Department of
Enterprise, Trade
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Consultation

Proposed Changes to the Northern Ireland Renewables Obligation

Statutory Consultation for the Renewables Obligation (Amendment) Order (Northern Ireland) 2011

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July 2010

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FOREWORD

By Arlene Foster, MLA, Minister of Enterprise Trade and Investment

As Minister of Enterprise, Trade and Investment, I am pleased to launch another consultation on improving the NIRO to meet local needs.

I am grateful to the consultees who responded to the Department's recent call for evidence on the costs of anaerobic digestion. This evidence has enabled the proposals contained in this consultation to increase the level of support offered to that technology. I hope this will, in due course, lead to the uptake of the technology on a commercial basis in Northern Ireland, benefitting communities across the region.

I know that many small-scale developers remain keen to see a feed-in tariff introduced here in Northern Ireland. My Department has been working on a detailed study to examine the most appropriate way of incentivising small-scale renewable electricity generation in Northern Ireland. This work has included the costs and benefits associated with introducing a feed-in tariff or with maintaining the NIRO.

As electricity users themselves, developers and renewables businesses in Northern Ireland will appreciate that further incentive represents a cost to electricity consumers which, particularly at a time of economic downturn, must be carefully weighed.

We must be sure that it is right for Northern Ireland. I will make an announcement on my decision on the future for incentivising smaller scale installations here later in the year.

The consultation also looks at the issue of refurbishment which I know from correspondence is an issue about which many stakeholders have been concerned.

I look forward to reading responses to the consultation as we move forward through the process this year.

ARLENE FOSTER MLA
Minister of Enterprise, Trade and Investment

INTRODUCTION

The Renewables Obligation

1.1 The Northern Ireland Renewables Obligation (NIRO) is the Department's main policy measure for supporting the development of renewable electricity in Northern Ireland. The NIRO was introduced on 1 April 2005 and has been the subject of a number of amendments, the most recent in April 2010: this was the Renewables Obligation (Amendment) Order (Northern Ireland) 2010).

1.2 The NIRO places a legal requirement on electricity suppliers to account for a specified and increasing proportion of their electricity as having been supplied from renewable sources or to pay a buy-out fee that is proportionate to any shortfall. Suppliers provide evidence of compliance by presenting Renewables Obligation Certificates (ROCs) which are issued to generators of renewable electricity for each unit of eligible output. The number of ROCs issued for each MWh unit varies depending on the technology involved and its generating capacity. The NIRO operates in tandem with two similar Obligations in Great Britain – the 'RO' in England & Wales and the 'ROS' in Scotland. ROCs issued in Northern Ireland under the NIRO (NIROCs) are tradeable with those issued under the two GB Obligations (GBROCs) in a UK-wide market for ROCs; both NIROCs and GBROCs are accepted as the necessary evidence under each of the Obligations.

1.3 ROCs (both NIROCs and GBROCs) are issued by OFGEM, which, in the case of NIROCs, is acting on behalf of the Northern Ireland Authority for Utility Regulation (NIAUR). Throughout this document the term ROCs will be used to refer to the certificates issued under the Obligations and the term NIROC will be used only when the reference is specifically in respect of ROCs issued under the NIRO.

Proposed Changes

1.4 This consultation sets out the changes which we propose to implement in the NIRO in 2011. The proposals contained in this document mirror some of those currently being proposed in GB through a similar consultation process for the Obligations in Great Britain. Consistency between the Obligations is desirable where possible in view of the operation of the three Obligations in a UK-wide market for ROCs. However, such consistency is not always possible or appropriate; the fact that NI has devolved responsibility for energy policy means that we may vary from GB in some areas. For example, the Feed-In Tariff (FIT) introduced in GB in April 2010 for generation up to 5MW created a difference in the way that small-scale generation is incentivised.

1.5 Some of the proposals being put forward by DECC's consultation in GB will apply in Northern Ireland: for example, offshore renewables generation is currently provided for by UK legislation made at Westminster and covering Northern Ireland. Discussions are underway with DECC to transfer the appropriate legislative powers to Northern Ireland, under plans outlined in the NI Offshore Renewable Energy Strategic Action Plan. But there are also proposals being put forward by DECC which will not apply to NI at this time, for example, to deal with transition to the RHI.

1.6 In Chapter 2 we propose increased support for Anaerobic Digestion generating stations to reflect both the high capital costs associated with this important technology and its wider environmental benefits. Stakeholders should take note of para 2.7 which refers to State Aid and HM Treasury issues.

1.7 Chapters 3 and 4 detail changes around:

- the use of refurbished and replacement equipment
- existing generating stations adding additional capacity
- a move from declared net capacity to total installed capacity
- Microgeneration Certification Scheme (MCS) accredited equipment and installers.

1.8 Chapters 5 and 6 deal with mandatory requirements agreed under the European Union's Renewable Energy Directive. This consultation deals with proposals to:

- introduce voluntary sustainability standards for biomass
- introduce sustainability standards for bioliquids and put in place arrangements to ensure monitoring and enforcement .

1.9 Chapter 7 of the consultation covers an issue which is relevant to renewables development in NI but which will be effected through the GBRO rather than the NIRO:

- phasing for offshore wind projects.

As this is a matter for the GB Obligation, Chapter 7 contains the relevant extracts from the DECC consultation. Comments on these proposals can be made as part of the NIRO consultation or, alternatively, comments can be sent directly to DECC (and copied to DETI).

Consultation Process

1.10 The Consultation will close for responses on **21st October 2010.**

1.11 The changes to the NIRO will be contingent on obtaining State Aid approval from the European Commission and legislative approval of the Assembly. This will require separate State Aid approval for those elements that differ from the changes being implemented in GB.

How to respond

1.12 Responses to this consultation should reach DETI on or before **21st October 2010** and should be sent, preferably by e-mail, to:

NIRO2011@detini.gov.uk

or by post to:

Michael Harris,
Sustainable Energy Branch
Department of Enterprise, Trade and Investment
Netherleigh
Massey Avenue
BELFAST
BT4 2JP.

All responses should include the name and postal address of the respondee.

Confidentiality & Data Protection

1.13 Your response may be made public by DETI and placed on the DETI website as part of the consultation process. If you do not want all or part of your response or name made public, please state this clearly in the response by marking your response as 'CONFIDENTIAL'. Any confidentiality disclaimer that may be generated by your organisation's IT system or included as a general statement in your fax cover sheet will be taken to apply only to information in your response for which confidentiality has been specifically requested.

1.14 Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 1998 (DPA)). If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

1.15 In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

Copies of the Consultation

1.16 This Consultation document is being produced primarily in electronic form and may be accessed on the DETI Energy website: www.energy.detini.gov.uk or may be obtained from the address above or by telephoning 028 9052 9240.

1.17 If you require access to this Statutory Consultation document in a different format – eg Braille, disk, audio cassette – or in a minority ethnic language please contact the Department on 028 9052 9240 and appropriate arrangements will be made as soon as possible.

SUPPORT FOR ANAEROBIC DIGESTION

2

Introduction

2.1 On 1 April this year, enhanced levels of NIROCs were introduced to reflect, but not necessarily match, the rates provided by the GB Feed-in Tariff (FIT). Table 1 below details the NIROC levels issued to operators of new generation stations receiving full accreditation by Ofgem after 31 March 2010.

2.2 These new NIROC levels have been well received and there is no intention to review these levels again outside the planned banding review which will commence in October 2010, with any proposed changes being introduced in 2013.

TABLE 1: NIROC LEVELS INTRODUCED ON 1 APRIL 2011

Technology	NIROCs/MWh
Wind	
Up to 250 kW	4
Hydro	
Up to 20kW	4
20kW –250kW	3
250kW – 1MW	2
PV	
Up to 50kW	4
50kW – 5MW	2

Support for Anaerobic Digestion

2.3 In 2009, ROC banding levels were increased and emerging technologies, including Anaerobic Digestion (AD), benefited from an increase from 1 NIROC to 2 NIROCs per MWh generated. Concern was raised during last year's NIRO consultation about the level of support provided for AD. Some responses to the consultation suggested that the current rate of 2 NIROCs/MWh was insufficient to incentivise AD in Northern Ireland. Responses on this issue suggested that a range of levels between 2.5 and 4 NIROCs would be more appropriate and bring NI more into line with the GB tariff levels of 9-11.5p/kWh for AD. However, there was insufficient supporting evidence provided by consultees to allow the Department to consider scope for change in time for inclusion in the legislative amendments to the NIRO which came into operation on 1 April 2010, particularly given that State Aid clearance is required.

2.4 DETI recognises the potential of AD in Northern Ireland, in terms of making a contribution to the proposed renewable electricity generation target of 40% by 2020 and the proposed renewable heat target of 10% by 2020; the economic opportunities for businesses; and addressing environmental and waste challenges. That is why the DETI Minister, Arlene Foster MLA, stated in the NI Assembly on 23 March 2010 that she would look again at the level of support offered for AD under the NIRO and announced that the Department would launch a public Call for Evidence on the costs of AD. This Call for Evidence produced just under 20 responses, including a number from developers actively pursuing investment in AD.

2.5 The evidence gathered supports an increase in NIROC levels for AD. Based on this evidence, we are therefore proposing that NIROC levels for AD generation should increase as detailed in Table 2 below.

TABLE 2: PROPOSED NEW NIROC LEVELS FOR ANAEROBIC DIGESTION

Capacity	NIROCs/MWh
Up to and including 500 kW	4
500kW – 5MW	3

2.6 We intend to implement this proposal for any AD generators with a full accreditation date under the NIRO of 26 April 2010 or thereafter. This date represents the date of publication of the Call for Evidence on Anaerobic Digestion.

2.7. Any increase in the banding of AD is subject to State Aid approval from the European Commission, and possibly also needs agreement from Her Majesty's Treasury (HMT). DETI questions the vires of HMT in this regard, viewing the NIRO as a fully devolved matter, but while this issue is being resolved, investors should take note.

2.8 The Biomass Process Challenge Fund[1] announced by Department of Agriculture and Rural Development (DARD) on 18 June 2010 is open to farm businesses installing AD (and other biomass fuelled) renewable energy facilities. Generators can claim ROCs and grant however, to comply with State Aid regulations grant rate may have to be adjusted downward to take into account the value of NIROCs in the case of electricity generation.

Questions

Q1. Does the support proposed represent an appropriate level to incentivise AD development in Northern Ireland? If you disagree, please provide an evidence-based rationale.

Q2. Do you agree with the proposed implementation date? If not, please propose a different date and explain your reasoning.

[1] http://www.dardni.gov.uk/index/grants-and-funding/-biomass-processing-challenge-fund/biomass_processing_challenge_fund-draft_brochure.htm

REFURBISHMENT AND REPLACEMENT OF GENERATING EQUIPMENT

Introduction

3.1 Following the consultation on The Renewables Obligation (Amendment) Order (Northern Ireland) 2010 a number of respondents raised questions on how we intend to deal with existing stations that refurbish or replace equipment.

3.2 The current NIRO makes limited provision for refurbishment and replacement. Currently, 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 at a lower cost than rebuilding a new station).

3.3 Refurbishing or replacing components so as to extend the life of the generating station maximises the use of resources and therefore has a greater potential to save CO_2 and increase value for money for the energy consumer. However, we do not 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).

3.4 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 NIRO 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

3.5 The NIRO doesn't 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. There is a historic exception to this for certain types of stations commissioned before 1990 and we do not propose to amend this exception.

3.6 Previous stakeholder feedback has seen a majority in favour of supporting the use of refurbishment and replacement that occurs during the 20 year eligibility period. However, 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 NIRO. This raises questions around what constitutes refurbishment or replacement, and major refurbishment or replacement. We have therefore been considering these issues in more detail.

3.7 For the purposes of this consultation, the terms 'refurbishment' and 'refurbished equipment' refer to the

use by a generator of previously used or non-new 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, then reinstalls it in the same station.

3.8 The terms 'replacement' and 'replacement equipment' refer to the substitution by a generator of new or refurbished equipment for existing equipment in a generating station, for the purpose of generating electricity.

3.9 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.

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

Proposals

Refurbishing or replacing parts of existing generating stations with new or refurbished equipment

3.11 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 will be accounted for when calculating overall costs. However, there may be instances where the main components can be refurbished or replaced and this is likely to extend the lifetime of the station beyond what was originally expected and at a lower resource and carbon cost than rebuilding new capacity.

3.12 In the case of major components being refurbished or replaced there are a number of options that could be considered:

- Not allow these stations any extra support under the NIRO (the current position)
- Allow the same support as new stations in the same band for the same duration (i.e. an additional 20 years, subject to the 2033 end date)
- Allow support at lower level/for reduced amount of time 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 a shorter duration.

Minor refurbishment/replacement

3.13 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

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

3.15 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 etc. Providing the same level of support as new stations for an additional 20 years would therefore be overcompensating.

3.16 We therefore **propose to offer a lower level of support and/or a shorter duration of support for such stations.** 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.**

3.17 To implement this, we would need to determine what should be treated as major replacement or refurbishment, for example it could be linked to the amount of spend involved, whereby the cost of the refurbishment or replacement must exceed a set percentage of the cost of a new station of equivalent capacity. 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

3.18 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 and for a 20 year period (subject to the end date of the NIRO).

3.19 DETI has listened to arguments that the current system in Northern Ireland does not encourage existing generators (those accredited on or before 31 March 2010) to install new capacity at their existing generating stations. We therefore propose that **new additional capacity installed at existing stations should be eligible for the same support as new stations – that is, at the NIROC level available to generating stations accredited after 31 March 2010 and for a 20-year period (subject to the end date of the NIRO).** DETI believes that this proposal will offer existing generators the opportunity to benefit from the recent introduction of enhanced NIROCs for any additional new capacity in which they are prepared to invest, bearing in mind the thresholds that exist for the enhanced NIROCs. Generators should also be aware that their existing capacity will remain on the NIROC level which it currently receives and that the total capacity of the generating station will take account of both the original and additional capacity.

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

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

3.21 Options include **allowing converted stations to reaccredit under the new technology band at the same level and for the same duration as new stations** (i.e. an additional 20 years, subject to the 2033 end date); or **allowing converted stations to reaccredit under the new technology band at a lower level/for a reduced amount of time** 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 a shorter duration.

3.22 With regards to the first option (i.e. reaccreditation at the same level and for the same duration as new stations), 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. We therefore favour the second option but do not currently have enough evidence to make a judgement on how this should apply.

3.23 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 NIRO, 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.

Introducing quality/safety standards for installed refurbished generating stations

3.24 As indicated above, generating stations seeking accreditation using refurbished equipment will continue to receive the same level of support as those installing new equipment. This is of particular interest to the wind industry. Whilst the lower costs associated with refurbished wind turbines means that more people can invest in them, it also raises issues around the quality, reliability and safety of the equipment being installed and that of the installers.

3.25 Whilst this consultation also includes proposals that the installation of microgeneration (up to 50kW) equipment should fall under the Microgeneration Certification Scheme (see Chapter 4), there is no regulation of larger, refurbished turbines.

3.26 We do not propose to legislate on this particular issue in 2011 as there still much to understand, not least the possibility of introducing a regulatory requirement which could do more to hinder renewables generation than support it. We are therefore seeking views at this time on whether there is sufficient concerns that refurbished wind turbines should be subject to some form of quality/safety regulation.

Move from Declared Net Capacity to Total Installed Capacity

3.27 The 2010 NIRO Amendment Order introduced new provisions that allowed hydro, wind and photovoltaic generating stations to realise enhanced levels of NIROCs, provided that they were accredited under the NIRO after 31 March 2010. There are several different capacity thresholds for each technology and if a hydro, wind or PV generating station is to qualify for the enhanced level of NIROCs, it must be at or below one of these thresholds. Currently, the NIRO Order sets out that the thresholds for qualifying generating stations are based upon declared net capacity (DNC) i.e. the total installed capacity (TIC) less the power consumed by the generating itself.

3.28 It has come to our attention that, in addition to often being difficult determine, DNC could create a gaming opportunity whereby generators will state a lower DNC in order to access a higher level of NIROC support. For example, the operator of a 25kW TIC hydro plant may claim that the DNC is 19kW so as to receive four NIROCs/MWh, rather than three. We believe that this situation would be avoided by amending the legislation so that the thresholds for qualifying power stations would be based on TIC rather than DNC. We would be grateful for respondents' views on this proposed change.

Questions

Q3. Do you agree that additional support should be introduced for refurbishment and replacement in existing stations?

Q4. Do you agree that this should be limited to cases of major refurbishment or replacement only?

Q5a. What should or should not be covered by the terms:

- refurbishment of parts;
- replacement;
- major refurbishment of parts and;
- major replacement?

Q5b. Should these terms be technology specific?

Q5c. Could 'major refurbishment' and 'major replacement' be related to the cost of the refurbishment or replacement?

Please give reasoning and provide any evidence.

Q6. 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?

Q7. 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.

Q8. 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.

Q9. Do you agree that existing generators who add additional capacity should receive the same level of support for this additional capacity only at the same level available to new stations?

Q10. Do you agree that support should be provided to existing co-firing generation converting to dedicated biomass?

Q11. 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

Q12. In your view, does the installation of refurbished wind turbines need to be regulated in terms of quality assurance and safety? Please give your reasoning and provide any evidence.

Q13. Do you agree that qualifying hydro, wind and PV generating station capacity thresholds should be based around total installed capacity rather than declared net capacity? If not, please give your reasoning and provide any relevant evidence.

MICROGENERATION CERTIFICATION SCHEME

Introduction

4.1 Previously, microgenerators (i.e. those up to 50kW capacity) who wished to benefit from an installation grant under DETI's Reconnect scheme or the UK-wide Low Carbon Buildings Programme (LCBP) had to use an installer accredited under the UK-wide Microgeneration Certification Scheme (MCS). The MCS scheme provides assurances to those installing microgeneration equipment (householders, community groups, SMEs) that both their installation company and the installed equipment are up to a high standard and ensures that installers are suitably assessed and certified.

4.2 The ending of both Reconnect and LCBP means that there is no regulatory requirement for microgenerators to use MCS installers or equipment. We are keen to close this loophole and we are therefore proposing that all microgenerators receiving full accreditation under the NIRO on or after 1 April 2011 must use MCS certified products installed by MCS accredited installers. We do not believe that this requirement will add any undue burden to microgenerators.

4.3 We would particularly welcome views as to whether this change could be effected administratively rather than requiring an amendment to the legislation, since the latter course would represent an additional burden on the de facto administrators of the scheme, Ofgem, and an additional cost on the buy-out fund.

Questions

Q14. Do you agree with the proposal to require new microgenerators seeking accreditation on or after 1 April 2011 to use the Microgeneration Certification Scheme (MCS)?

Q15. Do you agree that the MCS requirement should be limited to microgenerators i.e. up to and including 50kW? Please give your reasoning and provide any evidence.

Q16. Do you believe that this provision can be brought in on an administrative basis rather than in legislation? If not, please explain your rationale.

SUSTAINABILITY CRITERIA FOR BIOMASS

5.1 In Chapters 5 and 6 we deal with sustainability criteria issues which are required under the Renewable Energy Directive (RED). Chapters 5 and 6 describe those DECC proposals that DETI intends to replicate in the NIRO and seeks views of Northern Ireland stakeholders accordingly.

Issue

5.2 We understand that uncertainty about the introduction of sustainability criteria has been one of the main barriers to investment in large biomass electricity projects. Investors have been concerned about the impact of the introduction of mandatory sustainability criteria, which could potentially make generation from non-compliant projects commercially unviable.

5.3 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 25 February 2010 report: *http://ec.europa.eu/energy/renewables/bioenergy/sustainability_criteria_en.htm*.

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

5.5 Support is also more widespread, with NGOs, planning authorities and the finance sector generally encouraging the introduction of sustainability criteria for varied 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.

5.6 However, whilst 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 engage with a sustainability scheme.

Background

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

5.8 The current NIRO 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 sustainable data in the summer.

5.9 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

5.10 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 kgCO2 /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.

5.11 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.

5.12 The sustainability criteria will not apply to sewage gas or landfill gas, as these generators have no way of reasonably establishing where their feedstock originated from.

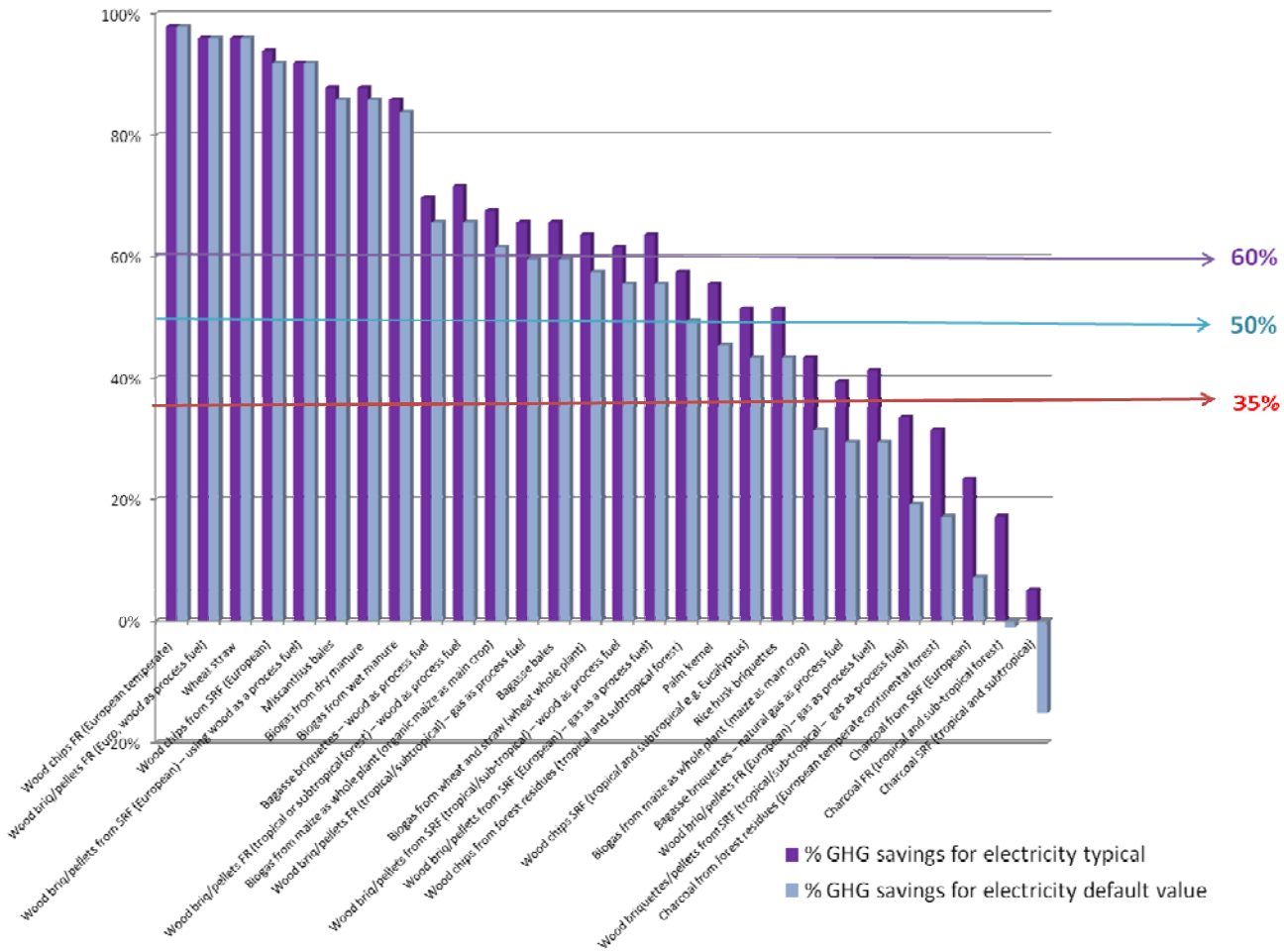
5.13 To limit the regulatory burden on small scale generators who may find compliance too costly or complex, we propose to exempt generators below 1MWe from compliance with the criteria. This is in line with the Commission's recommendation. However, we intend to require small scale generators over 50kW to report against the sustainability criteria (see below).

5.14 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.

5.15 The main departure from the sustainability criteria recommended by the Commission is in relation to the minimum greenhouse gas (GHG) emission saving.

5.16 The 60% threshold we are proposing, is above the 35% minimum GHG emission saving level recommended by the Commission, signalling the Government's determination to deliver real and significant carbon savings and to be at the forefront of sustainability. *[An indication of the types of feedstock that may fail to meet the GHG emissions saving threshold can be seen in Figure 1.]*

Figure 1: Modelled GHG savings for a biomass plant of 25% conversion efficiency.



Ref: 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

5.17 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 23 January 2008.

- Applying the 60% GHG emission savings threshold from April 2018 and with no exemption for biomass or biogas produced by installations in which production started before 1 January 2017.

5.18 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.

5.19 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 one year transition period before receipt of ROCs becomes dependent upon demonstrating compliance with the sustainability criteria.

5.20 This transition period will allow industry to familiarise itself with the compliance processes and techniques involved and will allow us to optimise the scheme if necessary and deal with any unforeseen problems. 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 greenhouse gas emission saving from the use of the biomass or biogas.

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 renewables directive). 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 NIRO 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 renewables directive).

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

5.21 This report will replace the report currently required under article 46 of the NIRO 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.

5.22 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. After the one year 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.

5.23 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. These are set out in Annex II to the Commission's report of 25 February 2010. However, the use of a generator's actual values across the feedstock's lifecycle such as the actual transport distance, in tools such as the Environment Agency's Biomass Environmental Assessment Tool (BEAT2 Reporter), will be strongly encouraged, for all but the smallest generators.

5.24 We propose that the Commission's recommended methodology should be used for calculating greenhouse gas emissions of solid biomass and biogas to generate electricity. This is set out in Annex I to the Commission's report of 25 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.

5.25 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.

5.26 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

Q17. Is 60% the right minimum GHG emission saving threshold?

Q18. Do you agree that the sustainability criteria restricting the types of land used should be consistent with the criteria imposed on bioliquids by the renewable energy directive?

Q19. 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?

Q20. Do you agree that for biomass generators of 1 MWe and above there should be a transition period of mandatory reporting against the sustainability criteria from April 2011 before compliance is linked to receipt of ROCs from April 2013?

Q21. Do you agree that for biomass generators below 1MWe compliance with the sustainability criteria should not be linked to the receipt of ROCs?

Q22. Do you agree with the exclusion of waste and sewage gas and landfill gas? Should anything else be excluded?

Q23. 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?

Q24. Do you have any other comments on the proposals in this chapter?

SUSTAINABILITY CRITERIA FOR BIOLIQUIDS

Issue

6.1 The Renewable Energy Directive (RED) requires that bioliquids used to generate electricity must meet the sustainability criteria set by the Directive in order to be eligible for financial support or to count towards compliance with renewable energy obligations. Therefore, we are introducing rules that electricity generated using bioliquids must use bioliquids meeting the sustainability criteria in order to be eligible for ROCs.

Background

6.2 There has long been concern that some bioliquids are not sustainable and in the UK recently there have been objections to planning permission for bioliquid generators about the unsustainable nature of palm oil.

6.3 This concern has been reflected at European level resulting in the introduction through articles 17 to 20 of the Renewable Energy Directive of sustainability criteria for bioliquids. A bioliquid means a liquid fuel for energy purposes produced from biomass.

6.4 The RED[1] requires that electricity generated from bioliquids must use bioliquids that fulfil the sustainability criteria set out in Article 17 of the Directive if the UK intends to:

- Count it towards meeting the 15% target for 2020 set by the Directive; or
- Allow it to count towards compliance with a renewable energy obligation; or
- Reward it with financial support.

6.5 The NIRO 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.

6.6 The Commission communication published 19 June[2] explains that bioliquids include viscous liquids such as waste cooking oil, animal fats, palm oil, crude tall oil and tall oil pitch.

6.7 The sustainability criteria set by the RED are broadly:

(1) The bioliquids used must demonstrate a greenhouse gas emission saving of at least:

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

[1] 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

[2] 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

b. 50% from 1 January 2017, and

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

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

(2) Raw material shall not be obtained from land with high biodiversity value. This applies to land having that status on or after 1 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.

(3) 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.

(4) 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).

(5) 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 19 January 2009[2] and in accordance with the minimum requirements for good agricultural and environmental conditions defined pursuant to Article 6(1) of that Regulation (article 17(6) of the RED).

6.8 Bioliquids produced from waste or residues (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).

6.9 The RED describes the 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

[1] The Commission memo published on 19 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 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 23 January 2008 at the latest the criterion of a minimum 35% greenhouse gas saving starts to apply only from 1 April 2013.'

[2] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:030:0016:0016:EN:PDF

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.

6.10 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.

6.11 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 social issues (article 18(3)). 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.

6.12 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

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

6.14 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.

6.15 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 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.

6.16 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.

6.17 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 be worked out.

6.18 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.

6.19 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 NIRO once the Commission publishes its decision.

Demonstrating compliance

6.20 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.

6.21 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 it does receive evidence satisfying it that there has been a breach of this sustainability criteria.

6.22 In compliance with the RED we will require generators to have an annual independent audit of the bioliquid sustainability information they provide to Ofgem over the year. The auditing should verify that the systems used by the generators to demonstrate compliance with the sustainability criteria are accurate, reliable and protected against fraud.

6.23 The directive 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. In line with proposals put forward for the Renewable Transport Fuels Obligation (RTFO)[1] we will require that independent auditors will operate to the ISAE 3000 standard, which 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.

6.24 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 the power to revoke ROCs/withhold a commensurate number of ROCs in the next Obligation Period.]

6.25 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.

Extending sustainability reporting on a voluntary basis

6.26 Chapter 5 sets out our proposals to introduce sustainability criteria for solid biomass and biogas. In order to align sustainability reporting between bioliquids and solid biomass we intend to introduce voluntary reporting on social criteria for bioliquids, in line with those proposed in chapter 5 for solid biomass.

Biodiesel

6.27 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

[1] http://www.renewablefuelsagency.gov.uk/

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.

6.28 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?

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

Questions

Q25. Do you agree with, where applicable, using the RFA technical guidance to calculate greenhouse gas emissions savings?

Q26. Do you agree that the ISAE 3000 standard should be regarded as an adequate standard for the independent audit report?

Q27. 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?

Q28. Are there other reasons, unrelated to sustainability grounds, why particular bioliquids ought to remain excluded from the NIRO?

Q29. Do you agree that we should introduce voluntary sustainability criteria in line with those being proposed for solid biomass in Chapter 5?

Q30. Do you have any other comments on the proposals in this chapter?

OFFSHORE WIND PHASING

7.1 Since its introduction in 2005 the remit of the NIRO has been restricted to renewables generation that is both generated and supplied on land (including inland waterways) within Northern Ireland. So, for example, offshore activity is currently provided for by UK legislation made at Westminster and covering Northern Ireland. As a result, any eligible renewables generation that is either generated outside Northern Ireland whether or not it is supplied here is handled under the GB Obligation; similarly any eligible renewables generation in Northern Ireland but supplied to customers in GB is handled by the GB Obligation.

Offshore Wind Phasing

7.2 The proposal contained within the current DECC consultation which falls to the GB Obligation deals with the phasing of accreditation for offshore wind stations.

Issue

7.3 Since the introduction of the 20 year limit on support under the Renewables Obligations, offshore wind developers have queried the way the policy works in practice.

7.4 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 specific supply chain issues with an underdeveloped supply chain that can add to overall project build time.

7.5 Offshore wind developers are obviously keen to start receiving RO support as soon as possible for financing purposes. Under the current system, Ofgem can accredit a station at any point after they have commissioned. Ofgem accredit the total capacity of a station upfront, and the 20 year limit starts for the whole station's capacity on that date. The same applies to additional capacity.

7.6 If developers choose to accredit the station when it first begins to produce eligible renewable electricity, the 20 year support limit starts before all the turbines are built or operating. In this case, the majority of the capacity will receive less than 20 years support, with some capacity constructed on large windfarms potentially receiving as little as 15 years support on a five year build.

7.7 In order to ensure all turbines receive 20 years support, the developer would need to wait until the whole station had been constructed before applying for accreditation. This would delay receipt of ROC income, and may impact the financial viability of a project.

7.8 Therefore, ideally offshore wind developers would like Ofgem to be able to 'phase' the support so they receive 20 years for phases of turbines as they are constructed.

7.9 Most other technologies do not have this issue, and commission when they are fully operational. Although onshore wind stations may also commission before all the turbines are fully built, they don't have the same restrictions on building imposed by the offshore environment, and thus construction is not as long. They also tend to be smaller stations, and therefore quicker to complete.

7.10 Under the current arrangements, the end date of the RO is 2037 (2033 for the NIRO), so this will cease to be an issue from 2017 (or 2013 if offshore powers are returned to Northern Ireland), as any new capacity will receive less than 20 years support. From this point, stations 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 (or 13 in Northern Ireland).

Background

7.11 When the RO was introduced in 2002, the original end date 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 (2033 in NI).

7.12 A limit of 20 years support per generating station was introduced (subject to the 2037/2033 end dates) to avoid overcompensation. Most renewables projects are financed over 15-20 years, and RO support levels take this into consideration.

7.13 Under the current legislation, the 20 year limit begins at the point when the station receives full accreditation. The same applies to additional capacity – the 20 year limit begins when the additional capacity is recognised as forming part of the station.

7.14 When accrediting a generating station or additional capacity, Ofgem accredit the total capacity of that station or additional capacity, regardless of whether they are generating at full capacity or not. A station can apply for full accreditation up to two months prior to commissioning, the accreditation date in this case would be the date the station subsequently commissioned. In the case of offshore wind, when a station (or additional capacity) is accredited, there are often only a few turbines actually generating, with the rest being built in phases over the following years.

Proposal

7.15 In order to account for the longer construction periods associated with building in the offshore environment, the legislation could be amended to allow support for offshore wind generating stations to be received in phases. DECC is seeking views on how this should work in practice.

7.16 This would not incur any additional costs to consumers, as calculations on support levels for the RO assume the whole station's capacity receives the full 20 years support. However, it may result in a very small increase in administration costs, which would be paid for out of the buyout fund.

7.17 It would be administratively more complicated than the current position and expensive to allow each turbine or string of turbines to receive 20 years support, so DECC is proposing that offshore wind stations should be allowed to receive support on capacity commissioned at one point every year for a maximum of five years. If a 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.

7.18 DECC considers that five years presents a balance between recognising large projects are constructed in stages, and incentivising projects to deploy as quickly as possible. Limiting the number of years should also help to prevent gaming of the system whereby investors install some turbines to secure a particular ROC band. DECC would welcome views on whether a minimum capacity should be applied to this policy to deter small wind projects from gaming the system, and whether a minimum proportion of overall capacity must be accredited in phase 1 in order for that project to secure a particular band.

7.19 Allowing phasing of support will not change the process by which Ofgem accredit a station or recognise additional capacity. The phases will be set portions of the total capacity of the station (or the additional capacity). DECC would welcome views on how this capacity should be split and whether each phase should be metered separately to prevent gaming.

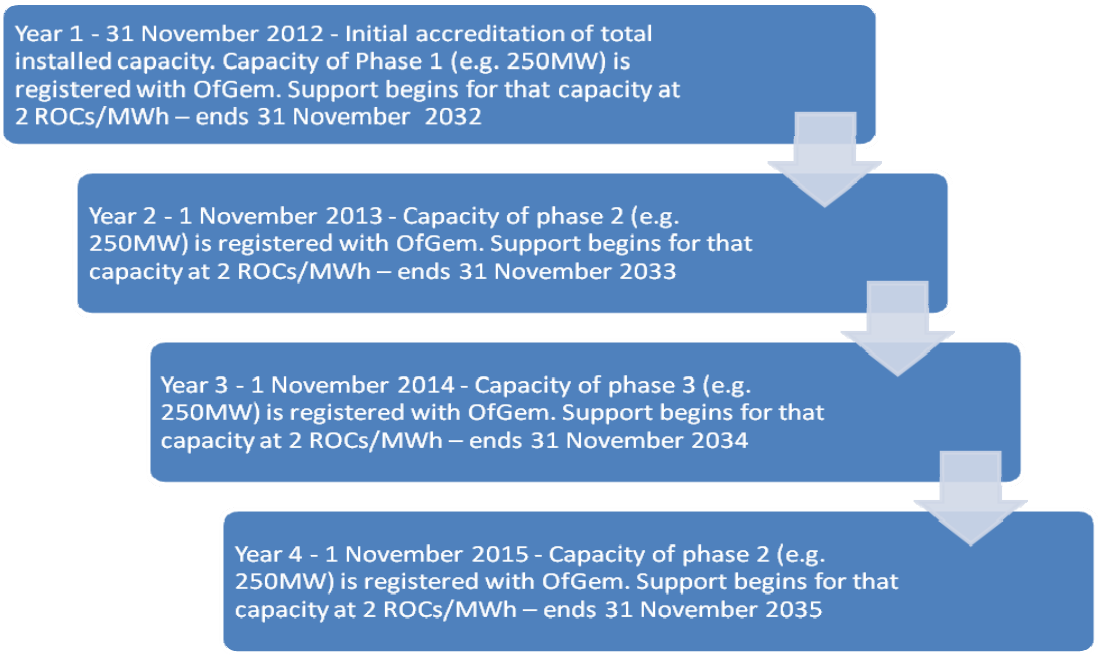
7.20 A station would be accredited at a set capacity which would be commissioned over a maximum five year period. The band for each of the phases will be the same as the band awarded at the initial accreditation of that capacity.

7.21 For example, if a generator accredited a station 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. See figure 2 for an example of how this could work in practice.

7.22 DECC is not proposing to amend the legislation for other technologies. Onshore wind is the only other technology that commissions over a period of time. However, onshore wind developers do not face the time constraints of operating in the marine environment nor do they have the same supply chain pressures. In addition, onshore wind farms tend to be smaller than offshore. DECC is therefore of the view that to extend the phasing to other technologies is not necessary and would also incur extra administration costs.

7.23 As explained in paragraphs 4.2 and 4.3, responsibility for offshore wind falls within the GB Renewables Obligation and changes will be reflected in the GB Order in 2011. However, comments are welcomed by DECC from Northern Ireland stakeholders and DETI will ensure that any responses to the questions listed below are copied to the DECC consultation team.

FIGURE 2: EXAMPLE FOR STATION A, 1000MW, BEGINNING GENERATION IN 2012



Questions

Q31. Do you agree with the proposal to phase support for offshore wind to account for the longer construction period?

Q32. Do you agree that phasing of capacity should be limited to once a year for a maximum of 5 years?

Q33. How do you think the capacity to be included in each phase should be determined e.g. split equally or at Ofgem's discretion? Please give your reasons.

Q34. Do you think each phase should be metered separately to avoid gaming or would a pro-rata approach be more appropriate?

Q35. Do you agree the support level for the total capacity of the station or additional capacity should be set at the initial accreditation?

Q36. Do you think that a minimum proportion of the overall capacity must be accredited in phase 1 to secure the band for the whole generating station?

Q37. Do you think a minimum capacity 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?

Q38. Do you agree that phased support should only apply to offshore wind generators?

Annex A
Glossary of Terms

Annex B
List of Consultation Questions

Annex C
Consultation Criteria

Annex D
Equality Assessment

Annex A – Glossary of Terms

Anaerobic Digestion (AD)	The process which digests animal wastes and slurries along with other wastes if required, to produce methane gas (biogas) which can be burnt as a source of energy to generate heat and electricity
'Banding'	Provision of differing levels of support for different types of generation in the Renewables Obligation.
Biomass	Animal or plant matter that is used as a fuel
Bioliquids	Liquid fuel for energy purposes produced from biomass
Capacity	Refers to the maximum output level of a generating station
CHP	See 'Combined Heat and Power'.
Combined Heat and Power	An installation that produces both electricity and heat for energy consumption.
DECC	Department of Energy and Climate Change – the GB Department with responsibility from renewable energy matters.
FAME	Fatty Acid Methyl (or ethyl) Esters – type of biodiesel.
Feed-In Tariff (FIT)	An alternative support mechanism to the Renewables Obligation. Requires electricity suppliers to enter into contracts with renewable generators to purchase their output at specified prices usually determined according to the renewable energy source or technology used.
GHG	Green House Gas – any of the atmospheric gases that contribute to the greenhouse effect by absorbing infrared radiation produced by solar warming of the Earth's surface. They include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_2), and water vapor
kW	Kilowatt - (1,000 watts) refers to the size or potential generating capacity of a generation station.
kWh	Kilowatt-hour - a measure of the amount of electricity actually produced by a generating station or used by a consumer (e.g. a 50kW station operating at full capacity for 4 hours will produce 200kWh of electricity) - NOTE: 1kWh is the standard unit of electricity in a household electricity bill.
LCBP	Low Carbon Buildings Programme – UK-wide incentive scheme operated by DECC which offered grants for microgeneration installations. Closed in 2010.
Microgeneration	Currently defined in the NIRO as a generation station with a capacity level of no more than 50kW.
MW	Megawatt (= 1,000 kilowatts) – refers to the size or potential generating capacity of a generating station.

MWh	Megawatt - hours - a measure of the amount of electricity actually generated by a generating station or used by a consumer (e.g. a 10MW station operating at 100% capacity for 3 hours will generate 300MWh of electricity).
NIAUR	Northern Ireland Authority for Utility Regulation – the body with responsibility for energy regulation in Northern Ireland.
NIRO	The Northern Ireland Renewables Obligation - the main support mechanism for encouraging the generation of electricity from renewable energy sources in Northern Ireland.
NIROC	A Renewables Obligation Certificate issued under the NIRO.
OFGEM	The body with responsibility for energy regulation in GB and responsible for the administration of the NIRO on behalf of NIAUR.
Photovoltaic	Generation of electricity from sunlight.
PV	See Photovoltaic.
Reconnect	DETI-led grant scheme towards domestic microgeneration installations. Closed 31 March 2008.
REFIT	Renewable Energy Feed-In Tariff operated in the Republic of Ireland
RO	The Renewables Obligation operated in England & Wales.
ROC	A Renewables Obligation Certificate issued under any of the 3 UK Obligations.
ROS	The Renewables Obligation operated in Scotland.
Single Electricity Market (SEM)	Established in November 2007 through legislation to provide for a single wholesale market for electricity across NI and the Irish republic. All generators on the island with a capacity of 10MW or greater are obliged to sell their output through the SEM and all suppliers must purchase electricity from the SEM.

Annex B – List of Questions

CHAPTER 2: SUPPORT FOR ANAEROBIC DIGESTION

Q1. Does the support proposed represent an appropriate level to incentivise AD development in Northern Ireland? If you disagree, please provide an evidence-based rationale.

Q2. Do you agree with the proposed implementation date? If not, please propose a different date and explain your reasoning.

CHAPTER 3 - REFURBISHMENT AND REPLACEMENT OF GENERATING EQUIPMENT

Q3. Do you agree that additional support should be introduced for refurbishment and replacement in existing stations?

Q4. Do you agree that this should be limited to cases of major refurbishment or replacement only?

Q5a. What should or should not be covered by the terms:

- refurbishment of parts;
- replacement;
- major refurbishment of parts and;
- major replacement?

Q5b. Should these terms be technology specific?

Q5c. Could 'major refurbishment' and 'major replacement' be related to the cost of the refurbishment or replacement? Please give reasoning and provide any evidence.

Q6. 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?

Q7. 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.

Q8. 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.

Q9. Do you agree that existing generators who add additional capacity should receive the same level of support for this additional capacity only at the same level available to new stations?

Q10. Do you agree that support should be provided to existing co-firing generation converting to dedicated biomass?

Q11. 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

Q12. In your view, does the installation of refurbished wind turbines need to be regulated in terms of quality assurance and safety? Please give your reasoning and provide any evidence.

Q13. Do you agree that qualifying hydro, wind and PV generating station capacity thresholds should be based around total installed capacity rather than declared net capacity? If not, please give your reasoning and provide any relevant evidence.

CHAPTER 4 – MICROGENERATION CERTIFICATION SCHEME

Q14. Do you agree with the proposal to require new microgenerators seeking accreditation on or after 1 April 2011 to use the Microgeneration Certification Scheme (MCS)?

Q15. Do you agree that the MCS requirement should be limited to microgenerators i.e. up to and including 50kW? Please give your reasoning and provide any evidence.

Q16. Do you believe that this provision can be brought in on an administrative basis rather than in legislation? If not, please explain your rationale.

CHAPTER 5 – SUSTAINABILITY CRITERIA FOR BIOMASS

Q17. Is 60% the right minimum GHG emission saving threshold?

Q18. Do you agree that the sustainability criteria restricting the types of land used should be consistent with the criteria imposed on bioliquids by the renewable energy directive?

Q19. Do you agree that generators over 50kWshould be required to report against the sustainability criteria from April 2011? Do you agree with the information to be included in the report?

Q20. Do you agree that for biomass generators of 1 MWe and above there should be a transition period of mandatory reporting against the sustainability criteria from April 2011 before compliance is linked to receipt of ROCs from April 2013?

Q21. Do you agree that for biomass generators below 1MWe compliance with the sustainability criteria should not be linked to the receipt of ROCs?

Q22. Do you agree with the exclusion of waste and sewage gas and landfill gas? Should anything else be excluded?

Q23. 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?

Q24. Do you have any other comments on the proposals in this chapter?

CHAPTER 6 – SUSTAINABILITY CRITERIA FOR BIOLIQUIDS

Q25. Do you agree with, where applicable, using the RFA technical guidance to calculate greenhouse gas emissions savings?

Q26. Do you agree that the ISAE 3000 standard should be regarded as an adequate standard for the independent audit report?

Q27. 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?

Q28. Are there other reasons, unrelated to sustainability grounds, why particular bioliquids ought to remain excluded from the NIRO?

Q29. Do you agree that we should introduce voluntary sustainability criteria in line with those being proposed for solid biomass in Chapter 5?

Q30. Do you have any other comments on the proposals in this chapter?

CHAPTER 7 – OFFSHORE WIND PHASING

Q31. Do you agree with the proposal to phase support for offshore wind to account for the longer construction period?

Q32. Do you agree that phasing of capacity should be limited to once a year for a maximum of 5 years?

Q33. How do you think the capacity to be included in each phase should be determined e.g. split equally or at Ofgem's discretion? Please give your reasons.

Q34. Do you think each phase should be metered separately to avoid gaming or would a pro-rata approach be more appropriate?

Q35. Do you agree the support level for the total capacity of the station or additional capacity should be set at the initial accreditation?

Q36. Do you think that a minimum proportion of the overall capacity must be accredited in phase 1 to secure the band for the whole generating station?

Q37. Do you think a minimum capacity 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?

Q38. Do you agree that phased support should only apply to offshore wind generators?

Annex C – Equality Assessment

Under section 75 of the Northern Ireland Act 1998, the Department is required to have due regard to the need to promote equality of opportunity:

- between persons of different religious belief, political opinion, racial group, age, marital status or sexual orientation;
- between men and women generally;
- between persons with a disability and persons without; and
- between persons with dependants and persons without.

In addition, without prejudice to its obligations above, the Department is also required, in carrying out its functions relating to Northern Ireland, to have regard to the desirability of promoting good relations between persons of different religious beliefs, political opinions or racial group.

We have carried out an equality screening exercise for the Draft Renewables Obligation (Amendment) Order (Northern Ireland) 2011 and found that it does not have any significant equality impact. A full Equality Impact Assessment, therefore, is not required. If you would like a copy of the screening form, please contact us.

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

Your views on this document are welcome.

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Department of Enterprise,
Trade and Investment
Netherleigh
Massey Avenue
BELFAST
BT4 2JP

E: email NIRO2011@detini.gov.uk
T: 028 9052 9240
F: 028 9052 9549
Textphone: 028 9052 9304
www.energy.detini.gov.uk

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