

**EXPLANATORY MEMORANDUM TO  
THE RENEWABLES OBLIGATION ORDER 2006**

**2006 No. 1004**

1. This explanatory memorandum has been prepared by the Department of Trade and Industry and is laid before Parliament by Command of Her Majesty.

This memorandum contains information for the Joint Committee on Statutory Instruments.

**2. Description**

2.1 The Renewables Obligation is the Government's main policy measure to encourage the development of electricity generating capacity using renewable sources of energy in the UK. This Order, the Renewables Obligation Order 2006 (the "2006 Order") revokes and re-enacts with modifications the Renewables Obligation Order 2005 (SI 2005/926 – the "2005 Order"). The changes in the 2006 Order include amendment to the rules relating to biomass and electricity generated from mixed wastes by combined heat and power generating stations, as well as more detailed changes relating to the administration of the Renewables Obligation together with some drafting simplifications.

**3. Matters of special interest to the Joint Committee on Statutory Instruments**

3.1 None. However, owing to the complexity of the legislative and policy background to the 2006 Order, the "Policy Background" contains a relatively detailed summary of the main elements of the Renewables Obligation system and details of the changes to it proposed by the 2006 Order. The Department is also including, for the Committee's reference, a table showing where the provisions of the 2005 Order now appear in the 2006 Order.

**4. Legislative Background**

**a) General**

4.1 The 2006 Order is made under sections 32 to 32C of the Electricity Act 1989 and applies in relation to suppliers of electricity in England & Wales. It revokes and re-enacts the 2005 Order with modifications. It also makes some limited changes to the Renewables Obligation system, as summarised in section seven below.

4.2 Following executive devolution of the relevant powers, in 2002 an Order for Scotland was made in terms virtually identical to the 2002 Order. It was subsequently amended and consolidated as the Renewables Obligation (Scotland) Order 2004 (S.S.I. 2004/170) and then again as the Renewables Obligation (Scotland) Order 2005 (S.S.I. 2005/185) (the "ROS"). The ROS applies in relation to suppliers of electricity

in Scotland. Corresponding amendments are now being proposed to the ROS and are intended to come into force on the same date as the 2006 Order.

4.3 Article 54 of the Energy (Northern Ireland) Energy Order 2003 (2003 No 419, NI 6), as amended by section 120 of the Energy Act 2004, contains provisions analogous to section 32B of the Electricity Act 1989 and applicable in Northern Ireland. The Northern Ireland Renewables Obligation Order 2005 (SI 2005/38) (the “NIRO”), made under the Energy (Northern Ireland) Energy Order 2003, came into force on 1 April 2005. This established a Renewables Obligation in Northern Ireland, the main features of which are analogous to those in the Obligation in Great Britain. Corresponding amendments are now being proposed to the NIRO and are intended to come into force on the same date as the 2006 Order.

## **b) EU Legislation**

4.4 As previously stated, this order revokes and re-enacts the 2005 Order which in turn revoked and re-enacted the 2002 Order, with modifications.

4.5 The 2002 Order transposed certain requirements in article 3 of Directive 2001/77/EC (“the Directive”) of the European Parliament and of the Council. A transposition note in respect of the 2002 Order was prepared and submitted to the Committee and a copy of that note is annexed.

4.6 This Order takes the same approach to transposition and does not raise any new transposition issues as compared with the 2002 Order.

4.7 Paragraph 2 of the transposition note submitted in respect of the 2002 Order referred to the requirement of the Directive that member states establish a certification system for renewables electricity. This requirement has in fact been transposed by a different set of regulations, the Electricity (Guarantees of Origin of Electricity Produced from Renewable Energy Sources) Regulations 2003 (S.I. 2003/2562).

## **5 Extent**

5.1 This instrument extends to England and Wales only.

## **6 European Convention on Human Rights**

6.1 The Minister for Energy, Malcolm Wicks, has made the following statement regarding Human Rights:

“In my view the provisions of the Renewables Obligation Order 2006 are compatible with the Convention rights”.

## **7 Policy Background**

7.1 The Renewables Obligation is the Government’s main policy measure to encourage the development of electricity generating capacity using renewable sources of energy in the UK. It is intended to provide an impetus for new generating capacity that will be required to meet our current targets for electricity generated from

renewable energy sources (“renewables electricity”) of 10% by 2010, and as a basis for further reductions in carbon dioxide emissions. The Renewables Obligation is supported by around £500m of funding up to 2008 for research and development and demonstration projects for longer-term renewables and low carbon energy generation technologies.

7.2 As with its predecessors, the 2006 Order will require all licensed suppliers of electricity in England and Wales to provide the Gas and Electricity Markets Authority (Ofgem) with certificates<sup>1</sup>, issued under the 2006 Order<sup>2</sup> or under the ROS, demonstrating the supply of a specified quantity of renewables electricity to customers. The quantity is set as an increasing percentage of the electricity supplied by each supplier (see articles 3(1)(a), 4(1) and (2), and Schedule 1). As an alternative or in addition to providing these certificates to demonstrate compliance with their renewables obligation, suppliers can use one or a combination of several of the other methods set out in paragraphs 7.3 to 7.8 instead.

7.3 A power generating station generating electricity from qualifying renewables sources as detailed under the Order (see in particular article 11) receives one Renewables Obligation Certificate (ROC) for each one megawatt hour (MWh) of renewables electricity generated from those sources (article 18(2)(e)). These ROCs can then be sold to (and indeed traded amongst) suppliers who present them to Ofgem in compliance with their obligations under the Order. A similar scheme for issuing certificates operates in Scotland, and these certificates (Scottish ROCs, or “SROC”s) can be presented to Ofgem under the 2006 Order<sup>3</sup>.

7.4 In addition, the NIRO 2005 introduced a similar scheme for issuing certificates for Northern Ireland and those certificates (“NIROCs”) can be used as an alternative to ROCs or SROCs to demonstrate compliance with a supplier’s renewables obligation. Article 12 of the 2006 Order provides that instead of producing “certificates” (that is, ROCs or SROCs) to Ofgem pursuant to article 3, a supplier may produce “eligible NIROCs”. Eligible NIROCs are defined in article 2(1) as those satisfying the criteria for eligibility in Schedule 3 to the 2006 Order. These criteria are analogous to the criteria for establishing that electricity has been generated from “eligible renewable sources” applicable to ROCs under articles 5 to 8, with appropriate amendments reflecting the fact that the electricity in question is generated in Northern Ireland.

7.5 Section 32B(2A) allows for the issue of ROCs in respect of electricity generated by offshore generating stations in UK territorial waters and supplied to customers in Northern Ireland. It provides that a certificate issued under section 32B and which relates to electricity that was not generated by a station situated on land in Northern Ireland may certify that that electricity was supplied to customers in Northern Ireland. These ROCs are known as “section 32B(2A) certificates”.

7.6 Article 13 of the 2006 Order allows suppliers to produce section 32B(2A) certificates in full or partial discharge of their renewables obligation. Under article

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<sup>1</sup> See article 3(2)

<sup>2</sup> See article 15(1)

<sup>3</sup> Because the reference in article 3(2) to section 32B of the Act includes certificates issued under the ROS

13(1) the certificates must relate to electricity generated from eligible renewable sources as specified in articles 5 to 8.

7.7 Article 11 also provides that, as an alternative to producing ROCs, SROCs, NIROCs or section 32B(2A) certificates to demonstrate compliance with its renewables obligation, suppliers can pay a 'buyout' price to Ofgem for all or any part of their renewable obligation not covered by the presentation of the various types of certificates.

7.8 The level of the buyout price was set at £32.33 per MWh in the 2005 Order and is adjusted annually in line with the Retail Prices Index (article 11(3)). Under the 2006 Order this figure will be £33.24. All proceeds from buyout payments are recycled to those suppliers who complied (in any part or in full) with their renewables obligation by presenting the various types of certificates in proportion to the number of certificates they present compared to the number presented by all suppliers in England and Wales, Scotland and Northern Ireland.

7.9 An Explanatory Memorandum was prepared for the 2005 Order and contains details of some of the more complex and detailed changes which were made to the Renewables Obligation at that time and which have now been incorporated into the 2006 Order. A copy can be found at [http://www.opsi.gov.uk/si/em2005/uksiem\\_20050926\\_en.pdf](http://www.opsi.gov.uk/si/em2005/uksiem_20050926_en.pdf).

7.10 The 2006 Order makes some technical changes to the Obligation following consultation with industry. Much of the text of the 2006 Order remains the same as that in the 2005 Order and the changes are intended to strengthen the Obligation and encourage investor confidence. In brief the principal changes are:

- a) modifications to the waste eligibility provisions to allow ROCs to be issued for the electricity generated from the biodegradable element of waste by certain combined heat and power generating stations;
- b) amendment to the definition of "biomass" so that only 90% of a substance has to have been derived from plant or animal matter to qualify as biomass rather than the previous level of 98%;
- c) new provisions setting out a pre-accreditation procedure for generating stations which have not yet been commissioned;
- d) amendments to the ROC issue procedure allowing Ofgem greater flexibility in relation to the late issue of ROC and correction of data errors;
- f) simplification of existing provisions so that generators only have to submit an annual rather than monthly declaration to Ofgem confirming various details relating to electricity in respect of which ROCs have been claimed;
- g) provision for Ofgem to impose reduced fuel sampling requirements for generators using established fuels;

- h) alterations to the timetable for suppliers submitting their yearly compliance data and to the timetable for Ofgem recycling the buyout fund and late payment fund;
- i) an amendment to the definition of “input electricity” to prevent the “double counting” of ROCs being claimed from the generation of electricity from hydrogen;
- j) a requirement that Ofgem publish information on ROCs claimed by generators but not yet issued.

7.11 In addition, the Department submitted a supplementary memorandum to the Joint Committee on Statutory Instruments in relation to the 2005 Order, in which we acknowledged the complexity of the Order and indicated that we would explore the possibility of simplifying its structure in the context of the further Order which we planned to lay for 2006 (see appendix 5 to 9th report from 2004/5 session).

7.12 Following this commitment, we have consulted on simplifications to the 2006 Order with lawyers who are familiar with the operation of the Renewables Obligation, as well as with the renewables industry generally. We believe that the simplifications detailed below will make the 2006 Order simpler to navigate.

7.13 The main simplifications we have made are as follows –

- a table of arrangement has been added to the beginning of the 2006 Order;
- the 2006 Order has been split into Parts;
- certain articles have been restructured so that relevant provisions are all now within the same Parts;
- three of the longer provisions have been split out into separate articles, including –
  - article 4 in the 2005 Order which has been split into articles 15 to 19 in the 2006 Order,
  - article 11 in the 2005 Order which has been split into articles 5 to 8 in the 2006 Order; and
  - article 18 in the 2005 Order which has been split into articles 24 to 27 in the 2006 Order.
- article 4(15) of the 2005 Order has been split out so that it forms a separate article 21 in the 2006 Order.

## **8. Impact**

8.1 A Regulatory Impact Assessment is attached to this memorandum.

8.2 The changes will affect all licensed electricity suppliers in England and Wales. They will also affect generators of renewables electricity in England and Wales who claim ROCs.

8.3 The Electricity Act requires us to consult, before the Order is made, with certain bodies, comprising Ofgem, the Gas and Electricity Consumer Council,

electricity suppliers to whom it would apply and generators of electricity from renewable sources.

8.4 A draft of the 2006 Order went out to consultation for a period of 12 weeks starting on 16 September 2005 and a total of 98 responses were received. A summary of the responses received and also copies of all the non-confidential responses can be found at [http://www.dti.gov.uk/renewables/renew\\_2.2.5.htm](http://www.dti.gov.uk/renewables/renew_2.2.5.htm)

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# **Regulatory Impact Assessment** **Renewables Obligation Order 2006**

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## 1. TITLE OF PROPOSAL

The Renewables Obligation Order 2006.

## 2. PURPOSE AND INTENDED EFFECT OF MEASURE

2.1 The purpose of the Renewables Obligation Order 2006 is to implement changes to the existing Renewables Obligation Order following the Renewables Obligation (RO) Review. It is intended that subject to parliamentary approval the Renewables Obligation Order 2006 will come into force on 1 April 2006. The RO Review sought to ensure that the RO continues to work as cost effectively as possible in stimulating the generation of renewable electricity and thereby contributes to reducing the UK's carbon dioxide emissions up to 2010 and beyond. The RO Review statutory consultation document set out proposals for a limited number of changes to the Renewables Obligation Order (ROO). Amendments to the ROO are now being made in the following areas:

- **Eligibility rules in the area of energy from mixed wastes.** The changes here aim to deliver some additional renewable generation from biomass and mixed wastes without undermining the wider operation of the RO
- **Processes relating to the administration of the Obligation.** The changes here aim to improve the administration of the Obligation and reduce regulatory burdens on companies that benefit from or are required to comply with the Obligation.

2.2 This Regulatory Impact Assessment (RIA) assesses the impact of these changes. The statutory consultation also set out some proposals which are not being taken forward in the ROO 2006 and details of these are also set out later in this RIA.

2.3 The RIA begins with some relevant background on the Renewables Obligation, how it is administered and the recent Review. Subsequent sections of the RIA discuss the individual amendments to the Order in more detail.

# **PART 1 – BACKGROUND TO THE RENEWABLES OBLIGATION AND GENERAL ISSUES**

## **3. POLICY BACKGROUND**

3.1 The Renewables Obligation is the Government's main policy measure to encourage the development of electricity generation capacity using renewable energy sources in the UK. It is underpinned by a substantial package of financial and non-financial supporting mechanisms and active assistance to the industry to develop its competitive potential. The Obligation has already provided and will continue to provide, an impetus for the new renewable generating capacity that will be needed to meet the UK's current 10% target for electricity produced from renewable energy sources and as a basis for further reductions in carbon dioxide emissions.

3.2 The Renewables Obligation was introduced in 2002. The details of the Obligation are contained in the Renewables Obligation Order 2005 in England and Wales, the Renewables Obligation (Scotland) Order 2005 in Scotland and the Northern Ireland Renewables Obligation Order 2005. RIAs were produced for the implementation of the Obligation in England & Wales and Scotland in 2002, for the amendments to the Obligation in 2004 and for the new powers set out in the Energy Act 2004 and for the Consolidated Order 2005 (see [www.dti.gov.uk/access/ria/index.htm#energy](http://www.dti.gov.uk/access/ria/index.htm#energy)).

3.3 The Renewables Obligation is a key part of the Government's policies to reduce CO<sub>2</sub> emissions and tackle climate change. The Obligation requires licensed electricity suppliers to ensure that specified and increasing amounts of the electricity they supply are from renewable sources, rising to 15.4% in 2015/16. Without the financial support provided by the Obligation, most forms of renewable electricity would not be economic and the Government would not achieve its targets for increasing the supply of electricity from renewable sources. The Government believes that, through the support of the Obligation, renewable sources of electricity will become increasingly economic over time

and will play an increasing part in the Government's efforts to reduce carbon emissions and address climate change.

3.4 The Government committed in the 2003 Energy White Paper to undertake a Review of the Renewables Obligation in 2005 to assess its effectiveness after 3 years of operation. This Review is now complete and the Renewables Obligation Order 2006 sets out in legislation the changes to the RO resulting from the Review.

## **4. REGULATORY BURDENS & COMPENSATORY SIMPLIFICATION**

4.1 The details of the Renewables Obligation is already set out in secondary legislation, which was introduced in 2002, with subsequent amendments in 2004 and 2005. The major regulatory burden imposed by the Renewables Obligation is that, in order to provide additional support for the generation of electricity from renewable sources, costs to all electricity consumers are increased. These costs are capped by the level of the Renewables Obligation and the level of the "buyout" price in the RO. The previous RIAs referred to in paragraph 3.2 above considered the costs and benefits of the introduction and subsequent extension of the Renewables Obligation at the time that those measures were introduced. The ROO 2006 does not contain any increases in Obligation levels or any changes to the buy-out price, and there are no other changes considered in this RIA which will create additional costs for electricity consumers.

4.2 Aside from issues of costs to consumers, the Renewables Obligation imposes some regulatory burdens on renewable generators and the electricity supply industry in relation to the administration which is required to benefit from and comply with the scheme. The amendments to the ROO 2006 include a number of detailed changes that will make it easier for renewable generators to benefit from the Obligation and electricity suppliers to comply with it. This will reduce the regulatory burdens on business.

The full list of changes being made to the ROO are detailed briefly below:

- a) modifications to the waste eligibility provisions to allow Renewables Obligation Certificates (ROCs) to be issued for the electricity generated from the biodegradable element of waste by certain combined heat and power generating stations;
- b) amendment to the definition of “biomass” so that only 90% of a substance has to have been derived from plant or animal matter to qualify as biomass rather than the previous level of 98%;
- c) new provisions setting out a pre-accreditation procedure for generating stations which have not yet been commissioned;
- e) amendments to the ROC issue procedure allowing Ofgem greater flexibility in relation to the late issue of ROCs and correction of data errors;
- f) simplification of existing provisions so that generators only have to submit an annual rather than monthly declaration to Ofgem confirming various details relating to electricity in respect of which ROCs have been claimed;
- g) provision for Ofgem to allow reduced fuel sampling requirements for generators using established fuels;
- h) alterations to the timetable for suppliers submitting their yearly compliance data and to the timetable for Ofgem recycling the buyout fund and late payment fund;
- i) an amendment to the definition of “input electricity” to prevent the “double counting” of ROCs being claimed from the generation of electricity from hydrogen;

- j) a requirement that Ofgem publish information on ROCs claimed by generators but not yet issued.

4.3 In total these changes aim to improve the operation of the scheme and will help to ease the burden on companies who are involved in either benefiting or complying with the Renewables Obligation. Some of the changes have the potential to increase costs for Ofgem, the administrator of the Obligation, and any such additional costs would be passed on to the electricity industry through increased licence fees. However, where such changes are being implemented it is because they have the potential to reduce burdens (and thus costs) for companies operating within the Obligation framework. Moreover many of the changes should reduce administrative costs for both Ofgem and companies. The Renewable Energy Association (REA) – a leading trade association for renewable generators – has confirmed that, whilst the beneficial impact is hard to quantify, the proposed amendments to the administration of the Obligation have the broad support of the industry, and should help to improve the operation of the scheme for participating companies. There are no changes being brought forward which will materially increase the administration or compliance costs for companies or organisations involved in benefiting from or complying with the Renewables Obligation.

## **5. BUSINESS SECTORS AFFECTED BY THE RENEWABLES OBLIGATION**

5.1 The main business sectors affected by the Renewables Obligation are companies involved in the generation of renewable electricity and companies involved in the supply of electricity to all electricity consumers. Users of biomass materials for non-energy generation purposes may be affected through increased competition for these materials. Large consumers of electricity may be particularly affected given that the Renewables Obligation increases the cost of electricity.

5.2 As noted above there are no changes which would further increase the cost of electricity to consumers. A considerable number of changes will ease the administrative burden on companies who benefit from or must comply with the Renewables Obligation. Reduction of the 98% rule for the definition of biomass (see para 14.1) should increase supplies of biomass fuels eligible for the Renewables Obligation and may therefore ease competitive pressures for some industries active in this area.

## **6. ISSUES OF EQUITY AND FAIRNESS**

6.1 The Renewables Obligation is a market-based mechanism whose rules apply in a non-discriminatory way to affected companies in the renewable energy and electricity sectors. This will remain the case with all the changes contained in the ROO 2006.

## **7. CONSULTATION WITH SMALL BUSINESS: THE SMALL FIRMS' IMPACT TEST**

7.1 The major regulatory impact on the large majority of small businesses arising from the Renewables Obligation comes from the increased costs of electricity which affect all electricity consumers. There are no changes contained in the ROO 2006 which will give rise to further increases in electricity costs, for small businesses or any other consumers of electricity.

7.2 A much smaller subset of small businesses active in the generation of renewable energy and/or the supply of electricity to customers in the UK are likely to be more affected by the changes to the RO. Prior to and following the publication of the preliminary consultation and then the statutory consultation the DTI has held a wide range of meetings with relevant stakeholders, companies and trade associations. These included small firms and organisations who represent small firms active in these sectors. The DTI has also received more than 150 responses to the preliminary consultation and a further 104 responses to the recent statutory consultation.

7.3 As a result of these consultations the Government does not consider that the amendments to the ROO are likely to give rise to any specific concerns for small businesses operating in the affected sectors. The range of administrative simplifications have been welcomed by smaller generators of renewable electricity – which in many cases will also be small businesses.

## **8. COMPETITION ASSESSMENT**

8.1 The Renewables Obligation is a market based instrument which operates in a competitive market for electricity. The rules of the RO apply in a non-discriminatory way to all affected companies in the renewables industry and electricity sector. This will remain the case with all the amendments to the ROO and there are no changes that will be likely to have any material impact on competition in the electricity market.

## **9. ENFORCEMENT AND SANCTIONS, COMPLIANCE & MONITORING**

9.1 The Renewables Obligation Orders are administered and enforced by Ofgem. Non-compliance with the Obligation is considered as a breach of a 'relevant requirement' of a supplier's licence and Ofgem may impose appropriate sanctions. Ofgem reports annually on its administration of the Obligation and conducts regular audits in relation to compliance with the Obligation. The DTI is responsible for monitoring of the impact of the Obligation on the development of renewable energy and collects detailed information on growth in renewable energy generation and projects under development.

9.2 There are no changes to the RO which will increase the burdens on business through imposition of additional enforcement or inspection measures. Nor are there any new powers of sanction proposed. A number of



proposals are being brought forward to ease the process of benefiting from or complying with the Renewables Obligation.

## **10. OTHER REGULATORY IMPACT ISSUES**

10.1 The ROO 2006 brings forward a number of limited proposals for changes to the operation of the Renewables Obligation. We do not consider that any of the proposals give rise to any negative impacts in relation to health, the environment or race equality issues, or are likely to have a material impact on the rural economy.

## **11. POST-IMPLEMENTATION REVIEW**

11.1 The Government will continue to monitor the performance of the Renewables Obligation and liaise closely with Ofgem on issues relating to the administration of the Obligation and compliance with it. This will include monitoring the impact of the changes which are contained within this RIA. The Government has shown its willingness in this and in previous years to bring forward adjustments to the Obligation to improve its effectiveness and this will remain the case, while balancing the needs of investors and developers in renewable energy to have a stable and consistent regulatory framework which avoids unnecessary changes.

11.2 While there are no current plans for a further fundamental review of the RO there is likely to be a further change to the ROO in 2007. This is to allow changes for small generators which were proposed as part of the Review statutory consultation but which cannot be brought in until the appropriate primary legislation is in place. The primary legislation is currently going through Parliament and subject to Parliamentary approval this will then allow for the secondary legislation (ie the ROO) to be amended.

11.3 The Review Statutory Consultation also proposed reducing support for future landfill gas projects. Further consultation work will take place on this issue also with a view to making final decisions and implementation into legislation in 2007.

## **12. CONSULTATION**

12.1 The Government consulted in the summer of 2004 on the terms of reference for this Review and these were finalised in November 2004. The Government then published a preliminary consultation document in March 2004, which set out a range of options for change in the areas covered by the Review. A 12-week period of consultation and discussion with a wide range of stakeholders followed, including in particular consultation and meetings with companies and trade associations active in the areas of renewable energy generation and electricity supply. Following the analysis of consultation responses and further work within Government on different options a Statutory Consultation was published which brought forward a range of specific proposals for amendments to the Renewables Obligation Order and consulted on their implementation. Copies of the consultation documents and associated documents can be found at [www.dti.gov.uk/renewables](http://www.dti.gov.uk/renewables) .

12.2 The amendments to the ROO have also been notified to the European Commission for State Aids purposes and received State Aids Clearance.

## PART 2 – CONSIDERATION OF SPECIFIC PROPOSALS

### 13. SUMMARY OF COSTS AND BENEFITS OF PROPOSALS

13.1 The changes to the Obligation set out in this RIA are quite complex in detail but, overall, represent relatively limited change to the regulatory framework created by the Renewables Obligation. The individual changes are considered in more detail below. The table below presents a summary assessment of the major costs and benefits of the amendments.

<b>Amendment Area</b>	<b>Key Benefits</b>	<b>Additional financial costs to electricity consumer?</b>	<b>Other costs?</b>
Amendments to RO eligibility rules in the area of biomass and mixed wastes	<p>Additional flexibilities for biomass/waste generators</p> <p>Potential for additional waste wood to be used for power generation.</p> <p>Potential for additional generation from energy from waste plants using CHP</p>	No	Potential for some impacts on confidence in stability of Renewables Obligation, but manageable as changes are limited in scope.
Amendments to Administrative processes within the Obligation	Reduced regulatory burdens on business	No	Some limited costs, particularly affecting Ofgem, arising from adjustments to existing procedures

13.2 Further detailed information on each amendment and the alternative options considered during the Review is given below.

## **14. ENERGY FROM MIXED WASTES**

### **What are the changes?**

14.1 Two relatively limited changes to the RO eligibility rules in the area of mixed wastes are being made.

- Amending the definition of biomass from a fuel which is over 98% plant and animal matter to a lower figure of 90%.
- Extending RO eligibility to mixed waste plants using good quality Combined Heat and Power (CHP).

### **Why are the changes being made and what are the benefits?**

14.2 Reducing the 98% rule to 90% will offer the potential for a wider range of fuels which are very largely plant and animal matter in content to be used to generate renewable energy – in particular waste woods which are 90% plus organic matter in content but do not easily meet the 98% threshold. The Waste Recycling Action Programme (WRAP) estimates that around 5-7 million tonnes of wood waste is currently generated per annum. Of this around 1.4 million tonnes were recovered in 2004. WRAP consider that an additional 1.5 million tonnes of high quality waste wood and around an additional 2-3 million tonnes of contaminated waste wood could potentially be recovered – though it would be likely to take many years to build up the infrastructure necessary to divert such large additional volumes of waste wood from landfill. Actual demand from the power sector for such waste woods is also likely to be constrained by a range of other factors including alternative competing uses for the material, the difficulties of developing secure supply chains, issues of contamination and the application of the Waste Incineration Directive (WID).

14.3 Responses to the RO Review statutory consultation presented evidence that a substantial amount of waste wood and other contaminated biomass streams are typically in the range of 93-97% biomass, and as the accuracy of measurement is limited to some degree, the changes to the ROO will allow more of these materials to be brought into the scope of the RO. Guidance on measurement issues relating to contaminated biomass fuel streams will be developed through the DTI/Ofgem Biomass Fuels Working Group.

14.4 In relation to extending RO eligibility to mixed waste plants using Combined Heat and Power (CHP), the Government commissioned additional work undertaken by ILEX Energy Consultants which was published alongside the statutory consultation. This suggested that energy from waste projects utilising CHP would offer net environmental advantages over conventional electricity-only plant but also face additional costs which would justify offering such projects the support of the Obligation. ILEX's work suggests that even with RO support, the development of new energy from waste (EfW) projects utilising CHP would be heavily constrained by a range of factors – in particular the limited number of sites and locations with suitable heat loads and other factors which will influence decisions on the location of energy from waste plants. While there is uncertainty over potential take-up, ILEX present a range of scenarios in which the number of additional ROCs issued could be between 2 and 4% of the obligation in the period 2011-2015, potentially rising to 3-5% of the RO by 2021.

14.5 Respondents to the statutory consultation were evenly split on this issue of whether to include EfW CHP, with a slight majority in favour. The Government considers that the change will be beneficial, given the additional carbon savings which can be achieved if wastes are burned in a CHP plant. The approach the Government is adopting on this issue is similar to the Climate Change Levy, which uses the CHP Quality Assurance scheme. For CHP plants that are fully compliant with the Good Quality benchmark (ie. they have a high efficiency of electricity generation and heat use), they would receive ROCs on all of their biomass-generated electricity. For those plants that are partially compliant (typically with a lower or intermittent heat use), they would receive ROCs on a lower fraction of their electricity generation. This will be determined by the relationship between their qualifying

power output (QPO) and total power output (TPO) in the same manner as for the CCL exemption. For example, a plant that uses a waste stream that is 50% biomass and is 70% CCL compliant (that is QPO is 70% of TPO) would receive ROCs on 35% (70% of 50%) of their electricity generation. The basis for this approach is that it will ensure that eligible projects always receive some ROCs on their electrical output, while maintaining a clear incentive to maximise the efficiency of the project.

14.6 ROC eligibility for EfW CHP projects will be available for both existing and new projects. This will provide an incentive for existing projects to improve their use of heat and could even be an incentive to convert from electricity only to CHP for those in appropriate locations. The QPO and TPO will be based on the most recent certificate held by the generator, but unlike the CCL, we do not intend to introduce an end-of-year reconciliation process<sup>4</sup>.

#### **What are the costs?**

14.7 The Government does not consider that the limited changes being made in this area have any significant costs or negative impacts. There will not be any increase in costs to electricity consumers. Consultation with relevant industry and stakeholders has highlighted some concerns about the potential impact on the supply/demand balance for ROCs from changes in this area – however the relatively limited nature of the proposed changes means that their impact on the ROC market is also likely to be limited. The consultation process has not indicated that there are any other financial or hidden costs associated with these changes.

#### **What are the alternative options?**

14.8 *Do nothing*. This option would offer some benefits in terms of market confidence in the stability of the Renewables Obligation but would mean that the potential for additional renewable generation and flexibility offered by the changes would not be brought forward.

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<sup>4</sup> Further details of the CHP Quality Assurance Scheme can be found at [www.chpqa.com](http://www.chpqa.com)

14.9 *Making the RO neutral to waste.* This would give generating stations additional flexibility to burn mixed wastes without losing RO eligibility for pure biomass fuels burned in the generation station by removing the current constraints in the RO that exclude generating stations fuelled by waste in a variety of circumstances.

14.10 In the RO Review statutory consultation there was substantial support amongst respondents for the policy objectives of this proposal. However, a number of detailed concerns over the implementation and practical consequences of this option were raised during the consultation. There was particular concern over the interaction of this new rule with the existing cap on co-firing; the interaction with a lowered purity requirement for biomass; and the creation of a potentially perverse incentive to segregate wastes before burning them. This can be illustrated by considering a waste stream that is 80% plant and animal matter and 20% plastics – under the neutral to waste option, there would be an incentive to segregate the waste to produce a high purity biomass stream and a waste residue, which could then be burned together, with ROCs being awarded for the biomass fraction. Had the un-separated waste been burned in the same plant, no ROCs would have been awarded.

**14.11 *Make much more broader changes to eligibility rules in this area, allowing the large majority of energy from mixed waste projects to be eligible for ROCs.*** Analysis by ILEX Energy Consultants, published alongside the RO Review preliminary consultation document, suggests that the majority of new energy from mixed waste projects will not need the support of the Renewables Obligation to be economic. In the circumstances this option would be vulnerable to the criticism that the Government was providing unnecessary subsidies, at a cost to the electricity consumer. This option could also give rise to unpredictable but potentially large volumes of new ROCs, with a consequent negative impact on market confidence in the Obligation and the economics of other renewable energy projects. Removing any negative impact would require an increase in the level of the Renewables Obligation, which would impose significant additional costs on electricity consumers.

## **15. ADMINISTRATION OF THE RENEWABLES OBLIGATION**

15.1 A number of detailed amendments and simplifications of administrative processes related to the Renewables Obligation are proposed. These are considered individually in detail below.

### **a) Pre-Accreditation for ROCs**

#### ***What is the change?***

15.2 The amendments to the ROO introduce a system of pre-accreditation for ROC eligibility. This system aims to allow developers of renewable energy projects to have certainty that their developments will be eligible for the support of the Renewables Obligation prior to the financing and construction of such projects.

#### ***Why is this change being made and what are the benefits?***

15.3 At present, for some renewable technologies (eg generation from mixed wastes using advanced conversion technologies) in some situations, there can be uncertainty as to whether a particular design of project or scheme will be eligible for the support of the renewables obligation. This uncertainty can inhibit the development and financing of new renewable projects, or lead to additional costs.

15.4 Responses to the RO Review statutory consultation showed almost unanimous support for this change with most agreeing that the appropriate time for pre-accreditation was after planning consent was obtained.

#### ***What are the costs?***



15.5 Where generators choose to take advantage of the pre-accreditation process this change will result in some additional work for Ofgem in determining whether specific proposals will be eligible for the support of the Obligation prior to construction. Ofgem will also need to make some amendments to their IT systems prior to the changes coming into force, subject to parliamentary approval, on 1 April 2006. The Government considers this an acceptable cost given the clear benefits in relation to potential new renewable energy developments.

***What are the alternatives?***

15.6 ***Do Nothing.*** This option would not resolve the uncertainties mentioned above.

**b) ROC Issuing**

***What is the change?***

15.7 To allow Ofgem greater flexibility in relation to late ROC issuing and data errors where appropriate or where the circumstances are exceptional.

***Why is the change being made and what are the benefits?***

15.8 Currently Ofgem has very limited flexibility when dealing with claims by generators which are either late or where claims were submitted on time but at a later point an error in the data is identified. This can result in ROCs not being issued at all or incorrect numbers of ROCs being issued where issue is based on erroneous data. Providing Ofgem with the flexibility to accept late claims and corrected claims should benefit participants in the market but generators in particular as it introduces a more pragmatic approach to the handling of data and issuing of ROCs. The circumstances where this flexibility will apply will be detailed in guidance.

***What are the costs?***

15.9 There are no significant costs associated with this proposal although generators may not always benefit from the erroneous over-issuing of ROCs as they do under current rules.

***What are the alternatives?***

15.10 ***Do Nothing.*** This option would not deliver the flexibility for Ofgem outlined above and the potential for generators to lose ROCs or to receive incorrect numbers of ROCs due to late applications and errors in data would still exist.

**c) Other simplifications for claiming of ROCs**

***What is the change?***

15.11 This change allows generators to submit the Article 4(10)c declaration, which confirms that renewables electricity on which ROCs are claimed has been supplied to customers in the UK, to be submitted on an annual basis as opposed to monthly.

***Why is this change being made and what are the benefits?***

15.12 This change received unanimous support in responses to the statutory consultation and will ease administrative burdens for both generators and Ofgem, making the process of claiming and issuing ROCs easier. An estimate of the benefit of the change is that it could save up to £300 per site per year.

***What are the costs?***

15.13 There are no costs associated with these proposals.

***What are the alternatives?***

15.14 ***Do Nothing***. The benefits in terms of reduced administrative burdens will not be gained with this option.

**d) Measurement of fuels**

***What are the changes?***

15.15 The Government is making a number of changes to reduce the administrative burden on users of biomass fuels. Firstly by allowing Ofgem to reduce the frequency of requirements to submit sampling data where biomass generators can demonstrate past evidence about the calorific value and biomass purity of a fuel. This approach is consistent with the Government's wider policy of reducing the overall regulatory burden on industry, focusing instead on a risk-based model of enforcement.

15.16 Secondly, the Government is also amending the legislation to clarify that off-site measurement of biomass fuels can be acceptable as the basis for claims for ROCs where Ofgem can be satisfied that the measurements in question are robust and will accurately reflect the calorific value and biomass content of the fuels which are used to generate electricity.

***Why are these changes being made and what are the benefits?***

15.17 The first change – to reduce the sampling requirement for established fuels - will reduce the burden on both generators and Ofgem. This will help make the process of claiming and issuing ROCs easier. In responses to the statutory consultation a large majority of respondents were in favour of this change. An estimate of the potential benefit of the change is that it could save in the region of £5-10k per site per year for some biomass generators.

Ofgem will consult separately on the guidance for this which will be developed through the DTI/Ofgem Biomass Fuels Working Group.

15.18 The use of off-site measurements may allow generators of biomass to develop more efficient processes for the supply of biomass to their plants. This change was also strongly supported in responses to the statutory consultation and development of guidance will be through the DTI/Ofgem Biomass Fuels Working Group.

***What are the costs?***

15.19 There are no costs associated with reducing the sampling requirement for established fuels. However, assessing the robustness of off-site measurements of biomass will give rise to some additional work for Ofgem through the development of new procedures and their implementation - for example, auditing processes for off-site measurement. At the same time the use of such measurements has the potential to reduce costs for industry.

***What are the alternatives?***

15.20 ***Do nothing.*** The benefits in terms of reduced administrative burdens will not be achieved.

15.21 ***Allow declarations for biomass measurement.*** The statutory consultation contained a proposal to allow Ofgem to accept a declaration from generators in lieu of certain supporting paperwork relating to claims for ROCs in respect of electricity generated from biomass. This proposal was generally considered to be of limited value by respondents as the data would have to be collected for audit purposes, and most generators would rather have the certainty that comes with submitting it to Ofgem, and were concerned that the proposal could increase the risk of ROC revocation.

## **e) Timetable for supplier compliance with the Obligation**

### ***What are the changes?***

15.22 The amendment to the ROO is to speed up the timetable for supplier compliance by requiring electricity suppliers to notify DTI and Ofgem simultaneously in June of their electricity sales levels for the previous Obligation period (e.g. in June 2007 for the Obligation period 2006/7). The new timetable would be as follows:

- Suppliers notify DTI and Ofgem of their electricity sales by 1 June
- Suppliers notify Ofgem of the Renewables Obligation by 1 July (this figure will include Article 13 – sale and buyback – figures which are not available by 1 June)
- Suppliers demonstrate compliance with the Obligation by 1 September through presentation of ROCs or payment of buyout
- Late payment period runs from 1 September to 31 October
- Ofgem recycle buyout fund by 1 November
- Ofgem recycle late payment fund by 1 January

### ***Why is the change being made and what are the benefits?***

15.23 The change to the timetable for supplier compliance will speed up the time between the end of the obligation period and the recycling of buyout payments. This should in turn increase the cash flow to ROC holders and decrease the risk of supplier default impacting upon the size of the buyout fund. In responses to the statutory consultation there was strong support for revising the compliance timetable, bringing forward buyout payments and buyout recycling.

### ***What are the costs?***

15.24 There are no costs (only benefits) to renewable generators from this change. For electricity suppliers their financial position will depend on whether they are likely to be net beneficiaries or losers from the process of recycling of buyout funds. Net beneficiaries will benefit from faster recycling. Net losers may face additional costs. This is consistent with the Government's objectives of encouraging electricity suppliers to meet as much of their renewables obligation as possible from renewable electricity as opposed to paying the buyout.

***What are the alternatives?***

15.25 ***No change to the current timetable for supplier compliance.*** This option would not deliver the benefits outlined above.

**f) Storage**

***What is the change?***

15.26 The Government is making a minor amendment to the definition of input electricity to avoid the position where electricity generated from hydrogen which is itself produced from electricity generated from renewable sources in effect receives ROCs twice (once from each process).

***Why is this change being made and what are the benefits?***

15.27 The change will close a potential loophole under which electricity consumers would be paying to over-reward some forms of renewable generation. This has been identified as a potential problem as we are not aware of any ROCs being claimed from use of hydrogen. Almost all respondents to the statutory consultation were in favour of this change.

***What are the costs?***

15.28 There are no costs associated with this proposal.

***What are the alternatives?***

15.29 ***Do nothing:*** the potential loophole would remain open under this option.

**g) ROCs Claimed But Not Issued**

***What is the change?***

15.30 That Ofgem will publish the figure for ROCs that have been claimed but not yet issued (in aggregate across all generators) for each Obligation period.

***Why is this change being made and what are the benefits?***

15.31 Where generators provide all required information within the statutory deadline and meet all relevant criteria, Ofgem will issue ROCs in a batch in accordance with its published timetable. There are, however, some circumstances under which the issue of ROCs is delayed. It is possible that where there are delays in the issuing of ROCs this can have an impact on the market and calculations made by market participants with regard to the number of ROCs likely to be issued during a compliance period. It is argued that by publishing a figure for the number of ROCs claimed this would increase transparency in the ROC market. Responses to the consultation on this change showed near unanimous support.

***What are the costs?***

15.32 This change will result in some additional work for Ofgem but the costs of publishing a single figure to show the total number of ROCs claimed but not issued are relatively low.

### ***What are the alternatives?***

15.33 ***Do nothing:*** There are situations where the number of ROCs issued will differ from the number claimed by generators, including occasions when no ROCs at all will be issued. Publishing information on the number of ROCs claimed could, potentially, be as misleading for market participants as the existing situation where no information is available. However, given the very strong industry support for this change it is considered on balance that it would not be appropriate to do nothing.

## **16. AREAS FOR CHANGE CONSIDERED BUT NOT TAKEN FORWARD IN THE 2006 RENEWABLES OBLIGATION ORDER**

16.1 There are two areas – low cost renewable technologies and small generators - where the Government intends to take forward its proposals in 2007 rather than introducing them in the 2006 Order. Details of the proposals are outlined below.

### **a) Low Cost Renewable Technologies**

#### ***What is the proposal?***

16.2 The Government is proposing that, from 1 April 2009, support for new landfill gas projects within the Renewables Obligation should be reduced – with ROC eligibility being limited to a fixed number of years or a fixed volume of output. Analysis by OXERA was published alongside the RO Review statutory consultation document to support that conclusion.

#### ***Why is it being proposed and what are the benefits?***



16.3 The change is being proposed because the Government considers that the majority of future landfill gas projects will not need the full and permanent support of the Renewables Obligation to be economically viable in today's energy market. This conclusion has been supported by independent analysis from Enviro and Oxera which was published as part of the preliminary consultation document. By reducing the support that the Obligation provides to future landfill gas projects, the Government can seek to ensure that the potential for excess subsidy is reduced over time and that the support to renewable energy provided by electricity consumers via the Obligation is targeted most effectively at those projects which need it.

16.4 The mechanism proposed for reducing support for landfill gas may over time be applied to other low cost renewable technologies (such as onshore wind). An approach of this kind has the potential to reduce the need to raise the level of the Renewables Obligation in the future and thus contain the costs to electricity consumers of supporting the development of renewable energy.

#### ***What are the costs?***

16.5 There are no additional costs to electricity consumers arising from the proposal – indeed as noted above the approach adopted should help to contain the costs of the Renewables Obligation to consumers over time.

16.6 There is some risk that, by reducing support for more economic renewable technologies such as landfill gas, there will be a reduction in the confidence of the renewables industry to develop new projects. The Government has sought to mitigate and remove this risk as far as practically possible through a) seeking to ensure that future support levels remain sufficient to allow sound projects to be developed and b) adopting a “grandfathering” approach which means that ROC eligibility rights are preserved at the time that investments are made.

#### ***Why is the proposal not being introduced in the 2006 Order?***

16.7 Although most respondents to the consultation expressed their preference that support for landfill gas should not be tapered, no convincing evidence was presented to show that future landfill gas projects would be uneconomic without the full support of the RO. We therefore remain committed to reducing support for future landfill gas projects from 1 April 2009.

16.8 Respondents were almost evenly split as to whether to taper support by output or time, with a number of practical issues raised in relation to both. Given the difference of views, we plan to hold further discussions on the precise mechanism for tapering over the coming year, with final decisions and implementation into legislation in 2007.

**What are the alternative options?**

16.9 **Do Nothing.** This option would mean that future landfill gas projects continued to benefit from the full support of the Renewables Obligation. This option would have the benefit of simplicity and retaining the full confidence of investors and developers active in the area of landfill gas. However it would not address the issues of potential over-subsidy through the Renewables Obligation and the potential benefits to consumers from targeting support more effectively over time.

16.10 **Identify a different mechanism for reducing support for more economic renewable technologies within the Obligation.** The RO Review preliminary and statutory consultation process did not bring forward clear and worked up alternatives to the mechanism proposed.

**b) Administrative arrangements for smaller generators**

**What are the proposals?**

16.11 The Government proposes to introduce measures that will make it easier for small and micro-generators to benefit from the Obligation (in this

context small generators are those with a declared net capacity of 50 kW or less). Two changes are proposed:

- a) allowing agents to act on behalf of smaller generators in seeking accreditation and claiming ROCs, and allowing ROCs to be issued to agents; and allowing agents to amalgamate the output of smaller generators
- b) removing the requirement for a sale and buyback agreement which small generators are required to have with a supplier in order to claim ROCs.

***Why is it being proposed and what are the benefits?***

16.12 The changes which allow agents to act on behalf of generators should reduce administrative burdens on small and micro-generators – and provide them with the option of an easier route to obtaining the benefits of ROC eligibility. The proposals also have the potential to reduce administrative burdens on Ofgem over time. The removal of sale and buyback agreements would also remove an administrative burden. There is also evidence that small generators find it difficult to obtain these agreements. Almost all respondents to the statutory consultation agreed that the sale and buyback requirement should be removed for small generators and all respondents who commented on the proposals in relation to agents supported the proposed change.

***What are the costs?***

16.13 The consultation process has not indicated that there are any costs associated with the introduction of this proposal. Moreover trade associations and smaller generators consider that the proposals have the potential to reduce costs and administrative burdens for smaller generators.

***Why is this proposal not being taken forward in the 2006 Order?***

16.14 Before these proposals can be implemented primary legislation is required which would then allow the appropriate amendments to be made to the Renewables Obligation Order. We aim to take the primary legislation forward through amendments to the Climate Change and Sustainable Energy Private Members Bill which would give the Government broad powers to make such changes in these areas in the future, through further amendments to the RO Order. Subject to the successful passage of the Bill through Parliament we intend to introduce these changes from 1 April 2007. We will consult on the details of the changes later in 2006.

***What are the alternatives?***

16.15 ***Do nothing:*** the benefits in terms of reduced administrative burdens and encouraging small generators will not be achieved with this option.

## **17. SUMMARY AND CONCLUSION**

17.1 The changes contained in the ROO 2006 represent relatively limited amendments to the Renewables Obligation. This is consistent with the Government's commitment, as set out in the terms of reference for the Review, to keep changes to a minimum.

17.2 The major regulatory impact of the Renewables Obligation arises from the increased costs it imposes on electricity consumers – in return for stimulation of the development of renewable energy sources for power generation. There are no changes arising from the Review to increase those costs at this stage. The Government considers that these relatively limited changes will have benefits in terms of increasing renewable generation from biomass and wastes, improving the cost effectiveness of the Obligation over time and improving and simplifying some of the administrative processes relating to the Obligation. The Renewable Energy Association has confirmed that whilst the beneficial impact is hard to quantify, the proposed amendments

to the administration of the Obligation have the broad support of the industry and should help to improve the operation of the scheme for participating companies.

**I have read the Regulatory Impact Assessment and I am satisfied the benefits justify the costs.**

**Signed by the Minister for Energy**

***Malcolm Wicks***  
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**Date**

**26 January 2006**  
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