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

Government Response

Energy

Government Response to the supplementary consultation on proposals to enhance the sustainability criteria for the use of biomass feedstock's under the Northern Ireland Renewables Obligation

October 2013

Table of contents

1. Introduction

1.1 The Northern Ireland Renewables Obligation (NIRO) is currently the main financial mechanism by which the Northern Ireland Executive incentivises the deployment of renewable electricity generation.

1.2 On 23 October 2012, the Department of Enterprise, Trade and Investment (DETI) published a consultation paper setting out proposals on levels of banded support for large scale solar PV and biomass affordability and sustainability for the NIRO for the period 1 April 2013 to 31 March 2017[1]. DETI published its response on large scale solar PV banding level support and Part B: biomass affordability on 24 January 2013[2]. Part A of the consultation, covering proposed improvements to the sustainability criteria that apply to the use of biomass for electricity generation under the NIRO, closed on 15 January 2013. The consultation proposals mainly addressed the use of solid biomass and biogas feedstock.

1.3 The Department of Energy and Climate Change (DECC) published separate consultations on the solar PV and biomass proposals on 7 September 2012. DECC's proposals were for the England and Wales Renewables Obligation, however given the complementarities of all three Renewables Obligations, the Devolved Administrations in Northern Ireland and Scotland and the UK Government understand the benefits of a consistent approach.

1.4 DETI did not propose to differ from the proposals set out in the DECC consultations as we were not aware of any significant differences that would merit a different approach.

1.5 Mandatory sustainability criteria for bioliquids have already been introduced as required and set under the EU Renewable Energy Directive. Therefore the consultation proposals were intended to apply to bioliquids only where this was specifically stated. This was limited to some proposed definitions and clarifications where for consistency and clarity these would potentially apply to bioliquids as well as solid biomass and biogas.

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[1] www.detini.gov.uk/niro_2012_consultation_on_solar_pv_and_biomass.pdf

[2] www.detini.gov.uk/this_oneniro_consultation_response_on_solar_pv_and_biomass.pdf

2. Responses to the consultation

2.1 The consultation on Part A: biomass sustainability closed on 15 January 2013. In total, three responses were received by DETI. Of these three, two were copies of responses sent to DECC and the third was not substantive. In total, DECC received 73 responses to the biomass sustainability proposals with a corresponding significant amount of evidence provided.

2.2 A list of consultation respondents to DETI can be found at Annex A.

Feedback

2.3 The two responses received by DETI were copies of responses sent to DECC and were, in general, in agreement with the majority of policy proposals. These responses can be accessed on the DETI website at: www.detini.gov.uk/deti-energy-consultations.htm

3. Northern Ireland position

3.1 DETI did not propose to differ from the DECC position in the biomass sustainability consultation and did not receive any subsequent evidence to suggest that Northern Ireland should take an alternative stance. **Therefore DETI will be adopting the proposals as set out in DECC's consultation response.**

3.2 You are therefore encouraged to read DECC's published response which provides more of the rationale and detail for the various consultation decisions. This can be viewed on the DECC website at: www.gov.uk/government/consultations/ensuring-biomass-affordability-and-value-for-money-under-the-renewables-obligation

3.3 A summary of DECC's policy decisions are shown below. For further detail please consult the full DECC government response at the above web address.

4. Summary of decisions

4.1 The changes to the sustainability criteria will be brought in as a **requirement to report against performance <u>from April 2014</u>.** This will give generators and their supply-chains a period of transition to familiarise themselves with the new controls and related guidance, ahead of the intent to mandate the requirements (i.e. require demonstrating meeting the criteria to receive support) for generators of 1MWe capacity and above.

4.2 The European Commission aims to publish an updated report on the requirements for sustainability criteria for solid biomass and biogas used for electricity, heat and cooling by the end of the year. Following the publication of the EC report, the UK intends to notify its sustainability criteria to the EU under the Technical Standards Directive (TSD) with the intention that the sustainability criteria for the use of solid biomass and biogas feedstocks under the Renewables Obligation **<u>will become mandatory from April 2015.</u>** This would mean generating stations of 1MWe capacity and above would be required from this date to demonstrate that solid biomass and biogas meet the sustainability criteria in order to be eligible for support under the RO and NIRO.

Greenhouse Gas Trajectories

4.3 Biomass power, whether new or existing, with or without combined heat and power (CHP, dedicated, standard co-firing, enhanced co-firing or coal to biomass conversion using solid biomass and/or biogas **will be placed on the <u>same GHG trajectory from 1 April 2020</u>**. Before this date existing biomass power will remain on the current target of a 60% GHG emissions saving compared to the EU fossil electricity average to reflect that long-term contracts will be in place and these plants will need time to transition to the tighter target. The GHG trajectories for generators using solid biomass and/or biogas will be:

(i) *New dedicated biomass power* (with or without CHP) that receives full accreditation on or after 1 April 2013 –

- **240 kg CO_2eq per MWh from 1 April 2014 to 31 March 2020**
- **200 kg CO_2eq per MWh from 1 April 2020 to 31 March 2025**
- **180 kg CO_2eq per MWh from 1 April 2025 to 31 March 2030**

(ii) *All other biomass power* (includes co-firing coal stations, coal stations converting to standard/enhanced co-firing or to 100% biomass and existing dedicated biomass power) with or without CHP that received full accreditation no later than 31 March 2013:

- **285 kg CO_2eq per MWh from 1 April 2014 to 31 March 2020**
- **200 kg CO_2eq per MWh from 1 April 2020 to 31 March 2025**
- **180 kg CO_2eq per MWh from 1 April 2025 to 31 March 2030**

4.4 In order to set an ambitious but achievable trajectory which recognises that consignments could through no fault of the generator exceed the target (e.g. ship diversion due to inclement weather conditions) the target will represent **an annual average.** This is subject to the provision that any one consignment of solid biomass or biogas feedstocks must not exceed the ceiling of:

- 285 kg CO_2eq per MWh from 1 April 2014 to 31 March 2020
- 270 kg CO_2eq per MWh from 1 April 2020 to 31 March 2025
- 260 kg CO_2eq per MWh from 1 April 2025 to 31 March 2030

4.5 This means that averaging will be available to new dedicated biomass (with and without CHP) from April 2015 when the criteria will become mandatory. It will also be available to all other biomass generating stations using solid biomass and biogas from April 2020 when these stations become subject to the 200 kg CO_2eq per MWh target. Details of how averaging will be applied in practice are set out in paragraphs 3.36-3.38 of the DECC government response.

4.6 Larger generating stations will typically have more than one generating unit on site (For example, a 600MW coal to biomass conversion station may consist of two separately fired 300MW turbines). The generating station (or individual generating unit) will be assessed against the *new dedicated biomass power* trajectory for a particular reporting year if it (i) received full accreditation on or after 1 April 2013 and (ii) during one or more months of that reporting year the station/unit claims the 1.4/1.5 ROC rate for dedicated biomass with or without the 0.5 CHP uplift/ additional RHI support). Otherwise the station or individual generating unit will be subject to the GHG trajectory for *all other biomass power*.

4.7 For simplicity and avoid unnecessary cost, where a generating station has two or more generating units on the same site and these units are subject to the same GHG target the sustainability report will not need to report separately on each unit's performance.

4.8 The greenhouse gas lifecycle methodology is as set out under the 2009 EU Renewable Energy Directive, reflecting the recommendations made in the European Commission's 2010 report on requirements for sustainability criteria for solid biomass and biogas used for heat, electricity and cooling. This methodology considers the emissions from cultivation, harvesting, processing and transport of biomass feedstocks. It also includes direct land use change where the land use has changed category since 2008. It does not include indirect impacts such as displacement effects or possible changes in carbon stocks due to changes in forest management practices.

4.9 Only biomass generating stations below 1MWe will be allowed to use the high level default values set out in the NIRO Order for specified whole feedstock GHG lifecycles. All stations of 1MWe and above will be required to use a GHG tool, when reporting on their GHG lifecycle emissions from different feedstocks, such as the tool available from the Ofgem website or suitable alternatives.

Land Use and Sustainable Forest Management Criteria

4.10 Biomass power plant, using solid biomass and/or biogas feedstocks, whether a new or existing generating station or unit, with or without CHP, dedicated, co-firing or coal to biomass conversion will be subject to land criteria. The land criteria will be different for (i) virgin wood and (ii) all other non-waste biomass including energy crops. Land criteria will not apply to biomass waste or to feedstocks wholly derived from waste

4.11 Sustainable forest management criteria will be brought in for the use of feedstocks that are virgin wood or made from virgin wood from April 2014. The sustainable forest management criteria will be based on the UK Timber Procurement Policy (UK-TPP) principles for central Government. Virgin wood includes sawmill residues as well as wood from forestry management.

4.12 The use of mass balance will be allowed for the processing, storage and sale of wood that is sourced from forests that use bespoke evidence (Category B evidence) as well as from forests certified under an approved scheme (Category A evidence). Reflecting that the UK TPP principles considers a range of social, economic and environmental issues relevant to forests, including biodiversity, productivity and protection of habitats, for these feedstocks **the land criteria will correspond to the sustainable forest management criteria.**

4.13 The proposed RO sustainability criteria do not directly address the preservation of carbon stocks in forests. Therefore, the UK Government will seek to work with the European Commission, the forestry, bioenergy and traditional wood-using industries, the certification schemes and their partners, so that future planned improvements to principles and criteria in sustainable forestry schemes include carbon stocks in addition to the current consideration of forest productivity. Ideally the protection of carbon stocks could be quantified in the reporting requirements for a forestry management unit.

4.14 This would support wider UK Government work to improve international carbon accounting and management practices. It would also offer important public awareness benefits of the value from sustainable forest management in addressing climate change. DECC intends to review the effectiveness of this approach in 2016/17 as part of the planned UK Bioenergy Strategy review.

4.15 The land criteria for all other solid biomass and biogas, including perennial energy crops, such as miscanthus grass and short rotation coppice willow, and agricultural residues, such as straw, **will correspond to the land criteria set out in the EU Renewable Energy Directive for transport biofuels and bioliquids.** In addition, RO energy crops which (i) meet the narrower definition of energy crops as set out in the NIRO Order 2009, as amended by the NIRO Order 2013, and (ii) have been assessed as meeting the requirements of the Energy Crops Scheme or equivalent that applied at the time of the assessment, will be deemed to meet the Land Criteria.

4.16 Use of feedstocks that are **biomass waste, made wholly from waste, animal manure or slurry will be exempt from the scope of land criteria, as well as the GHG criteria** reflecting the lower sustainability risks and that energy from waste is identified as a priority pathway in the UK bioenergy strategy. Users of waste feedstocks will be required to provide profiling information to enable Government to monitor the role of these feedstocks in biomass power generation.

4.17 As with the GHG trajectories the changes to the land criteria, including the introduction of sustainable forest management will be brought in on a reporting basis from April 2014, with the intention of generators of 1MWe and above being required to demonstrate meeting the improved sustainability criteria from April 2015.

Certainty for investment

4.18 The **tightening GHG trajectories will be put in legislation** to give industry sight of the toughening GHG targets to apply out to 31 March 2030.

4.19 **It is not proposed to make any further unilateral changes in the methodology underpinning the GHG targets or to other aspects of the RO sustainability criteria before 1 April 2027.** This is the date when support for existing coal to biomass conversions under the Renewables Obligations is due to end. Converting existing coal generation is identified as a priority low-risk transitional pathway by the UK Bioenergy Strategy. However, the option to make changes in light of any recommendations of the European Commission concerning bioliquids, biomass or biogas or requirements of EU or international law will be retained. Any such changes would take place following consultation.

4.20 **Contracts for Difference (CfD) awarded under the first Delivery Plan period for bioenergy** (i.e. to 2018/19) **will follow the same approach as the sustainability standards set under the Renewables Obligations.**

Independent Assessment/Audit

4.21 Biomass power and CHP generating stations of 1MWe and above electricity generating capacity, using solid biomass and/or biogas feedstocks will be **required to provide an independent assessment/audit report for feedstocks used from 1 April 2014.** For those using wastes or feedstocks made wholly from waste the independent assessment/audit report will cover the assessment of these feedstocks as being waste, and hence excluded from GHG and Land Criteria.

4.22 Recognising the complexity of producing the audit/assessment report in addition to the main sustainability report, but also the risk to the regulator of issuing RO Certificates (ROCs) which may need to be revoked, it is proposed to allow three months for the completion of these two reports. Setting this deadline will encourage generators to start work on these reports early, and continue refining their reports during the reporting year. Moreover these reports will be required to be submitted before the release of any ROCs that were withheld subject to the annual GHG average target being met.

4.23 Therefore the sustainability report and (or integrated with) the independent audit/assessment will be required to be submitted to Ofgem **by 30 June of the following reporting year.** This will allow Ofgem a month to check that the ROCs for the previous reporting year have been issued correctly, before suppliers potentially present these ROCs to demonstrate compliance against their Obligation in August. It is Ofgem's intention to develop a single integrated template covering the expected content for the report and the audit/assessment.

4.24 To avoid unnecessary cost and complexity, this report and audit can cover the use of bioliquids as well as solid biomass and biogas, but in this case the combined solid biomass, bioliquids and biogas report **should be submitted by 31 May, reflecting the bioliquid deadline.** For combined heat and power generating stations the report and audit can cover Renewable Heat Incentive requirements where this support is being claimed in addition to the RO. In this case the reporting year for the RHI will align itself with the RO, so will run April – March. The report should be submitted to Ofgem's RO and RHI teams by 30 June.

Profiling data

4.25 The proposals to rationalise the profiling data for solid biomass and biogas feedstocks, as well as bioliquids where appropriate will be introduced broadly as proposed. These changes include **improvements to reporting on anaerobic digestion to support the increased use of waste and improved monitoring of crop usage**, and **requiring additional information on land use and wood types for virgin wood feedstocks.**

4.26 If the reported data reveals significant use of high quality wood the measures will be considered to mitigate the adverse impacts, e.g. a code of practice for generators.

EU and International requirements

4.27 The decisions set out in the DECC response reflect the European Commission's report on the requirement for sustainability criteria for solid biomass and biogas used for electricity, heat and cooling published in February 2010. This report did not mandate criteria, instead it recommended that if members states chose to bring in criteria that these should be similar to those mandated for transport biofuels and bioliquids used for heat and electricity under the EU Renewable Energy Directive (RED).

4.28 The European Commission hopes to publish an updated report on the requirement for sustainability criteria for solid biomass and biogas later this year. As a Member State, the UK supports harmonised mandatory criteria across the EU for larger producers and users of solid biomass and biogas. This should draw both on the existing criteria for biofuels and bioliquids and well-established national and global controls to promote sustainable forestry. This would create a simpler, coherent market, benefiting both buyers and sellers.

4.29 Care is needed, however, to ensure that new EU controls do not impact community or household users using locally grown supplies, where sustainability risks are very low. Similarly DECC consider member states should be allowed some flexibility to go further than the mandated standards to reflect national circumstances. **DECC will work with the Commission and other member states to help achieve this.** Following the publication of the EC report, the UK would look to making the improved RO sustainability criteria 'mandatory', with an intended start date of April 2015. **Decisions set out in this document are subject to meeting EU and international regulation.**

5. Implementation

5.1 The proposals set out in the DECC response will be adopted in a consolidated Northern Ireland Renewables Obligation Order which will be laid in the Assembly in early 2014. The changes made by that Order are intended to come into operation (subject to Assembly approval and State aid clearance) on 1 April 2014.

Annex A

Index of NIRO Consultation Responses

Disability Action

Renewable Energy Association*

Scottish Power*

*Copies of responses to DECC consultations

Responses can be viewed on the DETI website at: www.detini.gov.uk/deti-energy-consultations.htm

October 2013

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