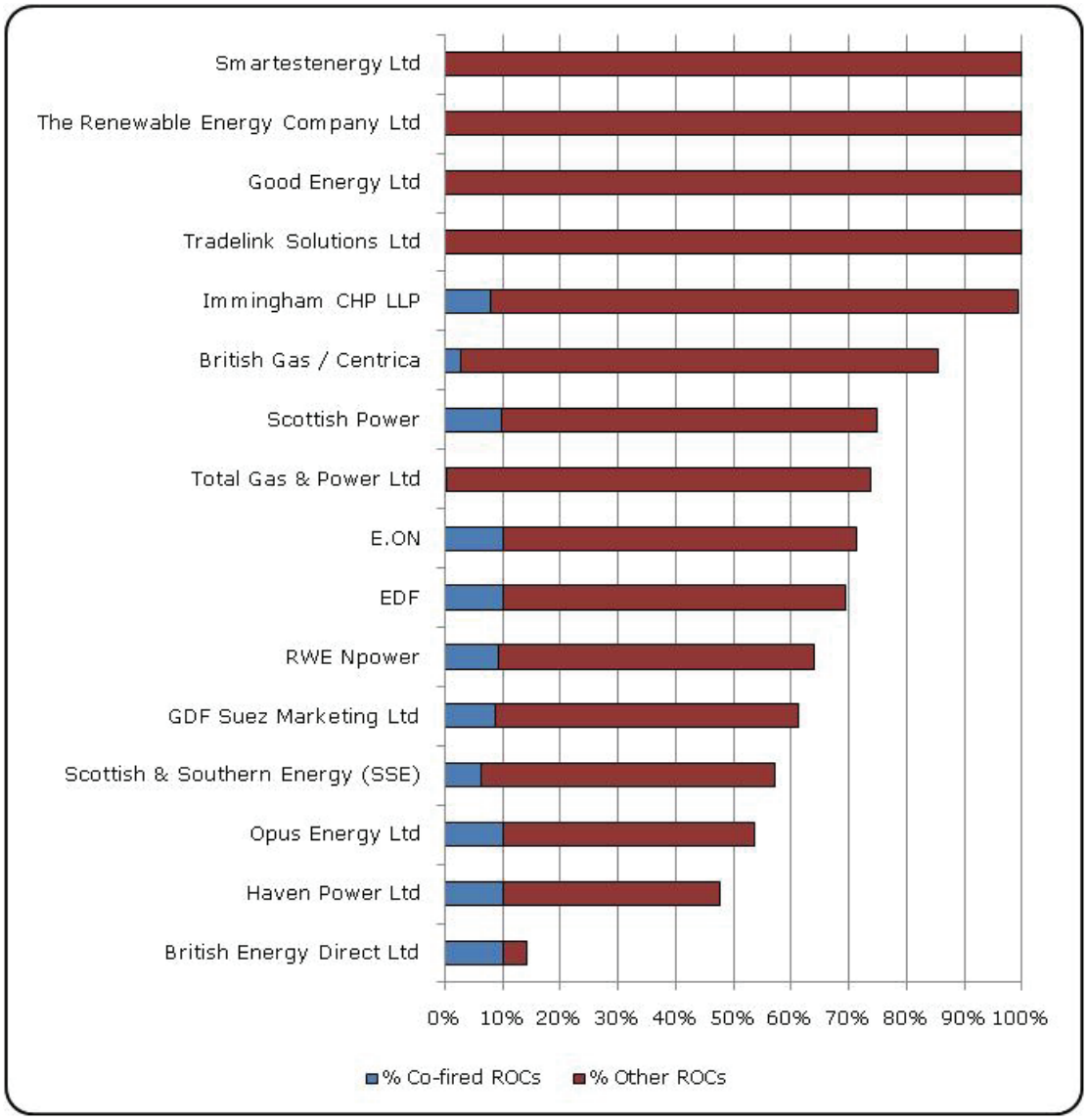
Co-fired ROCs

2.21. Under the Orders, each supplier is allowed to meet 10 per cent of its obligation by presenting ROCs that have been issued for co-firing of fossil fuels and biomass.

2.22. A number of suppliers made maximum use of their allowable limit on co-fired ROCs or used close to this limit. Of the 16 supplier groups that used ROCs to meet their obligation under the RO, six supplier groups have (or are very close to) exactly 10% of their obligation from co-fired ROCs. Of the 14 supplier groups that used ROCs to meet their obligation under the ROS, six supplier groups have (or are very close to) exactly 10% of their obligation from co-fired ROCs.

2.23. Figures 4, 5 and 6 compare the proportion of ROCs and co-fired ROCs presented by suppliers in meeting their obligations in England and Wales, Scotland and Northern Ireland respectively in 2008-09. Further detail can be found in Appendix 2.

Figure 4: Proportion of RO that was satisfied by co-fired ROCs and other ROCs[18]



[18] A list of supplier groups and their individual supply licences can be found in table A13 in Appendix 2

Figure 5: Proportion of ROS that was satisfied by co-fired ROCs and other ROCs

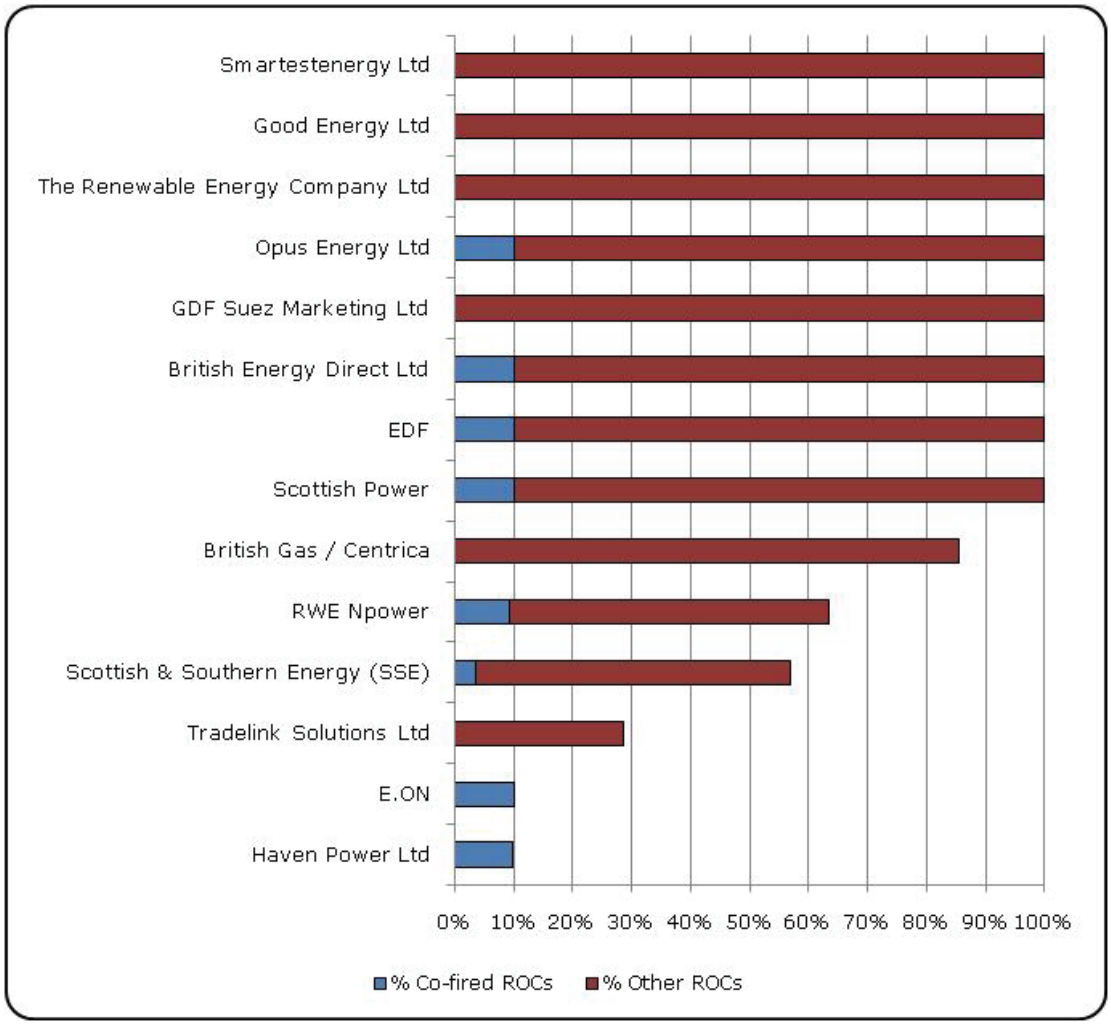
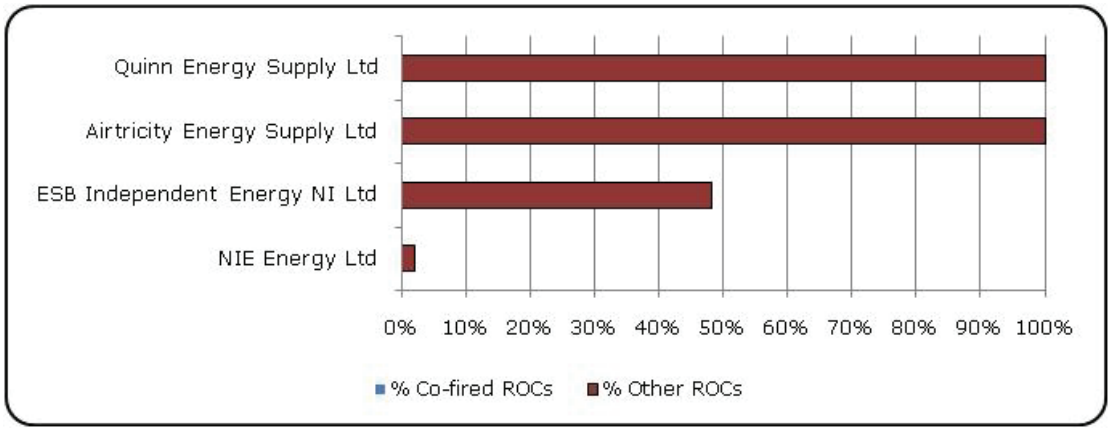


Figure 6: Proportion of NIRO that was satisfied by co-fired ROCs and other ROCs



The buy-out and late payment funds and their redistribution

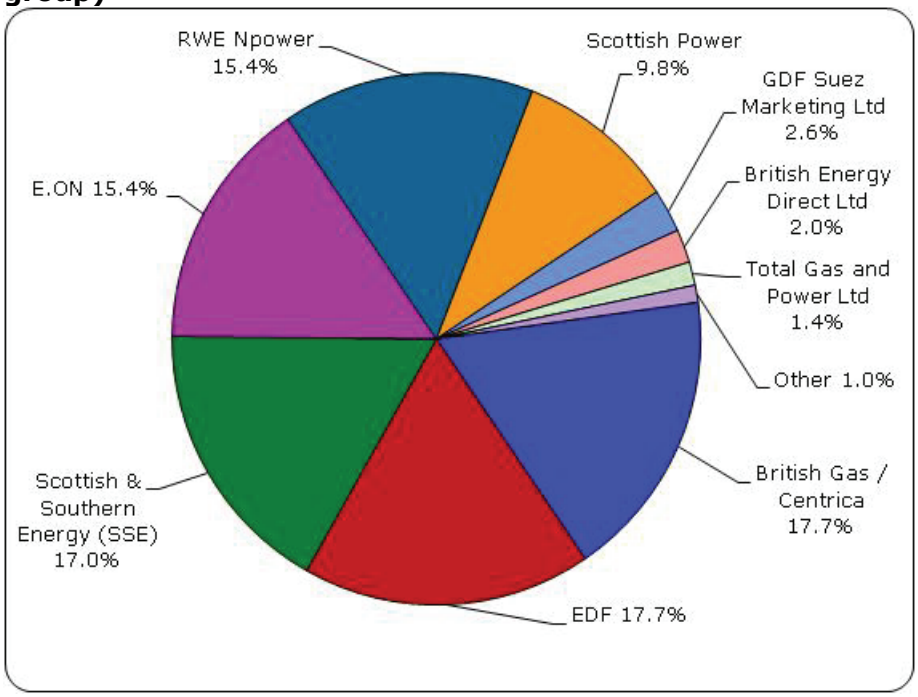
2.24. The buy-out funds and late payment funds, including any interest accrued, are recycled through the single recycling mechanism. The funds are redistributed to suppliers in proportion to the total number of ROCs that each has presented across the three obligations. For example, a supplier that presented ROCs representing 3 per cent of the total number of ROCs presented across all three obligations would get back 3 per cent of the total sum of the three buy-out funds and any late payment funds. That would still be the case if that supplier had only presented these ROCs in respect of just one of the obligations.

2.25. Table 4 and Figure 7 show the proportion of the buy-out and late payment funds received by each supplier. The buy-out fund was re-distributed on 30 September 2009 and the late payment fund was redistributed on 12 November 2009.

Table 4: Proportion of total ROCs presented by each licensee

Licensee	ROCs presented				% of ROCs
	RO	ROS	NIRO	Total	
British Gas Trading Ltd	3,081,424	275,639		3,357,063	17.72%
EDF Energy Customers Plc	3,170,306	177,011		3,347,317	17.66%
SSE Energy Supply Ltd	2,735,926	471,904		3,207,830	16.93%
Npower Ltd	2,010,862	114,698		2,125,560	11.22%
E.ON Energy Ltd	2,041,279	8,315		2,049,594	10.82%
Scottish Power Energy Retail Ltd	1,056,644	794,374		1,851,018	9.77%
E.ON UK Plc	853,607	6,767		860,374	4.54%
GDF Suez Marketing Ltd	456,106	40,763		496,869	2.62%
Npower Northern Ltd	403,941	15,388		419,329	2.21%
British Energy Direct Ltd	223,249	161,447		384,696	2.03%
Total Gas & Power Ltd	270,226			270,226	1.43%
Npower Direct Ltd	176,899	8,754		185,653	0.98%
Npower Yorkshire Ltd	131,440	34		131,474	0.69%
Opus Energy Ltd	41,195	13,399		54,594	0.29%
Electricity Plus Ltd	49,257	2,793		52,050	0.27%
Renewable Energy Company Ltd	22,551	1,249		23,800	0.13%
Smartestenergy Ltd	23,345	21		23,366	0.12%
Immingham CHP LLP	22,595			22,595	0.12%
ESB Independent Energy NI Ltd			21,473	21,473	0.11%
Haven Power Ltd	17,794	205		17,999	0.09%
Slough Energy Supplies Ltd	13,771			13,771	0.07%
Airtricity Energy Supply Ltd			12,831	12,831	0.07%
Good Energy Ltd	11,212	464		11,676	0.06%
Quinn Energy Supply Ltd			3,965	3,965	0.02%
NIE Energy Ltd			2,753	2,753	0.01%
Tradelink Solutions Ltd	102	900		1,002	0.01%

Figure 7: Redistribution of buy-out and late payment funds (by supplier group)



2.26. Twenty-six supplier licensees received a share of each of the buy-out funds and late payment funds. Of these, British Gas Trading Ltd, having presented the largest number of ROCs/SROCs/NIROCs, received the largest payments.

2.27. Table 5 shows the residual balances of the RO bank accounts after all funds were redistributed on 30 September 2009 and 12 November 2009. The balances are relatively high as no buyout or late payment amounts were redistributed to Bizz Energy due to the company's non-compliance with its 2007-08 obligations. Had these payments been made then the balances would be very small.

Table 5: Residual balances

RO buy-out fund (as at 30/09/2009)	£25,075.03
ROS buy-out fund (as at 30/09/2009)	£1,807.33
NIRO buy-out fund (as at 30/09/2009)	£543.18
RO late payment fund (as at 12/11/2009)	£15.97
ROS late payment fund (as at 12/11/2009)	£19.47
NIRO late payment fund (as at 12/11/2009)	£94.62
	£27,555.60

Non-compliance by suppliers

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

- provide information to DECC (formerly BERR/DETI) by 1 June 2009
- provide us with a copy of the information provided to DECC by 1 June 2009
- provide us with information as to the amount of electricity that they have supplied during the obligation period and the level of their obligation by 1 July 2009
- present ROCs, make a buy-out payment, or a combination of both to meet their total obligations before 1 September 2009, and
- make a late payment, where required, to meet any outstanding obligation by 31 October 2009.

2.29. The Authority has the powers to take enforcement action against any supplier who fails to meet the requirements of the Orders.

2.30. Ten supplier licensees did not send us the relevant supply information by 1 June 2009. However, all the remaining information was received by 8 June 2009. All ten licensees confirmed that they did not supply any customers in the relevant obligation period. Theses licensees were:

- The Royal Bank of Scotland Plc
- Team Gas and Electricity Ltd
- Power and Gas Ventures Ltd
- MA Energy Ltd
- Primary Connections Ltd
- Utilitis licences: Affinity Power Ltd, 730 Energy Ltd, SME Energy Ltd, Pan-Utility Ltd, Utilitease Ltd

2.31. Fifteen suppliers did not send us the relevant supply information by 1 July 2009; all the remaining information was received by 17 August 2009. Thirteen out of the fifteen suppliers confirmed that they did not supply any customers in the relevant obligation period. Of these suppliers, only BP Power Trading Ltd and Utilita Electricity Ltd had an obligation for this period. These licensees were

- Blizzard Utilities Ltd
- BP Power Trading Ltd
- Energy CO2 Ltd
- Firmus Energy Supply Ltd
- Gazprom Marketing & Trading Retail Ltd
- EON UK Plc (NI)
- Ineos Chlor Energy Ltd
- International Power Plc
- MA Energy Ltd
- Power and Gas Ventures Ltd

- Primary Connections Ltd
- Regent Electricity (NI) Ltd
- Reuben Power Supply Ltd
- Team Gas & Electricity Ltd
- Utilita Electricity Ltd

2.32. In terms of meeting the 2008-09 obligation, there were two suppliers (BizzEnergy Ltd and Electricity4Business Ltd) that failed to comply with their obligations. Neither supplier presented any ROCs nor made any buyout or late payments. This left shortfalls of £5,750,734.04 for the Renewables Obligation and £329,020.66 for the Renewables Obligation Scotland. The non-compliance of these licensees did not trigger mutualisation for the 2008-09 period.

2.33. We have tried to recover the shortfall from BizzEnergy Ltd and Electricity4Business Ltd. However, BizzEnergy Ltd is now in administrative receivership and their receivers have confirmed in writing that unsecured creditors (including Ofgem) will not receive any outstanding payments. This applies to the payments due from Bizz Energy Ltd for both the 2007-08 and 2008-09 obligation periods. Electricity4Business Ltd is also in liquidation. We are in contact with Electricity4Business Ltd's liquidators regarding their outstanding amounts but still waiting to hear what the position is for the outstanding payments. We will update suppliers if and when payments are made against these obligations.

2.34. RWE Npower notified us of an error in their supply information for the Npower Ltd licence, and submitted revised figures on the 5 August 2009. Although these revised figures were received after the 1 July 2009 deadline, these figures were accepted.

2.35. Haven Power notified us of an error in their supply information on 1 September 2009. The overall electricity supplied by Haven Power had not changed; however, the split of Haven's supply between customers in England and Wales for the RO and Scotland for the ROS had been found to be incorrect. Although these revised figures were received after the 1 July 2009 deadline, it was important to correct this discrepancy and hence these figures were accepted. The supplier also made a late payment to satisfy the revised obligation.

2.36. Given that compliance with the RO is a relevant requirement of the Electricity Supply Licence, the Authority may use its enforcement powers in the same way that it can in respect of breaches of other licence conditions. In some cases it is not necessary to take any formal enforcement action because the issues are resolved

quickly. We make decisions on whether or not to take enforcement action on a case-by-case basis and are guided by our Enforcement Guidelines[19].

Our audit process: suppliers

2.37. In July and August 2009 we undertook an independent audit of a number of suppliers. This work was aimed at assessing the reliability and accuracy of the information provided as part of the data provision requirements under the renewables obligation for 2008-09. In particular, suppliers have an obligation to provide us with information as to the amount of electricity that they have supplied during the obligation period and the level of their obligation. As these supply figures form the basis of the suppliers' Renewables Obligation (and hence the cost burden to suppliers), this was the most critical area to be checked during the audits.

2.38. Deloitte, specialist audit division, were recruited following a competitive tender exercise, to conduct these audits. To ensure we covered the issues that might arise across the different segments of the supply market, we asked Deloitte to audit: one large supplier in Great Britain, one small supplier in Great Britain, one supplier with zero sales in Great Britain and one supplier in Northern Ireland.

2.39. The audits proved very beneficial to the compliance process. The audit of one supplier found that their sales figures had been overstated. As a consequence, the supplier submitted revised sales figures. Although these revised figures were received after the 1 July 2009 deadline it was agreed to accept these amended figures.

2.40. The audits showed that two suppliers claimed they had a review process to check that their sales submissions to Ofgem were correct, but neither supplier could show complete records of this. These deficiencies within the suppliers' systems have the potential to cause errors in the supply figures in future. Both suppliers were requested to address this deficiency, and have since confirmed that records of the reviews of the supply figures will be kept for future compliance periods.

2.41. The audits showed that different methodologies were being used by suppliers to calculate the sales figures that are provided to Ofgem as part of the compliance process. We are planning to review this area and provide guidance in the future. The first part of the review will be to assess the full range of methodologies used by all licensed electricity suppliers. We will write to all suppliers requesting that they provide details of the methodology that they use for calculating their supply figures.

[19] A copy of Ofgem's enforcement guidelines is available at http://www.ofgem.gov.uk/About%20us/enforcement/Documents1/Enforcement%20Guidelines%20post%20consultation.pdf

2.42. The results from the small sample of the audits do not suggest that there is a major issue with the provision of data by the suppliers for supplier compliance under the RO. However, given the differences in approach and the fact that our sample was small, we intend to audit another four suppliers in 2010. In addition, we intend to re-audit deficient suppliers (from the 2008-09 audits) to confirm that the actions they have committed to are actually effective.

Mutualisation

2.43. In the event of a supplier being unable to meet its 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. This means that the buy-out fund would be less than the total amount which would have been paid in if all suppliers had properly discharged their RO and/or ROS.

2.44. Where the shortfall reaches a certain level, known as the 'relevant shortfall' a mutualisation process applies where all suppliers who have met their obligations will be required to make additional payments to make up the relevant shortfall. In 2008-09 the relevant shortfall was £9,100,000 in England and Wales and £910,000 in Scotland.

2.45. Additional payments were capped at £215,189,200 in England and Wales and £21,518,920 in Scotland for the 2008-09 obligation period; this cap is adjusted each year by RPI. These additional payments, known as the mutualisation fund are redistributed to suppliers in the same way as the buy-out and late payment funds.

2.46. Mutualisation does not apply in Northern Ireland; however, suppliers in Northern Ireland will receive a share of any mutualisation funds.

2.47. Although there were shortfalls of £5,750,734.04 for the RO (England & Wales) and £329,020.66 for the ROS (Scotland), mutualisation provisions did not apply in the 2008-09 obligation period as the amounts did not meet the 'relevant shortfall'.

3. Renewables Obligation Certificates

Chapter summary

This chapter, together with Appendix 3, provides information on the number of Renewable Obligation Certificates (ROCs), Scottish Renewable Obligation Certificates (SROCs) and Northern Ireland Renewable Certificates (NIROCs) issued by Ofgem to generating stations in the 2008-09 obligation period. It details information on:

- ➔ The total number of ROCs issued by Ofgem, and
- ➔ This total broken down by technology type.

We are required to publish this information under the Orders.

Information on the number of ROCs that have been issued since April 2006 can be found in the certificates report on our Renewables & CHP Register at https://www.renewablesandchp.ofgem.gov.uk

Renewable Obligation Certificates (ROCs)

3.1. The Orders require us to issue ROCs to accredited generating stations that have generated electricity from eligible renewable sources[20]. One ROC is issued for each MWh of electricity generated.

Headline figures

3.2. We issued 18,996,453 ROCs in total between 1 April 2008 and 31 March 2009. This total was made up of 11,677,480 (England & Wales) ROCs, 6,699,848 SROCs and 619,125 NIROCs.

3.3. There have been year-on-year increases in the total number of ROCs we have issued since the RO began, illustrated in Figures 8 and 9.

[20] See Article 2(1) of the Orders for the definition of eligible renewable sources.

Figure 8: Total number of ROCs issued since 2002

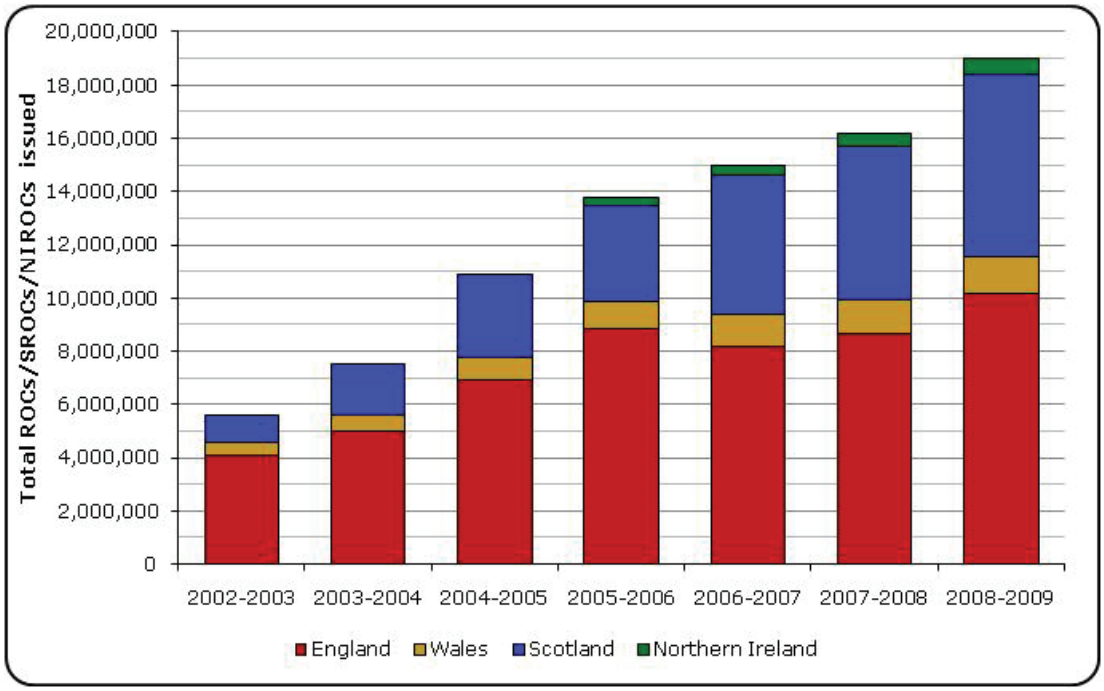
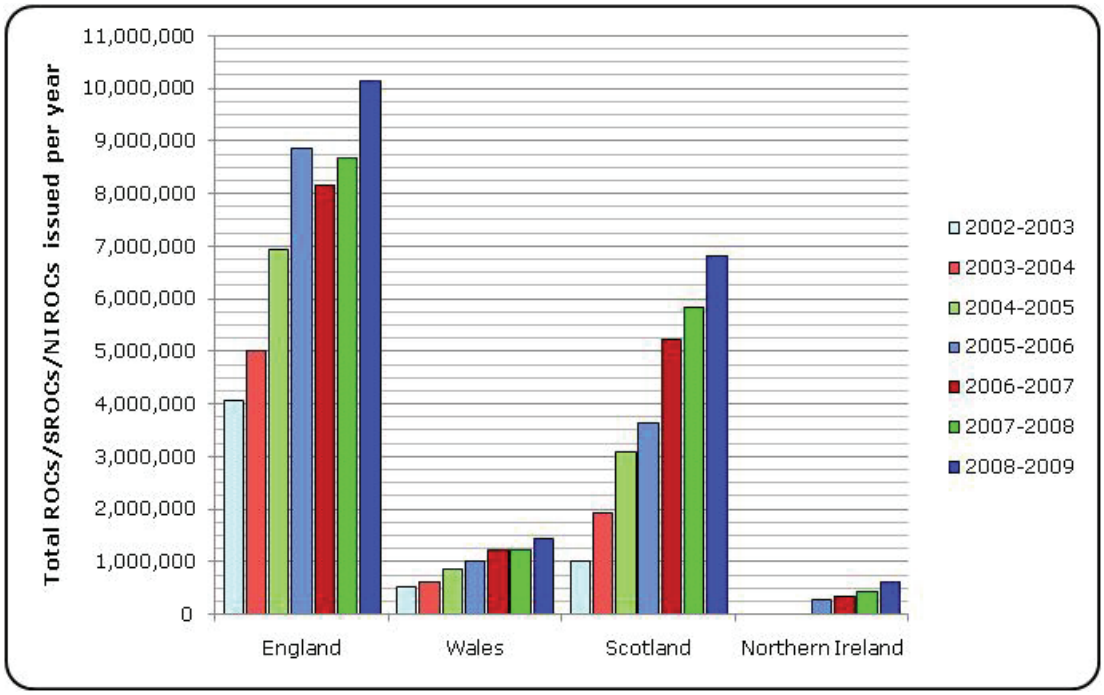
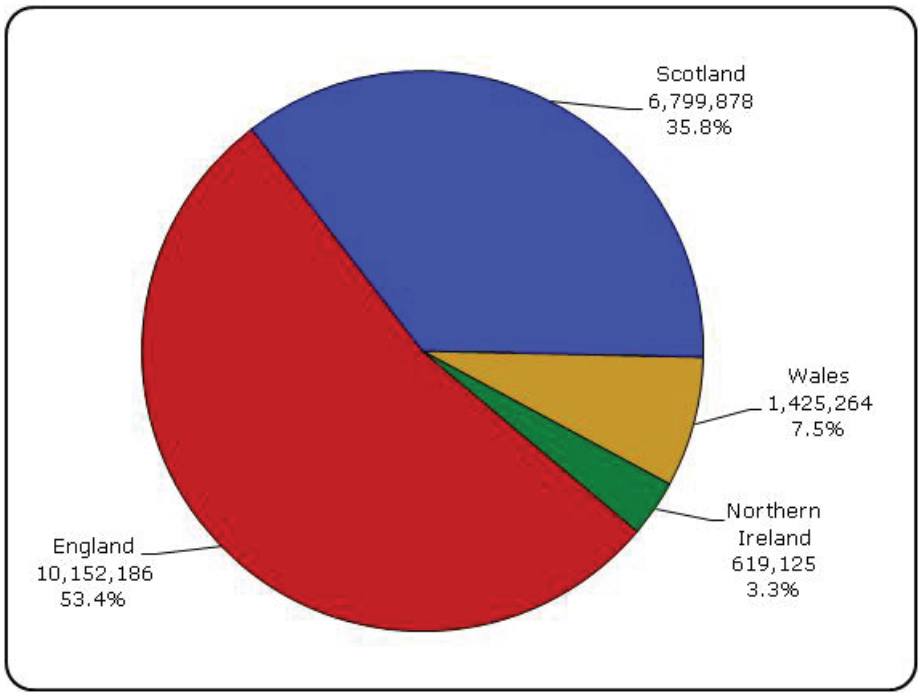


Figure 9: Total number of ROCs issued since 2002 by country



3.4. Renewable generating stations located in England received just over half of all ROCs issued in 2008-09. This compares to 35.8 per cent to generating stations located in Scotland and just 7.5 per cent to generating stations located in Wales. Generating stations located in Northern Ireland received 3.3 per cent of the total number of ROCs issued in this period. This is illustrated in figure 10.

Figure 10: Number of ROCs issued by country in the 2008-2009 period



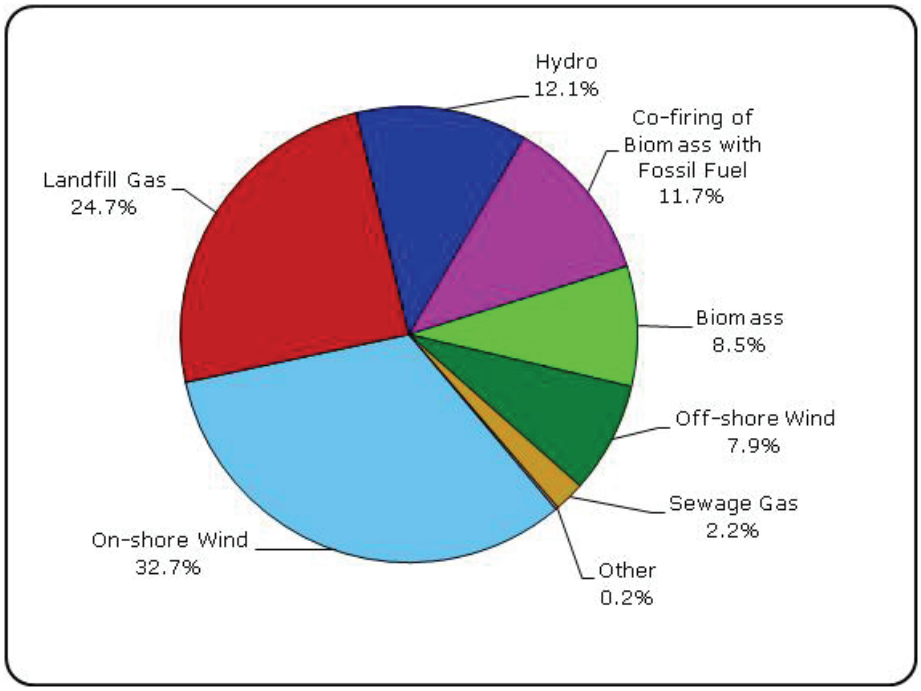
3.5. In 2008-09 the number of ROCs issued in England, Wales, and Scotland increased in each country by approximately 17 per cent compared with the previous compliance period. However the largest increase in ROCs issued was for Northern Ireland where the number of ROCs increased by approximately 44 per cent compared with the 2007-08 obligation period; this increase in ROCs issued to Northern Ireland were predominantly for on-shore wind.

ROCs issued by technology type and country

3.6. On-shore wind sites received the largest number of ROCs in the 2008-09 obligation period (6,220,107). In 2007-08, this technology type received 4,814,049 ROCs and 4,208,975 ROCs and 2,595,267 ROCs in 2006-07 and 2005-06 respectively. This means that the number of ROCs issued for on-shore wind has more than doubled in three years. This sharp increase follows the increase in the amount of wind farm capacity that has been accredited. In terms of total ROCs issued the next biggest beneficiary was landfill gas, which received 4,686,243 ROCs. Hydro generating stations were issued a total of 2,300,226 ROCs in the period. Figure 11

shows the percentage breakdown of the total ROCs issued by technology type. Further detail on the spread of ROCs issued can be found in table B1 in Appendix 3.

Figure 11: Breakdown of ROCs/SROCs/NIROCs issued in by generation technology[21,22]



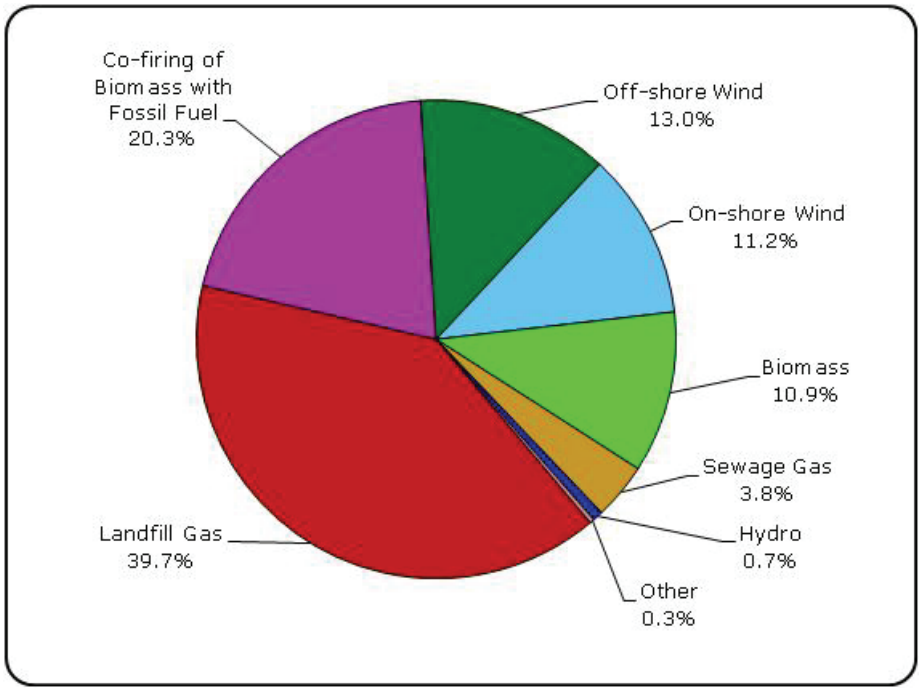
3.7. As can be seen from Figure 11, on-shore wind attracted almost a third (32.7 per cent) of the total ROCs issued in 2008-09. It has seen a steady increase in its share over previous compliance periods of 2007-08 (30 per cent) and 2006-2007 (28 per cent); off-shore wind attracted a further 7.9 per cent of total ROCs issued. Landfill gas received 24.7 per cent of total ROCs with hydro stations receiving 12.1 per cent.

3.8. Although nearly half of all accredited generating stations are photovoltaic, they produce less than 0.1% of generation. These are virtually all domestic installations.

3.9. Figures 12, 13, 14 and 15 disaggregate this information by country.

[21] "Other" technologies include ACT, co-firing energy crops, wave and PV
[22] Hydro includes Hydro < 20MW DNC, Hydro < 50kW DNC & Microhydro; On-shore Wind includes Wind < 50kW

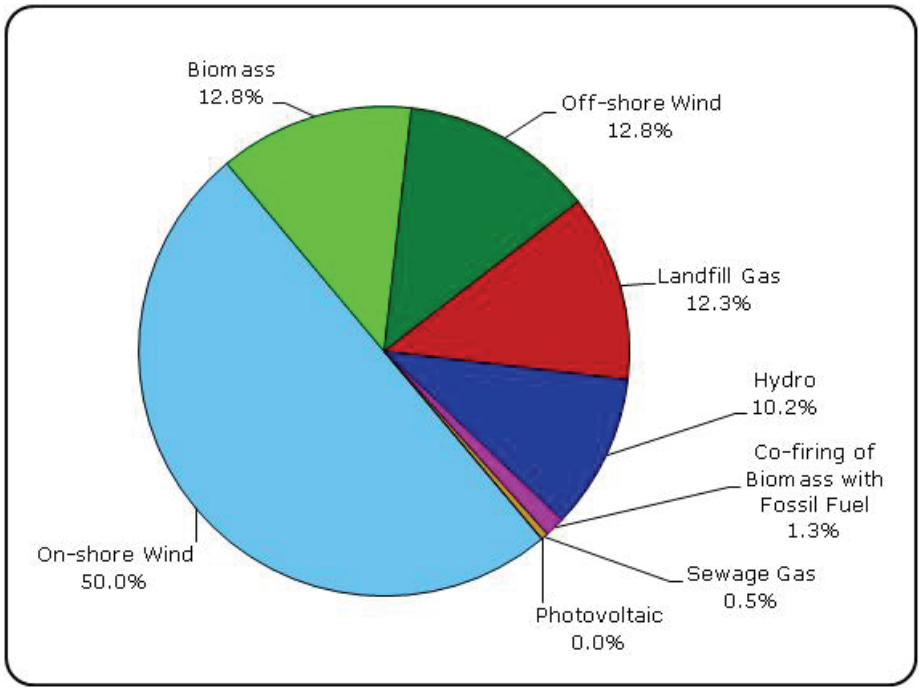
Figure 12: Breakdown of ROCs issued in England by technology type



3.10. The majority of ROCs issued in England went to landfill gas, followed by generating stations co-firing biomass with fossil fuel. The proportion of ROCs issued for off-shore wind increased by 68.7 per cent to 1,316,000 in 2008-09 and for the first time in an obligation period exceeded those issued for on-shore wind. This figure is anticipated to increase markedly in future years due to the Government's plans to source large amounts of renewable generation from off-shore wind[23].

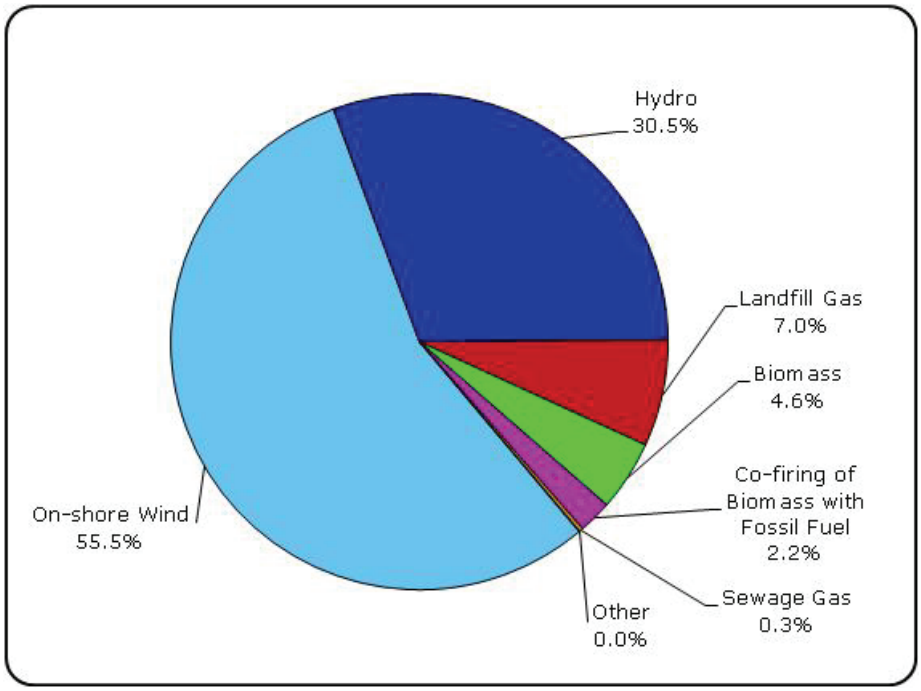
[23] Further information on the plans for further off-shore wind farms and Ofgem E-Serve's role in administering the tender process for off-shore transmission can be found at: http://www.ofgem.gov.uk/Media/PressRel/Documents1/Final%20shortlist%20press%20notice.pdf

Figure 13: Breakdown of ROCs issued in Wales by technology type



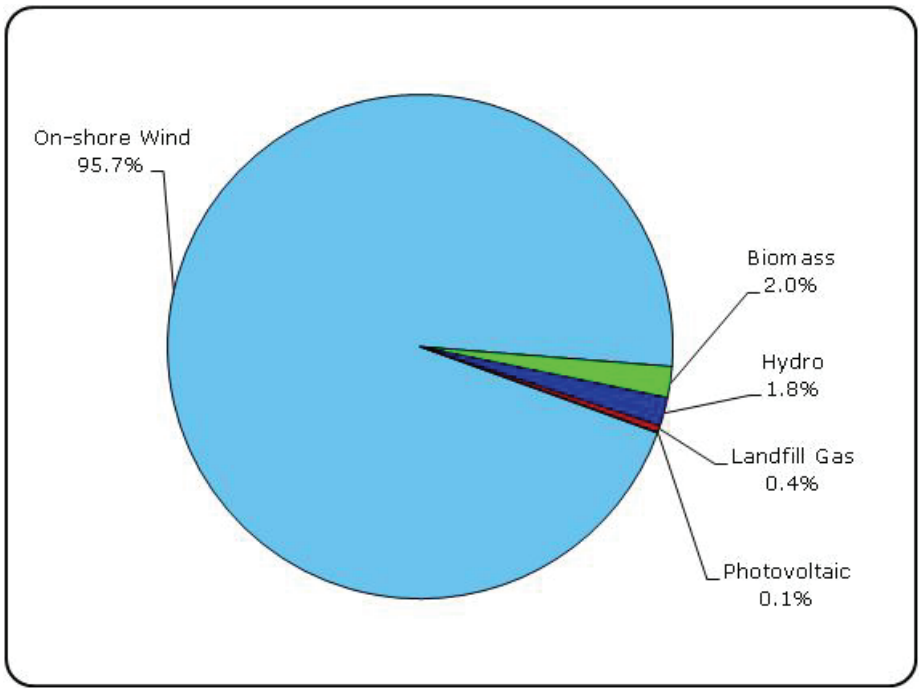
3.11. The majority of ROCs issued in Wales went to on-shore wind generating stations. Biomass, off-shore wind, landfill gas, and hydro generating stations received the bulk of the remaining ROCs issued in Wales in roughly equal shares.

Figure 14: Breakdown of ROCs issued in Scotland by technology type



3.12. The majority of ROCs issued (over 85 per cent) in Scotland went to on-shore wind generating stations and hydro stations. There were no ROCs issued for off-shore wind during this period.

Figure 15: Breakdown of ROCs issued in Northern Ireland by technology type



3.13. Nearly all the ROCs issued in Northern Ireland went to on-shore wind generating stations.

ROC issue process

3.14. We issue ROCs to all generating stations, with a declared net capacity greater than 50 kW, on a monthly basis. Microgenerators (those with a DNC of 50kW and under) can opt to receive ROCs annually. Typically, domestic-scale generators choose this option (often in conjunction with using agents) to minimise the administrative burden they face when claiming ROCs.

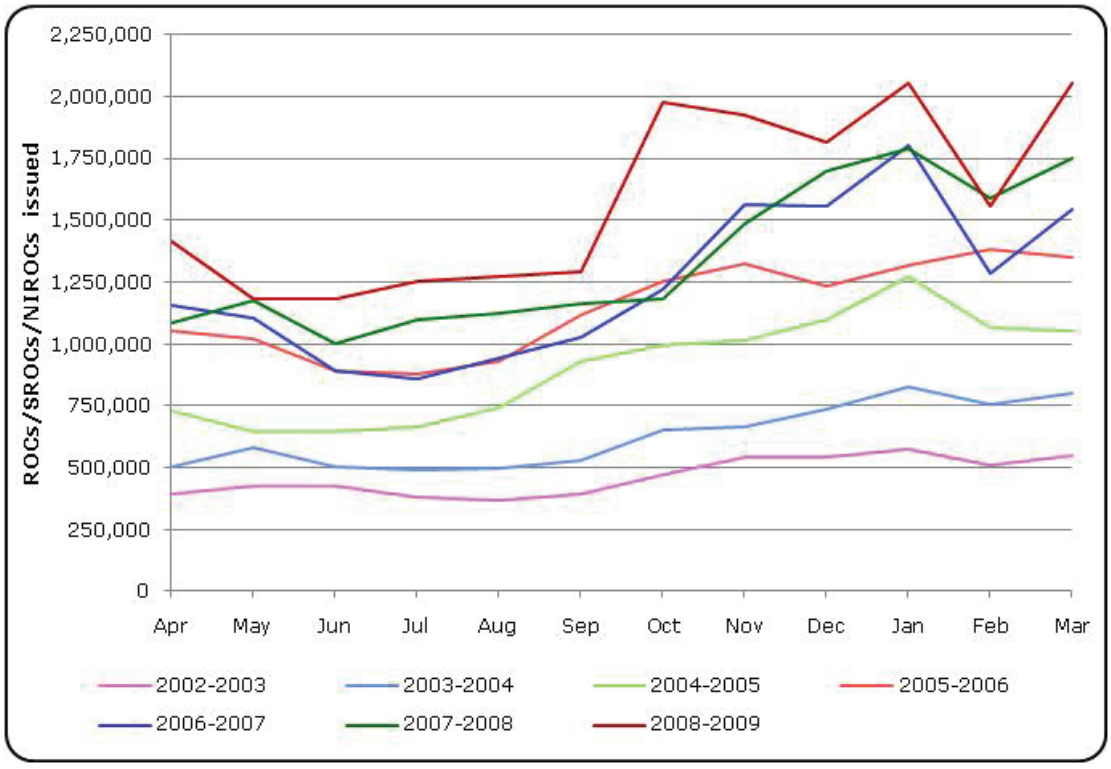
3.15. ROCs issued on a monthly basis are done so two and a half months after the month of generation. ROCs issued on an annual basis are issued two and a half months after the end of the obligation year. This lag reflects the legislative

timeframe for the provision of data to us, i.e. the two-month[24] window, and also our data processing time.

3.16. Figure 16 demonstrates the trend in ROCs issued each year since 2002-03. Figure 17 compares the ROCs issued by technology type per month in the obligation periods.

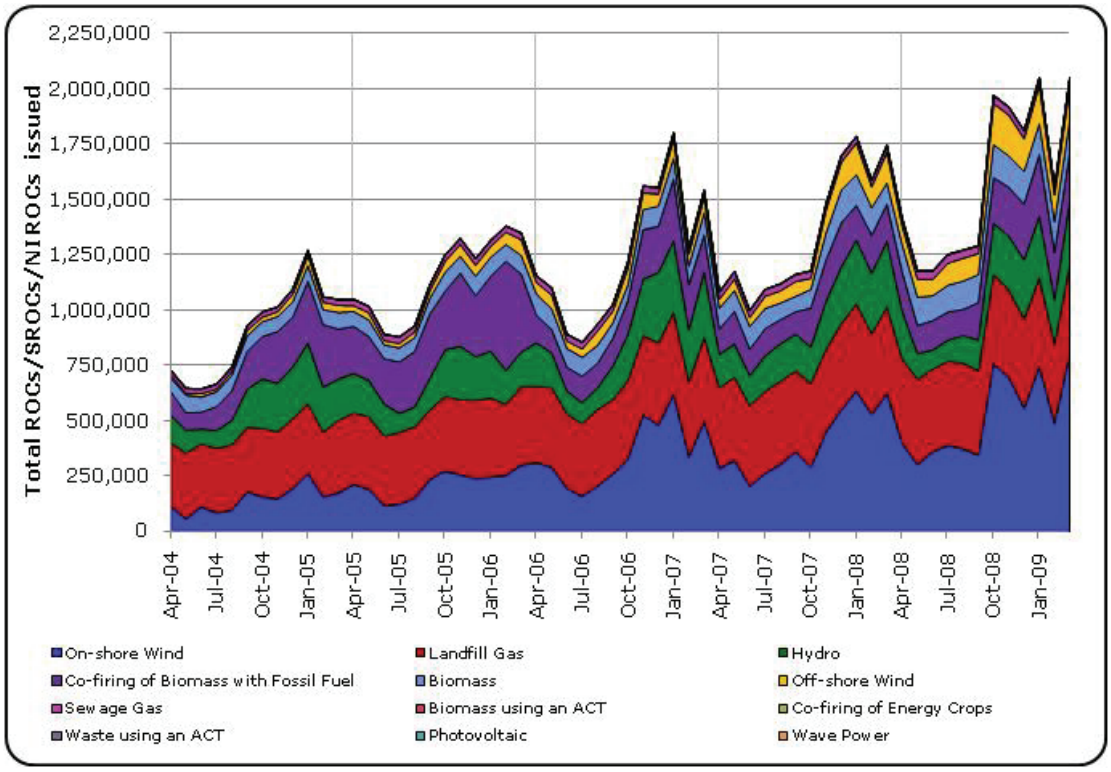
3.17. There is a clear trend across the periods of more ROCs being issued in winter months. This is predominantly due to the weather conditions being favourable for wind and hydro generation.

Figure 16: ROCs issued per month over the life of the obligations[25]



[24] Generating stations have two months after the end of the month of generation to provide us with their metered monthly output. We then have a further one month in which to issue ROCs. (Article 18(3)(a) of the Orders).
[25] For the 2007-08 and 2008-09 compliance periods the ROCs issued on an annual basis (mainly covering agents/microgenerators) are not included in the figures.

Figure 17: ROCs issued by technology type per month[26,27]



ROC revocation and replacement

3.18. We revoked 100,671 ROCs, SROCs and NIROCs in the 2008-09 obligation period. Further detail on ROC revocation by technology can be found in table B8 of Appendix 3.

[26] For the 2007-08 and 2008-09 compliance periods the ROCs issued on an annual basis (mainly covering agents/microgenerators) are not included in the figures
[27] For ROCs issued in 2002-03 and 2003-04 please see previous Renewables Obligation: Annual Reports

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 accredited under the Renewables Obligations.

We are required to publish this information under the Orders.

A detailed list of all stations accredited under the Orders can be found in the accredited stations report on our Renewables & CHP Register at https://www.renewablesandchp.ofgem.gov.uk

Accreditation of generating stations

4.1. The Orders require us to accredit eligible renewable generating stations for the RO. We have put in place appropriate on-line application forms and guidance to assist us to carry out this function.

Headline figures

4.2. We accredited 1,396 generating stations during the 2008-09 obligation period, up from 1,046 in 2007-08. There were a total of 3,801 generating stations accredited for the RO as of 31 March 2009. Figure 18 illustrates the location of the stations accredited in the 2008-09 obligation period.

4.3. Since the beginning of the RO the number of stations accredited has grown sharply. At the end of the 2004-05 obligation period, we had accredited 787 generating stations, with that number increasing to 980 at the end of the 2005-06 obligation period, to 1,359 at the end of the 2006-07 obligation period, and to 2,405 at the end of the 2007-08 period.[28] The significant growth seen since 2006-07 is a result of agents being able to represent microgenerators and amalgamate their output for the purposes of claiming ROCs. Figure 19 illustrates this dramatic increase

[28] This figure differs by a small amount to that reported in the last Annual Report as generators are accredited from the date we receive their application form. It is possible that we received generator applications in the 2007-08 obligation period but did not confirm their accreditation until after the last Annual Report was published.

Figure 18: Comparison of the number of generating stations accredited under the RO, ROS and NIRO by location in 2008-09 obligation period

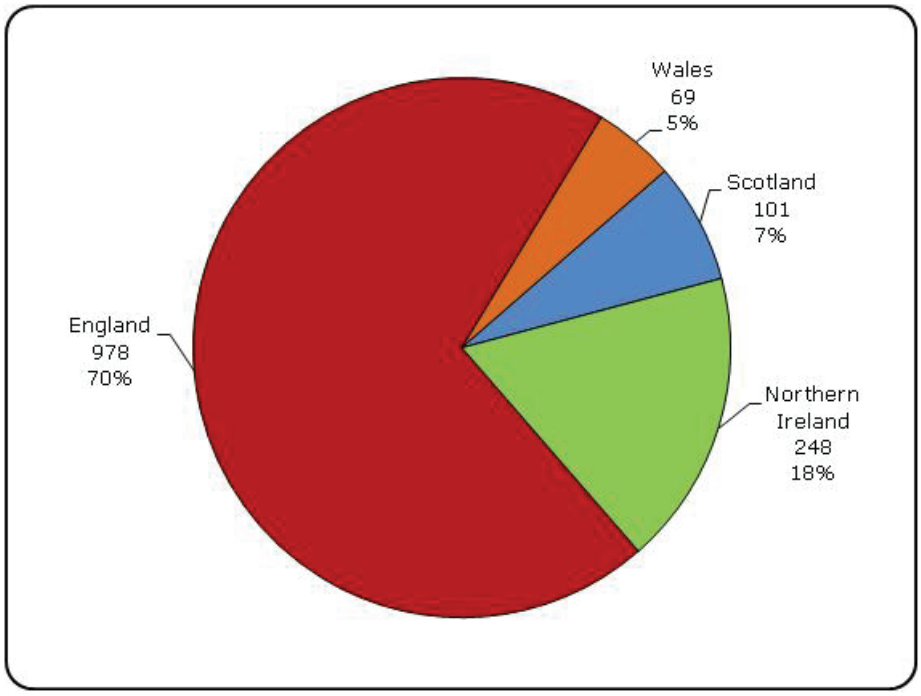
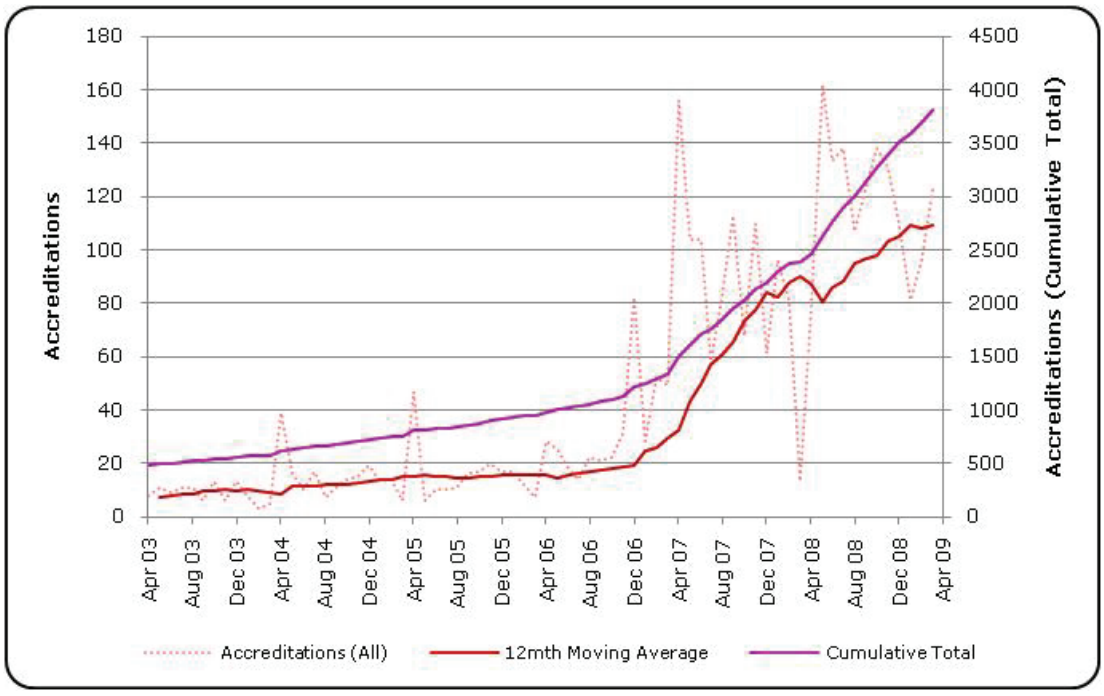


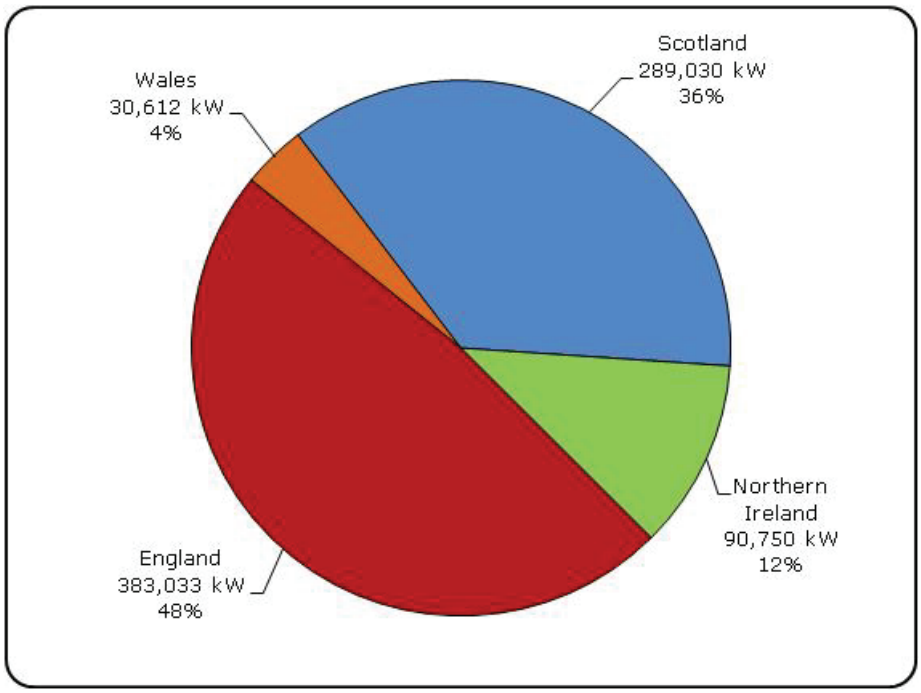
Figure 19: Number of accredited generating stations since 2003



4.4. As of 31 March 2009, we saw an increase of 58 per cent in the number of generating stations accredited when compared to those accredited at the end of 2007-08 obligation period. This rise in accredited generating stations was driven by a 94 per cent increase in accredited microgenerators.

4.5. The capacity accredited during the 2008-09 obligation period was 793,425 kW, giving a total accredited capacity of 6,329,027 kW as of 31 March 2009. Figure 20 shows the breakdown of newly accredited capacity by location for the 2008-09 period

Figure 20: Comparison of capacity (kW) of generating stations accredited under the RO, ROS and NIRO by location in 2008-09 obligation period



Newly accredited generation for 2008-09 by country

4.6. Of the total number of stations accredited under the RO in the United Kingdom, 70 per cent were in England equating to 48 per cent of the total eligible generating capacity. In comparison, Scotland had 7 per cent of the total number of stations and 36 per cent of the total generating capacity, and Wales, which had 5 per cent of the number of generators and 4 per cent of the total generating capacity. These figures suggest that a larger proportion of the microgeneration stations are situated in England compared with Scotland.

4.7. Generating stations located in Northern Ireland account for 18 per cent of the total number of eligible generators accredited under the RO in the United Kingdom, with 12 per cent of total generating capacity.

Total accredited generation for 2008-09 by country

4.8. As at 31 March 2009, England accounted for 68 per cent of the total number of stations accredited for the RO in the United Kingdom, and 47 per cent of the total eligible generating capacity. In comparison, Scotland had 13 per cent of the total number of stations, but 40 per cent of the total generating capacity. Wales which had 6 per cent of the number of generators and 8 per cent of the total generating capacity.

4.9. As at 31 March 2009, generating stations located in Northern Ireland account for 13 per cent of the total number of eligible generators accredited for the RO in the United Kingdom, accounting for 5 per cent of total generating capacity.

4.10. Further detail can be found in tables C1 and C2 of Appendix 4.

NFFO and SRO generating stations

4.11. Under the Electricity Act 1989, Orders were introduced in England and Wales, Scotland and Northern Ireland requiring the Regional Electricity Companies to contract for certain amounts of electricity generating capacity from renewable sources. These Orders are known as Non-Fossil Fuel Obligations (NFFO and NI NFFO) and the Scottish Renewables Obligation (SRO)[29]. The Orders set out specific eligibility requirements in respect of generating stations situated at locations where a NFFO, SRO or NI NFFO contract (known as "qualifying arrangements" in the legislation) exists[30].

4.12. In the 2008-09 obligation period, we accredited two generating stations (both hydro generating stations) that receive support under the NFFO scheme, but none were accredited that receive support under either the SRO or NI NFFO schemes.

4.13. As at 31 March 2009, NFFO generating stations made up around 22 per cent of the accredited RO capacity in England and Wales. NI NFFO generating stations made up around 12 per cent of the accredited RO capacity in Northern Ireland. SRO generating stations made up around 7 per cent of the accredited RO capacity in Scotland. These figures are markedly lower than those reported in our 2007-08 report; this is mainly due to an increase in non NFFO/SRO capacity. There was, however, a slight reduction in the number of stations no longer receiving support

[29] See the Electricity (Non-Fossil Fuel Sources) (England & 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.
[30] See Article 6 of the RO, Article 7 of the ROS and Article 6 of the NIRO for further details on qualifying arrangements

under the NFFO, SRO or NI NFFO schemes because their contracts had come to an end or their contracts had been terminated.

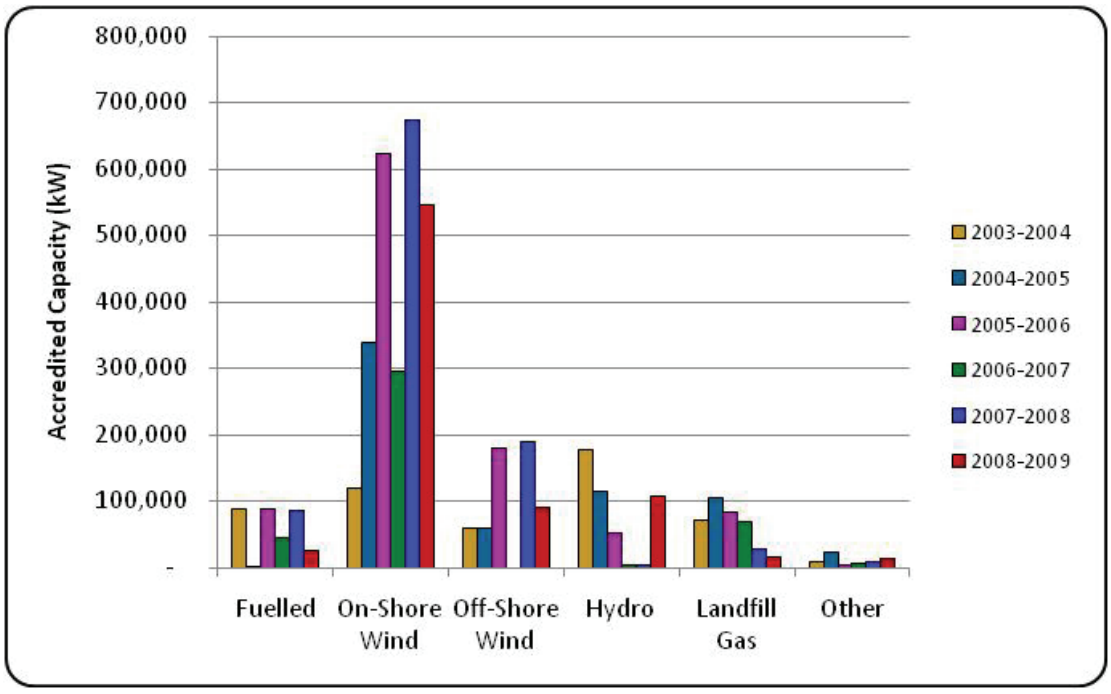
4.14. Further detailed information can be found in table C4 and C4a of Appendix 4.

Types of generating station accredited

4.15. When the RO was first introduced, the most prevalent technology type (in terms of the number of generating stations) was landfill gas, with 202 stations accredited at 1 April 2002. In 2008-09 we accredited 14 landfill gas generating stations.

4.16. The most prevalent technology in the 2008-09 obligation period in terms of the number of stations accredited was photovoltaic with 881 stations. The most prevalent technology by capacity was on-shore wind with 545,046 kW becoming accredited, as demonstrated in Figure 21.

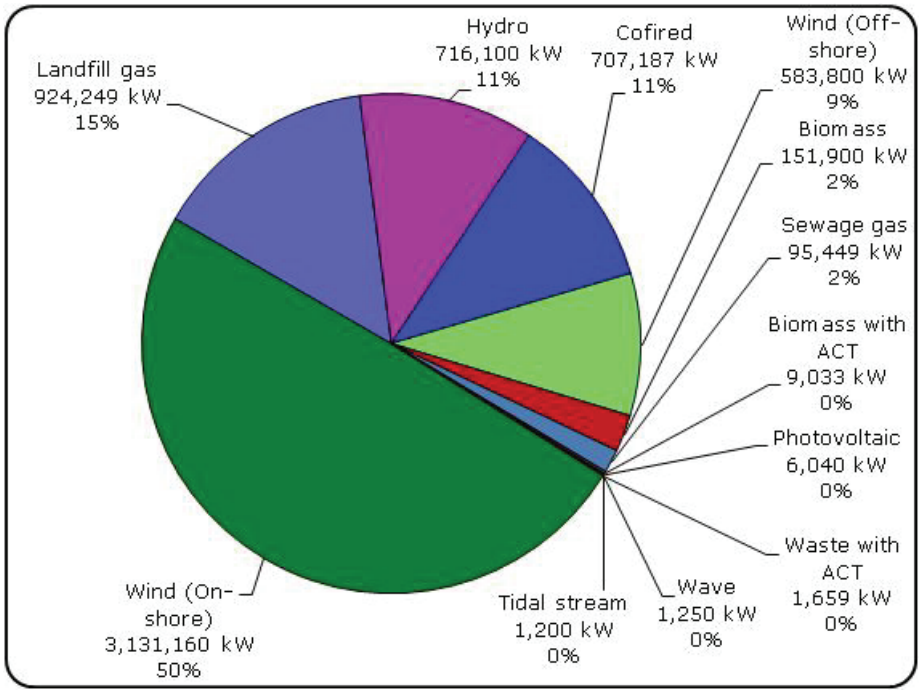
Figure 21: Additional accredited capacity by technology type and obligation period[31]



[31] The "Fuelled" technology includes biomass, co-firing biomass with fossil fuel, biomass with ACT, waste with ACT

4.17. On-shore wind stations made up 50 per cent of the total renewable capacity installed and accredited under the RO as of 31 March 2009. The total installed capacity for each technology is shown in Figure 22. Further details can also be found in Table C2 in Appendix 4.

Figure 22: Total capacity (kW) accredited for the RO, ROS and NIRO by technology as at 31 March 2009[32]



Our audit process: generating stations and agents

4.18. 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.

[32] A number of generating stations that are classified as co-firing generating stations claim and receive biomass ROCs as well as co-firing ROCs dependent on the fuel used at a particular time.

4.19. During the 2008-09 obligation period, we carried out technical audits of 29 accredited stations above 50kW and 20 accredited microgenerators across England and Wales, Scotland and Northern Ireland. Similar issues were identified in all three countries. 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 or failures to report modifications at the generating station. The following tables summarise the audit results.

Table 6: Summary of technical audit results for station over 50kW

Generating technology	No. of stations audited	Types of irregularity detected
Biomass	7	▪ calculation errors in the number of certificates issued ▪ discrepancies in the use of fossil fuel reported ▪ incorrect technology assigned to station classed as 'Waste using ACT' instead of AD ▪ input electricity not deducted correctly ▪ natural gas used by biogas engine not reported ▪ station modifications not reported
Hydro	7	▪ calculation errors in the number of certificates issued ▪ diesel generating set and output not reported ▪ incorrect output data submitted ▪ transformer losses not accounted for in monthly submissions ▪ station modifications not reported
Landfill gas	3	▪ inconsistencies in output data submitted ▪ incorrect output data submitted ▪ change to station operator not reported ▪ station modifications not reported
Off-shore wind	1	▪ input electricity not deducted correctly ▪ calculation errors in the number of certificates issued
On-shore wind	8	▪ input electricity not deducted correctly
Sewage gas	3	▪ discrepancies in the single line diagram submitted

Table 7: Summary of technical audit results for microgenerators

Generating technology	No. of stations audited	Types of irregularity detected
Hydro	3	▪ capacity exceeds the 50kW limit set for Micro-generators ▪ inconsistencies in output data reported ▪ inappropriate metering arrangements
Photovoltaic	11	▪ inconsistencies in output data reported

		▪ ineligible metering arrangements ▪ generator does not retain records of historic meter readings ▪ a station applied for CCL and REGOs but is only accredited for RO
Wind	6	▪ schematic diagram incorrect ▪ standby generator not reported

4.20. The most serious findings of the audits called into question the validity of a station being accredited as a microgenerator. This issue resulted from the generating station sharing civil works with three other generating turbines at the same site. We took the opinion that this matter did not represent fraudulent activity, but a misunderstanding of the legislative requirements. In addition, two generating turbines at the site are not operational and the combined DNC of the operational turbines was below the 50kW limit. We are currently reviewing this matter, and will take the appropriate remedial action.

4.21. The most common findings were in relation to the accuracy of the information submitted for ROC claims because of issues with metering equipment, measuring and reporting of 'input electricity' or the incorrect reporting of data. 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 will also carry out a follow-up exercise to ensure that the issues have been addressed. The errors found represented only a marginal difference to the ROCs issued.

4.22. In relation to metering equipment, there were some cases where the meter was not of an approved type. In these cases operators were required to rectify the situation by installing approved meters. In a number of other cases, station operators were not correctly reporting data taking account of electricity or fuel used as an input to the generation process. We took appropriate remedial action in these instances.

4.23. We introduced an audit programme for agents in 2008-09, and the first round of audits are now complete. We are still evaluating the results from these audits and will be in a position to give further feedback in next year's Annual Report.

5. Implementation Issues

Chapter summary

This chapter sets out the issues that arose in the 2008-09 obligation period.

It also looks at the issues that have come up in 2009-10 obligation period that are ongoing at the time this report was published.

Our 2007-08 Annual Report sets out some of the issues that came up prior to April 2008.

2008-09 Obligation period

Microgenerators and agents: Volume of applications

5.1. From April 2007, agents have been able to represent microgenerators and amalgamate their output for the purposes of claiming ROCs. As a result, we have continued to see significant increases in the number of microgenerators applying for accreditation (which continues the trend that we reported on in the 2007-08 Annual Report). As at April 2007, we had accredited around 407 microgenerators[33]. This had increased to 2678 by March 2009 and at the time of this report is 3539. This has had implications for our workload. There is a large administrative burden for microgenerators which make up a small proportion of renewable generation.

5.2. Microgenerators now make up over 70 per cent of the number of generators in the RO. However, they only comprise approximately 0.2 per cent of the generating capacity and 0.07 per cent of ROCs issued in 2008-09.

5.3. The cost of administering these microgenerators was a significant proportion of the £988,500 the team required in 2008-09. However, only £694,000 of ROCs were issued for their generation (assuming a value of £54.37 per ROC). The value passed on to generators will be less than this after the suppliers/agents have accounted for their administration expenses.

5.4. Feed-In-Tariffs (FITs) are expected to be introduced by the Government on 1 April 2010, which will reduce the administrative burden for both Ofgem and microgenerators. The government policy intent is that existing microgenerators accredited under the RO will be removed from the RO and migrated across to the Feed In Tariffs scheme. The main exception to this is that microgenerating stations in Northern Ireland will remain accredited under the NIRO as primary legislation does

[33] This figure includes stations which had applied for accreditation prior to 1 April 2007, but which were granted accreditation after this date.

not allow for a feed-in tariff scheme to cover Northern Ireland. There will also be a small number of microgenerators in England & Wales and Scotland that will remain under the RO as some generation technologies will not be covered by Feed-In-Tariffs.

Fuel Measurement and Sampling of Waste

5.5. The beginning of the 2008-09 obligation period saw the agreement of further fuel measurement and sampling procedures, including the approval of procedures for a number of dedicated biomass stations.

5.6. In addition, fuel measurement and sampling methodologies for stations using gasification technology were approved under the Renewables Obligation Order 2006 (as amended).

5.7. Ofgem and industry continued to grapple with a number of complex issues, including the agreement of procedures for stations using waste and in the latter part of the period, the eligibility of biodiesel under the RO. Amendments made to the Renewables Obligation Order 2009 have created specific provisions for generators' using waste fuels and in particular municipal waste, and it is hoped that these changes will provide greater flexibility to these generators' in the formulation of their fuel measurement and sampling procedures. In the case of the latter, we have consulted publically and published a detailed decisions document setting out the treatment of biodiesel under the RO.

5.8. During the 2008-09 period there were discussions on new conditions for sustainability reporting by biomass generators. This outcome of this was a new requirement in the Renewables Obligation Order 2009 for Ofgem to establish a sustainability reporting mechanism. Further development on this issue occurred during the following obligation period.

5.9. Much of the latter part of the obligation period was dominated by the impending introduction of the Renewables Obligation Order 2009. The period closed with the publication of a new fuel measurement and sampling guidance document which was released following an extensive public consultation.

2009-10 Obligation period

Current IT system

5.10. The Ofgem Renewables and CHP Register ("the Register"), which we now use to administer the RO scheme, went into operation on the 1 April 2008. The new system was introduced to make the RO process more automated and more flexible, as well as accommodating changes in legislation.

5.11. The Register is an electronic, web-based system used to manage the renewables and CHP schemes that Ofgem administers on behalf of the Government, namely the Renewables Obligation (RO), the Climate Change Levy (CCL) exemptions for Renewables and CHP and the Renewable Energy Guarantees of Origin (REGO).

5.12. The Register allows generators that wish to participate in any of the renewable schemes to apply for accreditation, manage output in respect of renewable electricity produced, receive certificates (ROCs) and submit annual declarations. The register also allows generators, suppliers and participants to transfer certificates and access reports.

5.13. During 2009-10 the improvements made to the Renewables and CHP Register have taken effect and in the majority of cases participants were able to use the system effectively. There were some isolated problems during this period and these are set out below:

- some public reports being unavailable on some occasions
- issues with a small number of suppliers editing supply data and submitting compliance reports.
- email notification and communication of system changes.

5.14. Participants worked with us to resolve these issues, and we are grateful to them for their co-operation. We have been working hard to resolve other issues and improve our service delivery. This has included fixing issues as they arise and releasing additional functionality throughout 2009. There is a planned additional release of functionality in April 2010 and October 2010. We will also be releasing modifications in April 2010 to take into account changes to the RO described in Chapter 6.

6. Changes in legislation

Changes to the Renewables Obligation introduced from 1 April 2008

UK wide changes

6.1. There were no UK wide changes to the Orders from 1 April 2008 to 31 March 2009. Amendments to the Orders were made on 1 April 2009.

Marine Supply Obligation - Scotland only

6.2. The Marine Supply Obligation (MSO) was introduced under the Renewables Obligation (Scotland) Order 2007 (ROS) with effect from 1 April 2007. It is a mechanism which requires suppliers with an obligation under the ROS to meet a proportion of that obligation by producing as evidence ROCs awarded to eligible wave or tidal generation in Scottish waters, or by paying a higher buy-out price.

6.3. For the obligation period 1 April 2007 to 31 March 2008, both the wave and tidal requirements were set to zero. Subsequently the Scottish Government has also set the wave and tidal requirements for the period 1 April 2008 to 31 March 2009 to zero. Suppliers are required to comply with the MSO only when the level goes above zero.

6.4. The MSO was removed from the ROS upon the introduction of banding from 1 April 2009

Changes to the Renewables Obligation from 1 April 2009

6.5. The Renewables Obligation Order 2009, the Renewables Obligation (Scotland) Order 2009 and the Renewables Obligation Order (Northern Ireland) 2009 came into force on 1 April 2009. This legislation introduced a number of changes to the Orders including:

- banding the RO so that different levels of support are provided to different technologies. Established technologies receive fewer ROCs per MWh (e.g. 0.25 ROCs per MWh for landfill gas) and emerging technologies will receive more ROCs per MWh (e.g. 1.5 ROCs per MWh for regular dedicated biomass).
- in association with the banding structure, grandfathering rights have been introduced; these cover exceptions to banding based on commissioning and accreditation dates for some technologies.
- introducing 4 yearly reviews of the banding levels from 2013, and early reviews if needed.

- in conjunction with the banding structure, the obligation will change from an obligation to source a certain percentage of a supplier's sales to an obligation to present a number of ROCs per MWh of a supplier's sales
- extending obligation levels up to 20 per cent on a "guaranteed headroom" basis (8 per cent "buffer" between number of ROCs and the target).
- microgenerators will be able to take annual meter readings up to 2 months following the end of the obligation period, as long as they provide this data to Ofgem within this timeframe. The first period that this will be applicable for is the obligation year 2009-2010
- Ofgem's costs of administering the RO will be recovered from the buy-out funds and late payment funds from 2010-11
- if the late payment fund is less than £50,000 then it will be rolled over and re-distributed in the following year's obligation period, from 2010-11
- a change to the treatment of generators supplying through private wire networks
- the introduction of a requirement on generators to submit annual sustainability reporting for biomass to Ofgem, and for Ofgem to make this information publicly available.
- allowing energy from waste to be deemed at 50 per cent renewable content and allowing a higher percentage where adequate sampling procedures are in place, and
- the cap on suppliers meeting their obligation from co-fired power stations will be raised from 10 per cent to 12.5 per cent from 2010-11.

6.6. The Register was amended to accommodate the changes by the time they came into force. We also published updated guidance documents in March 2009.

Changes to the Renewables Obligation from 1 April 2010

6.7. The Government is currently working on draft documents of the Renewables Obligation Order 2010, the Renewables Obligation (Scotland) Order 2010 and the Renewables Obligation Order (Northern Ireland) 2010, which are expected to come into force on 1 April 2010. A number of changes will be introduced to the Orders including:

- extending the RO and ROS to 2037, and the NIRO to 2033
- generating stations receiving full accreditation on or after 26 June 2008 will receive 20 years support from the date they are first accredited, subject to the 2037 end date (or 2033 end date for the NIRO)
- additional capacity receiving full accreditation on or after 26 June 2008 will receive 20 years support from the date it is first accredited, subject to 2037 end date (or 2033 end date for the NIRO)
- removing the 20 ROCs/100MWh renewable electricity cap on the obligation level
- increase headroom to 10 per cent with effect from 1 April 2011
- increasing the level of support for offshore wind projects that are granted full accreditation between 1 April 2010 and 31 March 2014 to 2 ROCs per MWh
- clarifying that measurement of Anaerobic Digestion (AD) feedstock is allowed to be carried out over a three-month period
- offsetting presented ROCs from a generator's future output where it has been found that ROCs, already submitted for compliance, should not have been issued.

- exclude electricity produced from landfill gas and sewage gas from the Sustainability Reporting requirements from 1 April 2010
- removal from the RO and ROS of PV, hydro, wind and anaerobic digestion for microgeneration technologies[34], with the continuing support for these technologies coming through the Feed-In-Tariff scheme from 1 April 2010
- strengthening the legislation in circumstances where a supplier has gone into administration

6.8. We are working to ensure the Register is amended to accommodate these changes by the time they come into force. We will also be publishing updated guidance documents shortly before 1 April 2010.

Future Changes to the Renewables Obligation

6.9. DECC has also taken powers to introduce a Renewable Heat Incentive (RHI) scheme under the Energy Act 2008, which is expected to be introduced on 1 April 2011. The details of the RHI scheme are subject to consultation at this time, but the proposed transitional arrangements would indicate that renewable CHP generating stations will have an option as to whether they can claim:

- under the RO with the additional "uplift" (of additional no. of ROCs/MWh for electricity generated from a renewable CHP plant), or
- under the RO without "uplift" + claim under the RHI

6.10. DECC has carried out an initial consultation on proposals for a revenue stabilisation mechanism under the RO. Following comments received, they are planning to carry out further research.

6.11. DECC have also indicated that they will carry out further work based on the responses received for their consultation on the following proposals:

- the option of extending the RO to include generating stations located outside the UK
- changes to the sustainability requirements for biomass fuels, and
- amendments to the co-firing cap.

[34] These technologies will only be removed from the RO and ROS; they will continue to be supported under the NIRO as there are no plans to introduce Feed-In-Tariffs in Northern Ireland

Appendices

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Appendix 1 - The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2008, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.[35]

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly[36].

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to contribute to the achievement of sustainable development;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them[37]; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[38]

[35] entitled "Gas Supply" and "Electricity Supply" respectively.
[36] However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.
[37] under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- Promote efficiency and economy on the part of those licensed[39] under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation[40] and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

[38] The Authority may have regard to other descriptions of consumers.
[39] or persons authorised by exemptions to carry on any activity.
[40] Council Regulation (EC) 1/2003

Appendix 2 – Compliance by licensed electricity suppliers

Table A1: 2008-09 supplier compliance with RO

Licensee	RO (MWh)	GB ROCs presented	NIROCs presented	Total ROCs presented	Buyout payment	Late payment
BizzEnergy Ltd	100,515	0	0	0	£0.00	£0.00
BP Power Trading Ltd	272	0	0	0	£9,726.72	£0.00
British Energy Direct Ltd	1,563,021	223,249	0	223,249	£47,910,246.72	£0.00
British Gas Trading Ltd	3,608,799	3,081,424	0	3,081,424	£18,858,930.00	£0.00
E.ON Energy Ltd	2,586,230	2,032,085	9,194	2,041,279	£19,487,447.76	£0.00
E.ON UK Plc	1,470,673	821,544	32,063	853,607	£22,066,280.16	£0.00
EDF Energy Customers Plc	4,566,300	3,170,306	0	3,170,306	£49,920,745.44	£0.00
Electricity4Business Ltd	58,835	0	0	0	£0.00	£0.00
Electricity Plus Ltd	77,635	38,321	10,936	49,257	£1,014,797.28	£0.00
Energy Data Company Ltd	96	0	0	0	£3,432.96	£0.00
First Utility Ltd	3,363	0	0	0	£120,260.88	£0.00
GDF Suez Marketing Ltd	744,854	439,456	16,650	456,106	£10,325,628.48	£0.00
Good Energy Ltd	11,212	11,212	0	11,212	£0.00	£0.00
Haven Power Ltd	37,247	17,787	7	17,794	£695,639.28	£0.00
Immingham CHP LLP	22,728	4,749	17,846	22,595	£4,756.08	£0.00
Npower Direct Ltd	278,814	176,899	0	176,899	£3,644,480.40	£0.00
Npower Ltd	3,137,709	1,929,452	81,410	2,010,862	£40,296,048.72	£0.00
Npower Northern Ltd	636,658	366,063	37,878	403,941	£8,321,959.92	£0.00
Npower Yorkshire Ltd	207,164	131,440	0	131,440	£2,707,890.24	£0.00

Table A1: 2008-09 supplier compliance with RO (Continued)

Licensee	RO (MWh)	GB ROCs presented	NIROCs presented	Total ROCs presented	Buyout payment	Late payment
Opus Energy Ltd	76,770	41,051	144	41,195	£1,272,162.00	£0.00
Power4All Ltd	108,323	0	0	0	£3,873,630.48	£0.00
Scottish Power Energy Retail Ltd	1,411,304	924,976	131,668	1,056,644	£12,682,641.60	£0.00
Slough Energy Supplies Ltd	13,771	13,771	0	13,771	£0.00	£0.00
Smartestenergy Ltd	23,345	23,345	0	23,345	£0.00	£0.00
Spark Energy Supply Ltd	1,206	0	0	0	£0.00	£43,457.98
SSE Energy Supply Ltd	4,803,264	2,555,083	180,843	2,735,926	£73,928,006.88	£0.00
The Renewable Energy Company Ltd	22,551	22,551	0	22,551	£0.00	£0.00
Total Gas & Power Ltd	365,958	270,226	0	270,226	£3,423,367.32	£9.02
Tradelink Solutions Ltd	102	80	22	102	£0.00	£0.00
Utilita Electricity Ltd	3,056	0	0	0	£0.00	£109,661.31
Wilton Energy Ltd	2,988	0	0	0	£0.00	£106,899.18

Supplier (Group)	RO (MWh)	GB ROCs presented	NIROCs presented	Total ROCs presented	Buyout payment	Late payment
E.ON	4,056,903	2,853,629	41,257	2,894,886	£41,553,727.92	£0.00
RWE Npower	4,337,980	2,642,175	130,224	2,772,399	£55,985,176.56	£0.00
Scottish & Southern Energy (SSE)	4,817,035	2,568,854	180,843	2,749,697	£73,928,006.88	£0.00

Table A2: 2008-09 supplier compliance with ROS

Licensee	RO (MWh)	GB ROCs presented	NIROCs presented	Total ROCs presented	Buyout payment	Late payment
BizzEnergy Ltd	4,603	0	0	0	£0.00	£0.00
British Energy Direct Ltd	161,447	161,447	0	161,447	£0.00	£0.00
British Gas Trading Ltd	322,797	275,639	0	275,639	£1,686,370.08	£0.00
E.ON Energy Ltd	83,155	8,315	0	8,315	£2,676,278.40	£0.00
E.ON UK Plc	67,673	6,767	0	6,767	£2,177,998.56	£0.00
EDF Energy Customers Plc	177,011	177,011	0	177,011	£0.00	£0.00
Electricity4Business Ltd	4,514	0	0	0	£0.00	£0.00
Electricity Plus Ltd	4,402	2,793	0	2,793	£57,537.84	£0.00
First Utility Ltd	66	0	0	0	£2,360.16	£0.00
GDF Suez Marketing Ltd	40,763	29,506	11,257	40,763	£0.00	£0.00
Good Energy Ltd	464	464	0	464	£0.00	£0.00
Haven Power Ltd	2,053	205	0	205	£0.00	£66,164.23
Npower Direct Ltd	13,797	8,754	0	8,754	£180,337.68	£0.00
Npower Ltd	180,778	114,698	0	114,698	£2,363,020.80	£0.00
Npower Northern Ltd	24,253	15,388	0	15,388	£317,012.40	£0.00
Npower Yorkshire Ltd	54	34		34	£715.20	£0.00
Opus Energy Ltd	13,399	13,399	0	13,399	£0.00	£0.00
Power4All Ltd	16,015	0	0	0	£572,696.40	£0.00
Scottish Power Energy Retail Ltd	794,374	794,374	0	794,374	£0.00	£0.00
Smartestenergy Ltd	21	21	0	21	£0.00	£0.00
Spark Energy Supply Ltd	360	0	0	0	£0.00	£12,972.53
SSE Energy Supply Ltd	828,937	434,851	37,053	471,904	£12,767,500.08	£0.00
The Renewable Energy Company Ltd	1,249	1,249	0	1,249	£0.00	£0.00
Total Gas & Power Ltd	29,470	0	0	0	£1,053,847.20	£0.00
Tradelink Solutions Ltd	3,131	870	30	900	£79,780.56	£0.00
Utilita Electricity Ltd	95	0	0	0	£0.00	£3,408.97

Table A2: 2008-09 supplier compliance with ROS (Continued)

Supplier (Group)	RO (MWh)	GB ROCs presented	NIROCs presented	Total ROCs presented	Buyout payment	Late payment
E.ON	150,828	15,082	0	15,082	£4,854,276.96	£0.00
RWE Npower	223,284	141,667	0	141,667	£2,918,623.92	£0.00
Scottish & Southern (SSE)	828,937	434,851	37,053	471,904	£12,767,500.08	£0.00

Table A3: 2008-09 supplier compliance with NIRO

Licensee	RO (MWh)	GB ROCs presented	NIROCs presented	Total ROCs presented	Buyout payment	Late payment
Airtricity Energy Supply Ltd	12,831	0	12,831	12,831	£0.00	£0.00
Bord Gais Eireann	134	0	0	0	£0.00	£4,802.67
ESB Independent Energy NI Ltd	44,552	0	21,473	21,473	£0.00	£825,429.40
NIE Energy Ltd	144,328	0	2,753	2,753	£5,062,722.00	£0.00
Quinn Energy Supply Ltd	3,965	0	3,965	3,965	£0.00	£0.00
Viridian Energy Supply Ltd	50,224	0	0	0	£1,796,010.24	£0.00

Table A4: ROCs presented in England & Wales

Licensee	RO (MWh)	ROCs Presented				% RO met by ROC type		
		Total	Co-fired	Banked (07-08)	Other	Co-fired	Banked (07-08)	Other
British Energy Direct Ltd	1,563,021	223,249	156,302	0	66,947	10.00%	0.00%	4.28%
British Gas Trading Ltd	3,608,799	3,081,424	100,000	0	2,981,424	2.77%	0.00%	82.62%
E.ON Energy Ltd	2,586,230	2,041,279	258,623	35,795	1,779,902	10.00%	1.38%	68.82%
E.ON UK Plc	1,470,673	853,607	147,067	0	706,540	10.00%	0.00%	48.04%
EDF Energy Customers Plc	4,566,300	3,170,306	456,630	0	2,713,676	10.00%	0.00%	59.43%
Electricity Plus Ltd	77,635	49,257	7,121	0	42,136	9.17%	0.00%	54.27%
GDF Suez Marketing Ltd	744,854	456,106	64,452	20,376	377,062	8.65%	2.74%	50.62%
Good Energy Ltd	11,212	11,212	0	851	10,361	0.00%	7.59%	92.41%
Haven Power Ltd	37,247	17,794	3,724	0	14,070	10.00%	0.00%	37.77%
Immingham CHP LLP	22,728	22,595	1,792	0	20,803	7.88%	0.00%	91.53%
Npower Direct Ltd	278,814	176,899	25,574	0	151,325	9.17%	0.00%	54.27%
Npower Ltd	3,137,709	2,010,862	288,319	711	1,721,832	9.19%	0.02%	54.88%
Npower Northern Ltd	636,658	403,941	58,396	0	345,545	9.17%	0.00%	54.27%
Npower Yorkshire Ltd	207,164	131,440	19,002	0	112,438	9.17%	0.00%	54.27%
Opus Energy Ltd	76,770	41,195	7,673	170	33,352	9.99%	0.22%	43.44%
Scottish Power Energy Retail Ltd	1,411,304	1,056,644	140,866	18	915,760	9.98%	0.00%	64.89%
Slough Energy Supplies Ltd	13,771	13,771	0	0	13,771	0.00%	0.00%	100.00%
Smartestenergy Ltd	23,345	23,345	0	0	23,345	0.00%	0.00%	100.00%
SSE Energy Supply Ltd	4,803,264	2,735,926	300,213	114,114	2,321,599	6.25%	2.38%	48.33%
The Renewable Energy Company Ltd	22,551	22,551	0	52	22,499	0.00%	0.23%	99.77%
Total Gas & Power Ltd	365,958	270,226	953	10,581	258,692	0.26%	2.89%	70.69%
Tradelink Solutions Ltd	102	102	0	25	77	0.00%	24.51%	75.49%

Table A4: ROCs presented in England & Wales (Continued)

Supplier (Group)	RO (MWh)	ROCs Presented				% RO met by ROC type		
		Total	Co-fired	Banked (07-08)	Other	Co-fired	Banked (07-08)	Other
E.ON	4,056,903	2,894,886	405,690	35,795	2,486,442	10.00%	0.88%	61.29%
RWE Npower	4,337,980	2,772,399	398,412	711	2,373,276	9.18%	0.02%	54.71%
Scottish & Southern (SSE)	4,817,035	2,749,697	300,213	114,114	2,335,370	6.23%	2.37%	48.48%

Table A5: ROCs presented in Scotland

Licensee	RO (MWh)	ROCs Presented				% RO met by ROC type		
		Total	Co-fired	Banked (07-08)	Other	Co-fired	Banked (07-08)	Other
British Energy Direct Ltd	161,447	161,447	16,144	409	144,894	10.00%	0.25%	89.75%
British Gas Trading Ltd	322,797	275,639	0	0	275,639	0.00%	0.00%	85.39%
E.ON Energy Ltd	83,155	8,315	8,315	0	0	10.00%	0.00%	0.00%
E.ON UK Plc	67,673	6,767	6,767	0	0	10.00%	0.00%	0.00%
EDF Energy Customers Plc	177,011	177,011	17,701	314	158,996	10.00%	0.18%	89.82%
Electricity Plus Ltd	4,402	2,793	404	0	2,389	9.18%	0.00%	54.27%
GDF Suez Marketing Ltd	40,763	40,763	0	0	40,763	0.00%	0.00%	100.00%
Good Energy Ltd	464	464	0	0	464	0.00%	0.00%	100.00%
Haven Power Ltd	2,053	205	205	0	0	9.99%	0.00%	0.00%
Npower Direct Ltd	13,797	8,754	1,265	0	7,489	9.17%	0.00%	54.28%
Npower Ltd	180,778	114,698	16,582	0	98,116	9.17%	0.00%	54.27%
Npower Northern Ltd	24,253	15,388	2,225	0	13,163	9.17%	0.00%	54.27%
Npower Yorkshire Ltd	54	34	5	0	29	9.26%	0.00%	53.70%

Table A5: ROCs presented in Scotland (Continued)

Licensee	RO (MWh)	ROCs Presented				% RO met by ROC type		
		Total	Co-fired	Banked (07-08)	Other	Co-fired	Banked (07-08)	Other
Opus Energy Ltd	13,399	13,399	1,339	0	12,060	9.99%	0.00%	90.01%
Scottish Power Energy Retail Ltd	794,374	794,374	79,437	0	714,937	10.00%	0.00%	90.00%
Smartestenergy Ltd	21	21	0	0	21	0.00%	0.00%	100.00%
SSE Energy Supply Ltd	828,937	471,904	29,862	0	442,042	3.60%	0.00%	53.33%
The Renewable Energy Company Ltd	1,249	1,249	0	0	1,249	0.00%	0.00%	100.00%
Tradelink Solutions Ltd	3,131	900	0	112	788	0.00%	3.58%	25.17%

Supplier (Group)	RO (MWh)	ROCs Presented				% RO met by ROC type		
		Total	Co-fired	Banked (07-08)	Other	Co-fired	Banked (07-08)	Other
E.ON	150,828	15,082	15,082	0	0	10.00%	0.00%	0.00%
RWE Npower	223,284	141,667	20,481	0	121,186	9.17%	0.00%	54.27%
Scottish & Southern (SSE)	828,937	471,904	29,862	0	442,042	3.60%	0.00%	53.33%

Table A6: ROCs presented in Northern Ireland

Licensee	RO (MWh)	ROCs Presented				% RO met by ROC type		
		Total	Co-fired	Banked (07-08)	Other	Co-fired	Banked (07-08)	Other
Airtricity Energy Supply Ltd	12,831	12,831	0	0	12,831	0.00%	0.00%	100.00%
ESB Independent Energy NI Ltd	44,552	21,473	0	29	21,444	0.00%	0.07%	99.86%
NIE Energy Ltd	144,328	2,753	0	85	2,668	0.00%	0.06%	96.91%
Quinn Energy Supply Ltd	3,965	3,965	0	0	3,965	0.00%	0.00%	100.00%

Table A7: Total number of GB ROCs and NIROCs presented under each obligation

Obligation	GB ROCs	NIROCs	Total
Renewables Obligation	16,295,070	518,661	16,813,731
Renewables Obligation (Scotland)	2,045,785	48,340	2,094,125
Northern Ireland Renewables Obligation	0	41,022	41,022
Total	18,340,855	608,023	18,948,878

Table A8: Late payment and interest

Licensee	Obligation	Outstanding buy-out	Days late	Interest due	Late payment due	Late payment received
BizzEnergy Ltd	RO	£3,594,416.40	61	£33,039.09	£3,627,455.49	£0.00
Electricity4Business Ltd	RO	£2,103,939.60	61	£19,338.95	£2,123,278.55	£0.00
Spark Energy Supply Ltd	RO	£43,126.56	51	£331.42	£43,457.98	£43,457.98
Total Gas & Power Ltd	RO	£9.00	14	£0.02	£9.02	£9.02
Utilita Electricity Ltd	RO	£109,282.56	23	£378.75	£109,661.31	£109,661.31
Wilton Energy Ltd	RO	£106,850.88	3	£48.30	£106,899.18	£106,899.18
BizzEnergy Ltd	ROS	£164,603.28	61	£1,513.00	£166,116.28	£0.00
Electricity4Business Ltd	ROS	£161,420.64	61	£1,483.74	£162,904.38	£0.00
Haven Power Ltd	ROS	£66,084.48	8	£79.75	£66,164.23	£66,164.23
Spark Energy Supply Ltd	ROS	£12,873.60	51	£98.93	£12,972.53	£12,972.53
Utilita Electricity Ltd	ROS	£3,397.20	23	£11.77	£3,408.97	£3,408.97
Bord Gais Eireann	NIRO	£4,791.84	15	£10.83	£4,802.67	£4,802.67
ESB Independent Energy NI Ltd	NIRO	£825,305.04	1	£124.36	£825,429.40	£825,429.40
Totals		£7,196,101.08		£56,458.92	£7,252,560.00	£1,172,805.29

Table A9: Distribution of buy-out and late payment funds to suppliers

Licensee	RO/ROS/NIRO fund redistribution payments						
	England and Wales		Scotland		Northern Ireland		Total
	Buy-out	Late pmt	Buy-out	Late pmt	Buy-out	Late pmt	
Airtricity Energy Supply Ltd	£217,140	£176	£16,212	£55	£4,645	£562	£238,790
British Energy Direct Ltd	£6,510,249	£5,281	£486,092	£1,676	£139,290	£16,865	£7,159,453
British Gas Trading Ltd	£56,811,916	£46,093	£4,241,904	£14,634	£1,215,521	£147,181	£62,477,249
E.ON Energy Ltd	£34,685,486	£28,141	£2,589,818	£8,934	£742,114	£89,858	£38,144,351
E.ON UK Plc	£14,560,196	£11,813	£1,087,148	£3,750	£311,523	£37,720	£16,012,150
EDF Energy Customers Plc	£56,646,984	£45,959	£4,229,589	£14,591	£1,211,992	£146,754	£62,295,869
Electricity Plus Ltd	£880,847	£714	£65,769	£226	£18,846	£2,281	£968,683
ESB Independent Energy NI Ltd	£363,389	£294	£27,132	£93	£7,774	£941	£399,623
GDF Suez Marketing Ltd	£8,408,564	£6,822	£627,831	£2,165	£179,905	£21,783	£9,247,070
Good Energy Ltd	£197,594	£160	£14,753	£50	£4,227	£511	£217,295
Haven Power Ltd	£304,598	£247	£22,743	£78	£6,517	£789	£334,972
Immingham CHP LLP	£382,377	£310	£28,550	£98	£8,181	£990	£420,506
Northern Ireland Electricity Plc	£46,589	£37	£3,478	£12	£996	£120	£51,232
Npower Direct Ltd	£3,141,824	£2,549	£234,586	£809	£67,221	£8,139	£3,455,128
Npower Ltd	£35,971,066	£29,184	£2,685,806	£9,265	£769,620	£93,189	£39,558,130
Npower Northern Ltd	£7,096,347	£5,757	£529,854	£1,827	£151,830	£18,384	£7,803,999
Npower Yorkshire Ltd	£2,224,947	£1,805	£166,127	£573	£47,603	£5,764	£2,446,819
Opus Energy Ltd	£923,899	£749	£68,983	£237	£19,767	£2,393	£1,016,028
Quinn Energy Supply Ltd	£67,100	£54	£5,010	£17	£1,435	£173	£73,789
Scottish Power Energy Retail Ltd	£31,324,964	£25,415	£2,338,902	£8,069	£670,214	£81,152	£34,448,716
Slough Energy Supplies Ltd	£233,048	£189	£17,400	£60	£4,986	£603	£256,286
Smartestenergy Ltd	£395,425	£320	£29,524	£101	£8,460	£1,024	£434,854
SSE Energy Supply Ltd	£54,286,431	£44,044	£4,053,337	£13,983	£1,161,487	£140,638	£59,699,920
The Renewable Energy Company Ltd	£402,769	£326	£30,073	£103	£8,617	£1,043	£442,931
Total Gas and Power Ltd	£4,573,061	£3,710	£341,451	£1,177	£97,843	£11,847	£5,029,089
Tradelink Solutions Ltd	£16,956	£13	£1,266	£4	£362	£43	£18,644
Totals	£320,673,766	£260,162	£23,943,338	£82,587	£6,860,976	£830,747	£352,651,576

Table A9: Distribution of buy-out and late payment funds to suppliers (Continued)[41,42]

Supplier (Group)	RO/ROS/NIRO fund redistribution payments						
	England and Wales		Scotland		Northern Ireland		Total
	Buy-out	Late pmt	Buy-out	Late pmt	Buy-out	Late pmt	
E.ON	£49,245,682	£39,954	£3,676,966	£12,684	£1,053,637	£127,578	£54,156,501
RWE Npower	£49,315,031	£40,009	£3,682,142	£12,700	£1,055,120	£127,757	£54,232,759
Scottish & Southern (SSE)	£54,519,479	£44,233	£4,070,737	£14,043	£1,166,473	£141,241	£59,956,206

[41] The buy-out and late payment funds were redistributed on 30 September and 12 November 2009, respectively. No payments were made into the late payment fund after this date.
[42] The payments redistributed to suppliers are based on the number of ROCs originally presented for compliance

Table A10: Licensees with no obligation

No RO	No ROS	No NIRO
730 Energy Ltd	730 Energy Ltd	AES Kilroot Supply
AES Energy Ltd	AES Energy Ltd	E.ON UK Plc
Affinity Power Ltd	Affinity Power Ltd	Electricity Supply Board
BizzEnergy@home	BizzEnergy@home	Firmus Energy Supply Ltd
Blizzard Utilities Ltd	Blizzard Utilities Ltd	Lowlands Health and Energy Ltd
Caboodle Energy Ltd	BP Power Trading Ltd	Npower Ltd
Cherwell Energy Ltd	Caboodle Energy Ltd	Power & Gas Ventures Ltd
Citigen (London) Ltd	Cherwell Energy Ltd	Premier Power Ltd
Economy Power Ltd	Citigen (London) Ltd	Regent Electricity (NI) Ltd
Electricity Direct Ltd	Economy Power Ltd	Scottish and Southern Energy Plc
Energy Co2 Ltd	Electricity Direct Ltd	Scottish Power Energy Retail Ltd
Energy COOP Ltd	Energy Co2 Ltd	SSE (Ireland) Ltd
Essential Power Ltd	Energy COOP Ltd	SSE Energy Supply Ltd
Fellside Heat & Power Ltd	Energy Data Company Ltd	Tradelink Solutions Ltd
Gazprom Marketing & Trading Retail Ltd	Essential Power Ltd	
Ineos Chlor Energy Ltd	Fellside Heat & Power Ltd	
International Power Plc	Gazprom Marketing & Trading Retail Ltd	
International Power Retail Supply Company Ltd	Immingham CHP LLP	
IPM Energy Retail Ltd	Ineos Chlor Energy Ltd	
MA Energy Ltd	International Power Plc	
Morgan Stanley Capital Group Inc	International Power Retail Supply Company Ltd	
Npower Northern Supply Ltd	IPM Energy Retail Ltd	
Npower Yorkshire Supply Ltd	MA Energy Ltd	
Pan-Utility Ltd	Morgan Stanley Capital Group Inc	
Primary Connections Ltd	Npower Northern Supply Ltd	
R S Energy Ltd	Npower Yorkshire Supply Ltd	

Table A10: Licensees with no obligation (Continued)

No RO	No ROS	No NIRO
RBS Sempra Energy Europe Ltd	Pan-Utility Ltd	
Reuben Power Supply Ltd	Primary Connections Ltd	
SEEBOARD Energy Ltd	R S Energy Ltd	
SME Energy Ltd	RBS Sempra Energy Europe Ltd	
South Wales Electricity Ltd	Reuben Power Supply Ltd	
SWEB Energy Ltd	SEEBOARD Energy Ltd	
Team Gas and Electricity Ltd	Slough Energy Supplies Ltd	
Telecom Plus Plc	SME Energy Ltd	
The Nuclear Decommissioning Authority	South Wales Electricity Ltd	
The Royal Bank of Scotland Plc	SWEB Energy Ltd	
Utilitease Ltd	Team Gas and Electricity Ltd	
	Telecom Plus Plc	
	The Nuclear Decommissioning Authority	
	The Royal Bank of Scotland Plc	
	Utilitease Ltd	
	Wilton Energy Ltd	

Table A11: Supplier groups and their licences

Supplier Group	Supply Licences
Bizz Energy	BizzEnergy Ltd
	BizzEnergy@home
British Gas / Centrica	British Gas Trading Ltd
	Electricity Direct Ltd
EDF	EDF Energy Customers Plc
	SEEBOARD Energy Ltd
	SWEB Energy Ltd
E.ON	Citigen (London) Ltd
	E.ON Energy Ltd
	E.ON UK Plc
	Economy Power Ltd
	E.ON UK Plc (NI)
International Power	International Power Plc
	International Power Retail Supply Company Ltd
	IPM Energy Retail Ltd
Opus Energy	Cherwell Energy Ltd
	Opus Energy Ltd
Royal Bank of Scotland	RBS Sempra Energy Europe Ltd
	The Royal Bank of Scotland Plc
RWE Npower	Electricity Plus Ltd
	Npower Direct Ltd
	Npower Ltd
	Npower Northern Ltd
	Npower Northern Supply Ltd
	Npower Yorkshire Ltd
	Npower Yorkshire Supply Ltd
	Npower Ltd (NI)

Supplier Group	Supply Licences
Scottish & Southern Energy (SSE)	Slough Energy Supplies Ltd
	South Wales Electricity Ltd
	SSE Energy Supply Ltd
	Scottish and Southern Energy Plc (NI)
	SSE Energy Supply Ltd (NI)
	SSE (Ireland) Ltd (NI)
Utilitis Consulting	730 Energy Ltd
	Affinity Power Ltd
	Pan-Utility Ltd
	SME Energy Ltd
	Utilitease Ltd
Scottish Power	Scottish Power Energy Retail Ltd
	Scottish Power Energy Retail Ltd (NI)

Appendix 3 – Renewables Obligation certificates: Detailed information

Table B1: 2008-09 ROCs, SROCs and NIROCs issued per generation technology type by Order

Generation Technology	ROCs/SROCs/NIROCs issued			
	RO	ROS	NIRO	Total
Biomass	1,291,954	312,159	12,277	1,616,390
Biomass using an ACT	16,299	2,105	0	18,404
Co-firing of Biomass with Fossil Fuel	2,083,817	147,865	0	2,231,682
Co-firing of Energy Crops	9,263	0	0	9,263
Hydro (DNC: >50kW, <=20MW)	206,732	1,936,459	9,846	2,153,037
Hydro (DNC <= 50kW)	3,092	1,557	549	5,198
Hydro (DNC >20MW)	0	76,135	0	76,135
Landfill Gas	4,215,537	468,122	2,584	4,686,243
Micro Hydro	11,779	53,108	969	65,856
Off-shore Wind	1,497,892	0	0	1,497,892
On-shore Wind	1,940,759	3,683,602	591,040	6,215,401
Wind (DNC <=50kW)	2,155	1,079	1,472	4,706
Photovoltaic (DNC >50kW)	368	0	0	368
Photovoltaic (DNC <=50kW)	2,348	42	388	2,778
Sewage Gas	393,530	17,571	0	411,101
Waste using an ACT	1,955	0	0	1,955
Wave Power	0	44	0	44
Total	11,677,480	6,699,848	619,125	18,996,453

Note: ACT = Advanced Conversion Technology

Table B2: 2008-09 ROCs, SROCs and NIROCs issued per generation technology type by location[43]

Generation Technology	ROCs/SROCs/NIROCs issued				
	England	Wales	Scotland	N. Ireland	Total
Biomass	1,108,893	183,061	312,159	12,277	1,616,390
Biomass using an ACT	16,299	0	2,105	0	18,404
Co-firing of Biomass with Fossil Fuel	2,064,850	18,967	147,865	0	2,231,682
Co-firing of Energy Crops	9,263	0	0	0	9,263
Hydro (DNC: >50kW, <=20MW)	58,632	142,236	1,942,323	9,846	2,153,037
Hydro (DNC <= 50kW)	2,354	738	1,557	549	5,198
Hydro (DNC >20MW)	0	0	76,135	0	76,135
Landfill Gas	4,033,958	175,487	474,214	2,584	4,686,243
Micro Hydro	8,785	2,994	53,108	969	65,856
Off-shore Wind	1,316,000	181,892	0	0	1,497,892
On-shore Wind	1,139,507	713,178	3,771,676	591,040	6,215,401
Wind (DNC <=50kW)	2,112	43	1,079	1,472	4,706
Photovoltaic (DNC >50kW)	366	0	0	0	366
Photovoltaic (DNC <=50kW)	2,336	14	42	388	2,780
Sewage Gas	386,876	6,654	17,571	0	411,101
Waste using an ACT	1,955	0	0	0	1,955
Wave Power	0	0	44	0	44
Total	10,152,186	1,425,264	6,799,878	619,125	18,996,453

Note: ACT = Advanced Conversion Technology

[43] ROCs that were previously incorrectly allocated to England for UPM Shotton power station have now been correctly allocated to Wales. This means that some of the figures for biomass and co-firing ROCs will show slight differences from previous annual reports.

Table B2a: Proportional increase this period of ROCs, SROCs and NIROCs issued per generation technology type by location[44]

Generation Technology	% increase in ROCs/SROCs/NIROCs issued (07/08 to 08/09)				
	England	Wales	Scotland	N. Ireland	Total
Biomass	11%	55%	164%	-25%	30%
Biomass using an ACT	9%	n/a	23%	n/a	10%
Co-firing of Biomass with Fossil Fuel	32%	99%	-22%	n/a	26%
Co-firing of Energy Crops	57%	n/a	n/a	n/a	57%
Hydro (DNC: >50kW, <=20MW)	17%	-3%	-11%	25%	-9%
Hydro (DNC <= 50kW)	53%	-45%	-1%	127%	11%
Hydro (DNC >20MW)	n/a	n/a	n/a	n/a	n/a
Landfill Gas	2%	15%	3%	n/a	3%
Micro Hydro	-9%	62%	10%	-31%	8%
Off-shore Wind	69%	-1%	n/a	n/a	56%
On-shore Wind	29%	-3%	35%	46%	29%
Wind (DNC <=50kW)	344%	-31%	404%	384%	346%
Photovoltaic (DNC >50kW)	63%	n/a	n/a	n/a	63%
Photovoltaic (DNC <=50kW)	308%	-46%	91%	397%	299%
Sewage Gas	18%	22%	1%	n/a	18%
Waste using an ACT	3%	n/a	n/a	n/a	3%
Wave Power	n/a	n/a	100%	n/a	100%
Total	18%	5%	17%	44%	18%

[44] The percentage increases are the ROCs, SROCs and NIROCs in the 2008-09 period as a proportion of the 2007-08 figures

Table B2b: 2008-09 ROCs issued under the RO per generation technology type by location

Generation Technology	ROCs issued			
	England	Wales	Scotland	Total
Biomass	1,108,893	183,061	0	1,291,954
Biomass using an ACT	16,299	0	0	16,299
Co-firing of Biomass with Fossil Fuel	2,064,850	18,967	0	2,083,817
Co-firing of Energy Crops	9,263	0	0	9,263
Hydro (DNC: >50kW, <=20MW)	58,632	142,236	5,864	206,732
Hydro (DNC <= 50kW)	2,354	738	0	3,092
Hydro (DNC >20MW)	0	0	0	0
Landfill Gas	4,033,958	175,487	6,092	4,215,537
Micro Hydro	8,785	2,994	0	11,779
Off-shore Wind	1,316,000	181,892	0	1,497,892
On-shore Wind	1,139,507	713,178	88,074	1,940,759
Wind (DNC <=50kW)	2,112	43	0	2,155
Photovoltaic (DNC >50kW)	366	0	0	366
Photovoltaic (DNC <=50kW)	2,336	14	0	2,350
Sewage Gas	386,876	6,654	0	393,530
Waste using an ACT	1,955	0	0	1,955
Wave Power	0	0	0	0
Total	10,152,186	1,425,264	100,030	11,677,480

Note: ACT = Advanced Conversion Technology

Table B3: 2008-09 ROCs, SROCs and NIROCs issued per month by Order

Month	ROCs/SROCs/NIROCs issued			
	RO	ROS	NIRO	Total
April 2008	882,964	490,550	44,806	1,418,320
May 2008	814,063	334,415	33,668	1,182,146
June 2008	785,403	358,947	36,040	1,180,390
July 2008	815,314	398,933	41,754	1,256,001
August 2008	862,356	373,461	38,844	1,274,661
September 2008	870,875	384,617	38,891	1,294,383
October 2008	1,158,472	747,376	69,370	1,975,218
November 2008	1,148,840	710,138	63,632	1,922,610
December 2008	1,106,400	654,857	54,154	1,815,411
January 2009	1,202,012	781,746	70,969	2,054,727
February 2009	936,979	575,060	45,936	1,557,975
March 2009	1,087,324	887,425	78,812	2,053,561
Annually	6,478	2,323	2,249	11,050
Total	11,677,480	6,699,848	619,125	18,996,453

Table B3a: 2008-09 ROCs issued under the RO per month by location[45]

Month	ROCs issued under the RO		
	England	Scotland	Total
April 2008	872,029	10,935	882,964
May 2008	807,270	6,793	814,063
June 2008	775,196	10,207	785,403
July 2008	805,218	10,096	815,314
August 2008	854,160	8,196	862,356
September 2008	863,234	7,641	870,875
October 2008	1,140,967	17,505	1,158,472
November 2008	1,133,107	15,733	1,148,840
December 2008	1,093,476	12,924	1,106,400
January 2009	1,202,012	0	1,202,012
February 2009	936,979	0	936,979
March 2009	1,087,324	0	1,087,324
Annually	6,478	0	6,478
Total	11,577,450	100,030	11,677,480

[45] The ROCs in this table issued to Scotland relate to five generating stations (located in Scotland) that were accredited under the RO scheme. During 2008-09 these stations were given new accreditation numbers under the ROS scheme. Consequently, from Jan 09 output onwards these stations have been issued with SROCs instead or ROCs.

Table B4: 2008-09 ROCs, SROCs and NIROCs issued per month by location

Month	ROCs/SROCs/NIROCs issued				
	England	Wales	Scotland	N. Ireland	Total
April 2008	758,900	113,129	501,485	44,806	1,418,320
May 2008	720,338	86,932	341,208	33,668	1,182,146
June 2008	698,659	76,537	369,154	36,040	1,180,390
July 2008	711,470	93,748	409,029	41,754	1,256,001
August 2008	738,310	115,850	381,657	38,844	1,274,661
September 2008	764,565	98,669	392,258	38,891	1,294,383
October 2008	972,186	168,781	764,881	69,370	1,975,218
November 2008	981,399	151,708	725,871	63,632	1,922,610
December 2008	958,082	135,394	667,781	54,154	1,815,411
January 2009	1,052,229	149,783	781,746	70,969	2,054,727
February 2009	837,590	99,389	575,060	45,936	1,557,975
March 2009	952,159	135,165	887,425	78,812	2,053,561
Annually	6,299	179	2,323	2,249	11,050
Total	10,152,186	1,425,264	6,799,878	619,125	18,996,453

Table B5: 2008-09 ROCs, SROCs and NIROCs issued per generation technology type by month

Generation Technology	ROCs/SROCs/NIROCs issued						
	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08
Biomass	123,960	127,527	112,251	121,603	128,102	126,666	153,129
Biomass using an ACT	1,341	1,198	1,219	1,313	1,495	1,573	2,103
Co-firing of Biomass with Fossil Fuel	176,200	127,357	133,200	126,415	118,090	168,283	203,169
Co-firing of Energy Crops	1,044	151	384	2,462	668	410	695
Hydro (DNC: >50kW, <=20MW)	212,989	113,227	84,225	92,262	118,438	134,838	225,199
Hydro (DNC <= 50kW)	141	114	102	103	129	131	147
Hydro (DNC >20MW)	0	0	0	0	0	0	0
Landfill Gas	384,100	389,568	376,272	383,073	390,178	383,963	404,863
Micro Hydro	4,745	2,737	2,740	4,199	6,550	5,867	7,427
Off-shore Wind	84,045	81,393	74,100	99,283	102,913	95,144	184,687
On-shore Wind	398,302	301,871	360,292	389,441	373,527	344,931	758,877
Wind (DNC <=50kW)	2	1	2	2	2	5	6
Photovoltaic (DNC >50kW)	25	47	63	51	45	34	31
Photovoltaic (DNC <=50kW)	6	2	7	2	5	4	3
Sewage Gas	31,255	36,915	35,501	35,786	34,519	32,436	34,686
Waste using an ACT	163	38	31	6	0	96	192
Wave Power	2	0	1	0	0	2	4
Total	1,418,320	1,182,146	1,180,390	1,256,001	1,274,661	1,294,383	1,975,218

Table B5: 2008-09 ROCs, SROCs and NIROCs issued per generation technology type by month (continued)

Generation Technology	ROCs/SROCs/NIROCs issued						
	Nov 08	Dec 08	Jan 09	Feb 09	Mar 09	Annual	Total
Biomass	144,828	149,212	142,550	138,543	148,012	7	1,616,390
Biomass using an ACT	1,987	1,782	1,575	1,161	1,657	0	18,404
Co-firing of Biomass with Fossil Fuel	218,297	251,780	276,266	213,431	219,194	0	2,231,682
Co-firing of Energy Crops	2,085	822	542	0	0	0	9,263
Hydro (DNC: >50kW, <=20MW)	236,691	241,227	261,287	177,585	255,069	0	2,153,037
Hydro (DNC <= 50kW)	152	152	141	131	168	3,587	5,198
Hydro (DNC >20MW)	1,327	18,296	12,615	16,924	26,973	0	76,135
Landfill Gas	396,620	406,772	403,158	362,299	405,377	0	4,686,243
Micro Hydro	6,396	6,544	6,348	5,336	6,904	63	65,856
Off-shore Wind	183,281	147,861	172,648	121,003	151,534	0	1,497,892
On-shore Wind	697,527	557,187	744,682	489,000	799,764	0	6,215,401
Wind (DNC <=50kW)	15	5	6	2	9	4,649	4,706
Photovoltaic (DNC >50kW)	15	9	10	8	30	0	368
Photovoltaic (DNC <=50kW)	1	0	1	1	2	2,744	2,778
Sewage Gas	33,128	33,496	32,533	32,384	38,462	0	411,101
Waste using an ACT	255	259	357	165	393	0	1,955
Wave Power	5	7	8	2	13	0	44
Total	1,922,610	1,815,411	2,054,727	1,557,975	2,053,561	11,050	18,996,453

Table B5a: 2008-09 ROCs issued per generation technology type by month under the RO (England & Wales)

Generation Technology	ROCs issued						
	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08
Biomass	97,739	102,759	91,578	85,357	99,569	108,288	121,489
Biomass using an ACT	1,196	1,084	1,091	1,149	1,317	1,414	1,869
Co-firing of Biomass with Fossil Fuel	163,509	121,028	122,355	113,603	109,190	155,863	189,596
Co-firing of Energy Crops	1,044	151	384	2,462	668	410	695
Hydro (DNC: >50kW, <=20MW)	16,341	7,588	8,167	11,413	20,024	20,531	28,572
Hydro (DNC <= 50kW)	85	90	87	86	98	101	108
Landfill Gas	345,675	351,382	338,655	345,003	349,019	344,453	364,020
Micro Hydro	887	772	779	875	1,246	1,070	1,287
Off-shore Wind	84,045	81,393	74,100	99,283	102,913	95,144	184,687
On-shore Wind	131,480	105,915	104,082	111,447	136,837	104,818	215,197
Wind (DNC <=50kW)	0	0	0	0	1	4	4
Photovoltaic (DNC >50kW)	25	47	63	51	45	34	31
Photovoltaic (DNC <=50kW)	6	2	7	2	5	4	3
Sewage Gas	29,834	35,021	33,817	34,481	33,228	31,004	33,217
Waste using an ACT	163	38	31	6	0	96	192
Total	872,029	807,270	775,196	805,218	854,160	863,234	1,140,967

Table B5a: 2008-09 ROCs issued per generation technology type by month under the RO (England & Wales - continued)

Generation Technology	ROCs issued						
	Nov 08	Dec 08	Jan 09	Feb 09	Mar 09	Annual	Total
Biomass	113,051	113,909	133,576	115,651	108,981	7	1,291,954
Biomass using an ACT	1,787	1,568	1,383	960	1,481	0	16,299
Co-firing of Biomass with Fossil Fuel	208,562	236,206	264,078	205,584	194,243	0	2,083,817
Co-firing of Energy Crops	2,085	822	542	0	0	0	9,263
Hydro (DNC: >50kW, <=20MW)	22,691	20,370	24,655	9,163	11,353	0	200,868
Hydro (DNC <= 50kW)	100	95	87	74	109	1,972	3,092
Landfill Gas	356,343	366,503	360,460	324,547	363,385	0	4,209,445
Micro Hydro	905	979	1,056	779	1,081	63	11,779
Off-shore Wind	183,281	147,861	172,648	121,003	151,534	0	1,497,892
On-shore Wind	212,456	173,091	211,347	128,078	217,937	0	1,852,685
Wind (DNC <=50kW)	10	3	2	1	8	2,122	2,155
Photovoltaic (DNC >50kW)	15	9	10	8	30	0	368
Photovoltaic (DNC <=50kW)	1	0	1	1	2	2,314	2,348
Sewage Gas	31,565	31,801	31,810	30,965	36,787	0	393,530
Waste using an ACT	255	259	357	165	393	0	1,955
Total	1,133,107	1,093,476	1,202,012	936,979	1,087,324	6,478	11,577,450

Table B5b: 2008-09 ROCs issued per generation technology type by month under the RO (Scotland)

Generation Technology	ROCs issued						
	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08
Hydro (DNC: >50kW, <=20MW)	568	269	433	534	762	671	980
Landfill Gas	712	684	628	644	715	685	596
On-shore Wind	9,655	5,840	9,146	8,918	6,719	6,285	15,929
Total	10,935	6,793	10,207	10,096	8,196	7,641	17,505

Table B5b: 2008-09 ROCs issued per generation technology type by month under the RO (Scotland - continued)

Generation Technology	ROCs issued						
	Nov 08	Dec 08	Jan 09	Feb 09	Mar 09	Annual	Total
Hydro (DNC: >50kW, <=20MW)	825	822	0	0	0	0	5,864
Landfill Gas	701	727	0	0	0	0	6,092
On-shore Wind	14,207	11,375	0	0	0	0	88,074
Total	15,733	12,924	0	0	0	0	100,030

Table B6: 2008-09 SROCs issued per generation technology type by month (Scotland)

Generation Technology	SROCs issued						
	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08
Biomass	24,838	23,176	20,131	35,267	27,298	16,886	30,629
Biomass using an ACT	145	114	128	164	178	159	234
Co-firing of Biomass with Fossil Fuel	12,691	6,329	10,845	12,812	8,900	12,420	13,573
Co-firing of Energy Crops	0	0	0	0	0	0	0
Hydro (DNC: >50kW, <=20MW)	195,292	105,064	75,522	79,807	96,698	112,628	194,474
Hydro (DNC <= 50kW)	44	16	11	9	15	15	27
Hydro (DNC >20MW)	0	0	0	0	0	0	0
Landfill Gas	37,713	37,502	36,878	37,249	40,256	38,650	40,057
Micro Hydro	3,807	1,962	1,957	3,307	5,285	4,702	6,014
Off-shore Wind	0	0	0	0	0	0	0
On-shore Wind	214,597	158,358	211,790	229,013	193,540	197,723	460,895
Wind (DNC <=50kW)	0	0	0	0	0	0	0
Photovoltaic (DNC >50kW)	0	0	0	0	0	0	0
Photovoltaic (DNC <=50kW)	0	0	0	0	0	0	0
Sewage Gas	1,421	1,894	1,684	1,305	1,291	1,432	1,469
Waste using an ACT	0	0	0	0	0	0	0
Wave Power	2	0	1	0	0	2	4
Total	490,550	334,415	358,947	398,933	373,461	384,617	747,376

Table B6: 2008-09 SROCs issued per generation technology type by month (Scotland - continued)

Generation Technology	SROCs issued						
	Nov 08	Dec 08	Jan 09	Feb 09	Mar 09	Annual	Total
Biomass	30,159	34,839	8,974	22,364	37,598	0	312,159
Biomass using an ACT	200	214	192	201	176	0	2,105
Co-firing of Biomass with Fossil Fuel	9,735	15,574	12,188	7,847	24,951	0	147,865
Co-firing of Energy Crops	0	0	0	0	0	0	0
Hydro (DNC: >50kW, <=20MW)	212,161	219,079	235,618	167,406	242,710	0	1,936,459
Hydro (DNC <= 50kW)	39	42	41	44	47	1,207	1,557
Hydro (DNC >20MW)	1,327	18,296	12,615	16,924	26,973	0	76,135
Landfill Gas	39,389	39,392	42,556	37,325	41,155	0	468,122
Micro Hydro	5,358	5,417	5,170	4,436	5,693	0	53,108
Off-shore Wind	0	0	0	0	0	0	0
On-shore Wind	410,199	320,302	463,659	317,092	506,434	0	3,683,602
Wind (DNC <=50kW)	3	0	2	0	0	1,074	1,079
Photovoltaic (DNC >50kW)	0	0	0	0	0	0	0
Photovoltaic (DNC <=50kW)	0	0	0	0	0	42	42
Sewage Gas	1,563	1,695	723	1,419	1,675	0	17,571
Waste using an ACT	0	0	0	0	0	0	0
Wave Power	5	7	8	2	13	0	44
Total	710,138	654,857	781,746	575,060	887,425	2,323	6,699,848

Table B7: 2008-09 NIROCs issued per generation technology type by month (Northern Ireland)

Generation Technology	NIROCs issued						
	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08
Biomass	1,383	1,592	542	979	1,235	1,492	1,011
Biomass using an ACT	0	0	0	0	0	0	0
Co-firing of Biomass with Fossil Fuel	0	0	0	0	0	0	0
Co-firing of Energy Crops	0	0	0	0	0	0	0
Hydro (DNC: >50kW, <=20MW)	788	306	103	508	954	1,008	1,173
Hydro (DNC <= 50kW)	12	8	4	8	16	15	12
Hydro (DNC >20MW)	0	0	0	0	0	0	0
Landfill Gas	0	0	111	177	188	175	190
Micro Hydro	51	3	4	17	19	95	126
Off-shore Wind	0	0	0	0	0	0	0
On-shore Wind	42,570	31,758	35,274	40,063	36,431	36,105	66,856
Wind (DNC <=50kW)	2	1	2	2	1	1	2
Photovoltaic (DNC >50kW)	0	0	0	0	0	0	0
Photovoltaic (DNC <=50kW)	0	0	0	0	0	0	0
Sewage Gas	0	0	0	0	0	0	0
Waste using an ACT	0	0	0	0	0	0	0
Wave Power	0	0	0	0	0	0	0
Total	44,806	33,668	36,040	41,754	38,844	38,891	69,370

Table B7: 2008-09 NIROCs issued per generation technology type by month (Northern Ireland - continued)

Generation Technology	NIROCs issued						
	Nov 08	Dec 08	Jan 09	Feb 09	Mar 09	Annual	Total
Biomass	1,618	464	0	528	1,433	0	12,277
Biomass using an ACT	0	0	0	0	0	0	0
Co-firing of Biomass with Fossil Fuel	0	0	0	0	0	0	0
Co-firing of Energy Crops	0	0	0	0	0	0	0
Hydro (DNC: >50kW, <=20MW)	1,014	956	1,014	1,016	1,006	0	9,846
Hydro (DNC <= 50kW)	13	15	13	13	12	408	549
Hydro (DNC >20MW)	0	0	0	0	0	0	0
Landfill Gas	187	150	142	427	837	0	2,584
Micro Hydro	133	148	122	121	130	0	969
Off-shore Wind	0	0	0	0	0	0	0
On-shore Wind	60,665	52,419	69,676	43,830	75,393	0	591,040
Wind (DNC <=50kW)	2	2	2	1	1	1,453	1,472
Photovoltaic (DNC >50kW)	0	0	0	0	0	0	0
Photovoltaic (DNC <=50kW)	0	0	0	0	0	388	388
Sewage Gas	0	0	0	0	0	0	0
Waste using an ACT	0	0	0	0	0	0	0
Wave Power	0	0	0	0	0	0	0
Total	63,632	54,154	70,969	45,936	78,812	2,249	619,125

Table B8: Revoked 2008-09 ROCs per technology by Order

Generation Technology	ROCs/SROCs/NIROCs revoked					
	RO			ROS	NIRO	Total
	England	Wales	Total	Scotland	N. Ireland	
Biomass	6,619	0	6,619	130	0	6,749
Co-firing of Biomass with Fossil Fuel	54,299	21,561	75,860	0	0	75,860
Co-firing of Energy Crops	1	0	1	0	0	1
Hydro (DNC: >50kW, <=20MW)	46	1,881	1,927	21	0	1,948
Landfill Gas	4,348	0	4,348	31	0	4,379
On-shore Wind	39	0	39	112	9,520	9,671
Photovoltaic (DNC <=50kW)	0	0	0	0	1	1
Sewage Gas	2,062	0	2,062	0	0	2,062
Total	67,414	23,442	90,856	294	9,521	100,671

Appendix 4 - Accredited generating stations - Detailed information

Table C1: Generating stations accredited in 2008-09 by generation technology type and country (All capacities)[46,47]

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	3	6,440	1	14,200	0	0	0	0	4	20,640
Biomass with ACT	4	3,375	1	1,000	0	0	0	0	5	4,375
Cofired	1	284	0	0	0	0	0	0	1	284
Hydro	13	214	9	721	23	106,415	3	60	48	107,410
Landfill gas	7	8,106	2	2,000	3	2,149	2	2,622	14	14,877
Off-shore wind	1	90,000	0	0	0	0	0	0	1	90,000
On-shore wind	172	266,172	18	11,848	65	180,433	173	86,593	428	545,046
Photovoltaic	767	2,023	35	83	10	33	69	275	881	2,414
Sewage gas	10	6,419	3	760	0	0	0	0	13	7,179
Tidal stream	0	0	0	0	0	0	1	1,200	1	1,200
Total	978	383,033	69	30,612	101	289,030	248	90,750	1,396	793,425

Note: Capacity is in kW

[46] These figures are after taking into account the stations that ceased generating from renewable sources or were decommissioned during the 2008-09 period.

[47] Co-firing capacity is an estimate of the renewable capacity and is based on the proportion of biomass used to feed the generating station in relation to the total generating station capacity.

Table C1a: Generating stations accredited in 2008-09 by generation technology type and country (DNC > 50kW)

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	3	6,440	1	14,200	0	0	0	0	4	20,640
Biomass with ACT	4	3,375	1	1,000	0	0	0	0	5	4,375
Cofired	1	284	0	0	0	0	0	0	1	284
Hydro	1	70	3	660	11	106,211	0	0	15	106,941
Landfill gas	7	8,106	2	2,000	3	2,149	2	2,622	14	14,877
Off-shore wind	1	90,000	0	0	0	0	0	0	1	90,000
On-shore wind	18	265,199	2	11,755	9	179,998	10	85,525	39	542,477
Photovoltaic	2	119	0	0	0	0	0	0	2	119
Sewage gas	10	6,419	3	760	0	0	0	0	13	7,179
Tidal stream	0	0	0	0	0	0	1	1,200	1	1,200
Total	47	380,012	12	30,375	23	288,358	13	89,347	95	788,092

Note: Capacity is in kW

Table C1b: Generating stations accredited in 2008-09 by generation technology type and country (DNC <= 50kW)

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Hydro	12	144	6	61	12	204	3	60	33	469
On-shore wind	154	973	16	93	56	435	163	1,068	389	2,569
Photovoltaic	765	1,904	35	83	10	33	69	275	879	2,295
Total	931	3,021	57	237	78	672	235	1,403	1,301	5,333

Note: Capacity is in kW

Table C2: Total accredited generators[48] by generation technology type and country (All capacities)[49,50]

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	21	76,630	1	14,200	3	58,620	1	2,450	26	151,900
Biomass with ACT	9	7,456	1	1,000	2	577	0	0	12	9,033
Cofired	36	635,670	2	25,615	3	43,501	1	2,401	42	707,187
Hydro	100	23,007	50	77,911	178	612,040	22	3,142	350	716,100
Landfill gas	340	790,399	17	35,008	35	96,220	2	2,622	394	924,249
Off-shore wind	8	513,800	1	60,000	1	10,000	0	0	10	583,800
On-shore wind	468	718,959	76	321,024	223	1,793,030	291	298,147	1,058	3,131,160
Photovoltaic	1,478	5,078	70	193	44	129	174	640	1,766	6,040
Sewage gas	122	87,353	12	3,069	4	5,027	0	0	138	95,449
Tidal stream	0	0	0	0	0	0	1	1,200	1	1,200
Waste with ACT	2	1,659	0	0	0	0	0	0	2	1,659
Wave	0	0	0	0	2	1,250	0	0	2	1,250
Total	2,584	2,860,011	230	538,020	495	2,620,394	492	310,602	3,801	6,329,027

Note: Capacity is in kW

[48] These figures reflect the number of accredited generating stations as at the end of the 2008-09 period i.e. 31 March 2009

[49] A number of generating stations that are classified as co-firing generating stations claim and receive biomass ROCs as well as co-firing ROCs dependent on the fuel used at a particular time.

[50] In the 2007-08 Annual Report, Thetford Power Station was classified as a biomass generating station. However as it is accredited as both a co-firing and biomass generating station, it was felt more appropriate to classify the station as co-firing as this would be consistent with our approach for other generating stations of this type. This means that some of the figures may differ from that shown in our previous Annual Report

Table C2a: Total accredited generators by generation technology type and country (DNC > 50kW)

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	20	76,622	1	14,200	3	58,620	1	2,450	25	151,892
Biomass with ACT	9	7,456	1	1,000	2	577	0	0	12	9,033
Cofired	36	635,670	2	25,615	3	43,501	1	2,401	42	707,187
Hydro	49	22,367	31	77,617	142	611,354	15	2,975	237	714,313
Landfill gas	340	790,399	17	35,008	35	96,220	2	2,622	394	924,249
Off-shore wind	8	513,800	1	60,000	1	10,000	0	0	10	583,800
On-shore wind	107	716,569	33	320,759	73	1,791,968	35	296,175	248	3,125,471
Photovoltaic	13	915	0	0	0	0	0	0	13	915
Sewage gas	121	87,323	12	3,069	4	5,027	0	0	137	95,419
Tidal stream	0	0	0	0	0	0	1	1,200	1	1,200
Waste with ACT	2	1,659	0	0	0	0	0	0	2	1,659
Wave	0	0	0	0	2	1,250	0	0	2	1,250
Total	705	2,852,780	98	537,268	265	2,618,517	55	307,823	1,123	6,316,388

Note: Capacity is in kW

Table C2b: Total accredited generators by generation technology type and country (DNC <= 50kW)

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	1	8	0	0	0	0	0	0	1	8
Hydro	51	640	19	294	36	686	7	167	113	1,787
On-shore wind	361	2,390	43	265	150	1,062	256	1,972	810	5,689
Photovoltaic	1,465	4,163	70	193	44	129	174	640	1,753	5,125
Sewage gas	1	30	0	0	0	0	0	0	1	30
Total	1,879	7,231	132	752	230	1,877	437	2,779	2,678	12,639

Note: Capacity is in kW

Table C3: Proportional increase this period in accredited generators by generation technology and country (All capacities)[51]

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	17%	9%	N/A	N/A	0%	0%	0%	0%	18%	16%
Biomass with ACT	80%	83%	N/A	N/A	0%	0%	N/A	N/A	71%	94%
Cofired	3%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Hydro	15%	1%	22%	1%	15%	21%	16%	2%	16%	18%
Landfill gas	2%	1%	13%	6%	9%	2%	N/A	N/A	4%	2%
Off-shore wind	14%	21%	0%	0%	0%	0%	N/A	N/A	11%	18%
On-shore wind	58%	59%	31%	4%	41%	11%	147%	41%	68%	21%
Photovoltaic	108%	66%	100%	75%	29%	34%	66%	75%	100%	67%
Sewage gas	9%	8%	33%	33%	0%	0%	N/A	N/A	10%	8%
Waste with ACT	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A	0%	0%
Wave	N/A	N/A	N/A	N/A	0%	0%	N/A	N/A	0%	0%
Total	61%	15%	43%	6%	26%	12%	102%	41%	58%	14%

Note: Capacity is in kW

[51] The percentage increases are the newly accredited quantities and capacity in the 2008-09 period as a proportion of the 2007-08 figures.

Table C3a: Increase this period in accredited generators by generation technology and country (DNC > 50kW)

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Biomass	18%	9%	N/A	N/A	0%	0%	0%	0%	19%	16%
Biomass with ACT	80%	83%	N/A	N/A	0%	0%	N/A	N/A	71%	94%
Cofired	3%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Hydro	2%	0%	11%	1%	8%	21%	0%	0%	7%	18%
Landfill gas	2%	1%	13%	6%	9%	2%	N/A	N/A	4%	2%
Off-shore wind	14%	21%	0%	0%	0%	0%	N/A	N/A	11%	18%
On-shore wind	20%	59%	6%	4%	14%	11%	40%	41%	19%	21%
Photovoltaic	18%	15%	N/A	N/A	N/A	N/A	N/A	N/A	18%	15%
Sewage gas	9%	8%	33%	33%	0%	0%	N/A	N/A	10%	8%
Waste with ACT	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A	0%	0%
Wave	N/A	N/A	N/A	N/A	0%	0%	N/A	N/A	0%	0%
Total	7%	15%	14%	6%	10%	12%	31%	41%	9%	14%

Note: Capacity is in kW

Table C3b: Increase this period in accredited generators by generation technology and country (DNC <= 50kW)

Generation Technology	England		Wales		Scotland		Northern Ireland		Total	
	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity	Qty	Capacity
Hydro	31%	29%	46%	26%	50%	42%	75%	56%	41%	36%
On-shore wind	74%	69%	59%	54%	60%	69%	175%	118%	92%	82%
Photovoltaic	109%	84%	100%	75%	29%	34%	66%	75%	101%	81%
Total	98%	72%	76%	46%	51%	56%	116%	102%	94%	73%

Note: Capacity is in kW

Table C4: Total accredited generators (as at 31 March 2009) by technology type and NFFO/SRO classification

Generation Technology	England and Wales		Scotland		Northern Ireland		Total	
	NFFO	Non-NFFO	SRO	Non-SRO	NI NFFO	Non-NFFO	NFFO/SRO	Other
Biomass	0	21	0	3	0	1	0	25
Biomass with ACT	0	10	0	2	0	0	0	12
Cofired	2	37	0	3	0	1	2	41
Hydro	20	130	10	168	3	19	33	317
Landfill gas	145	212	11	24	0	2	156	238
Off-shore wind	1	8	0	1	0	0	1	9
On-shore wind	48	496	15	208	8	283	71	987
Photovoltaic	0	1,548	0	44	0	174	0	1,766
Sewage gas	0	134	0	4	0	0	0	138
Tidal stream	0	0	0	0	0	1	0	1
Waste with ACT	0	2	0	0	0	0	0	2
Wave	0	0	1	1	0	0	1	1
Total	216	2,598	37	458	11	481	264	3,537

Table C4a: Total accredited capacity (as at 31 March 2009) by technology type and NFFO/SRO classification

Generation Technology	England and Wales		Scotland		Northern Ireland		Total	
	NFFO	Non-NFFO	SRO	Non-SRO	NI NFFO	Non-NFFO	NFFO/SRO	Other
Biomass	0	90,830	0	58,620	0	2,450	0	151,900
Biomass with ACT	0	8,456	0	577	0	0	0	9,033
Cofired	51,152	610,133	0	43,501	0	2,401	51,152	656,035
Hydro	14,653	86,264	11,363	600,677	685	2,457	26,701	689,398
Landfill gas	386,622	438,785	30,595	65,625	0	2,622	417,217	507,032
Off-shore wind	1,800	572,000	0	10,000	0	0	1,800	582,000
On-shore wind	291,926	748,057	146,281	1,646,749	36,780	261,367	474,987	2,656,173
Photovoltaic	0	5,271	0	129	0	640	0	6,040
Sewage gas	0	90,422	0	5,027	0	0	0	95,449
Tidal stream	0	0	0	0	0	1,200	0	1,200
Waste with ACT	0	1,659	0	0	0	0	0	1,659
Wave	0	0	500	750	0	0	500	750
Total	746,153	2,651,877	188,739	2,431,655	37,465	273,137	972,357	5,356,669

Note: Capacity is in kW

Appendix 5 - Glossary

A	
Act	Electricity Act 1989
ACT	Advanced Conversion Technology
B	
BERR	Department of Business, Enterprise and Regulatory Reform
D	
DECC	Department of Energy and Climate Change
DETI	Department of Enterprise, Trade and Investment
DNC	Declared Net Capacity
F	
FMS	Fuel Measurement and Sampling
G	
GB	Great Britain
GB ROCs	ROCs and SROCs
K	
kW	Kilowatt
kWh	Kilowatthour
M	
MSO	Marine Supply Obligation
MW	Megawatt
MWh	Megawatthour
N	
NI	Northern Ireland
NIAUR	Northern Ireland Authority for Utility Regulation
NIRO	Renewables Obligation Order (Northern Ireland) 2006
NIROC	Northern Ireland Renewables Obligation Certificates
NFFO	Non-Fossil Fuel Obligation
NFPA	Non-fossil Fuel Purchasing Agency
O	
Ofgem	Office of Gas and Electricity Markets
P	
PV	Photovoltaics
R	
RO	Renewables Obligation Order 2006
ROC	Renewable Obligation Certificate
ROS	Renewables Obligation (Scotland) Order 2006
RPI	Retail Price Index

S

SRO	Scottish Renewables Obligation
SROC	Scottish Renewable Obligation Certificate

Appendix 6 - Feedback form: Renewables Obligation Annual Report 2008-2009

We would welcome your feedback on this report, including the length of the document and the content. Please address your feedback to keith.duncan@ofgem.gov.uk or peter.collins@ofgem.gov.uk. You may wish to respond to the following questions in giving your feedback.

Overall

Is the report too long, or too short?
Is the report easy to read and understand? If not, can you please tell us what you would like to change?
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 charts convey information clearly, or not? If not, what do you dislike about the charts? What can we do to improve our charts?

Appendices

We publish a number of tables in the appendices to this document. Do you think the appendices contain too much information, or too little?
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 information that we are required to publish. It also contains information that we believe stakeholders will find useful.

We will endeavour to incorporate all comments into the report. However, we must ensure the content of the report meets the requirements of the RO legislation. As such, we may not be able to incorporate all comments.

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