DEPARTMENT OF ENERGY & CLIMATE CHANGE

Statutory Consultation on the Renewables Obligation Order 2011 (ROO 2011)

&

Consultation on changes to Renewable Energy Guarantees of Origin (REGOs)

Contents

Executive summary:

1. The Coalition Agreement makes clear our commitment to maintaining a banded Renewables Obligation (RO) alongside committing to implementing a full feed-in-tariff, with the aim of securing a significant increase in investment in renewables.

2. This will ensure that we are able to meet both our legally binding renewable energy target of sourcing 15% of our total energy from renewables by 2020, and our longer term decarbonisation objectives.

3. To date the RO has been the Government's main mechanism for incentivising investment in large scale renewable electricity. Since its introduction in 2002, the RO has supported over 6.3GW of installed capacity and been successful in tripling the level of eligible renewable generation.

4. It has been subject to a number of changes since its introduction, the most significant being the introduction of banding in April 2009, which brought in differentiated levels of support for different technologies.

5. This consultation document sets out a number of further technical amendments to the RO in order to maintain investor confidence, ensure the RO continues to work efficiently and effectively, and transpose the EU Renewable Energy Directive (RED) as we are legally required.

6. This consultation proposes:

   - The **introduction of phased support for offshore wind projects**, allowing developers to register groups of turbines in phases;

   - **Introduction of mandatory sustainability standards for biomass.** There would be a transition period of mandatory reporting against the criteria from April 2011, with eligibility for Renewables Obligation Certificates (ROCs) from April 2013 restricted to sustainably sourced biomass;

   - **Introduction of sustainability criteria for bioliquids** in line with the mandatory requirements introduced by the RED.

7. Subject to the responses received to this consultation we are aiming to introduce these changes via the Renewables Obligation Order 2011 (ROO 2011), which would be implemented on 1st April 2011. The changes will be contingent on obtaining State Aid approval from the European Commission and subject to Parliamentary process. We will publish a draft amending ROO 2011 during the consultation period.

8. This consultation document is also being used to issue calls for evidence on:

   - Whether additional RO support should be extended to stations using refurbished parts or replacing major components;

- How to support Combined Heat and Power (CHP) stations in light of any future policies the Government may introduce to support renewable heat (responses to the Renewable Heat Incentive (RHI) consultation are still being considered and Government will set out detailed options on how it proposes to take forward action on renewable heat through the Spending Review. However, in order to meet the legislative timetable to make changes to the RO we need to consult ahead of deciding how to take forward action on renewable heat);

- Whether there is a need to adjust the size of the Mutualisation cap and trigger that exists to protect ROC values in event of a shortfall in the buyout fund.

9. The evidence received will feed into the scheduled banding review of RO support levels (due to begin in October 2010) and/or help inform if further changes to the legislation are necessary.

10. The RO is a devolved policy, working on the basis of three complementary obligations; one for England and Wales, one for Northern Ireland and one for Scotland. Any changes following this consultation will apply to the RO for England and Wales. The Scottish Executive and Northern Ireland Assembly will be carrying out their own respective consultations before finalising their policy. However, the Government and both administrations recognise the need for a consistent approach to maintain investor confidence.

11. **Part A** of this consultation, **on changes to the RO**, is relevant to energy generators, energy suppliers, energy consumers and their representatives, network operators, Ofgem, environmental and energy efficiency organisations, energy service companies, installers, the construction sector, finance institutions and other stakeholders with an interest in the renewable energy business.

12. **Part B** of this document, consults on the implementation of various changes to **Renewable Energy Guarantees Of Origin (REGOs**). These changes are required under the Renewable Energy Directive to be implemented by 5th December 2010 and include:

- changing the unit of measurement of a REGO from kilowatt hour to megawatt hour;

- expiry of the REGO 12 months from first production of the electricity for which it is issued; and

- changes to information included in the REGO.

13. The changes to REGOs will be contingent on parliamentary approval, and would apply to REGOs issued in Great Britain. Part B of this consultation, on changes to REGOs is relevant to energy suppliers, energy generators, Ofgem and others with an interest in renewable energy.

14. To allow for implementation by 5th December, **note that Part B of the consultation relating to REGOs only, closes on 7th September.** Therefore any views on our proposed implementation of these changes should be submitted to DECC by that date. Parts A and B of the consultation are not related.

How to respond

The closing date for responses for:

Part A: changes to the RO is **19th October 2010**
Part B: changes to REGOs is **7th September 2010**

Online responses are preferred and for Part A can be submitted at the following link: http://econsultation.decc.gov.uk/decc-policy/roo2011.

Responses to Part B can be submitted at the following link: http://econsultation.decc.gov.uk/decc-policy/regos

If you are unable to submit your response online please submit this in an email to: rfi@decc.gsi.gov.uk. Please use the template provided to record your response, which can be found at: http://www.decc.gov.uk/en/content/cms/consultations/RO/RO.aspx.

Alternatively, hard copy replies should be sent to:

RFI Team, Renewables Directorate,
Department of Energy and Climate Change,
4th Floor, Area A/B,
3 – 8 Whitehall Place,
London, SW1A 2AW.

Additional copies

You may make copies of this document without seeking permission. Further printed copies of the consultation document can be obtained from:

RFI Team, Renewables Directorate,
Department of Energy and Climate Change,
4th Floor, Area A/B,
3 – 8 Whitehall Place,
London, SW1A 2AW.
Telephone: 0300 068 6833

An electronic version can be found at:
http://www.decc.gov.uk/en/content/cms/consultations/RO/RO.aspx
Other versions of the document are available on request.

Confidentiality and Data Protection

When this consultation ends, members of the public may ask for a copy of responses under freedom of information legislation. If you do not want your response – including your name, contact details and any other personal information – to be publicly available, please say so clearly in writing when you send your response to the consultation. Please note, if your computer automatically includes a confidentiality disclaimer, that will not count as a confidentiality request.

Please explain why you need to keep details confidential. We will take your reasons into account if someone asks for this information under freedom of information legislation. But, because of the law, we cannot promise that we will always be able to keep those details confidential.

We will summarise all responses and place this summary on our website at www.decc.gsi.gov.uk. This summary will include a list of names of organisations that responded but not people's personal names, addresses or other contact details.

Help with queries

Please direct any queries about this consultation to our dedicated e-mail address:

rfi@decc.gsi.gov.uk,

or in writing to:

RFI Team, Renewables Directorate,
Department of Energy and Climate Change,
4th Floor, Area A/B,
3 – 8 Whitehall Place,
London, SW1A 2AW
Telephone: 0300 068 6833

If you have any comments or complaints about the consultation process, please address them to:

Ferry Lienert
DECC Consultation Coordinator
Area 6A
3 Whitehall Place
London, SW1A 2AW
Email: Consultation.coordinator@decc.gsi.gov.uk

A copy of the Code of practice on Consultations can be found at:
www.decc.gov.uk/Media/viewfile.ashx?FilePath=Consultations\1_20090408170031_e_@@_codepracticeconsultation. pdf&filetype=4

Part A: Statutory Consultation on the Renewables Obligation Order 2011 (ROO 2011)

NOTE CLOSING DATE 19th OCTOBER 2010

Chapter 1. Offshore wind phasing

Summary	We propose to allow operators of large offshore wind generating stations to register for Renewables Obligation Certificates (ROCs) in phases of operational capacity to account for long construction periods. The 20 years support would apply to up to five phases, starting from the date of full Renewables Obligation (RO) accreditation and then once a year for a maximum of five years. Generators would be eligible to register operational capacity once a year for a maximum of five years for a single offshore wind generating station, and for large sections of additional capacity added.

Issue

15. Since the introduction of the 20 year limit on support under the RO earlier this year, developers of offshore wind stations argue have maintained that due to long construction periods, they are unable to receive an early ROC stream if they want the full 20 years support for their total capacity, affecting their cash flow and potentially economic viability.

Background

16. When the RO was introduced in 2002, the original end date for support was 2027. However, in light of the 2020 targets and the need to encourage investment in renewables up to 2020, this was recently extended to 2037. A limit of 20 years support for accredited generating stations was introduced in parallel (subject to the 2037 end date) to avoid overcompensation.

17. Under the current system Ofgem are, following application from the operator, able to accredit[1] a station at any point after they have commissioned[2]. On application, Ofgem will accredit the total installed capacity of a station upfront, and, as set out in the current RO Order, the 20 year support starts for the whole station's capacity on that date. The same applies to additional capacity.

18. Operators have the choice of when to approach Ofgem with an application for RO accreditation. Provided that the generating station is commissioned and all other eligibility

[1] Accreditation is the process by which Ofgem recognise a station as eligible for support under the RO.

[2] Commissioned means the station has demonstrated to Ofgem it is capable of commercial operation

requirements are met they may choose to apply for accreditation when the generating station first produces eligible renewable electricity. For offshore wind stations, this would usually be when the first turbines are in operation.

19. Offshore wind stations are often constructed over a number of years due to the scale of the projects, and the challenges faced with operating in the marine environment. The UK offshore wind industry also face an additional challenge with an underdeveloped supply chain that can add to overall project build time.

20. Offshore wind developers are keen to start receiving RO support as soon as possible for financing purposes. If they accredit as soon as they commission and start producing eligible electricity from the first turbines, the 20 years of support starts before all the turbines are built or operating. With this in mind, the majority of the capacity will receive less than 20 years support, with the final turbines constructed on large windfarms potentially receiving as little as 15 years support on a five year build.

21. Alternatively, in order to ensure all turbines received 20 years support, operators may wait until the whole generating station has been constructed before applying for accreditation. Whilst this would ensure maximum support was received, it would delay receipt of ROC income, affect projected cash flow and potentially jeopardise the viability of some projects.

22. Therefore, ideally offshore wind developers would like to be able to 'phase' their ROC support so they receive 20 years for phases of turbines as they are constructed and start producing eligible renewable electricity.

23. Most other technologies do not face this issue, with all the installed capacity being commissioned within a shorter space of time. Although onshore wind stations may also be commissioned before all the turbines are in place, because they tend to be smaller and do not have the same restrictions on building imposed by the offshore environment, construction does not take as long. Onshore wind stations are also often extended in phases and this new capacity i.e. over and above the original consented capacity, can be recognised as additional capacity under the current legislation. We are therefore of the view that to extend the phasing to other technologies is not necessary and would also incur unnecessary extra administration costs.

24. Under the current arrangements, the end date of the RO is 2037, so this will cease to be an issue from 2017, as any new capacity will receive less than 20 years support. From this point on, operators will want to accredit all their capacity upfront as the total length of support will be reducing each year. E.g. If a station accredits in 2020, it will receive 17 years support.

Proposal

25. In order to account for the longer construction periods associated with building in the offshore environment, we propose to amend the legislation to allow the operational capacity of offshore wind generating stations to be registered in phases, with each phase receiving 20 years support (subject to the 2037 end date of the RO). We are seeking views on how this should work in practice.

26. Allowing each turbine or string of turbines to receive 20 years support would be administratively more complicated and expensive than the current position. We are therefore proposing that offshore wind stations should be allowed to register capacity that has been brought into operation at one point every year for a maximum of five years. We propose this registration should occur on the anniversary of the accreditation date, in line with the current rules governing 20 years of RO support. If an offshore generating station is going to take over five years to build the generator will need to register all remaining capacity as part of the final phase, on the fifth anniversary of accreditation.

27. We believe five years presents a balance between recognising large projects are constructed in stages, and incentivising projects to be built, commissioned and deployed as quickly as possible. Limiting the number of years should also help to prevent gaming of the system whereby investors install a few turbines to secure a particular ROC band, but do not build the rest of the windfarm for some years. We welcome views on whether a minimum accreditation capacity should be applied to this policy to deter small wind projects phasing support which would be unnecessarily costly from an administrative point of view, and whether a minimum proportion of the accredited capacity should be registered in phase one in order for that project to secure a particular band.

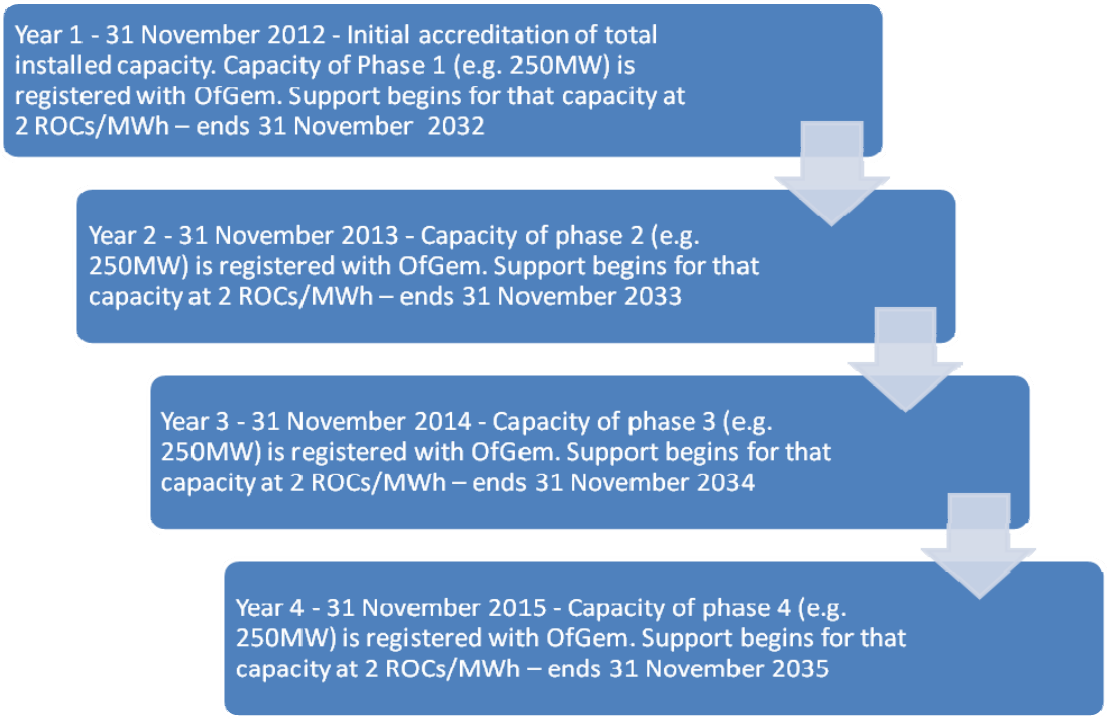
28. Allowing phasing of RO support will not change the process by which Ofgem accredit a station or recognise additional capacity. The phases will be portions of the total accredited capacity of the station (or the additional capacity). We welcome views on what requirements should be made on how much, or how little, capacity may, or must be registered in each phase and whether each phase should be metered separately to prevent operators overstating the electricity, in any one phase, eligible for ROCs.

29. In line with the current accreditation process, a station would be accredited at the outset for the full consented capacity. The band for each of the phases will be the same as the band awarded at the initial accreditation of that capacity.

30. For example, if a generating station was granted full accreditation on 25th September 2012, they would receive 2 ROCs/MWh for the total capacity of that station regardless of whether the band changed in 2013/14 (factoring in our policy to grandfather offshore wind). See figure 1 for an example of how this could work in practice.

31. Our calculations on support levels for the RO already assume the whole station's capacity receives the full 20 years support. However, because in reality stations may apply before all the capacity is fully operational, this change may result in a small increase in the total number of ROCs issued. There would also be a very small increase in administration costs, which would be paid for out of the buyout fund.

Figure 1: Example for station A, accredited for 1000MW, beginning generation in 2012



Questions	
1.	**Do you agree with the proposal to phase support for offshore wind to account for the longer construction period?**
2.	**Do you agree that phasing of capacity should be limited to once a year for a maximum of five years?**
3.	**How do you think the capacity to be included in each phase should be determined e.g. split equally or based upon operational capacity? Please give your reasons.**
4.	**Do you think each phase should be metered separately or would a *pro-rata* approach be more appropriate?**
5.	**Do you agree that the band applied to each phase should be the same as the band awarded at initial accreditation of that capacity?**
6.	**Do you think a minimum accredited capacity or any other criteria should apply to this policy i.e. the station or additional capacity must be a certain size to qualify? If so, what do you consider this should be?**
7.	**Do you agree that phased support should only be available for offshore wind generators?**

Chapter 2. Sustainability criteria for biomass

Summary	We propose to introduce sustainability criteria for the use of solid biomass and biogas fuel. We are proposing a minimum 60% Greenhouse Gas ("GHG") emission saving for electricity generation using solid biomass or biogas relative to fossil fuel (target of 285.12 $kgCO_2$/MWh or lower) and general restrictions on using materials sourced from land with high biodiversity value or high carbon stock. Generators below 1MW will not need to comply with the sustainability criteria. The sustainability criteria will not apply to the use of biomass or biogas made from waste, landfill gas or sewage gas. Following a transition phase of mandatory reporting against the sustainability criteria, eligibility to receive support under the RO for solid biomass and biogas will be linked to meeting the sustainability criteria from April 2013.

Issue

32. Uncertainty about the introduction of sustainability criteria has been raised as one of the main barriers to investment in large biomass electricity projects. Investors have been keen to have early sight of proposed sustainability criteria to ensure that their projects will be compliant.

33. The Renewable Energy Directive (RED) has now set mandatory sustainability criteria for bioliquids (and biofuels). However, the introduction of sustainability criteria for solid biomass and biogas is at the discretion of each member state, with the Commission only giving recommendations for potential criteria as outlined in their 25th February 2010 report: *http://ec.europa.eu/energy/renewables/bioenergy/sustainability_criteria_en.htm*.

34. There appears to be broad support within the renewable generating industry for introducing solid biomass and biogas sustainability criteria to end uncertainty around whether and how such criteria would be applied.

35. Support is also more widespread, with NGOs, planning authorities and the finance sector generally encouraging the introduction of sustainability criteria for a variety of reasons.

These range from preventing deforestation and optimising GHG emission savings, to avoiding unwanted impacts on global food supplies and securing public support for the growth of the bioenergy we need to meet the UK's goals for energy security, carbon reductions and new green jobs.

36. However, while support for introducing sustainability criteria for solid biomass appears to be widespread, there are concerns that small biomass users and suppliers, such as owners of small woodlands, could struggle to comply with a sustainability scheme.

Background

37. Sustainability reporting for biomass was introduced into the RO in April 2009. The intention was to develop knowledge and expertise ahead of a potentially more rigorous, EU-wide sustainability scheme.

38. The current RO sustainability reporting requires generators to submit an annual report on their biomass feedstocks, such as the country of origin and any land use change since November 2005, but does not set a minimum standard to be achieved. Ofgem are due to publish the first year of sustainability data in the summer.

39. More generally the UK has been very active in Europe and internationally to support the introduction of sustainability criteria for bioenergy, not only to optimise GHG emission reductions and to protect land important on biodiversity and carbon grounds, but also to support a single coherent market that will benefit both biomass producers and users.

Proposal

40. We are proposing to introduce solid biomass and biogas sustainability criteria, which will consist of the following key elements:

- A minimum 60% lifecycle GHG emissions savings threshold for solid biomass (including energy crops) and biogas used for electricity generation. GHG emission savings will be compared against the EU's recommended comparator figure for EU-wide fossil fuel electricity (712.8 $kgCO_2/MWh$).

- A restriction on the use of raw materials obtained from land with high biodiversity value. We propose to define this in the same way as under the RED (article 17(3)). It includes primary forest, areas designated for nature protection purposes, and highly bio-diverse grassland.

- A restriction on the use of raw material obtained from land with high carbon stock. We propose to define this in the same way as under the RED (article 17(4)). It includes land which had the status of wetland or continuously forested area in January 2008 but no longer has that status.

- A restriction on the use of raw material obtained from land that was peatland in January 2008. A similar restriction is imposed on bioliquids by article 17(5) of the RED.

- Limited exceptions to the above restrictions on the use of raw materials as recognised by the RED in the sustainability criteria for bioliquids. For example, where it is shown that the harvesting of the raw material is necessary to preserve grassland status.

- Requiring reporting of the available information on biomass type, format, mass or volume, country of origin, whether waste, energy crop or byproduct, if meets an environmental standard and the name of the standard, plus details of land use change since January 2008.

41. We propose that the sustainability criteria will not apply to biomass or biogas made from waste (or consisting of waste). This will encourage the use of waste for energy, such as manure and domestic food waste in anaerobic digesters, by limiting the regulatory burden and is in line with the Commission's recommendation. Non-waste residues, such as straw and grain husks, will however, be subject to the sustainability criteria.

42. Similarly we consider that the sustainability criteria should not apply to sewage gas or landfill gas, as these generators have no way of reasonably establishing where their feedstock originated from.

43. To limit the administrative burden on small scale generators who may find compliance too costly or complex, we propose to exempt generators below 1MW from compliance with the criteria. This is in line with the Commission's recommendation. However, we intend to require small scale generators over 50kW to factually report against the sustainability criteria set out in paragraph 40. This will allow Government to monitor the sustainability of the biomass used by generators below this 1MW level, and to consider extending the standards in due course if that becomes warranted, albeit with a proportionately lighter touch approach.

44. To support coherence and clarity across the EU, we are proposing sustainability criteria that closely correspond with the Commission's recommendations within its recent report. This also has the advantage of keeping the sustainability criteria for solid biomass and biogas closely aligned with the sustainability criteria for bioliquids, although there will be some differences. This should reduce complexity, particularly for generators or fuel suppliers who may be dealing with both bioliquids and solid biomass or biogas.

45. Our main departure from the sustainability criteria recommended by the Commission is in relation to the minimum GHG emission saving. The 60% threshold (equating to a target of 285.12 $kgCO_2$/MWh or lower) we are proposing, is above the 35% minimum GHG emission saving level recommended by the Commission. This signals the Government's determination to deliver real and significant carbon savings and to be at the forefront of sustainability. An indication of the typical GHG emissions savings from different types of feedstock can be seen in Figure 2 below.

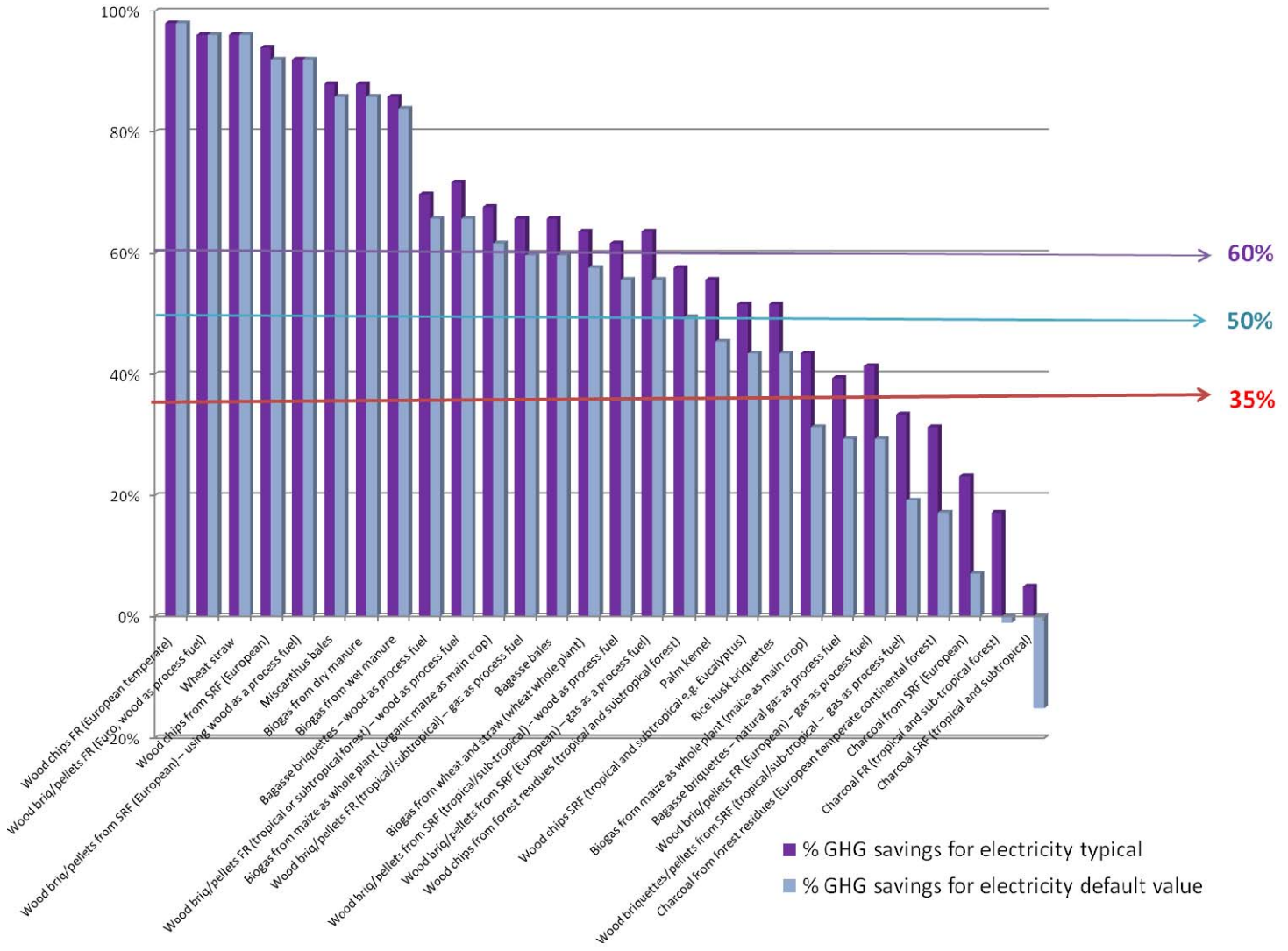
46. Other differences between the Commission's recommendation and our proposed sustainability criteria include:

- applying the sustainability criteria to all forms of solid biomass and biogas (other than waste, landfill gas and sewage gas) and not just to the types of solid or gaseous

biomass for which the Commission has calculated default GHG emission values (listed in Annex 2 of the Commission's report).

- Not exempting from the 60% GHG emission savings threshold biomass and biogas produced by installations that were in operation on 23rd January 2008.

Figure 2: Modelled GHG savings for a biomass plant of 25% conversion efficiency.



Key: FR=Forestry Residues; SRF = Short Rotation Forestry

Ref: Data and methodology sourced from EU (2010) *Report from Commission on sustainability requirements for use of solid & gaseous biomass sources in electricity, heating & cooling* http://ec.europa.eu/energy/renewables/bioenergy/sustainability_criteria_en.htm

47. Although the sustainability criteria for bioliquids set by the RED include a requirement for agricultural crops sourced from within the EU to meet certain environmental standards under the Common Agricultural Policy regulations, the RED does not require generators to demonstrate compliance with the standards. Therefore, we are not proposing to include this requirement in the sustainability criteria for solid biomass and biogas.

48. Sustainability criteria are a relatively new concept for industry and will take some time to embed in industry processes and operational behaviour. Thus we propose to have a short transition period of reporting on performance against these criteria, before receipt of ROCs

is made dependent upon demonstrating compliance with the sustainability criteria. This transition period will allow industry to familiarise itself with the processes and techniques involved and will allow us to optimise the scheme if necessary and deal with any unforeseen problems ahead of the link to ROC eligibility.

49. From April 2011, we propose that all generators over 50kW using solid biomass or biogas (other than waste, landfill gas or sewage gas) will have to report:

a. The GHG emission saving relative to the EU fossil electricity comparator, and the carbon intensity as $kgCO_2$/MWh, from the use of the biomass or biogas for electricity generation;

b. Whether the biomass or biogas was made from raw material obtained from land with high biodiversity value (within the meaning of article 17(3) of the RED). The Commission has not yet set the criteria and geographical ranges to determine which grassland is to be treated as having high biodiversity value, and so we may not be able to include this in the RO Order for 2011;

c. Whether the biomass or biogas was made from raw material obtained from land with high carbon stock (within the meaning of article 17(4) of the RED);

d. Whether the biomass or biogas was made from raw material obtained from land that was peatland in January 2008;

e. Biomass type, format, mass or volume, country of origin, whether waste, energy crop or byproduct, if meets an environmental standard and the name of the standard, plus details of any land use change since January 2008 not covered in b, c, or d.

50. This report will replace the sustainability reporting criteria currently required under article 54 of the RO Order. The proposed exemption for waste, landfill gas and sewage gas means that sustainability reports will no longer be required for the use of solid or gaseous waste.

51. Where a generator is unable to provide the information required for the report, we propose that they should be required to explain why they are unable to do so. Where the report shows that a generator has used solid biomass or biogas that cannot be shown to meet the sustainability criteria, we propose that they should be required to explain why they used that biomass or biogas. The reports should be provided by 31st May immediately following the end of each Obligation period, and will be published by Ofgem for transparency. After the transition period, from April 2013, we propose that eligibility for ROCs will be made subject to generators (of 1MW and above) demonstrating compliance with the sustainability criteria.

52. In terms of practical implementation, we propose to allow the Commission's default values for GHG emissions savings for the various biomass feedstocks to be used in combination with the actual conversion efficiency of the plant. These default values for feedstocks are set out in Annex II to the Commission's report of 25th February 2010. However, the use of a generator's actual values across the feedstock's lifecycle such as the actual transport distance, within a suitable GHG modelling tool, will be strongly encouraged, for all but the smallest generators.

53. We propose that the Commission's recommended methodology should be used for calculating GHG emissions of solid biomass and biogas to generate electricity. This is set out in Annex I to the Commission's report of 25th February 2010. Unlike the methodology set by the RED for bioliquids, the conversion efficiency of the solid biomass or biogas to electricity will be included in the GHG emissions calculations.

54. Sustainable forest management practices, at home and abroad, are a critical element of ensuring biomass sustainability. At the same time we are keen that many more of the unmanaged small woodlands in the UK are brought under active management with resulting biodiversity benefits as well as providing additional homegrown woodfuel supplies. The woodfuel sector is likely to benefit significantly from the RO, and it is right the material should be sustainably sourced. We are minded, therefore, that all but the smallest contracts for woodfuel should be sourced from independently verifiable legal and sustainable sources; independent certification schemes such as FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification schemes) provide one method of meeting this requirement. This could be included either as part of the formal criteria or as part of the accompanying guidance to generators, with the requirement on generators to report on the environmental accreditation of the feedstocks they use allowing Government to monitor against this.

55. A further important and very challenging issue is that of indirect land use change (ILUC), which involves the displacement of food production or other land uses from areas used to grow energy crops; this can erode the carbon savings of bioenergy and lead to habitat loss. Work is underway in the UK and internationally on how to best address this. The European Commission is due to report later this year on biofuels, bioliquids and ILUC and the UK will look to implement their proposals for solid and gaseous biomass as appropriate. In addition, negotiations continue to widen the future international carbon accounting rules to include forest management, cropland management, grazing land management and revegetation.

Questions	
8.	**Is 60% saving (equating to 285.12 kgCO_2/MWh) the right minimum GHG emission threshold?**
9.	**Do you agree that the sustainability criteria restricting the types of land used should be consistent with the criteria imposed on bioliquids by the RED?**
10.	**Do you agree that generators over 50kW should be required to report against the sustainability criteria from April 2011? Do you agree with the information to be included in the report?**
11.	**Do you agree that for biomass generators of 1MW and above there should be a transition period of mandatory reporting against the sustainability criteria from April 2011, before compliance is linked to the receipt of ROCs from April 2013?**

12.	**Do you agree that for biomass generators below 1MW compliance with the sustainability criteria should not be linked to the receipt of ROCs ?**
13.	**Do you agree with the exclusion of waste and sewage gas and landfill gas? Should anything else be excluded?**
14.	**Do you consider that sustainable forestry management practices should be a mandatory part of the criteria, or addressed in guidance? In particular how can the potential environmental impacts on woodlands be balanced against the compliance burdens on small businesses?**
15.	**Do you have any other comments on the proposals in this chapter?**

Chapter 3. Sustainability criteria for bioliquids

Summary	We are proposing to introduce sustainability criteria for bioliquids. Eligibility for receipt of ROCs for electricity generated from bioliquids will be dependent upon demonstrating that the sustainability criteria have been met. Generators will be required to have an independent audit to verify that their data and their systems for demonstrating compliance with the sustainability criteria are accurate, reliable and protected against fraud. We are proposing to open up the RO to all bioliquids produced from biomass, including biodiesel such as FAME.

Issue

56. The RED[3] requires that bioliquids used to generate electricity must meet the sustainability criteria set by the RED in order to be eligible for financial support or to count towards compliance with renewable energy obligations. Therefore, we intend to introduce a requirement that electricity generated using bioliquids must use bioliquids that meet the sustainability criteria in order to be eligible for ROCs.

Background

57. There has long been concern that some bioliquids are not sustainable. Recently in the UK we have seen objections to planning permission for bioliquid generators on the grounds that palm oil is unsustainable.

58. This concern has been reflected at European level resulting in the introduction through articles 17 to 19 of the RED of sustainability criteria for bioliquids. A bioliquid means a liquid fuel used for energy purposes produced from biomass.

59. The RED requires that electricity generated from bioliquids must use bioliquids that fulfil the sustainability criteria set out in Article 17 of the RED if the UK intends to:

- Count it towards meeting the 15% target for 2020 set by the RED; or

[3] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:en:PDF

- Allow it to count towards compliance with a renewable energy obligation; or
- Reward it with financial support.

60. The RO currently does not differentiate between biomass (including energy crops) in solid, liquid or gaseous form. The RED therefore imposes a new requirement that electricity generated from bioliquids will need to demonstrate compliance with sustainability criteria in order to receive ROCs.

61. The Commission communication[4] published on 19th June explains that bioliquids include viscous liquids such as waste cooking oil, animal fats, palm oil, crude tall oil and tall oil pitch.

62. The sustainability criteria set by the RED are broadly:

I. The bioliquids used must demonstrate a GHG emission saving of at least

a. 35% from the introduction of these criteria, unless produced in an installation in operation on 23rd January 2008 (for bioliquids produced in installations in operation on that date, the minimum 35% GHG saving requirement will apply from 1st April 2013);

b. 50% from 1st January 2017, and

c. 60% from 1st January 2018 for bioliquids produced in installations[5] in which production started on or after 1st January 2017.

The methodology for calculating the GHG emission saving is set out in Article 19 of the RED.

II. Raw material shall not be obtained from land with high biodiversity value. This applies to land having that status on or after 1st January 2008, whether or not the land continues to have that status. Article 17(3) of the RED lists the categories of land that have high biodiversity value, such as primary forest, areas designated for nature protection purposes and highly biodiverse grassland. There are some limited exceptions where taking of the raw material can be shown to be necessary to preserve grassland status or can be shown not to interfere with the nature protection purposes.

[4] Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels. OJ C 160, 19.6.2010, p.8 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:160:0008:0016:EN:PDF

[5] The Commission communication published on 19th June 2010 states that 'the term "installation" includes any processing installation used in the production process. It should not be understood as including production facilities that might have been intentionally added to the production chain only to qualify for the exemption foreseen in this provision. If at least one of such processing installations used in the production chain was in operation on 23rd January 2008 at the latest the criterion of a minimum 35% greenhouse gas saving starts to apply only from 1st April 2013.

III. Raw material shall not be obtained from land with high carbon stock. This applies to land that in January 2008 would have fallen into one of the categories of land listed in article 17(4) of the RED, such as wetlands, and certain forested areas, but no longer has that status. The restriction does not apply if at the time the raw material was obtained the land has the same status as it had in January 2008.

IV. Raw material shall not be obtained from land that was peatland in January 2008, unless evidence is provided that cultivation and harvesting of the raw material does not involve draining of previously undrained soil (article 17(5) of the RED).

V. Agricultural raw materials cultivated in the EU will need to comply with the requirements and standards under the provisions referred to under the heading 'Environment' in part A and in point 9 of Annex II to Council Regulation [EC] No 73/2009 of 19th January 2009[6] and in accordance with the minimum requirements for good agricultural and environmental conditions defined pursuant to Article 6(1) of that Regulation[7] (article 17(6) of the RED).

63. Bioliquids produced from waste or residues[8] (but not from agriculture, aquaculture, fisheries and forestry residues) are only required to meet the greenhouse gas emission saving criteria (i.e. the first criteria listed above).

64. The RED includes a description of a mass balance system which must be used by generators when demonstrating compliance with the first four sustainability criteria listed above. Article 18(1) of the RED requires that the mass balance system :

a. Allows consignments of raw material or bioliquids with differing sustainability characteristics to be mixed;

b. Requires information about the sustainability characteristics and sizes of the consignments referred to in point (a) to remain assigned to the mixture; and

c. Provides for the sum of all consignments withdrawn from the mixture to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture.

65. The RED also requires generators to have an independent audit of the sustainability information they submit (article 18(3) of the RED). The audit must verify that their systems for demonstrating compliance with the sustainability criteria are accurate, reliable and protected against fraud. It must also evaluate the frequency and methodology of sampling and the robustness of the data used by the generator.

66. Generators using bioliquids will also be required to submit information on measures taken for soil, water and air protection, the restoration of degraded land, the avoidance of excessive water consumption in areas where water is scarce and on a range of other

[6] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:030:0016:0016:EN:PDF
[7] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:030:0016:0016:EN:PDF
[8] Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels. OJ C 160, 19.6.2010, p.8 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:160:0008:0016:EN:PDF

social issues (article 18(3) of the RED). However, the Commission is yet to establish the list of information to be provided on these matters. In the absence of a Commission decision on this matter, we will not be able to draft the amendments to implement this requirement of the RED.

67. Article 17(8) of the RED prevents us from refusing, on other sustainability grounds, to take into account bioliquids which comply with the sustainability criteria set out in the RED. This means that we cannot impose any additional sustainability criteria of our own on bioliquids.

Proposals

Sustainability criteria

68. We propose that ROCs should only be issued where generators are able to demonstrate that the first four sustainability criteria listed at paragraph 62 above have been met. Generators – where bioliquids have been used – will need to provide evidence as part of their ROC claim to confirm that the sustainability criteria have been met.

69. We intend that the administration of this will continue to be carried out by Ofgem and Ofgem's administrative costs be funded from the buyout fund.

70. For the purpose of demonstrating compliance with the minimum greenhouse gas emission savings criteria, generators will be required to follow the greenhouse gas emissions methodology set out in the RED. One method of doing this would be to use the Renewable Fuels Agency's (RFA) life cycle analysis methodology as set out in the technical guidance. For fuels where default values are appropriate, these can be found in the RFA's technical guidance.

71. For fuels that are the same as those used in road transport (e.g. palm derived FAME), the RFA's current data may be applicable, however as parts of the fuel chain may be different (e.g. end stage transport) this will need to be investigated.

72. Where the bioliquid is a precursor to a road transport fuel (e.g. palm oil), the data up to that point that the chains diverge could be used. Where it is not the same at all – e.g. fish waste – these will have to worked out

73. Use of the RFA methodology (where applicable) would ensure consistency between returns from different generators and between the use of similar fuels in power generation or transport

74. For the purpose of identifying land with high biodiversity value, a non-exhaustive list of the relevant areas designated in the UK for nature protection purposes will be identified in guidance. The Commission has not yet set the criteria and geographical ranges to determine which grassland is to be treated as highly biodiverse grassland (for the purposes of Article 17(3)(c)). In the absence of a Commission decision on this matter, we will not be able to draft the amendments to implement the sustainability criteria relating to highly biodiverse grassland. Should this be the case, we will need to amend the RO once the Commission publishes its decision.

Demonstrating compliance

75. In order to demonstrate compliance with the first four sustainability criteria listed above generators will be required to operate a mass balance system if bioliquids or raw materials with different sustainability criteria are mixed.

76. We do not propose to routinely require generators to demonstrate compliance with the fifth sustainability criteria listed above (compliance with standards under common agricultural policy regulations) as the RED does not require generators to demonstrate compliance with this criteria. Instead, we propose that Ofgem should refuse to issue ROCs where, on receipt of evidence, it is satisfied that there has been a breach of this sustainability criteria.

77. In compliance with the RED we will require generators to have an independent audit – at least annually – of the bioliquid sustainability information they provide to Ofgem over the year. The audit should verify that the systems used by the generators to demonstrate compliance with the sustainability criteria are accurate, reliable and protected against fraud. The RED requires the audit to be carried out by an independent person. We propose that this should be someone who is not the owner or operator of the generating station or a person connected to the owner or operator.

78. The RED requires the audit to be carried out to an adequate standard. In line with proposals put forward for the RTFO we propose that the ISAE 3000 standard[9] should be regarded as an adequate standard for this purpose. If generators wish to have their audit done to a different standard, they will need to demonstrate to Ofgem's satisfaction that the alternative standard they wish to use is adequate.

79. We propose that generators should have until 31st December following each Obligation period to provide an audit report to Ofgem showing that the audit has been carried out. In the event that the audit report is late, qualified or not provided, we propose that Ofgem should have power to either revoke ROCs or withhold a commensurate number of ROCs in the next Obligation period.

80. As required by article 18(3) of the RED, we propose to require generators to make available to Ofgem on request, the data that they used to develop the sustainability information that they provided to Ofgem. We propose that Ofgem should be able to request data going back five years, in line with the Commission communication on requirements for voluntary schemes.

Article 54 sustainability reporting

81. Chapter 4 sets out our proposals to introduce sustainability criteria for solid biomass and biogas. Currently article 54 of the ROO applies and this requires a wider range of information than is set out in the RED. We believe that this information should continue to be gathered. We will therefore continue to require generators not exempted by the article 54 to mandatorily report information on biomass type, format, mass or volume, country of origin, whether waste, energy crop or byproduct, if it meets an environmental standard and

[9] http://www.accountability21.net/uploadedFiles/Issues/ISAE_3000.pdf)

the name of the standard, plus details of any land use change since January 2008 not covered by the RED.

Biodiesel

82. We consider that the current exclusion of bioliquids produced directly or indirectly from fossil fuel, including biodiesel such as FAME, amounts to the imposition of additional sustainability criteria, not permitted by the RED. Therefore, we consider that we are obliged to allow all bioliquids to be eligible for ROCs if they meet the sustainability criteria, unless there are other reasons for excluding them which do not amount to additional sustainability criteria.

83. We propose to enable electricity generated from bioliquids, including biodiesel such as FAME, to be eligible for ROCs (whether or not it is produced directly or indirectly from fossil fuel). However, we would welcome views on whether there are other reasons, unrelated to sustainability grounds, why any bioliquids ought to remain excluded from the RO?

84. We cannot change support levels under the RO without a banding review. Therefore, we propose that support for those bioliquids that become eligible for the RO as a result of these changes should follow whichever RO band (if any) they happen to fall within, pending the outcome of the forthcoming banding review. We intend to allow Biodiesel to receive support in proportion to its renewable part.

Questions	
16.	**Do you agree with, where applicable, using the RFA technical guidance to calculate greenhouse gas emissions savings?**
17.	**Do you agree that the ISAE 3000 standard should be regarded as an adequate standard for the independent audit report?**
18.	**Do you agree that Ofgem should have the power to revoke ROCs/withhold a commensurate number of ROCs in the next Obligation period where the audit is late, qualified or not carried out?**
19.	**Are there other reasons, unrelated to sustainability grounds, why particular bioliquids ought to remain excluded from the RO?**
20.	**Do you agree that we should maintain reporting criteria in line with those being proposed for solid biomass in Chapter 2?**
21.	**Do you have any other comments on the proposals in this chapter?**

Calls for Evidence

Chapter 4. Refurbishment and replacement

Summary	We intend to continue to make support available under the RO for new generating stations or additional capacity (i.e. stations or capacity seeking accreditation) that use refurbished and other used equipment. We are seeking views on whether to introduce additional support for existing stations (i.e. stations already accredited) where there is major refurbishment or replacement of parts, including converting existing co-firing generation to dedicated biomass. If additional support for refurbishment or replacement, including conversion, is introduced, the appropriate level of support should be determined as part of a banding review and our intention would be to consult further on this and the duration of support.

Issue

85. The refurbishment or replacement of existing parts could help to extend the life of a generating station. Some parts of existing generating stations are likely to be replaced or refurbished throughout the lifetime of the station and we are assuming that many of these smaller components and the ongoing maintenance will be accounted for when developers are calculating overall costs of the generating station. However, there may be instances where the main generating components are refurbished or replaced and this is likely to extend the lifetime of the station beyond what was originally expected, at a lower resource and carbon cost than building new capacity. We therefore want to consider whether, in these instances, we should introduce additional RO support.

86. Following the consultation on the Renewables Obligation (Amendment) Order 2010 a number of respondents raised questions on how we intend to deal with existing stations that refurbish or replace equipment, and there have been particular questions around the repowering of wind farms

87. Currently, in most cases, support is available for new stations or additional capacity (that is, those stations or additional capacity seeking accreditation for the first time) that use refurbished and other used equipment and we do not intend to change this. However, there is no provision for additional support where an existing station (that is already accredited at a certain capacity) undergoes refurbishment or replacement of parts, for example to extend the life of the station (but without increasing capacity and at a lower cost than rebuilding a new station).

88. We do not, however, intend to introduce support for refurbishment or replacement of small parts of an existing generating station given the potential for gaming (whereby stations make unnecessary replacements or refurbishments to gain additional support).

89. Some generators have also suggested that they may be interested in converting existing co-firing generation to dedicated biomass. We are therefore interested in considering how the RO should treat such stations. As with other major refurbishments or replacements this is likely to maximise the use of existing resources and therefore increase value for money while also having the potential to increase the amount of deployed renewable energy.

Background

90. The RO does not currently differentiate between new stations (or additional capacity) that use new equipment and those that use refurbished or other used equipment. Nor, once accredited, is there anything to prevent most stations from using refurbished equipment or replacing components; this would have no effect (positive or negative) on the amount or duration of support they could receive i.e. currently stations would not receive any additional support for using refurbished equipment or replacing components but nor would their support be reduced (there is a historic exception to this for certain types of stations commissioned pre-1990 and we do not propose amending this exception).

91. Previous stakeholder feedback has seen a majority in favour of supporting the use of refurbishment and replacement that occurs during the 20 year RO eligibility period. Given the potential to save CO_2 and provide value for money for the energy consumer, we are considering whether stations that undergo major refurbishment or replacement of parts should receive any further support in addition to that for which that are already eligible under the RO. This raises questions around what constitutes refurbishment or replacement and major refurbishment or replacement.

92. For the purposes of this consultation, the terms ‘refurbishment’ and ‘refurbished equipment’ refer to the use by a generator of previously used equipment, where the equipment is installed in a generating station for the purpose of generating electricity. This would include where the generator removes the part temporarily from the station for repairs or reconditioning and then reinstalls it in the same station.

93. The terms ‘replacement’ and ‘replacement equipment’ refer to the substitution by a generator of new or refurbished equipment for existing equipment that is installed in a generating station for the purpose of generating electricity.

94. In the context of wind turbines, we understand that the term ‘repowering’ is also used to describe the situation where generators replace turbines with newer, often more powerful ones. We are proposing to treat wind turbines that have repowered as covered by the description of “replacement” above.

95. However we welcome views on what these terms should or should not cover.

Proposals

Minor refurbishment/replacement

96. In the case of minor refurbishment or replacement, it is likely that this will constitute general, ongoing maintenance work and we are assuming this has been accounted for in the initial cost calculations. Given the limited cost to the generator, potential for gaming, and limited potential for extending the life of the station, we **are not proposing to provide any additional support to minor refurbishment/replacement**.

Major refurbishment/replacement

97. In the case of existing stations refurbishing parts or replacing parts with new or refurbished equipment we are considering whether to provide additional RO support to major refurbishments or replacements.

98. Given the potential material, energy and carbon savings that refurbishing or replacing major components could bring, and the potential to prolong the life of stations beyond what was originally predicted, we propose that some form of support is provided to incentivise efficient use of resources. However, we recognise that stations will have already received support for the initial costs and will not face the same costs of grid connection, planning and electrical infrastructure. Providing the same level of support as new stations for an additional 20 years would therefore be overcompensating.

99. We therefore propose to offer a lower level of support and/or a shorter duration of support for such stations, which could be:

- a lower level of support than for new stations for the same duration; or
- the same level of support as new stations for a shorter duration; or
- a lower level of support than new stations for shorter duration

100. We welcome views on whether you agree with this approach and whether we should treat each technology differently. The appropriate level of support should be determined as part of a banding review **and our intention would be to consult further on this and the duration of support.**

101. To implement this, we would need to determine what should be treated as major replacement or refurbishment. For example it could be linked to instances whereby a minimum number of generating components at an existing generating station are replaced with new or refurbished parts. We welcome views on what should be treated as major refurbishment or replacement and whether it should differ by technology.

Major replacement/refurbishment and additional capacity

102. In the case of a station replacing or refurbishing major parts and at the same time adding additional capacity, we propose that the original capacity (of which parts have been refurbished or replaced) is eligible for limited additional support as outlined above – that is, at a lower level and/or for a shorter duration than new stations. However, the additional

capacity should (as now) be eligible for the same support as new stations – that is, at the level available to new stations and for a 20-year period (subject to the end date of the RO).

Converting existing co-firing generation to dedicated biomass by replacing or refurbishing equipment

103. Given the potential for such conversions to increase the amount of deployed renewable energy, we would like views on whether the RO should support generators converting existing co-firing generation to dedicated biomass and, if so, on the level of support offered.

104. Options include allowing converted stations to re-accredit under the new technology band at the same level and for the same duration as new stations (i.e. an additional 20 years, subjects to the 2037 end date); or allowing converted stations to re-accredit under the new technology band at a lower level/for a reduced amount of time (as we are proposing for other forms of major refurbishment or replacement.

105. Given that stations are unlikely to face the same costs as a new build (which requires all equipment to be put in place and incurs grid connection and planning costs) we believe there is a significant risk of overcompensating such stations if they are allowed to re-accredit at the same level and for the same duration as new stations. We therefore favour allowing stations to re-accredit under the new technology at a lower lever/for a reduced amount of time but do not currently have enough evidence to make a judgement on how this should apply. We would like consultees views on whether support for converting stations should be allowed and on the level of support offered (i.e. as for new stations or reduced). Should we decide to allow this to be rewarded by the RO, the actual level of support will be determined as part of a banding review and our intention would be to consult further on this as well as the duration of support.

Questions	
22.	**Do you agree that additional support should be introduced for refurbishment and replacement in existing stations?**
23.	**Do you agree that this should be limited to cases of major refurbishment or replacement only?**
24.	**a. What should or should not be covered by the terms:** - **refurbishment of parts;** - **replacement;** - **major refurbishment of parts; and;** - **major replacement?** **b. Should these terms be technology specific?**

	c. Could 'major refurbishment' and 'major replacement' be related to the number of generating components that are refurbished or replaced? **Please give reasoning and provide any evidence.**
25.	**In your view, is the repowering of wind turbines covered by the description of 'replacement' used in this chapter? If not, how does it differ and should it be treated differently from other technologies?**
26.	**Do you agree that any additional support for stations undergoing such major refurbishment or replacement should be less than for newly accrediting stations (or additional capacity)? Please give your reasoning and provide any evidence.**
27.	**Do you have a preference between a lower level of support, shorter duration of support ,or a combination of the two? Please give your reasoning and provide any evidence.**
28.	**Do you agree that support should be provided to existing co-firing generation converting to dedicated biomass?**
29.	**If so, what is your view on the level of support that should be given to converted stations (i.e. should it be as for new stations or reduced)? Please give your reasoning and provide any evidence.**

Chapter 5. Renewable Heat Support

Summary	We propose keeping CHPQA good quality requirements for Combined Heat and Power (CHP) stations in the RO in order to qualify for the higher ROC bands available for certain types of CHP stations (the "CHP uplift"). We propose that the forthcoming banding review should remove the CHP uplift (and requirement for CHPQA) for all CHP generating stations accredited on or after 1st April 2013.

Issue

106. The Government is considering responses to the Renewable Heat Incentive (RHI) consultation and will set out detailed options on how it proposes to take forward action on renewable heat through the Spending Review. However, in order to meet the legislative timetable to make changes to the RO, we need to consult ahead of these decisions on how to take forward action on renewable heat. Because Combined Heat and Power (CHP) stations generate both heat and electricity, Government needs to ensure that they are not over-compensated as result of receiving support under the RO and any future policies the Government may introduce to support renewable heat. We are therefore asking for views now on potential transition measures for the RO to allow for the smooth introduction of action to support renewable heat in the future.

107. CHP generating stations receive an extra 0.5 ROCs/MWh up to the 2 ROC threshold, e.g. co-firing of biomass with CHP generating stations receive an extra 0.5 ROCs/MWh as compared to co-firing of biomass generating stations without CHP. This is known as the CHP uplift, and is the way in which the RO recognises the extra costs and benefits of CHP.

108. Dedicated energy crops generating stations receive 2 ROCs/MWh regardless of whether the generation is with or without CHP. This is because the generating station already benefits from an uplift for using energy crops, and so a further uplift which would push the level of ROCs above the 2 ROCs/MWh threshold was not considered appropriate.

109. Another exception is Energy from Waste (EfW) generating stations are only eligible for ROCs if the generation is with CHP.

110. If we introduce policies to support renewable heat there is a question of whether it remains appropriate for the RO to give an uplift for CHP.

111. The RHI consultation proposed the following transitional arrangements:

- RO-eligible CHP stations installed after 15th July 2009 would be offered a one-off change to claim RO + CHP uplift, or RO (without CHP uplift) + any renewable heat support.
- This transitional arrangement would be available for new installations accredited under the RO before 1st April 2013 (the expected date of implementation of the forthcoming RO banding review).
- Operators of such CHP stations could decide between the RO uplift and any future renewable heat support at any point 2013. If a station begins receiving support for renewable heat, it would not be possible to reverse this decision.
- From April 2013 the RO uplift would no longer be available for new installations, and all new CHP stations would be able only to claim the basic RO tariff + any renewable heat support.

The table below provides a summary of the arrangements proposed in consultation:

CHP stations accredited before 15th July 2009	RO + uplift
CHP stations accredited between 15th July 2009 and 31st March 2013	RO + uplift OR RO + any future renewable heat support
CHP stations accredited on or after 1st April 2013	RO + any future renewable heat support

112. This approach aimed to provide investor certainty by maintaining the position of existing generating stations. It also removed a potential reason to delay RO accreditation by giving investments nearing the accreditation stage the opportunity to make a commercial choice where a move from the RO uplift to any future renewable heat support may place them in a better position.

113. However, aspects of this approach would only be able to be implemented following a banding review because they involve changes to the amount of ROCs that a generating station would receive – for those generating stations accredited between 15th July 2009 and 31st March 2013 choosing to receive any future renewable heat support in place of the CHP uplift, and also for those generating stations accredited on or after 1st April 2013 which would no longer receive the CHP uplift.

Proposal

114. We propose that co-firing of biomass with CHP, co-firing of energy crops with CHP and dedicated biomass with CHP generating stations reaching accreditation under the RO between 15th July 2009 and 31st March 2013 should be offered a choice between continuing to receive support from the RO only (retaining the CHP uplift), or foregoing the

CHP uplift and receiving support instead for the heat element of their generation under actions which Government may introduce following the Spending Review.

115. From 1st April 2013 we propose that the CHP uplift should be removed for all new co-firing of biomass with CHP, co-firing of energy crops with CHP and dedicated biomass with CHP generating stations gaining accreditation on or after this date. We propose that EfW generating stations with CHP accredited on or after 1st April 2013 should continue to be eligible for support under the RO but also have the 0.5 ROC uplift removed to reflect the proposed introduction of the RHI. EfW without CHP will continue to be ineligible for support under the RO.

116. However, these proposals could not be implemented until after a banding review. We are therefore requesting views and early comments from industry to inform our proposals in the banding review starting October 2010. Subject to the outcome of the forthcoming banding review and the spending review, we would propose to offer generators a one-off choice between the CHP uplift or any future renewable heat support for CHP stations accrediting under the RO between 15th July 2009 and 31st March 2013. We welcome views on what would constitute a suitable period of time for notifying Ofgem of a generators intention to switch between support from the RO only, to RO and RHI

CHPQA requirements for stations retaining the RO uplift

117. To receive the CHP uplift under the RO the CHP plant must meet the Good Quality Heat requirement under the Combined Heat and Power Quality Assurance Standard (CHPQA).

118. We propose that any station receiving the CHP uplift under the RO must continue to meet the CHPQA standard. . We also propose that all EfW with CHP stations receiving support under the RO must continue to m*eet* the CHPQA standard.

Questions	
30.	**Do you agree the Banding review should consider removing the uplift for CHP generating stations accrediting on or after 1st April 2013? Please provide evidence to support your answer.**
31.	**Do you agree that the CHPQA requirement for CHP stations should remain for those stations benefiting from the CHP uplift under the RO?**
32.	**Do you agree that the CHPQA requirement should remain for all EfW with CHP stations?**
33.	**Do you have any comments on the potential transitional proposals set out above for generating stations with CHP accrediting between 15th July 2009 and 31st March 2013?**

Chapter 6. Mutualisation

Summary	There is currently no provision in the RO to link the mutualisation trigger to the size of the Obligation set by headroom. Mutualisation trigger figures are currently linked to the fixed targets set out in the RO Order. We are seeking views on whether there is a need to change the mutualisation triggers in the RO to reflect the size of the Obligation as set by headroom. We are also seeking views on whether it is necessary to change the cap on the size of the mutualisation fund. If we change the level of the mutualisation trigger or the size of the cap we need to decide how to implement those changes.

Issue

119. Mutualisation provisions were introduced into the RO in 2005 to protect the value of ROCs where a significant shortfall in the buyout fund arises. Mutualisation is triggered if there is a shortfall of more than £1m per percentage point of the size of the Obligation, in line with the fixed targets set out to 2016. For the Obligation period ending March 2011 the trigger is therefore set at £10.4m in England and Wales, rising annually to £15.4m for the Obligation period ending March 2016 and capped thereafter. The level for Scotland is set by the Scottish Executive.

120. There is currently no mechanism within the RO to link the level of the mutualisation trigger to the size of the Obligation, as we move away from fixed targets setting the level of the Obligation. **We are seeking views as to whether the trigger needs to be adjusted to reflect the size of the Obligation as set by the headroom mechanism that was introduced in 2009.**

121. The mutualisation cap for 2010/11 as announced by Ofgem on 4/2/10 is £222,805,333.33, after that it rises (or falls) annually in line with inflation. **We are also seeking views on whether it is necessary to change the cap on the size of the mutualisation fund.**

Background

122. The concept of mutualisation was introduced into RO legislation in 2005 following several licensed suppliers being unable to meet their obligations in 2003 which led to a shortfall in the buyout fund of £23m and affected investor confidence in the UK renewables market.

123. Mutualisation is intended to maintain investor confidence in the value of ROCs by protecting the value of the buyout fund and therefore the premium attached to the ROC when the buyout fund is recycled.

124. Mutualisation works in the event of a shortfall in the buyout fund at the end of the Obligation period above the trigger (as set out in the RO Order). Ofgem notify suppliers of the shortfall and requests that suppliers make a payment to the buyout fund proportionate to their share of the Obligation. The buyout fund is then re-distributed in the usual way to suppliers in line with the proportion of ROCs they presented. The payments are staggered quarterly and recycled immediately to minimise the burden on consumers and suppliers. A cap exists on the size of the shortfall that can be recovered to protect against the fund causing smaller suppliers to go into solvency.

Headroom

125. In 2009 a headroom mechanism was introduced to work in parallel with existing fixed targets out to 2015/16 in the RO, to set the size of the Obligation. Headroom is designed to ensure there is always a positive gap of on average 10% between generation and the size of the Obligation. This protects investor confidence by ensuring there is always a market for ROCs and also helps protect consumers by guarding against an inflated ROC price (because of too few ROCs in the market) if deployment falls behind expected levels.

126. The introduction of the headroom mechanism to determine the size of the Obligation is expected to impact the value of the buyout fund as the gap between generation and the size of the Obligation closes. We expect that although the amount paid into the buyout fund will increase as the Obligation gets bigger, the recycle payment per ROC to each supplier will decrease.

127. Currently the size of the mutualisation trigger corresponds to £1million for every percentage of the Obligation. As headroom begins to set the level of the Obligation, the link between the size of the Obligation and the size of the mutualisation trigger is increasingly eroded as the size of the Obligation set by headroom is increasingly greater than would have been set by fixed targets in the RO, because from 2016 the trigger is capped at £15.4 million. This means that the size of the Obligation as set by headroom will no longer be reflected in the size of the mutualisation trigger.

Options

128. The move to setting the Obligation through the headroom mechanism removes the link between the trigger and the size of the Obligation. We would welcome views on whether the mutualisation triggers and cap (as set out in the RO Order 2009) should be reviewed. There are a number of options for how this could be approached.

129. For the trigger, we could:

- **leave the mutalisation trigger in line with fixed targets** up to 2015/16 then capped at £15.4million out to 2037. However, the move to headroom will mean that the size of the trigger will no longer be proportionate to the size of the Obligation

- **link the level of the trigger to the size of the Obligation set by headroom.** Although this would mean that the trigger could increase significantly to £30 million as we approach 30% renewable electricity generation by 2020

- **choose a new trajectory or level for the trigger**.

130. We also welcome views on **whether there is a need to change the cap on mutualisation payments**; currently £245m and adjusted annually for inflation or deflation out to 2037.

131. We are interested in consultees views in order to inform our thinking on what level of trigger is most appropriate, how it should be set, and whether the cap on the fund should be adjusted, and to understand the implications of adjusting the mutualisation trigger and cap levels for different sized suppliers and other stakeholders.

132. This initial call for evidence seeks views on a number of issues, with a view to implementing any changes from April 2012. We will consult further on any changes prior to implementation.

Questions	
34.	**Is there a need to change the mutualisation cap and trigger for the period** **a) up to 2015/16** **b) after 2016/17?** **Please give your reasoning.**
35.	**If you think the mutualisation trigger should be changed at what level should it be set and what calculation process should be used? Please give your reasoning.**
36.	**Should mutualisation payments be capped (and adjusted as they are now in line with inflation) and if so at what level and why?**
37.	**Could smaller suppliers be disproportionately affected by significant increases in mutualisation fund payments? If so what level of increase would give rise to such concerns?**

Part B: Changes to Renewable Energy Guarantees of Origin (REGOs)

NOTE CLOSING DATE 7th SEPTEMBER 2010

Chapter 1. Changes to Renewable Energy Guarantees of Origin (REGOs)

Summary	**A number of changes are required to the arrangements governing Renewable Energy Guarantees of Origin (REGOs**) by 5th December 2010. These changes are required under Article 15 of the Renewable Energy Directive (RED), and include: • changes to the definitions of "*renewable energy sources*" and "*biomass*"; • changing the unit of measurement of a REGO from kWh to MWh; • introduction of an expiry of the REGO 12 months from first production of the electricity for which it is issued, and subsequent cancellation of that REGO; • changes to information to be included in the REGO.

Note that this part (B) of the consultation, relating to REGOs only, closes on 7th September 2010. Any views on our proposed implementation of these changes should be submitted to DECC by that date.

Issue

133. A number of changes are required to the arrangements governing REGOs by 5th December 2010. These changes are required under Article 15 of the RED.

Background

134. Renewable Electricity Guarantees of Origin (REGOs) are transferable certificates which demonstrate that electricity has been produced from a renewable source of energy within the European Union. The Electricity (Guarantees of Origin of Electricity Produced from Renewable Energy Sources) Regulations 2003 (S.I. 2003/2562) (the 2003 Regulations) regulate operation of REGOs in Great Britain.

135. Ofgem administers the REGO scheme in Great Britain. There is a single accreditation process for generators to undergo in order to be able to claim any combination of REGOs,

Renewable Obligation Certificates (ROCs) and Levy Exemption Certificates(LECs). REGOs are issued by Ofgem on a monthly or annual basis when requested by a electricity producer (or by the relevant NFFO / SRO[10] purchaser). Once issued, REGOs remain in Ofgem's Renewables and CHP Register and can be transferred between parties until used.

136. One REGO is issued per kWh of renewable electricity generated. REGOs are rounded up or down to the nearest whole kWh. REGOs have a unique reference number representing the generating station, technology and country of origin. The REGO also states the period over which the electricity was generated. A REGO can be transferred, usually between the producer (or NFFO/SRO purchaser) and the final electricity supplier or user. REGOs have no shelf life and do not have a value in the way that ROCs or LECs do.

137. The main purpose of REGOs in the UK is as evidence for Fuel Mix Disclosure (FMD) purposes. FMD requires that Great Britain licensed electricity suppliers who supply electricity to customers report the different energy sources used to generate the electricity supplied to their customers. REGOs are used as the main evidence of renewable electricity generation for these purposes.

138. Suppliers must hold all evidence by 1st July annually of the renewable electricity they supplied during the previous period running from 1st April to 31st March. The evidence must relate to renewable electricity generated during that period. This means that it is increasingly likely that if a generator is selling electricity to an electricity supplier the supplier may require the generator to provide a REGO to accompany that electricity.

Proposal

139. The RED changes the information requirements and reporting structure for REGOs from 5th December 2010. Changes that we expect to make to the 2003 Regulations are summarised under the section below on proposals.

140. Changes that we expect to make to the 2003 Regulations include:

a. Changes to definitions, so that "*renewable energy sources*" includes aerothermal, geothermal, hydrothermal and ocean (rather than tidal) energy, and "*biomass*" includes matter from fisheries and aquaculture.

b. The measurement unit of REGOs will change from kWh to MWh. REGOs are currently rounded up or down to the nearest kWh. We propose that the same approach to rounding should be taken in relation to issuing REGOs when the measurement unit changes to MWh i.e. continue with current rounding arrangements but rounding up or down to the nearest MWh. Given the increase in size of unit this creates potentially much more significant discrepancy between actual generation and the 1MWh value of the REGO. However, ROCs are rounded in the same way. The

[10] NFFO - Non –Fossil Fuel Obligation and SRO - Scottish Renewable Obligation purchaser – e.g. a purchaser of electricity under a NFFO /SRO arrangement or its equivalent in Scotland.

rounding approach also has the advantage of being straightforward to administer and enables REGOs to be presented for FMD in a given year.

c. The RED imposes a time limit on use of the REGO of 12 months from when the energy was produced. We intend to transpose this by causing a REGO to expire 12 months from first production of the electricity for which it is issued, and treating the REGO as evidence only of electricity production that occurred during those initial 12 months. However, current UK practice is for the issue and transfer of REGOs to continue beyond those initial 12 months in preparation for FMD, under which REGOs presented on 1st July in a given year may date back to April in the preceding year. To allow for this, we intend to have a grace period before Ofgem cancels the REGO, during which the expired REGO may still be presented for FMD.

d. The RED sets out new requirements concerning the information included in the REGO. Specifically the following information must now be recorded:

- When and how the energy was produced.
- Whether it is electrical energy or relates to heating and cooling.
- The identity, location, fuel type and capacity of the installation.
- Whether and to what extent the installation has benefitted from investment support.
- Whether the unit of energy has benefitted from any other national support scheme and if so of what type.
- The date the installation became operational.
- The date and country of **issue and a unique identification number**.

141. We intend to transpose these information requirements by changing the list of information that is required from someone requesting a REGO and the list of information that must be included in the REGO. This information will be held on the Renewables and CHP register held by Ofgem. In particular, someone requesting a REGO will have to provide details of support that has benefitted the station or electricity generated, including through the RO, the FITs, or any other scheme.

142. Finally the RED requires an amendment to the wording of the regulations in relation to the circumstances in which a Member State may refuse to recognise a REGO from another Member State. Currently Ofgem may refuse to issue a REGO where it is necessary for the prevention of fraud or that the REGO was mistakenly issued. The circumstances in which Ofgem can refuse to recognise a REGO from another Member State will be amended to be where there is well founded doubts as to the accuracy, reliability or veracity of the guarantee of origin.

143. The RED also leaves Member States discretion on the introduction of a number of optional changes: for example, whether to extend the use of REGOs by issuing them for heating and cooling. However, we consider that it would be preferable to delay decisions on the

issuing REGOs for heating and cooling until introduction of a support mechanism for heat, by which time there will be monitoring and reporting structure in place for renewable heat that could be utilised. We therefore do not propose extending the scope of REGOs to cover heating and cooling at this time.

Timing

144. Part B of the consultation, relating to REGOs only, closes on 7th September 2010. Please send any comments you have on REGOs by this date.

Question	
1.	**Do you have any comments on the changes to the arrangements governing REGOs set out in this chapter?**

Annex A – How the RO works

- The RO works by placing an obligation on licensed electricity suppliers to source a specified and annually increasing proportion of their sales from renewable sources, or pay a penalty.

- The level of the Obligation is 11.1% for 2010/11.

- Generators are issued with Renewables Obligation Certificates (ROCs) for every megawatt hour (MWh) of eligible renewable electricity they generate. As of 1st April 2009, when we introduced 'banding', different technologies receive different numbers of ROCs per MWh. This reflects differences between technologies including the cost of generation and potential for large-scale deployment, and provides increased support to technologies that are less well-developed or further from the market.

- Generators sell their ROCs to suppliers or traders which allows them to receive a premium in addition to the wholesale price of their electricity. ROCs can be sold with or without the electricity they represent.

- Suppliers satisfy their Obligation by presenting ROCs to Ofgem, who administer the scheme. Where they do not present sufficient ROCs they have to pay a penalty known as the buy-out price. This is set at £36.99/MWh for 2010/11 (and linked to RPI).

- This money is held by Ofgem in the buy-out fund until the end of the Obligation period, when it is recycled to suppliers who presented ROCs on a pro-rata basis.

Annex B – List of Questions

Part A – Statutory Consultation on the Renewables Obligation Order 2011

Questions	
1.	Do you agree with the proposal to phase support for offshore wind to account for the longer construction period?
2.	Do you agree that phasing of capacity should be limited to once a year for a maximum of five years?
3.	How do you think the capacity to be included in each phase should be determined e.g. split equally or based upon operational capacity? Please give your reasons.
4.	Do you think each phase should be metered separately or would a *pro-rata* approach be more appropriate?
5.	Do you agree that the band applied to each phase should be the same as the band awarded at initial accreditation of that capacity?
6.	Do you think a minimum accredited capacity or any other criteria should apply to this policy i.e. the station or additional capacity must be a certain size to qualify? If so, what do you consider this should this be?
7.	Do you agree that phased support should only be available for offshore wind generators?
8.	Is 60% saving (equating to 285.12 kgCO_2/MWh) the right minimum GHG emission threshold?
9.	Do you agree that the sustainability criteria restricting the types of land used should be consistent with the criteria imposed on bioliquids by the RED?
10.	Do you agree that generators over 50kW should be required to report against the sustainability criteria from April 2011? Do you agree with the information to be included in the report?

11.	**Do you agree that for biomass generators of 1MW and above there should be a transition period of mandatory reporting against the sustainability criteria from April 2011, before compliance is formally linked to the receipt of ROCs from April 2013?**
12.	**Do you agree that for biomass generators below 1MW compliance with the sustainability criteria should not be linked to the receipt of ROCs ?**
13.	**Do you agree with the exclusion of waste and sewage gas and landfill gas? Should anything else be excluded?**
14.	**Do you consider that sustainable forestry management practices should be a mandatory part of the criteria, or addressed in guidance? In particular how can the potential environmental impacts on woodlands be balanced against the compliance burdens on small businesses?**
15.	**Do you have any other comments on the proposals in this chapter?**
16.	**Do you agree with, where applicable, using the RFA technical guidance to calculate greenhouse gas emissions savings?**
17.	**Do you agree that the ISAE 3000 standard should be regarded as an adequate standard for the independent audit report?**
18.	**Do you agree that Ofgem should have the power to revoke ROCs/withhold a commensurate number of ROCs in the next Obligation period where the audit is late, qualified or not carried out?**
19.	**Are there other reasons, unrelated to sustainability grounds, why particular bioliquids ought to remain excluded from the RO?**
20.	**Do you agree that we should maintain reporting criteria in line with those being proposed for solid biomass in Chapter 2?**
21.	**Do you have any other comments on the proposals in this chapter?**
22.	**Do you agree that additional support should be introduced for refurbishment and replacement in existing stations?**

23.	**Do you agree that this should be limited to cases of major refurbishment or replacement only?**
24.	**a. What should or should not be covered by the terms:** - **refurbishment of parts;** - **replacement;** - **major refurbishment of parts; and;** - **major replacement?** **b. Should these terms be technology specific?** **c. Could 'major refurbishment' and 'major replacement' be related to the number of generating components that are refurbished or replaced?** **Please give reasoning and provide any evidence.**
25.	**In your view, is the repowering of wind turbines covered by the description of 'replacement' used in this chapter? If not, how does it differ and should it be treated differently from other technologies?**
26.	**Do you agree that any additional support for stations undergoing such major refurbishment or replacement should be less than for newly accrediting stations (or additional capacity)? Please give your reasoning and provide any evidence.**
27.	**Do you have a preference between a lower level of support, shorter duration of support ,or a combination of the two? Please give your reasoning and provide any evidence.**
28.	**Do you agree that support should be provided to existing co-firing generation converting to dedicated biomass?**
29.	**If so, what is your view on the level of support that should be given to converted stations (i.e. should it be as for new stations or reduced)? Please give your reasoning and provide any evidence.**
30.	**Do you agree the Banding review should consider removing the uplift for CHP generating stations accrediting on or after 1st April 2013? Please provide evidence to support your answer.**

31.	**Do you agree that the CHPQA requirement for CHP stations should remain for those stations benefiting from the CHP uplift under the RO?**
32.	**Do you agree that the CHPQA requirement should remain for all EfW with CHP stations?**
33.	**Do you have any comments on the potential transitional proposals set out above for generating stations with CHP accrediting between 15th July 2009 and 31st March 2013?**
34.	**Is there a need to change the mutualisation cap and trigger for the period** **a) up to 2015/16** **b) after 2016/17?** **Please give your reasoning.**
35.	**If you think the mutualisation trigger should be changed at what level should it be set and what calculation process should be used? Please give your reasoning.**
36.	**Should mutualisation payments be capped (and adjusted as they are now in line with inflation) and if so at what level and why?**
37.	**Could smaller suppliers be disproportionately affected by significant increases in mutualisation fund payments? If so what level of increase would give rise to such concerns?**

Part B - REGOs

Question	
1.	**Do you have any comments on the changes to the arrangements governing REGOs set out in this chapter?**

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