

Renewables Obligation: Third annual report

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Overview:

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

In April 2002, the Renewables Obligation came into force. In April 2004, the Renewables Obligation (Scotland) came into force. Ofgem administers these schemes on behalf of the Department of Trade and Industry and the Scottish Executive respectively.

This report provides information in respect of the third period of the Renewables Obligation (1 April 2004 to 31 March 2005), including information on how licensed electricity suppliers have complied with their obligations, the number of ROCs issued by Ofgem and the number and type of generating stations accredited for the schemes.

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Target Audience: This document provides information to parties with an interest in the Renewables Obligation.

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Context

The Government's aim is that renewable energy will make an increasing contribution to energy supplies in the UK, with renewable energy playing a key role in the wider climate change programme.

Sections 32 to 32C of the Electricity Act 1989 ("the Act") empower the Secretary of State and the Scottish Ministers to impose obligations on licensed electricity suppliers ("suppliers") to source a proportion of their supplies from renewable sources. These obligations are referred to collectively as the Renewables Obligation. The Gas and Electricity Markets Authority ("the Authority"), whose day to day functions are performed by Ofgem, is given powers and functions under the Orders.

The obligation in respect of those suppliers supplying customers in England and Wales is set out in the Renewables Obligation Order 2002 (as amended) ("the RO") whilst the obligation in respect of those suppliers supplying customers in Scotland is set out in the Renewables Obligation (Scotland) Order 2004 ("the ROS"). These obligations are referred to collectively as the Orders.

"Green certificates" are issued under the RO and the ROS. They certify that a generating station has generated from renewable sources an amount of electricity and that it has been supplied to customers in Great Britain. These are known as ROCs (Renewables Obligation Certificates) or SROCs (Scottish Renewables Obligation Certificates).

An obligation period runs from 1 April to 31 March each year. Suppliers are required to produce evidence to Ofgem of compliance with their Renewables Obligation before a specified day each year. The specified day for the 2004/05 compliance period was 1 October 2005. Evidence can be via ROCs or SROCs. Alternatively, a supplier can discharge its Renewables Obligation, in whole or in part, by paying the buy-out price. The Government intends that suppliers will be subject to a renewables obligation until 31 March 2027.

This third annual report is based on the requirements on the Authority and obligations on suppliers under the RO and the ROS referred to above. For the avoidance of doubt, in respect of later obligation periods, other RO orders will apply.

Associated Documents

Readers should be aware of the following documents which support this publication. These documents are available on our website at www.ofgem.gov.uk.

- Renewables Obligation: Third annual report - appendices (ref 35/06)
- The Renewables Obligation second annual report (ref 44/05), and
- The Renewables Obligation first annual report (ref 45/04)

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Summary

The Renewables Obligation Orders¹ ("the Orders") detail Ofgem's powers and functions in respect of the Renewables Obligation. 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
- revoking ROCs where necessary
- monitoring compliance with the requirements of the Orders
- calculating annually the buy-out price resulting from the adjustments made to reflect changes in the RPI
- receiving buy-out payments and redistributing the buy-out fund
- receiving late payments and redistributing the late payment fund, and
- publishing an annual report on the operation of and compliance with the requirements of the Orders.

We carry out these functions as efficiently and effectively as possible according to the provisions of the Orders. We cannot act beyond the scope of the powers laid down in the Orders. For example, we have no remit over the operation or regulation of the ROC market itself. Amendments to the relevant legislation in respect of the Renewables Obligation are a matter for the Secretary of State and Scottish Ministers.

Ofgem's costs of exercising its functions under the Orders were around £600,000 in 2004-05. These costs included:

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

¹ Renewables Obligation Order 2002 (as amended) and Renewables Obligation (Scotland) Order 2004

Because of a significant increase in the volume of activity under the RO, these costs will rise to around £700,000 in 2005-06 and are expected to rise further in 2006-07. This is, in part, because of the need to review our IT systems. It is also to allow us to improve service standards. Full details of Ofgem's costs of administering the environmental programmes, including the RO, are set out in our Corporate Strategy and Plan², published in January 2006.

This annual report incorporates information on both the RO and the ROS. Unless otherwise stated, where "RO" and "ROC" are used below they denote both the RO and the ROS and ROCs and SROCs respectively.

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 RO.

Chapters 1 to 4 provide details on:

- how each supplier has complied with its obligation (in terms of ROCs presented, the buy-out payments made or a combination of both as appropriate)
- the amount of the buy-out fund and late payment fund each licensed supplier received
- summaries of the outcomes of any enquiries or investigations regarding implementation of the RO and compliance by suppliers and operators of generating stations
- the total number of ROCs issued by us during the third obligation period
- ROCs issued disaggregated by the different eligible renewable technologies
- the number of ROCs accepted by us as evidence of compliance
- the total number of ROCs issued but not deleted from the ROC Register for use in the next period (April 2005 - March 2006), and
- any other matters which we consider relevant.

Chapter 5 provides a summary of legislative changes made since April 2005.

Further information on the RO, including our role and key features of the obligation, can be found in chapter 1 of our second annual report, published on 14 February 2005.

Enquiries on any aspect of this report should be emailed to renewable@ofgem.gov.uk with the email clearly marked "3rd annual report". Alternatively, you can telephone Yvonne Naughton on 0141 331 6006.

² Ofgem document 13/06: 'Corporate Strategy and Plan 2006-2011'

1. Compliance by licensed electricity suppliers

This chapter, when read with Appendix 3, provides information on:

- the extent of compliance by each licensed electricity supplier ("supplier")
- how each supplier has complied with its obligation (in terms of ROCs presented, the buy-out payment made or a combination of both)
- the total number of ROCs correctly presented against each supplier's obligation
- the amount of the buy-out fund and late payment fund each supplier received, and
- the total number of ROCs that remain on the ROC Register for use in the next obligation period (April 2005 - March 2006).

Publication of this information is a requirement on Ofgem under the Renewables Obligation 2002 (as amended) Order and the Renewables Obligation (Scotland) 2004 Order ("the Orders").

Total Renewables Obligation for England & Wales and for Scotland

1.1. The RO requires each supplier to source a proportion of the electricity that it has supplied in Great Britain from eligible³ renewable sources. The proportion for the third obligation period was 4.9 per cent. This proportion increases each year.

1.2. The RO also requires each supplier to provide evidence that it has done this, that another supplier has done this or that between them they have done this. In practice, this means that suppliers meet their obligations by presenting ROCs, making buy-out payments to cover any shortfall in the presentation of sufficient ROCs or by a combination of both.

Headline figures

1.3. For the third obligation period, the total Renewables Obligation for electricity supplied to customers in England & Wales was 14,315,784 MWh and 1,445,283 MWh for electricity supplied to customers in Scotland.

1.4. The total number of ROCs correctly presented before the 1 October 2005 statutory deadline was 9,971,851 for England & Wales and 883,997 for Scotland.

1.5. The total buy-out payments made and received before the 1 October 2005 statutory deadline were £135,657,001.57 for England and Wales and £17,602,787.25 for Scotland.

1.6. The total amounts of the buy-out funds that we redistributed, including interest, were £136,169,908 for England & Wales and £17,667,485 for Scotland. This meant that each supplier who correctly presented ROCs in respect of its RO received £13.66 back per certificate. Each supplier who correctly presented ROCs in respect of its ROS received £19.99 back per certificate.

³ See Article 2(1) of the Orders for the definition of eligible renewable sources

1.7. The total amounts of the late payment funds that we redistributed, including interest, were £6 for England and Wales and £907 for Scotland.

1.8. 43,576 ROCs and 53,515 SROCs issued during the third obligation period were not presented back to us for compliance purposes in 2004/05. These remain on the ROC Register for use in the fourth obligation period.

1.9. Tables 1 and 2 summarise the headline figures and make comparisons to earlier obligation periods. Further detail can be found in tables A1, A2, A5 and A6 in Appendix 3.

Table 1: 2004/05 RO compliance compared to 2003/04 and 2002/03 (England & Wales)

	2004/05	2003/04	2002/03
Total obligation (MWh)	14,315,784	12,387,720	8,393,972
ROCs produced	9,971,851	6,914,524	4,973,091
Buy-out paid (£)	£135,657,001	£157,960,978	£78,853,260
Shortfall in buy-out fund (£)	£699,055.30	£9,026,232	£23,773,170
Percentage obligation met by ROCs	70%	56%	59%
Buy-out redistributed (including late payment fund)	£136,169,914	£158,466,502	£79,251,930
Buy-out paid per ROC produced (£)	£13.66	£22.92	£15.94
What a ROC was "worth" ⁴ to a supplier (£)	£45.05	£53.43	£45.94

Table 2: 2004/05 RO compliance compared to 2003/04 and 2002/03 (Scotland)

	2004/05	2003/04	2002/03
Total obligation (MWh)	1,445,283	1,239,692	867,596
ROCs produced	883,997	695,620	478,358
Buy-out paid (£)	£17,602,787	£16,436,835	£11,210,730
Shortfall in buy-out fund (£)	£15,067.20	£162,801	£466,410
Percentage obligation met by ROCs	61%	56%	55%
Buy-out redistributed	£17,668,392	£16,488,755	£11,267,124
Buy-out paid per ROC produced (£)	£19.99	£23.70	£23.55
What a ROC was "worth" ⁵ to a supplier (£)	£51.38	£54.21	£53.55

1.10. 38 suppliers in England and Wales had an obligation under the RO. 24 suppliers in Scotland had an obligation under the ROS in 2004/05. Of these, 23

⁴ When combined with the buy-out price that suppliers effectively avoid paying by presenting ROCs, a ROC produced against the RO was "worth" £45.05 to suppliers, or £51.38 if produced against the ROS in 2004/05.

⁵ See Article 2(1) of the Orders for the definition of eligible renewable sources

suppliers had an obligation under both the RO and the ROS.

1.11. 47 suppliers had no obligation under the RO and 56 had no obligation under the ROS either because they had no sales to customers or all their sales were to transmission connected customers.

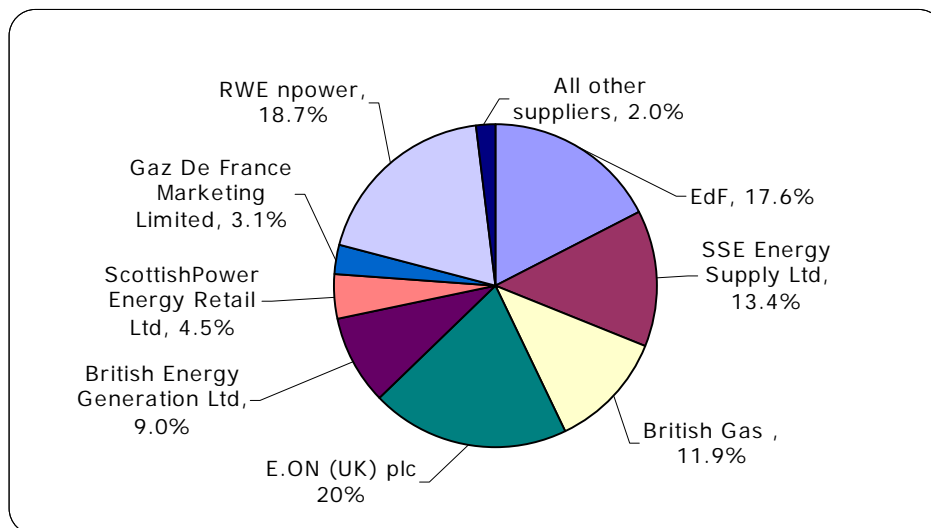
Detail about ROCs presented

1.12. London Energy plc (part of EdF group) had the largest obligation in England and Wales (2,035,827 MWh) followed by SSE Energy Supply Limited and British Gas Trading Limited with obligations of 1,920,605MWh and 1,618,131 MWh respectively.

1.13. ScottishPower Energy Retail Limited had the largest obligation in Scotland (647,050 MWh) followed by SSE Energy Supply Limited and British Gas Trading Limited with obligations of 397,831 MWh and 154,846 MWh respectively.

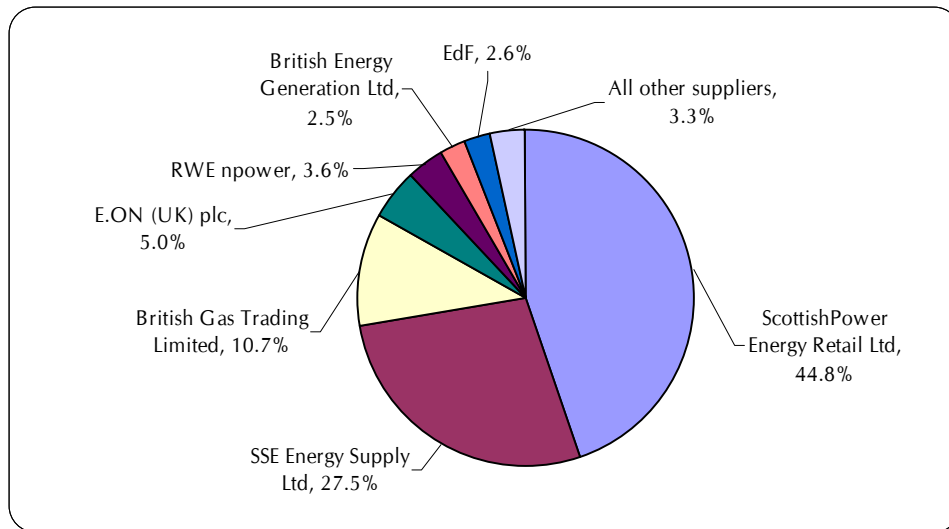
1.14. Figures 1 and 2 show the breakdown of the total obligation by supplier group.

Figure 1: Comparison of the relative size of suppliers' RO by supplier group⁶



⁶ A list of supplier groups and their individual supply licences can be found in table A9 in Appendix 3

Figure 2: Comparison of the relative size of suppliers' ROS by supplier group⁷



1.15. Four suppliers fulfilled both obligations entirely by presenting ROCs:

- British Gas Trading Limited
- Electricity Direct (UK) Limited
- Cinergy Global Trading Limited, and
- Total Gas & Power Limited.

1.16. SSE Energy Supply Limited presented the most ROCs under the RO in England and Wales - 1,632,514. This made up 85 per cent of its obligation.

1.17. Scottish Power Energy Retail Limited presented the most ROCs under the RO in Scotland – 301,934. This made up 47 per cent of its obligation.

Co-fired ROCs

1.18. Under current rules, each supplier is allowed to meet 25 per cent of its obligation by presenting ROCs that have been issued to co-firing generating stations (i.e. those fuelled partly by fossil fuels).

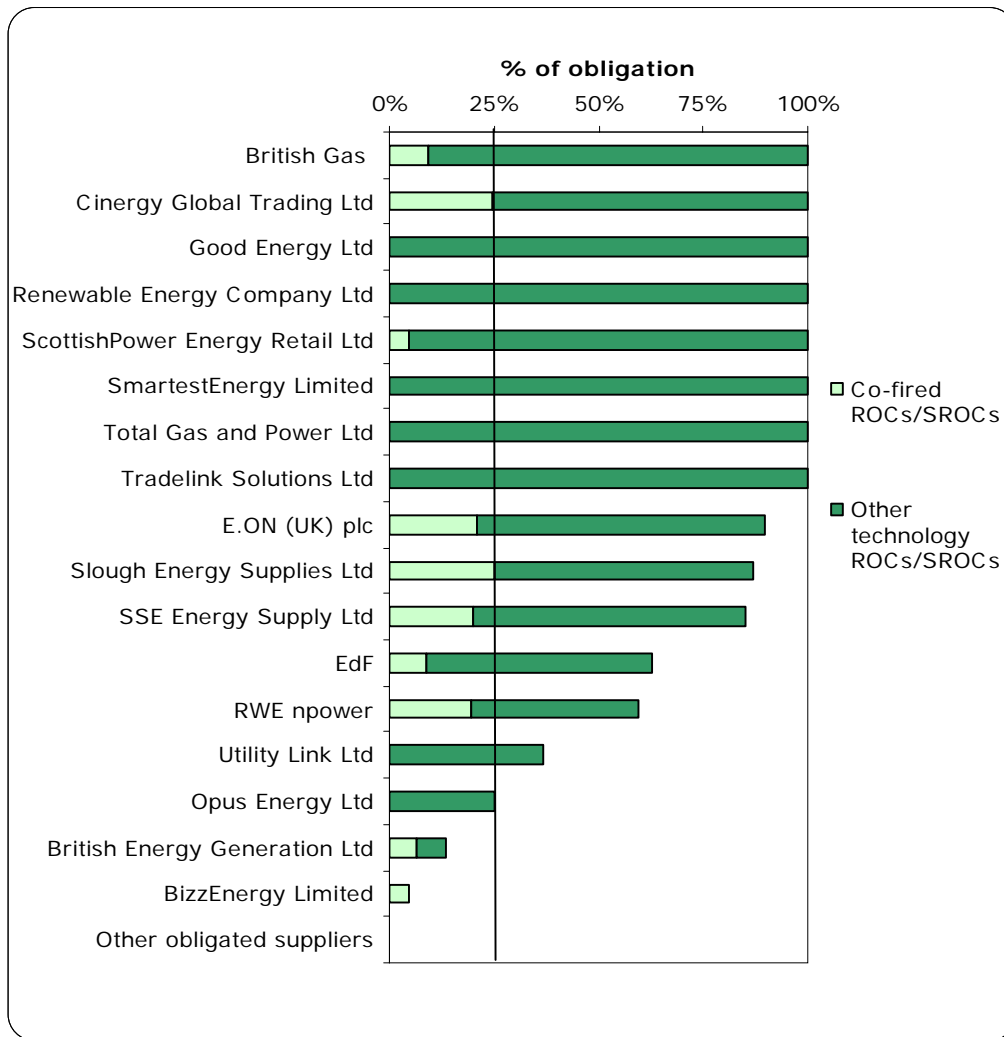
1.19. The number of co-fired ROCs that can be presented by suppliers will decrease to 10 per cent for the period April 2006 to March 2011, and to 5 per cent from April 2011 to March 2016.

1.20. Figures 3 and 4 compare the proportion of ROCs and co-fired ROCs presented by suppliers in meeting their obligations in England and Wales and Scotland

⁷ A list of supplier groups and their individual supply licences can be found in table A9 in Appendix 3

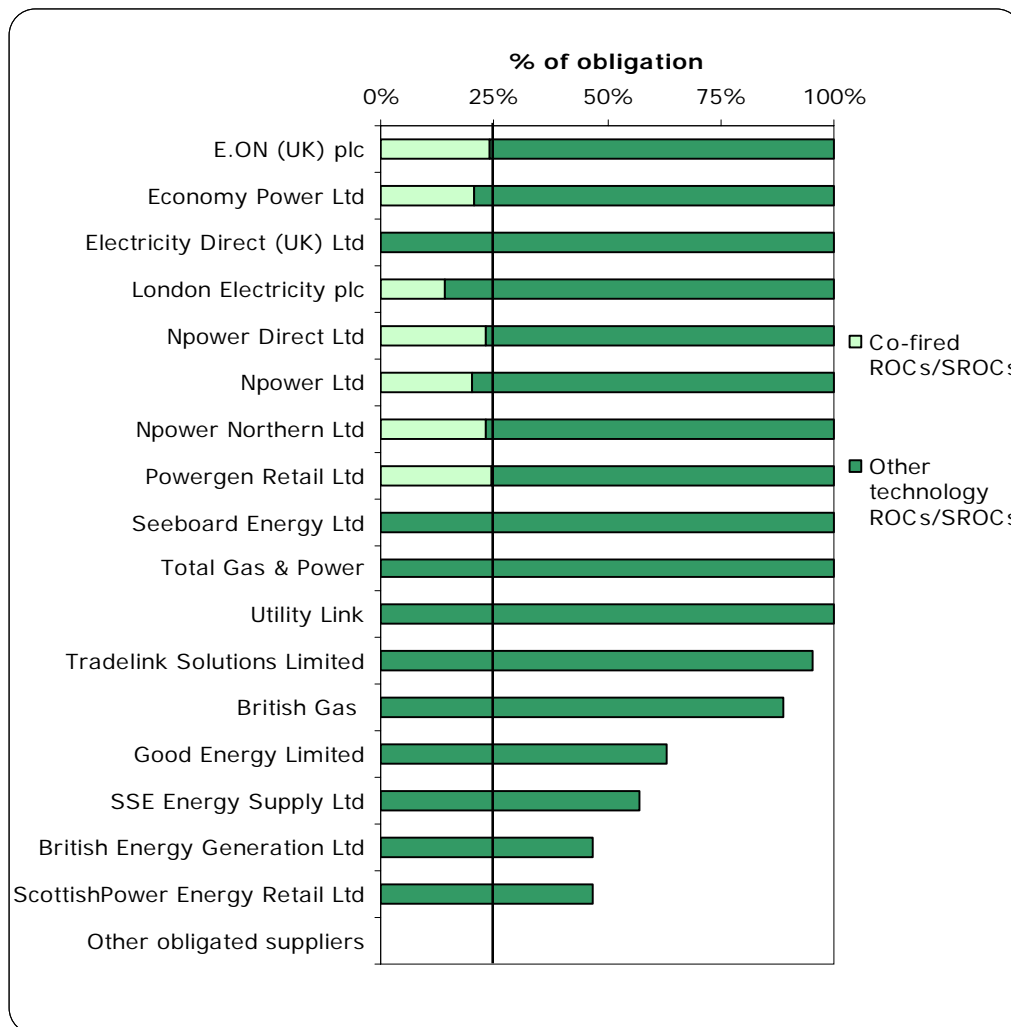
respectively in 2004/05. Further detail can be found in tables A3 and A4 in Appendix 3.

Figure 3: Comparison of the percentage of each supplier's RO that was satisfied by ROCs⁸



⁸ A list of supplier groups and their individual supply licences can be found in table A9 in Appendix 3

Figure 4: Comparison of the percentage of each supplier's ROS that was satisfied by ROCs⁹



The buy-out fund and its redistribution

1.21. 23 suppliers received a share of the England and Wales buy-out fund. Of these, SSE Energy Supply Limited received the largest payment of £22,292,681. Both British Gas Trading Limited and Powergen Retail Limited also received payments in excess of £20m.

1.22. 18 suppliers received a share of the buy-out fund in Scotland. Of these, Scottish Power Energy Retail Limited received the largest payment of £6,034,429.

⁹ A list of supplier groups and their individual supply licences can be found in table A9 in Appendix 3

1.23. Figures 5 and 6 compare the amount of buy-out fund redistributed to each supplier group. More detail on a supplier basis can be found in tables A5 and A6 in Appendix 3.

Figure 5: The amount of the England & Wales buy-out fund redistributed to each supplier group under the RO

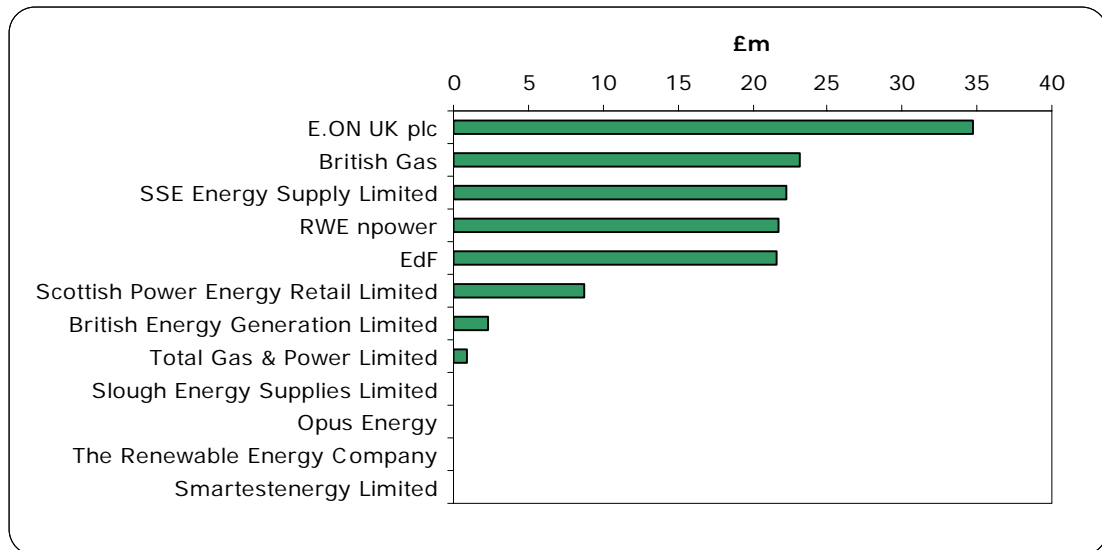
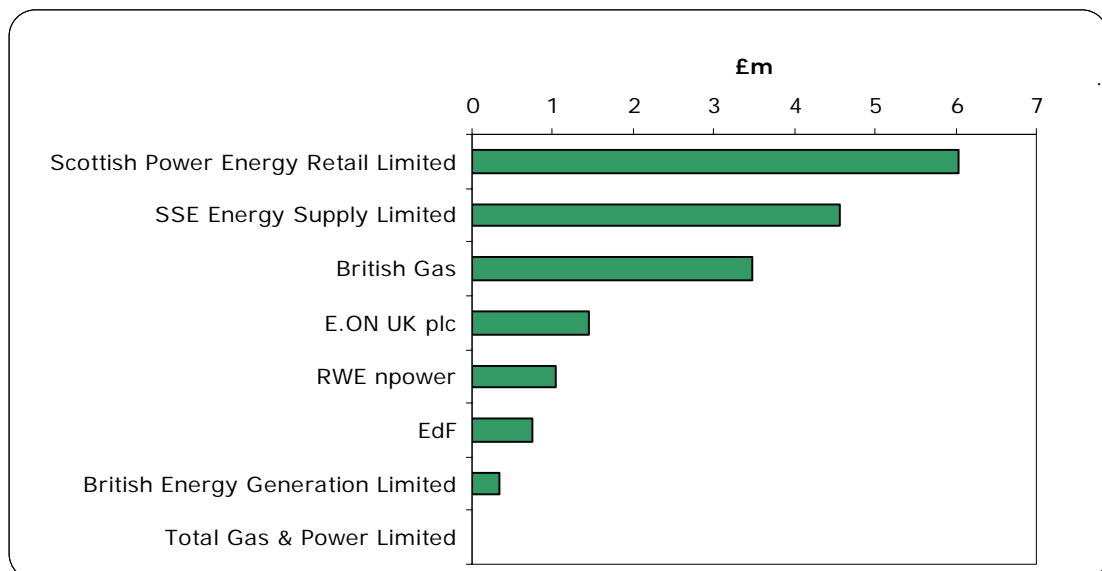


Figure 6: The amount of the Scotland buy-out fund redistributed to each supplier group under the ROS



1.24. The buy-out fund available for redistribution was less than the amount available in 2003/04. This was due to a higher number of ROCs available and

presented by suppliers for compliance.

1.25. There was, correspondingly, a decrease in the amount of buy-out redistributed per ROC to suppliers in 2004/05 compared to last year. This value fell from £22.92 to £13.66 for England and Wales and from £23.70 to £19.99 for Scotland.

1.26. When combined with the buy-out price that suppliers effectively avoid paying, a ROC produced against the RO was "worth" £45.05 to suppliers or £51.38 if produced against the ROS.

1.27. Table 3 shows the residual balances of the RO bank accounts after all funds were redistributed on 31 October 2005. The small amounts arise from rounding down the buy-out payments to the nearest pound and interest earned on the small surpluses carried over.

Table 3: Residual balances

RO buy-out fund	£11.23
ROS buy-out fund	£27.28
RO late payment fund	£4.17
ROS late payment fund	£8.37

Compliance by suppliers

1.28. Any duty or other requirement placed on a supplier under sections 32 to 32C of the Act is a "relevant requirement" under the Act which Ofgem may enforce by way of an order for securing compliance or a financial penalty.

1.29. A number of suppliers failed to meet requirements of the Orders in the third obligation period. The Authority decided not to make any orders or place financial penalties on these suppliers.

1.30. The following sections provide details of those suppliers that failed to meet the requirements of the Orders in one or more stages of the compliance process.

Suppliers that failed to provide information to Ofgem on the amount of their obligation by 7 August 2005

1.31. A supplier's obligation is based on the amount of electricity supplied to customers in England and Wales and Scotland respectively during an obligation period. Each supplier must inform us of the amount of sales and also its obligation by 7 August each year¹⁰.

1.32. One supplier, Smartest Energy Limited, failed to provide this information to us by the statutory deadline. Smartest Energy Limited was in breach of Article 6(6) of the Orders.

¹⁰ See Article 6(6) of the Orders

1.33. Another supplier, British Energy Generation Limited incorrectly rounded its obligation. British Energy Generation Limited was in breach of Article 6(1) of the Orders.

1.34. BP Power Trading Limited incorrectly calculated its obligation by using the previous year's percentage. BP Power Trading Limited was in breach of Article 6(2) of the Orders.

1.35. Each of these suppliers provided the relevant information within a few days of receiving a reminder from us.

1.36. Suppliers who did not supply electricity to customers during an obligation period are required to confirm this before 7 August each year¹¹. We wrote to each supplier in June 2005 reminding them of their obligations and set out the timetable for submissions. Twelve suppliers failed to provide this information to us before the required date:

- EDF Trading Limited
- Energy Co2 Limited
- Electricity 4 Business
- Essential Power Limited
- Fellside Heat & Power Limited
- Ineos Chlor Limited
- International Power plc
- Norweb Energi Limited
- Primary Connections Limited
- Shell Gas Direct Limited
- Team Group of Companies Limited, and
- PowerRelate Limited

1.37. These suppliers provided the relevant information within a few days of receiving a reminder from us.

1.38. Each of these suppliers was in breach of Article 6(6) of the Orders.

¹¹ Standard Licence Condition 19 of the electricity supply licence.

Suppliers that failed to provide their estimate of total sales to the DTI by 20 June 2005

1.39. Suppliers are required to provide DTI with their estimate of total sales of electricity to customers in England & Wales and Scotland during an obligation period, by no later than 20 June immediately following the obligation period¹². Four suppliers failed to provide any sales figures to DTI:

- SmartestEnergy Limited
- Tradelink Solutions Limited
- Utilita Electricity, and
- Zest4 Electricity Limited

1.40. Slough Energy Supplies Limited provided information for part of the compliance year only. British Gas Trading Limited and Electricity Direct (UK) Limited provided figures to DTI on a group rather than on an individual licensee basis.

1.41. Each of these suppliers was in breach of Article 6(5) of the Orders.

Suppliers that failed to copy to Ofgem the information provided to the DTI

1.42. To enable us to be satisfied that a supplier has discharged its obligation, we asked suppliers to provide us with a copy of the estimated figures for total sales of electricity as provided to DTI by 20 June 2005¹³. We requested this information be provided before 7 August 2005. Eight suppliers failed to provide this information:

- Bizz Energy Limited
- Eledor Limited
- Gaz de France Limited
- Good Energy Limited
- Opus Energy Limited
- The Renewable Energy Company Limited
- Total Gas and Power Limited, and
- Utility Link

1.43. Each of these suppliers was in breach of Article 11(1) of the Orders.

¹² Article 6(5) of Orders.

¹³ We requested this information under Article 11(1) of the Orders

Suppliers that failed to produce the correct number of ROCs or make full payment into the buy-out fund before 1 October 2005

1.44. Each supplier that has an obligation under the RO must present sufficient ROCs or make sufficient payment into the buy-out fund (or comply by a combination of these) to meet its obligation.

1.45. Atlantic Electric and Gas Limited failed to meet its obligation at all due to the company being in administrative receivership. The company's administrators advised us that there were insufficient funds available to enable it to meet its obligations, and we notified this to industry on 31 August 2005¹⁴. We were satisfied that no further steps could be taken by this company to comply with the Orders and that it would serve no practical effect to issue a provisional or final enforcement order on Atlantic Electric and Gas Limited.

1.46. Fortum Direct Limited failed to make sufficient payment into the Scotland buy-out fund before 1 October 2005 (it was short by £2.78). However, it did make full payment into the late payment fund immediately to rectify this administrative oversight once the error was pointed out. Fortum Direct Limited was in breach of Article 7(1) of the ROS.

1.47. Good Energy Limited presented excessive "banked"¹⁵ ROCs in meeting its ROS. Suppliers are able to present up to 25 per cent ROCs that were issued in the preceding obligation period, in this case 2003/04. The company did make full payment into the late payment fund immediately to rectify this administrative oversight once the error was pointed out. Good Energy Limited was in breach of Article 3 (3) of the ROS.

Information checking

1.48. We performed a number of checks on the information provided by suppliers in relation to their compliance with the RO during the third obligation period. These checks are important not only to confirm the size of the RO but also serve to identify the extent of any non-compliance by suppliers.

1.49. We compared the information provided to us with the information provided to DTI. These checks resulted in us corresponding with a number of suppliers to confirm the accuracy of the information. All suppliers we contacted provided an explanation which was sufficient to enable us to be satisfied that the figures submitted were accurate.

1.50. In addition, we selected two suppliers to audit the data provided. The suppliers selected were Opus Energy Limited and Scottish Power Energy Retail Limited. Prior to the audit visit, we provided each supplier with a questionnaire which set out the scope of the subsequent visit. During the on-site visit, we assessed:

¹⁴ See Ofgem Information Note 195/05.

¹⁵ ROCs issued in the compliance period immediately preceding that period.

- the information systems used to compile the electricity supply information provided
- any other information used to compile the figures
- how updated information was incorporated, for example any information updated as a result of settlements between the estimate of sales provided to DTI before 20 June 2005 and final sales information provided to us by 7 August
- how sales figures for customers directly connected to the transmission system were removed from the figures provided to us (where applicable), and
- how information on electricity supplied under "sell-and-buy-back" contracts¹⁶ were incorporated into the data provided to us (where applicable)

1.51. We intend to continue to carry out similar audits each year going forward. We expect all suppliers to ensure that their processes are fully auditable and that the processes incorporate an appropriate senior level sign off on figures provided to us.

¹⁶ See Article 10 of the Orders.

2. Renewable Obligation Certificates ("ROCs")

This chapter, together with Appendix 4, provides information on the number of Renewable Obligation Certificates ("ROCs") and Scottish Renewable Obligation Certificates ("SROCs") issued in the third compliance period (April 2004 to March 2005). It details information on:

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

Publication of this information is a requirement on Ofgem under the Renewables Obligation 2002 (as amended) Order and the Renewables Obligation (Scotland) 2004 Order ("the Orders").

Renewable Obligation Certificates ("ROCs") issued in the third obligation period

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

Headline figures

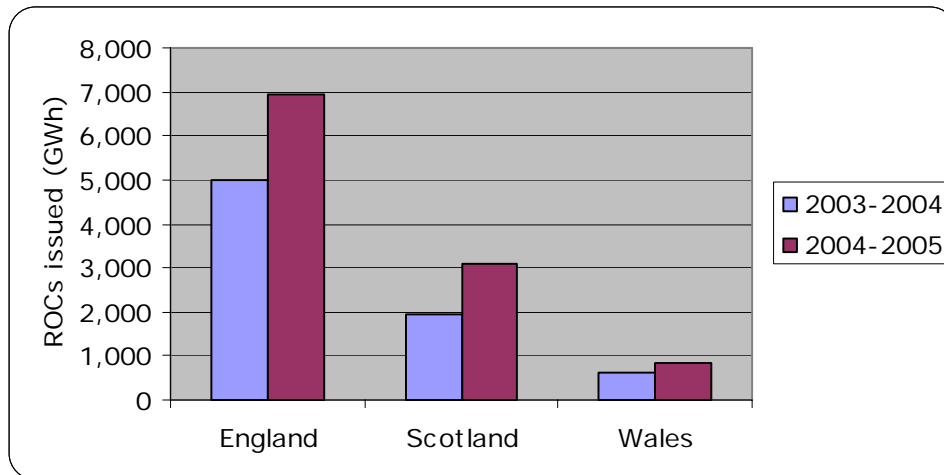
2.2. We issued 10,870,929 ROCs in total for electricity generated between 1 April 2004 and 31 March 2005 - made up of 7,867,819 ROCs and 3,003,110 SROCs.

2.3. The majority of ROCs issued in England and Wales were issued to landfill gas and co-firing generating stations. On-shore wind and biomass generation were also issued significant numbers of ROCs. Smaller contributions were made by sewage gas and off-shore wind generation.

2.4. This compares to ROCs in Scotland which were mainly issued to hydro generating stations with a declared net capacity ("DNC") under 20MW and on-shore wind generating stations.

2.5. There has been an increase in the number of ROCs issued to generating stations in all three countries since 2003/04. This is illustrated in Figure 7.

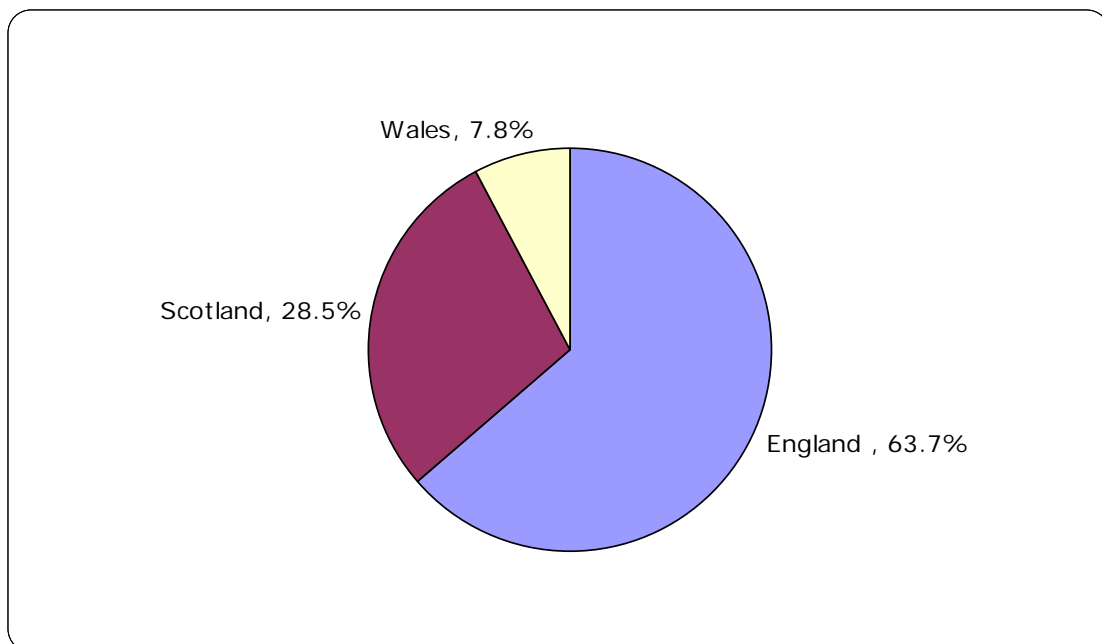
Figure 7: The total number of ROCs issued to each country in the second and third obligation periods



2.6. Renewable generating stations located in England received over 60 per cent of all ROCs issued in the third obligation period. This compares with just under a third issued to generating stations in Scotland and one tenth to generating stations in Wales. This reflects the capacity available in each country as shown in Figure 17.

2.7. Figure 8 compares the total number of ROCs issued in each country in the third obligation period.

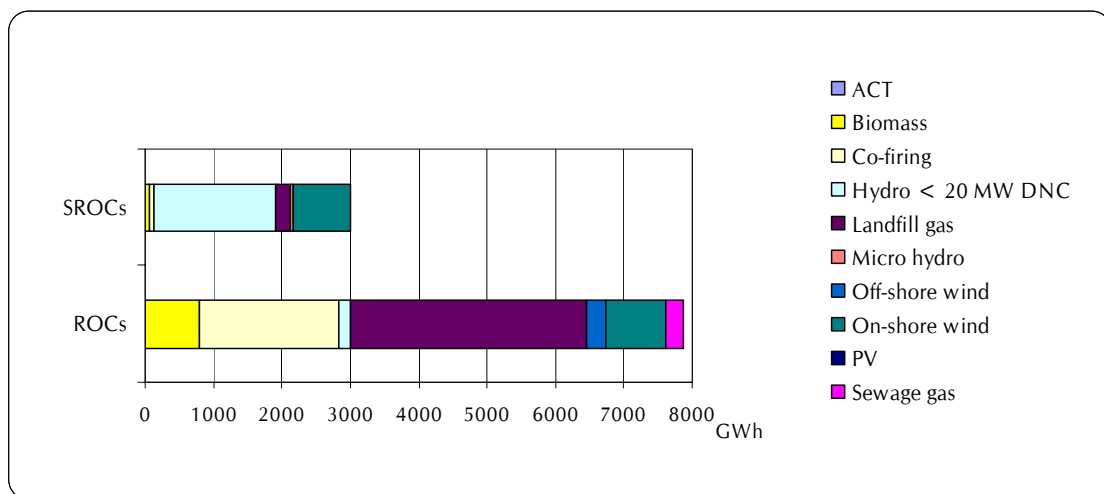
Figure 8: Comparison of the total number of ROCs issued in each country



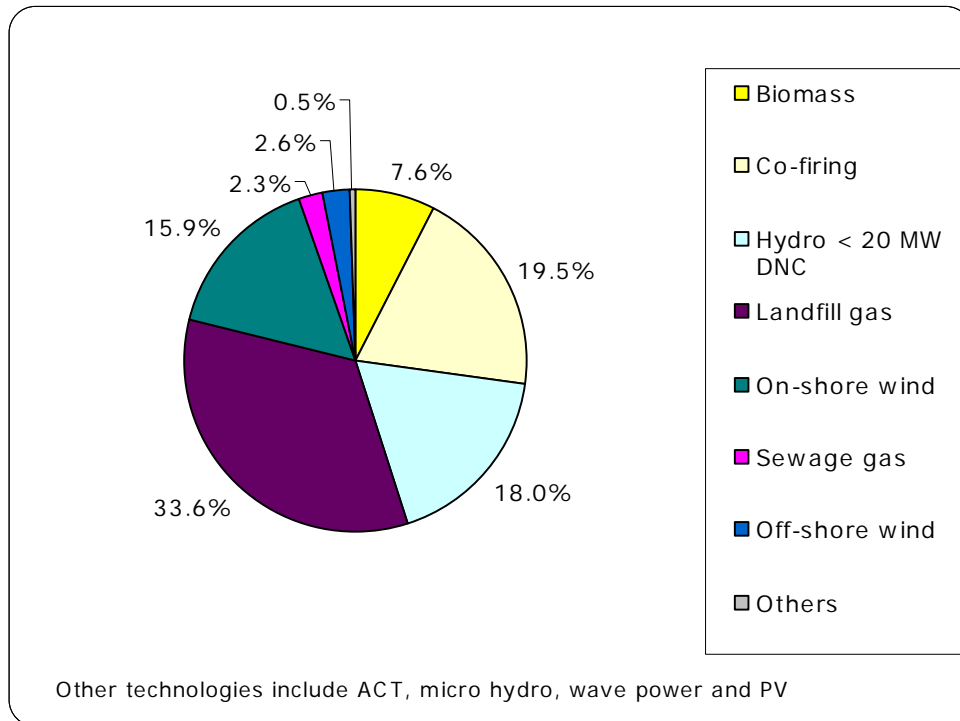
Technology type

2.8. We issued ROCs to an array of different eligible renewable technologies in 2004/05. The technology that received the largest number of ROCs in this period was landfill gas, receiving 3,335,570 ROCs. This compares with 3,151,530 in 2003/04. The next biggest beneficiary was co-firing generation. Co-firing generation received 2,116,599 ROCs in 2004/05 compared with 796,151 in 2003/04. Figure 9 illustrates the breakdown of ROCs issued by technology for the RO and the ROS. More detail can be found in table B1 in Appendix 4.

Figure 9: Comparison of the total number of ROCs issued by technology type

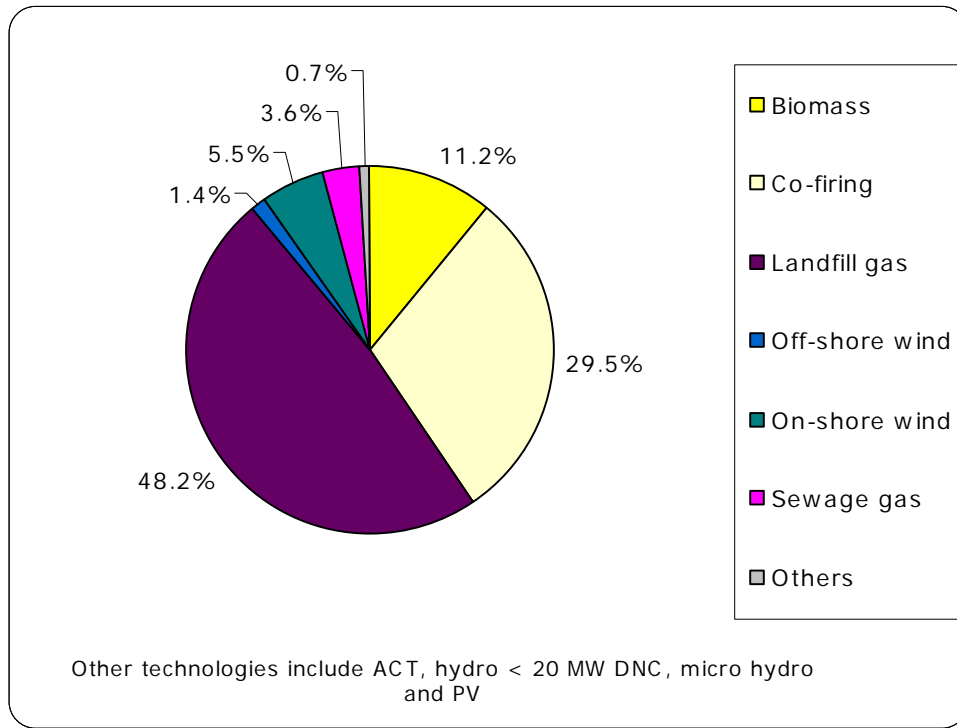


2.9. Figure 10 shows the percentage breakdown of the total ROCs issued by technology type.

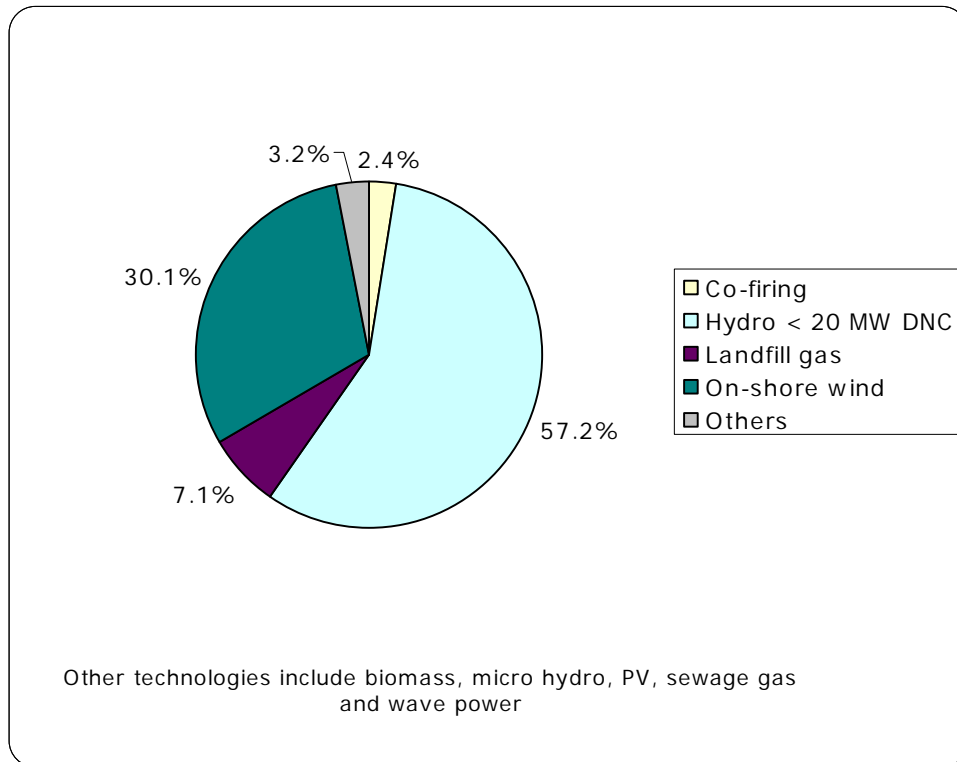
Figure 10: Breakdown of ROCs issued by technology type

2.10. Landfill gas generation attracted over 30 per cent of the total ROCs issued in 2004/05. This is slightly lower than in the second obligation period. Hydro generating stations and co-firing generation stations received 18 per cent and 19 per cent respectively. On-shore wind attracted almost 16 per cent of the total ROCs issued.

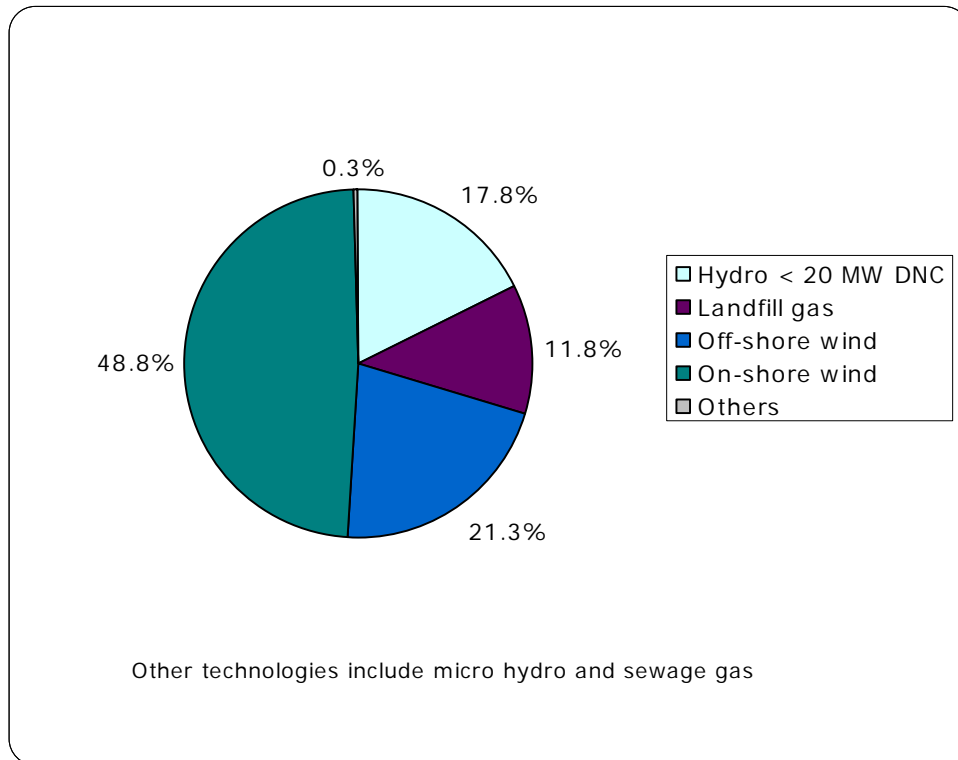
2.11. Figures 11, 12 and 13 disaggregate the information in Figure 10 for England, Wales and Scotland.

Figure 11: Breakdown of ROCs issued by technology type in England

2.12. Almost half of all ROCs issued in England were to generating stations fuelled by landfill gas. Co-firing generating stations received around 30 per cent of ROCs issued and biomass stations received around 11 per cent of ROCs issued.

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

2.13. The majority of ROCs issued in Scotland were to hydro generating stations. On-shore wind generating stations received around 30 per cent of ROCs issued with around 12 per cent going to other technology types.

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

2.14. Almost half of the ROCs issued in Wales went to on-shore wind generating stations. The remaining half was split between hydro, landfill gas and off-shore wind generating stations.

ROCs issued per month

2.15. We issue ROCs to generating stations on a monthly basis, three months after the month of generation. This lag reflects both the time allowed to generating stations to collate the metering information and our processing of that data.

2.16. Figures 14 and 15 compare the ROCs issued in each month for the three obligation periods.

Figure 14: Total number of ROCs issued per month

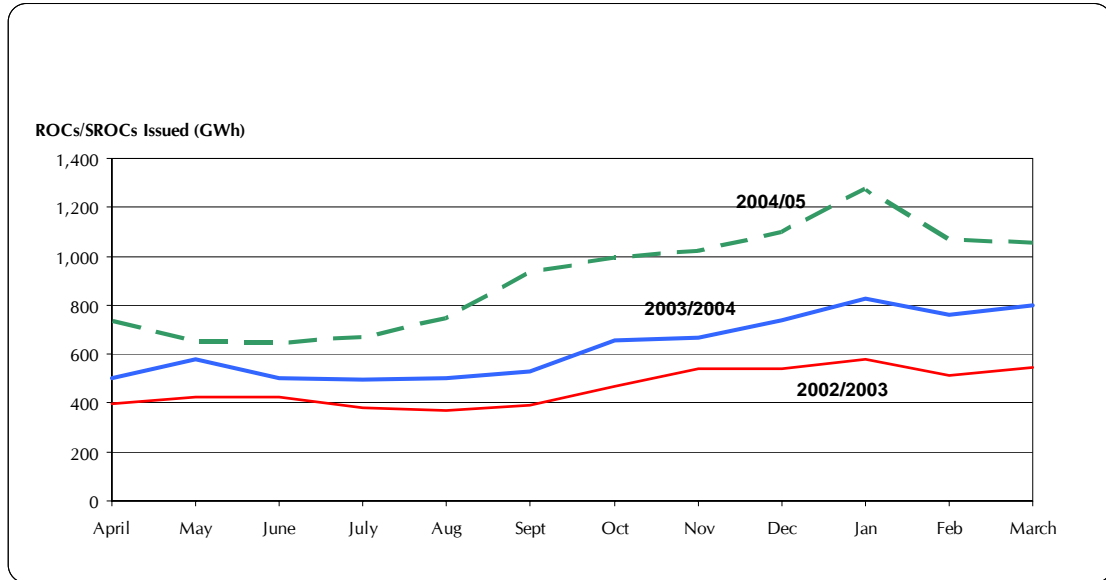
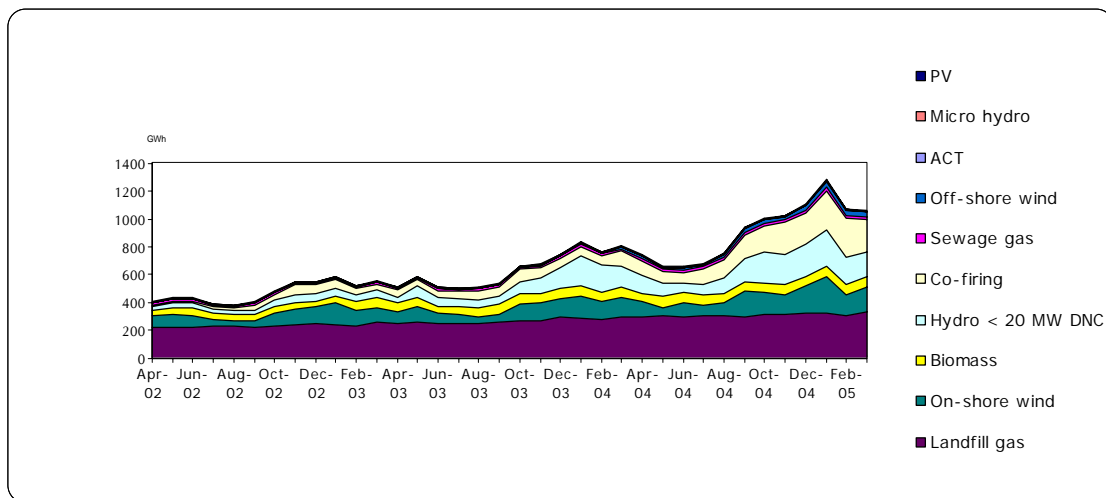


Figure 15: ROCs issued by generation technology per month



2.17. There is a clear upward seasonal trend with more ROCs being issued in winter months, especially January. This could be the result of a number of factors including more suitable weather conditions for some technology types.

ROC revocation

2.18. Ofgem revoked 101,676 ROCs and 5,197 SROCs in the third obligation period. 64,899 replacement ROCs and 5,158 replacement SROCs were issued. 36,777 ROCs and 39 SROCs were not replaced. Further detailed information can be found in table B12 in Appendix 4.

2.19. 34 separate ROC ranges were revoked. Details including sequence numbers of revoked ROCs, reasons for revocation and sequence numbers of any replacement ROCs are published on our website.

3. Accredited generating stations

This chapter, together with Appendix 5, provides information on the number and type of generating stations accredited under the Renewables Obligations.

This information is based on requirements set out the Renewables Obligation 2002 (as amended) Order and the Renewables Obligation (Scotland) 2004 Order ("the Orders").

Accreditation of generating stations

3.1. The Orders require us to accredit eligible generating stations for the RO. We have put in place appropriate application forms and guidance in order for us to carry out this function.

Headline figures

3.2. Ofgem accredited 179 generating stations during the third obligation period with 126 of these being commissioned in that period. There was a total of 788 generating stations accredited for the RO at the end of 2004/05.

3.3. At the end of the first obligation period there were 505 generating stations accredited for the scheme. This increased to 616 at the end of the second obligation period.

3.4. Seven generating stations were decommissioned or ceased generating from renewable sources during the third obligation period.

3.5. Three applications for accreditation were withdrawn in the third obligation period. One application for accreditation was rejected by Ofgem.

Generating stations accredited by country

3.6. Generating stations accredited in England account for around 70 per cent of the total number of stations accredited and have just over 60 per cent of the total generating capacity. Generating stations located in Scotland account for just over 20 per cent of the total number of stations with nearly 30 per cent of the total generating capacity. Generating stations in Wales account for around 10 per cent of both the number of stations accredited and the capacity.

3.7. This reflects the different technologies accredited for the scheme in each country.

3.8. The majority of eligible renewable generation in England comes from landfill gas whereas in Scotland it comes from hydro generation. The majority of eligible renewable generation in Wales comes from on-shore wind.

3.9. This breakdown is illustrated in figures 16 and 17. Further detail can be found in table C1 in Appendix 5.

Figure 16: Comparison of the number of generating stations accredited under the RO, by location

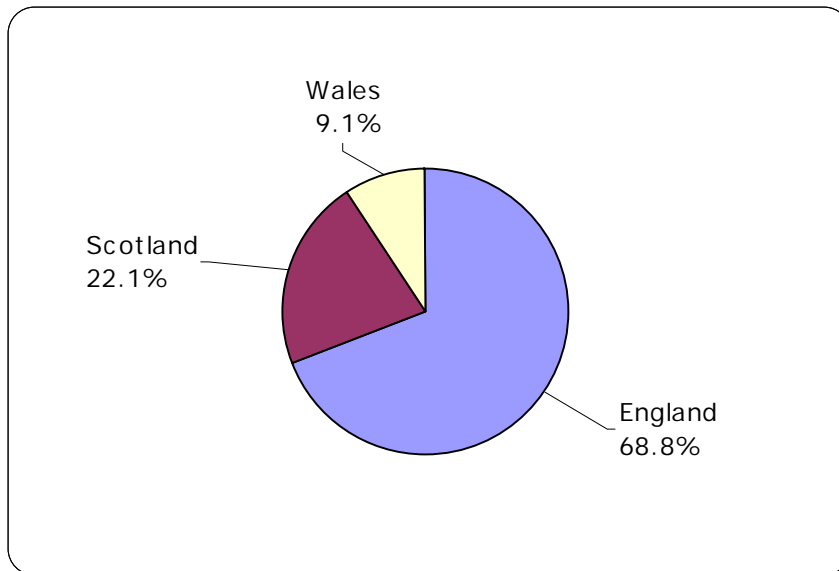
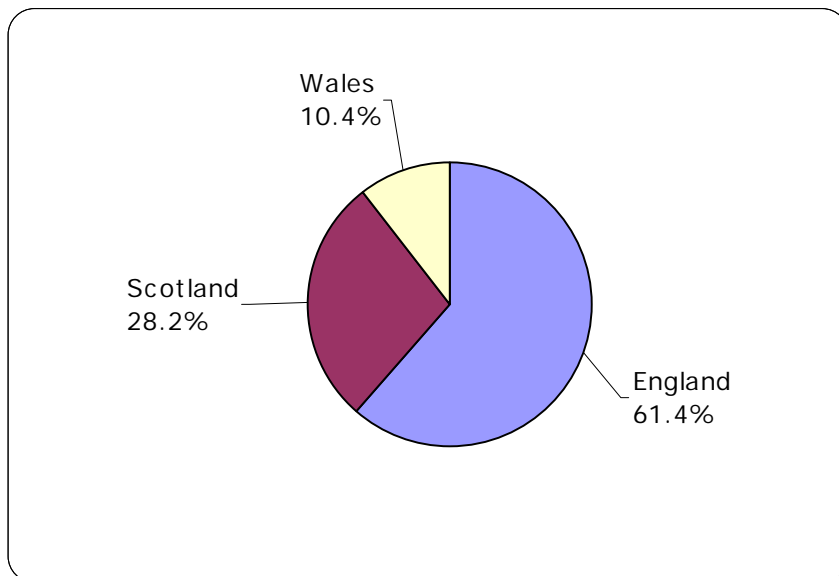


Figure 17: Comparison of the capacity of generating stations accredited under the RO, by location



3.10. This is similar in pattern to the second obligation period, where England had around 58 per cent of the total installed capacity of accredited generating stations, Scotland had 29 per cent and Wales had 13 per cent.

NFFO and SRO generating stations

3.11. 22 generating stations that receive support under the Non- Fossil Fuel Obligation ("NFFO")¹⁷ and 3 generating stations that receive support under the Scottish Renewables Obligation ("SRO")¹⁸ were accredited for the RO in the third obligation period.

3.12. NFFO generating stations made up 22 per cent of the accredited RO capacity in the third obligation period. SRO generating stations made up 6 per cent.

3.13. Further detailed information can be found in tables C7 and C8 in Appendix 5.

Trends in generating stations accredited (by technology type)

3.14. When the RO was first introduced, the most prevalent technology type (in terms of the number of accredited generating stations) was landfill gas with 202 stations accredited at 1 April 2002.

3.15. The number of landfill gas stations being accredited reduced significantly in the first obligation period but increased slightly in the second and third periods. In 2002/03 we accredited 24 landfill gas generating stations with 31 being accredited in 2003/04. In 2004/05, we accredited 42 landfill gas generating stations.

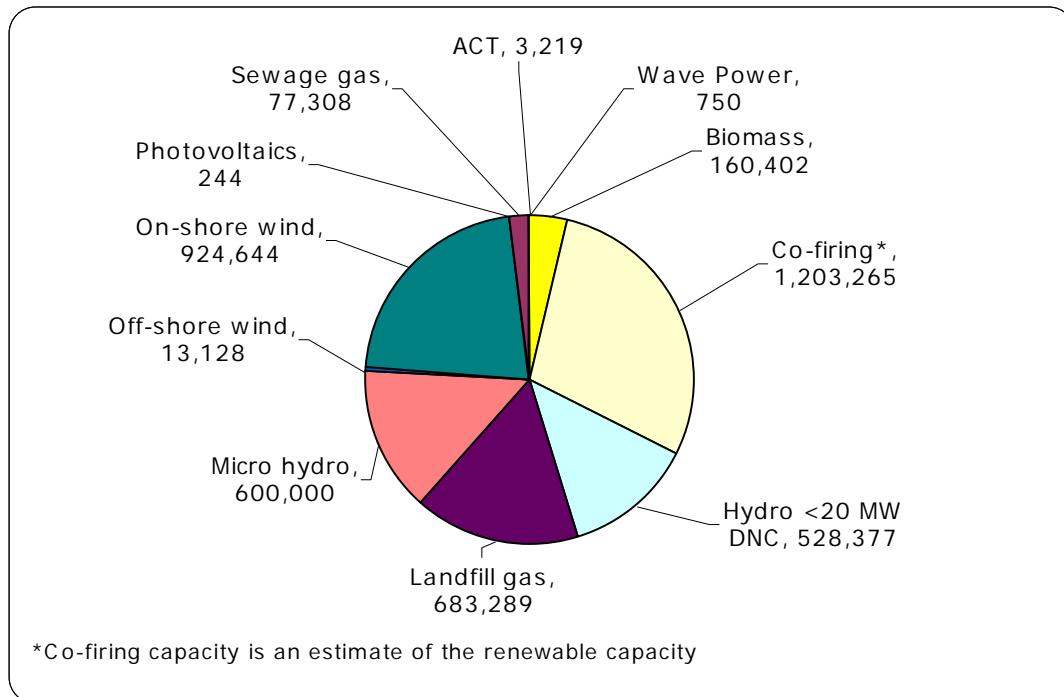
3.16. During the third obligation period, the most prevalent technology (in terms of generation capacity) was on-shore wind, followed closely by hydro generating stations with a DNC less than 20MW and then landfill gas.

3.17. Further detail can be found in table C3 in Appendix 5.

3.18. Co-firing and on-shore wind made up more than half of the total renewable capacity installed and accredited under the RO. This was followed closely by landfill gas and hydro with a DNC less than 20 MW. The total installed capacity for each technology is shown in Figure 18.

¹⁷ See the Electricity (Non-Fossil Fuel Sources) (England & Wales) Orders

¹⁸ See the Electricity (Non-Fossil Fuel Sources) (Scotland) Orders

Figure 18: Total capacity (kW) accredited for the RO and ROS by technology

Checks undertaken on accredited generating stations

3.19. We expect the operators of generating stations applying for accreditation to give us complete and accurate information. They should tell us about 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 of compliance with the requirements of the RO.

3.20. During the third obligation period, we carried out 65 audits of accredited generating stations. Most of the findings were satisfactory, but some revealed irregularities that either called in question the validity of a station's accreditation or indicated that the operator had received more ROCs than it should. We took appropriate remedial action in these instances. The following table summarises the audit results.

Table 4: Summary of audit results

Generating technology	No. of stations audited	Types of irregularity detected
Advanced conversion technology	2	Non-compliant metering.
Biomass	3	Metering and off-site fuel storage. Two separate schemes accredited as one.
Co-firing	16	Flawed fuel measurement.
Hydro	2	Incorrect calibration of meters.
Landfill gas	23	Failure to report meter readings for input electricity ¹⁹ .
On-shore wind	7	None
Sewage gas	12	Non-compliant metering.

3.21. The most common findings threatening accreditation related to metering equipment. In some cases this was not of an approved type. In a number of other cases, station operators were failing correctly to meter, and to take account of, electricity used as an input to the generation process. Operators can usually avoid withdrawal of accreditation by rectifying their metering arrangements. Where incorrect information has been given on application, it is more difficult to maintain accredited status. In one example, two separate generating technologies had been presented as a single generating station. When this was revealed by audit, we withdrew the station's accreditation.

3.22. During the compliance period, we conducted a full review of our strategy and methodology for audit of accredited generating stations. Building on experience of more than 170 technical audits of generating stations, we identified how we could better target stations for audit. Revisions to the way in which we manage the audit programme are intended to secure greater assurance of compliance, while delivering improved value for money.

¹⁹ Input electricity is used by the generating station itself for a purpose directly related to the operation of the generating station.

4. Issues raised

This chapter sets out the issues that have been raised by stakeholders and that we have considered since April 2004. Our second annual report sets out some of the issues that came up prior to April 2004.

Data submission deadline

4.1. We have continued to receive data from generating stations after the two month deadline. The legislation makes clear that generating stations must submit their ROC data by the end of the second month following the month of generation. We have taken a number of steps to help generating stations with this. We now issue a reminder to all generating stations each month, just before the data submission deadline. We also carry out high level checks of the data upon receipt.

Fuel measurement

4.2. Under the RO, biomass and co-firing generating stations are required to provide us with accurate and reliable information on the fuel they burn each month. To do so, they need to accurately measure the Gross Calorific Value and volume or mass of that fuel. We agree fuel measurement and sampling procedures with individual generating stations.

4.3. We are working with generating stations, via the DTI's Biomass Working Group, to produce a fuel measurement and sampling guidance document which will be published in April 2006. This document will make transparent the range of ways in which we consider that generating stations can meet the legislative requirements and will include examples of good practice.

Late issue of ROCs

4.4. In the 2004/05 compliance period a number of ROCs were issued after the main batch issue. This was because there were issues we needed to follow up with some generating stations before we could be satisfied as to the accuracy of their data. A large number of these ROCs were issued shortly before the 1 October 2005 compliance deadline and stakeholders raised a concern about the impact of this on ROC prices. In the majority of cases, it was fuel measurement issues that caused the delay to the issue of ROCs. The fuel measurement guidance should help to deal with these.

Calculation of input electricity

4.5. We issued an information note on 26 August 2004²⁰ which clarified how to calculate input electricity. This note was issued as a number of generating stations were not providing correct figures for both output and input electricity. Input electricity is deducted from gross output as part of the calculation to ascertain how

²⁰ Information note: Deduction of input electricity for ROC issue purposes.

many ROCs may be issued. No input electricity needs to be deducted from the gross output to calculate the net output of the generating station where input electricity does not exceed 0.5 per cent of gross output in the month in question.

5. Changes to the legislation

Renewables Obligation 2005

5.1. The Renewables Obligation Order 2005, the Renewables Obligation (Scotland) Order 2005 and the Renewables Obligation (Northern Ireland) Order 2005 ("NIRO") came into force on 1st April 2005. This legislation introduced a number of changes to the RO including:

- an increase in the required amount of electricity to be sourced from eligible renewable sources from 10.4 per cent in 2010/11 to 15.4 per cent in 2015/06
- the introduction of Northern Ireland Renewables Obligation certificates ("NIROCs") in Great Britain
- the introduction of a mutualisation provision to secure the buy-out fund in the event of a shortfall occurring due to a supplier failing (mutualisation provisions do not apply under the NIRO)
- the introduction of surcharges on late payments
- the introduction of a single recycling mechanism for the buyout fund, and
- the introduction of more flexibility for small generating stations (i.e. less than 50kW DNC) so that they can receive ROCs on an annual or monthly basis.

5.2. These changes did not affect the requirements in respect of this report.

Renewables Obligation 2006

5.3. Subject to Parliamentary approval, the legislation will change again on 1 April 2006 when new Orders will come into effect for England and Wales, Scotland and Northern Ireland. The new Orders will introduce further changes to the scheme including:

- the ability for generating stations to be granted preliminary accreditation for the RO once they have obtained planning permission
- expanding eligibility for the scheme to include energy from waste CHP stations
- giving Ofgem greater flexibility to issue ROCs and to correct ROC issue after the two month deadline
- bringing forward the timeframes on which suppliers are required to comply with the RO
- allowing for offsite measurement of biomass fuels

- reducing the purity rule in the definition of biomass from 98 per cent to 90 per cent
- requiring us to publish statistics on the number of ROCs claimed but not issued
- reduced fuel sampling requirements where the generator has a year's worth of consistent evidence of Gross Calorific Value, and
- a technical change to the definition of input electricity in the case of a generating station fuelled wholly or partly by hydrogen to prevent double counting in respect of ROCs claimed.

5.4. Guidance on these latter points will be included in the guidance on fuel measurement and sampling document which will make transparent the range of ways in which generating stations can meet the necessary legislative requirements and will include examples of best practice. This will be published in April 2006.

5.5. With regards to compliance, many of these changes will not take effect until the 2006/07 compliance period when the timetable for compliance changes.

5.6. Our fifth annual report, due to be published by 1st April 2008, will take into account these changes to the Renewables Obligation.

Appendices

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3	Compliance by licensed electricity suppliers: detailed information	Separate document
4	Renewables Obligation Certificates issued: detailed information	Separate document
5	Accredited generating stations: detailed information	Separate document

Appendix 1 - Ofgem's Statutory Responsibilities

1.1. Ofgem is the Office of Gas and Electricity Markets, regulating the gas and electricity industries in Great Britain. Ofgem operates under the direction and governance of the Gas and Electricity Markets Authority. The Gas and Electricity Markets Authority has the ultimate responsibility for all that Ofgem does. It determines strategy and decides on major policy issues.

1.2. Ofgem's powers and duties are provided for under the Gas Act 1986, the Electricity Act 1989, as amended principally by the Utilities Act 2000, Competition Act 1998, Enterprise Act 2002 and Energy Act 2004. Ofgem has concurrent powers with the Office of Fair Trading ("OFT") to apply the Competition Act 1998 to the gas and electricity sectors in Great Britain.

1.3. Ofgem's principal objective is to protect the interests of consumers present and future, wherever appropriate by promoting effective competition. We must also have regard to:

- The need to ensure that all reasonable demands for electricity and, so far as is economical, gas are met
- The need to secure that licence holders are able to finance their obligations, and
- The interests of those people who are disabled or chronically sick, of pensionable age, living on low incomes, or living in rural areas.

1.4. We are also required to carry out our functions in the manner, which we consider best calculated:

- To promote efficiency and economy including efficient use of energy
- To protect the public from dangers
- To contribute to the achievement of sustainable development
- To secure a diverse and viable long term energy supply, and
- Shall have regard, in carrying out those functions, to the impact on the environment of the gas and electricity industries.

1.5. In carrying out our functions we must also have regard to 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 us to represent the best regulatory practice.

1.6. Furthermore, we must have regard to social and environmental guidance issued by Ministers. Ofgem also has a duty to consult and take into account any advice given by the Health and Safety Executive about all gas and electricity safety issues that may be relevant to our functions under the Gas Act and the Electricity Act.

Appendix 2 - Glossary

A

Act	Electricity Act 1989
ACT	Advanced Conversion Technology

D

DNC	Declared net capacity
DTI	Department of Trade and Industry

K

kW	Kilowatt
kWh	Kilowatt/hour

M

MW	Megawatt
MWh	Megawatt/hour

N

NIRO	Renewables Obligation Order (Northern Ireland)
NIROC	Northern Ireland Renewables Obligation Certificates
NFFO	Non-Fossil Fuel Obligation
NFPA	Non-fossil Fuel Purchasing Agency

P

PV	Photovoltaics
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R

RO	Renewables Obligation 2002 (as amended 2004)
ROC	Renewable Obligation Certificate
ROS	Renewables Obligation (Scotland) 2004

S

SRO	Scottish Renewables Obligation
SROC	Scottish Renewable Obligation Certificate