



Department
of Energy &
Climate Change

Government Response to the consultation on adjustments to sustainability and reporting provisions for biomass

URN 14D/290 August 2014

© Crown copyright 2014

URN 14D/290

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Any enquiries regarding this publication should be sent to us at deccbiomass@decc.gsi.gov.uk

Contents

1. Executive summary.....	5
Post consultation decisions	5
Economic Impacts	6
Next Steps.....	6
2. Introduction.....	7
Overview of current biomass sustainability requirements under financial incentives.....	7
3. Responses and Decisions	11
Proposal 1 – To revise the definition of ‘saw logs’ in the RO.....	11
Original Consultation proposal.....	11
Main messages from the responses	11
Post consultation decisions.....	12
Proposal 2- To reconsider the reporting requirements for tree species in the RO.....	14
Original proposal.....	14
Main messages from responses	15
Post consultation decisions.....	15
Proposal 3 – To provide exemptions from the Timber Standard for certain categories of wood for the RHI and RO.....	17
Original proposal on arboricultural residues, diseased trees and trees removed for ecological reasons	17
Main messages from responses	17
Post Consultation decisions.....	18
Original proposal on wind blow	22
Main messages from responses	23
Post consultation decisions.....	24
Original proposal on saw mill residues.....	24
Main messages from responses	25
Post consultation decision	26
Proposal 4-To add ‘highly biodiverse grasslands’ to the list of protected land types for the RHI and the RO	26
Original consultation proposal.....	26
Post consultation decision	27
Proposal 5 – Averaging of Greenhouse Gas Emissions across the year in the RO	28
Original consultation proposal.....	28
Post consultation decisions.....	30
Carbon Stocks.....	31
Annex A – List of respondents	33

Annex B - Details of GHG thresholds and ceilings for RO generators using solid biomass
and/or biogas 34

Annex C - Flow chart showing approach to annual averaging of GHG emissions for issue of
ROCs. 35

1. Executive summary

Purpose of this document

- 1.1 This document sets out the Government's response to its consultation of 16 June 2014 on adjustments to sustainability and reporting provisions for biomass¹.
- 1.2 The consultation sought views and comments on five aspects of the reporting requirements and sustainability criteria for biomass:
 - Proposal 1- To revise the saw logs definition in the Renewables Obligation (RO)
 - Proposal 2 - To reconsider the reporting requirements for tree species in the Renewables Obligation
 - Proposal 3 – To provide exemptions from the Timber Standard for Heat and Electricity² for certain categories of wood for the Renewable Heat Incentive (RHI) and RO
 - Proposal 4 – To add 'highly biodiverse grasslands' to the list of protected land types for the RHI and RO
 - Proposal 5 – Averaging of Greenhouse Gas Emissions (GHG) across the year in the RO

Consultation Responses

- 1.3 In total, 43 responses were received. These were drawn from across the biomass industry including UK and international biomass producers and suppliers, UK generators and power station developers, trade associations, Government agencies and environmental NGOs.
- 1.4 Some of the responses provided general evidence and feedback regarding bioenergy rather than specific answers to the questions. In addition, some responses addressed some of the questions but not all. The list of respondents is available at Annex A.

Post consultation decisions

- 1.5 After taking into account the consultation responses, the Government has decided:
 - To change the definition of 'saw logs' currently set out in RO legislation (which is based on tree age) to use the definition of a 'saw log' as set out in local sawmill specifications. Where local specifications are not available, suppliers should use the UK specifications set out in Table 1 of the Forestry Commission Field Book 9

¹ DECC (2014) Consultation on adjustments to sustainability and reporting provisions for biomass <https://www.gov.uk/government/consultations/biomass-sustainability>

² DECC (2014) Timber Standard for Heat and Electricity <https://www.gov.uk/government/publications/timber-standard-for-heat-electricity>

(second edition)³. This provision would also be introduced in the Contracts for Difference (CfD).

- To change the current requirement in the RO to report on specific ‘tree species’ to a requirement to report on the proportion of ‘hardwood’ and ‘softwood’. There will be an additional requirement to report on whether any of the wood used was likely to have come from threatened or protected species. This provision would also be introduced in the CfDs.
- To “deem sustainable” arboricultural residues under the Timber Standard for the RO and RHI, and in the forthcoming CfDs.
- Not to exempt wood from diseased trees from the Timber Standard.
- To “deem sustainable” under the Timber Standard, trees removed from non-forest land for ecological reasons.
- Not to exempt wind blow from the Timber Standard at this stage but to keep the evidence under review.
- Not to exempt non-waste residues from sawmills from the Timber Standard.
- To add ‘highly biodiverse grasslands’ to the list of protected land types in the land criteria for non-wood solid and gaseous biomass under the RO, RHI and in the CfDs.
- To implement the GHG annual averaging methodology under the RO and in the CfDs as set out in the consultation document.

Economic Impacts

- 1.6 We have not identified any significant expected economic impacts from the decisions set out in this document. In most cases, we expect that the revised measures will lead to a reduction in the administrative burden of biomass generators and supply chain. Further details of the impacts are set out in Chapter 3.

Next Steps

- 1.7 In so far as they relate to the RO, the changes to the biomass reporting and sustainability criteria set out in this document will be included in a consolidated Renewables Obligation Order to be laid in Parliament in early 2015 and due to come into force (subject to Parliamentary approval) on 1 April 2015. We intend that the decisions relating to the RHI will follow a similar legislative timetable and are intended to come into force in spring 2015.
- 1.8 It is our intention that the changes we set out in this consultation response will also apply to forthcoming Investment Contracts and generic CfD awarded under the Electricity Market Reform.

³ Forestry Commission (1993) Field Book 9 Classification & Presentation of soft wood saw logs 2nd Edition. A copy can be viewed on the DECC website at <https://www.gov.uk/government/consultations/biomass-sustainability>

2. Introduction

Background

- 2.1 Biomass fuels used for electricity and heat generation come from a range of sources and locations, including forestry management, sawmill residues, perennial energy crops, agricultural residues such as straw, and wastes such as sewage. Imports, from the EU, North America, and potentially from developing countries will play an important part alongside expanding home-grown supplies (wood, straw, animal wastes, etc.). The majority of the biomass used for UK electricity generation is expected to be imported whereas that used for renewable heat is likely to be derived mainly from domestically produced bio materials.
- 2.2 Ahead of the RO biomass sustainability requirements becoming mandatory in 2015, several generators have been using the reporting phase to become familiar with what is required in practice. This experience identified a number of areas where we considered that minor adjustments and clarification could help to ensure the effective operation of the sustainability criteria.
- 2.3 As set out in the Bioenergy Strategy⁴, Government is committed to supporting sustainably produced biomass that delivers real GHG savings, is cost effective, takes account of wider impacts across the economy and manages possible risks such as food security and biodiversity. The Strategy set out that Government intends to revisit the analysis periodically, in order to inform the further development of policy.
- 2.4 As part of our commitment to revisit the analysis, on 24 July we published the Biomass Emissions and Counterfactual Model (BEAC)⁵. This is a research tool that will help to inform and evaluate the further development of our bioenergy policy and the UK's future negotiations at an EU and international level with respect to global accounting and future energy and decarbonisation targets.

Overview of current biomass sustainability requirements under financial incentives

- 2.5 Reporting requirements on the use of solid and gaseous biomass under the RO were introduced in 2009, and in 2011 these were enhanced to require generators of stations over 50kW in size to report whether the biomass they had used had been sourced from a type of 'protected land' and to provide details of the GHG emissions associated with its production and use. Additional sustainability provisions were introduced in the Government Response to the consultation on proposals to enhance sustainability criteria for the use of biomass feedstocks under the Renewables Obligation published in August 2013⁶; these included the introduction of new criteria for sustainable forest management (the UK Timber Standard for Heat and Electricity based on UK timber procurement

⁴ DECC (2013) UK Bioenergy Strategy <https://www.gov.uk/government/publications/uk-bioenergy-strategy>
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48337/5142-bioenergy-strategy-pdf

⁵ DECC (2014) Life cycle impacts of biomass in 2020 <https://www.gov.uk/government/publications/life-cycle-impacts-of-biomass-electricity-in-2020>

⁶ DECC 2013 Government Response to the consultation on proposals to enhance sustainability criteria for the use of biomass feedstocks under the Renewables Obligation' <https://www.gov.uk/government/consultations/ensuring-biomass-affordability-and-value-for-money-under-the-renewables-obligation>

principles), establishment of a GHG target trajectory and a requirement for generators of 1MW and above to produce independent audit reports.

- 2.6 The awarding of Renewables Obligation Certificates (ROCs) is not currently linked to achieving the sustainability criteria but Government has previously stated its intention to make the sustainability provisions mandatory from April 2015 for stations of 1MW and above wishing to claim support under the RO.
- 2.7 In February 2013⁷ Government announced its intention that the biomass sustainability measures under the Renewable Heat Incentive (RHI) should be broadly comparable to the RO (with some differences to account for the smaller scale nature of the heat market and fact that most biomass supported under the RHI is expected to come from UK sources). These are intended to be introduced from Spring 2015.
- 2.8 It is our intention that the changes we set out in this consultation response will also apply to forthcoming Investment Contracts and generic CfD awarded under the Electricity Market Reform.

Purpose of consultation

- 2.9 Between 16 June and 14 July, Government consulted on adjustments to sustainability and reporting provisions for biomass⁸. This document provides a summary of the points raised by stakeholders to the questions posed, and sets out the Government's response and final policy decisions.
- 2.10 The consultation sought views and comments on five specific aspects of the reporting requirements and sustainability criteria for biomass:
 - Proposal 1- To revise the Saw Logs definition in the RO
 - Proposal 2 - To reconsider the reporting requirements for tree species in the RO
 - Proposal 3 – To provide exemptions from the Timber Standard for certain categories of wood for the RHI and RO
 - Proposal 4 – To add 'highly biodiverse grasslands' to the list of protected land types for the RHI and RO
 - Proposal 5 – Averaging of GHG Emissions across the year in the Renewables Obligation
- 2.11 All of the proposals are relevant to the RO in England and Wales and CfDs. Reflecting the smaller-scale nature of the heat market and the fact that most of the biomass supported under the RHI is expected to come from UK sources, the sustainability arrangements for the RO and RHI differ in that the saw logs and tree species reporting requirements, and GHG averaging mechanism, do not apply to the RHI. Therefore, only proposals 3 and 4 would apply to the RHI in England, Scotland and Wales.

Overview of consultation responses

- 2.12 DECC received a total of 43 responses from a wide range of stakeholders representing UK and international biomass producers and suppliers, UK generators, the forest industries, trade associations, Government agencies and environmental NGOs. We

⁷ DECC (2013) Government response to 'Providing Certainty, improving performance' consultation <https://www.gov.uk/government/consultations/renewable-heat-incentive-providing-certainty-and-improving-performance>

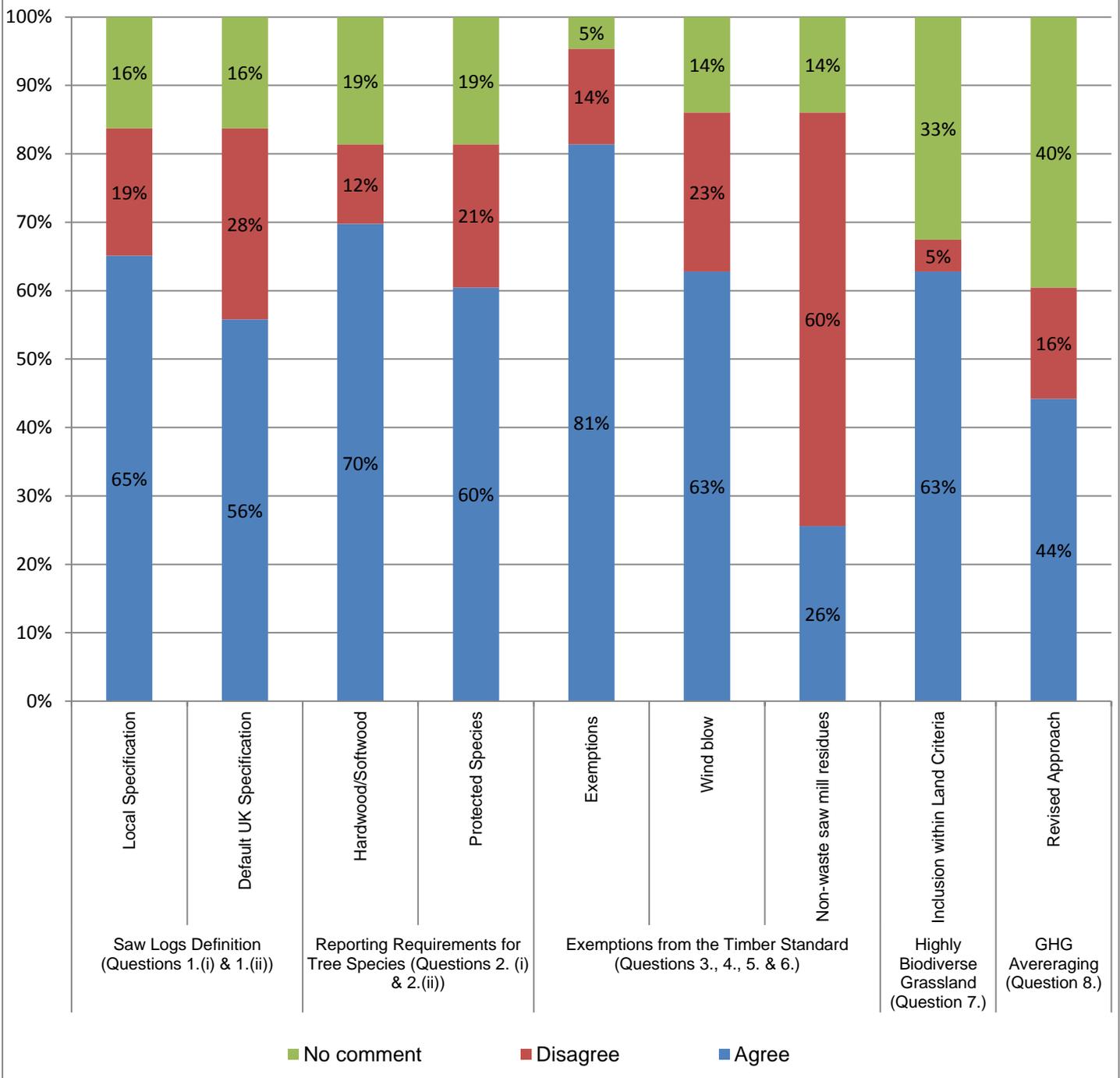
⁸ DECC (2014) Consultation on adjustments to sustainability and reporting provisions for biomass <https://www.gov.uk/government/consultations/biomass-sustainability>

received similar numbers of responses from those interested in renewable electricity and renewable heat.

2.13 Not all respondents chose to answer the specific questions. Some preferred to provide their views in more general terms and where possible we have included information from these responses in the appropriate section. A statistical analysis of the responses for each question is set out below. Further details of the main supporting comments made by respondents are recorded in Chapter 3.

2.14 DECC also held stakeholder workshops on 8 and 11 July and several meetings and telephone conversations with a cross-section of respondents.

Statistical Breakdown of Responses by Question



Devolved Administrations

- 2.15 The decisions set out in this document apply to the RO in relation to England and Wales. Decisions regarding the sustainability criteria for the RO in Scotland and Northern Ireland are for the Scottish Government and Department of Enterprise, Trade and Investment in Northern Ireland respectively. The Scottish Government intends to consult separately on some of the issues covered in this consultation. In so far as the proposals apply to the Renewable Heat Incentive, they apply to England, Scotland and Wales. The decisions are also relevant to the CfDs in England, Scotland and Wales.

Implementation and Next Steps

- 2.16 In so far as they relate to the RO, the changes to the biomass reporting and sustainability criteria set out in this document will be included in a consolidated Renewables Obligation Order to be laid in Parliament in early 2015 and due to come into force (subject to Parliamentary approval) on 1 April 2015. We intend that the decisions relating to the RHI follow a similar legislative timetable and are intended to come into force in Spring 2015.
- 2.17 We also intend that the changes set out in this consultation response will also apply to forthcoming Investment Contracts and generic CfD awarded under the Electricity Market Reform.

3. Responses and Decisions

Proposal 1 – To revise the definition of ‘saw logs’ in the RO

Original Consultation proposal

3.1 The Renewables Obligation (Amendment) Order 2014⁹ ("ROO 2014") introduced a requirement for generators over 50kW and above to report on their use of saw logs. A single definition of ‘saw logs’ was provided, based on the age of the tree. Feedback from stakeholders suggested this definition was not always appropriate and could lead to under or over reporting. We proposed replacing that definition of ‘saw logs’ with a requirement for generators to use a definition for ‘saw logs’ which matches the local specifications for saw logs in operation where the wood originates. This should ensure that the data being collected more closely matches the type and quality of timber actually being used by saw mills in the UK and overseas to produce quality products.

We asked:

Consultation Question

1. Do you agree that we should replace the current definition of ‘saw logs’ in the ROO 2014 with a requirement for generators to:
- (i) use local specifications for saw logs
 - (ii) where local or national specifications are not available, use the local UK specifications set out in the Forestry Commission Field Book.

Summary of responses

	1. (i) Local Specification		1. (ii) Default UK Specification	
Agree	28	65%	24	56%
Disagree	7	19%	12	28%
No comment	7	16%	7	16%
TOTAL	43	100%	43	100%

Main messages from the responses

- Of the responses that addressed this question there was broad agreement from biomass supply chain, generators and some NGOs and agencies that the current saw log definition is unworkable and will lead to inaccurate reporting.
- Many of the respondents flagged the difficulty in finding a single definition to suit all circumstances and welcomed the proposed new definition based on local standards.
- Even with the change in definition, a number of respondents pointed to difficulties in reporting with 100% accuracy so they were keen that the current approach based on estimating the proportion of saw logs in a consignment is maintained.

⁹ DECC (2014) The Renewables Obligation (Amendment) Order 2014
http://www.legislation.gov.uk/ukxi/2014/893/pdfs/ukxi_20140893_en.pdf

- A few respondents requested further guidance on the definition of “local specification” and stressed that this take into account the need to undertake a supply chain audit under ISAE 3000 or an equivalent standard.
- A number of respondents (including some who agreed and some who disagreed with the proposal) questioned the need to report on saw logs at all, given that in their view, economics will dictate that wood of saw log quality will not be used for lower value bioenergy products.
- Some evidence was provided to demonstrate current and historic price differentials between different types of uses of wood and there was a suggestion that Government should be monitoring market and land use trends domestically and internationally for wood rather than requiring industry reporting.
- Some requests for clarity on whether all materials derived from saw logs (i.e. sawdust) should be reported - sawdust is considered to be lowest value, cannot be avoided, and has no other viable outlet.
- Of those that disagreed with the proposal there was a suggestion that the definition could be simplified by just asking generators to report on use of “merchantable” saw logs.
- There was broad support for using the Forestry Commission Field Book as the default definition – one or two suppliers suggested that we should use all definitions in the Field Book not just the ones set out in Table 1.
- Two NGOs disagreed with the proposal because they consider the age of a tree is an important part of the definition of a ‘saw log and it gives vital information about the potential carbon debt that occurs when burning it.
- They also expressed concern that the definition of ‘saw logs’ could be open to local interpretation and this could ‘open the door to misuse, e.g. in countries where the definition of ‘saw logs’ might be very different’. They considered the reporting requirement should be mandatory (and linked to ROCs).

Post consultation decisions

- 3.2 The UK Bioenergy Strategy¹⁰ sets out that carbon and economic benefits are generally highest when high quality wood is used for products and low quality wood or wood at the end of its lifecycle is used for bioenergy.
- 3.3 Responses to this consultation have provided some evidence that the price premium placed on quality wood is continuing to deliver this outcome both within the UK and internationally. However, it is important that Government continues to monitor the situation and take action if necessary, particularly as biomass markets expand and develop in the longer term.
- 3.4 Requiring generators of over 50kW to report under the RO on the amount of saw logs or materials derived from saw logs that they use will provide us with data to help assess the extent to which timber and timber products, from UK and international forests, are being used in bioenergy.
- 3.5 We note that the majority of consultation responses that addressed this question agree that the current definition of ‘saw logs’ based on tree age (the trunk of trees of 10 years

¹⁰ DECC (2013) UK Bioenergy Strategy (April 2012) - <https://www.gov.uk/government/publications/uk-bioenergy-strategy>
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48337/5142-bioenergy-strategy-.pdf

and over) set out in the RO Order 2014¹¹ is likely to result in inaccurate reporting as in practice it will be the form of tree, local geography and climate, growth rates and local sawmill markets that will determine what is a suitable quality for sawing.

- 3.6 There was also a general consensus that there is no single workable definition that is likely to be able to capture all of these variables and that a definition that is clear but flexible enough to reflect local sawmill practices should be used. We considered carefully the suggestion from a few respondents that we should ask generators to report on the use of “merchantable” saw logs. However, we concluded that it would be open to a significant level of subjective interpretation and would therefore be difficult to define and to administer.
- 3.7 **We therefore intend to change the current definition of ‘saw logs’ to one based on the proposal set out in the consultation document.** This means that generators will be required to report against the definition of ‘saw logs’ which matches the local specifications for saw logs in the place where the closest sawmill operates and to reference details of the local specification used. This will ensure that where logs are taken to a sawmill for processing, that the relevant definition is used and, if logs are sent to a processor other than a sawmill, that the most appropriate definition for that locality is used.
- 3.8 Local specifications could be standards published by forestry authorities at national (country) or regional level. For example in the US, the Department of Agriculture and Oregon Counties has produced a Woodland Work Book setting out specifications for East and West Oregon¹². Specifications may also be based on those set and published by individual sawmills in the locality closest to where the wood has been processed. For example North East Timber Exchange in Kellyville Newport, USA, publishes details of saw log specifications (and pricing) on its website¹³.
- 3.9 Where details of relevant local specifications are not available, generators should report against the UK specifications set out in Table 1 of the ‘Forestry Commission Field Book 9 – Classification and Presentation of Soft Saw Logs’¹⁴. Feedback from a number of stakeholders suggested that these specifications and in particular that for green logs are most appropriate for the UK market.
- 3.10 We realise that even with these revised definitions it may not always be easy for generators to report exact figures especially where large consignments of mixed wood are used. As at present, generators can continue to provide estimates of the percentage of each consignment of biomass that was composed of, or is derived from, saw logs. We recognise that this reporting requirement may still capture wood which would not have had any alternative uses, but it should be more accurate than the current definition of ‘saw log’.
- 3.11 Furthermore, information collected through the reporting will supplement the evidence already collected by Government on the production and use of timber, for example

¹¹ DECC (2014) The Renewables Obligation (Amendment) Order 2014
http://www.legislation.gov.uk/ukxi/2014/893/pdfs/ukxi_20140893_en.pdf

¹² Oregon State University (2009) The Woodland Workbook Forest Measurement
<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/13600/EC1127.pdf;jsessionid=5A24E37D963245CA221F32AAD8D08350?sequence=1>

¹³ NortheastTimberExchange, LLC (2014) Hardwood Saw Log Specifications <http://northeasttimberexchange.com/wp-content/uploads/2008/05/NTE-Saw-Log-and-Pulp-PRICE-SHEET-JULY-2014.pdf>

¹⁴ Forestry Commission (1993) Field Book 9 Classification & Presentation of soft wood saw logs 2nd Edition
<https://econsultation.decc.gov.uk/decc-policy/biomass-sustainability>

through the National Forestry Inventory Reports and Forestry Statistics which are compiled by the Forestry Commission in Great Britain¹⁵ and produced by forestry authorities in a number of other countries.

- 3.12 DECC has also introduced a voluntary reporting requirement on all large scale electricity generators to disclose their intentions with regards to the use of UK-sourced wood for the next five years. We will repeat this exercise each year under both the RO and CfD regimes¹⁶.

Economic Impacts

- 3.13 This proposal is expected to have a small administrative impact on generators. We have not identified any other additional expected impact relative to the status quo.

Proposal 2- To reconsider the reporting requirements for tree species in the RO

Original proposal

- 3.14 The ROO 2014 introduced the requirement for generators to report on the species of wood they use for energy generation. However, generators had suggested that it can be very difficult in practice to obtain this detailed information for wood from large areas of mixed woodland and for saw mill processing residues. We proposed to make this reporting requirement more workable, by replacing the 'tree species' reporting requirement with a requirement for generators to report on the proportion of wood used which is 'hardwood' and the proportion which is 'softwood'. We also proposed to include a requirement for generators to report on whether any of the wood used was likely to have come from protected or threatened species (and if so, to name that species).

We asked:

Consultation Question

- | | |
|----|---|
| 2. | Do you agree that we should replace the 'tree species' reporting requirement in the RO with a requirement for generators to report on:
(i) the estimated proportion which is hardwood and the estimated proportion which is softwood trees; and
(ii) whether any of the wood was likely to have come from a protected or threatened tree species (and if so, to name that species)? |
|----|---|

¹⁵ For further information and a copies of reports for GB see the Forestry Commission website at: <http://www.forestry.gov.uk/forestry/INFD-89PJU5> and [http://www.forestry.gov.uk/pdf/ewgs-on009-standard-costs.pdf/\\$FILE/ewgs-on009-standard-costs.pdf](http://www.forestry.gov.uk/pdf/ewgs-on009-standard-costs.pdf/$FILE/ewgs-on009-standard-costs.pdf)

¹⁶ DECC (2013) Use of UK biomass for electricity and CHP
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/246006/UK_wood_and_biomass.pdf

Summary of responses

	Hardwood/Softwood		Protected Species	
Agree	30	70%	26	60%
Disagree	5	12%	9	21%
No comment	8	19%	8	19%
TOTAL	43	100%	43	100%

Main messages from responses

- A large cross section of respondents considered that the proposed new definition is more workable and will lead to more accurate reporting;
- A number of respondents suggested that the term ‘threatened’ species should be dropped as this is too vague and subjective. Generators should be required to report against ‘protected species’ in accordance with CITES definitions.
- Some suggested that reporting on whether wood was likely to have come from a protected or threatened species was superfluous as the use of this wood was likely to be illegal under the EU Timber Regulation, and generators were in any case highly unlikely to declare if it had been used.
- Two of the organisations who disagreed with the proposal made the point that details of the tree species gives vital information about the potential carbon debt that occurs when the wood is burnt. They suggest that reporting should be mandatory and that the burning of protected tree species for energy should never receive subsidies. An alternative if it was really not possible to identify all species would be to report on the predominant species.
- One organisation also suggested that reporting on protected or threatened species should go beyond just tree species. The reporting should be widened to include any protected or threatened non-tree species that are likely to be affected by the removal of the forest biomass.

Post consultation decisions

- 3.15 Collecting data from generators on the types of trees used in energy together with other related information on location and forestry management practices both within the UK and internationally contributes to our work in assessing the impacts of using wood for bioenergy.
- 3.16 If generators are able to provide relatively complete species information for all or most of the consignments of biomass that they use, this would provide more comprehensive and useful information. However, generators are only required to report to the best of their knowledge and belief, and responses to this consultation have confirmed that it can be difficult in practice for generators to report on all of the tree species (i.e. the full scientific name) for wood that has originated from several areas of mixed woodland and for non waste residues such as saw mill residues.
- 3.17 **We therefore intend to replace the current requirement in the RO to report on specific ‘tree species’ with a requirement for generators to report on the proportion of wood used which is ‘hardwood’ and the proportion which is ‘softwood’.** In the UK, hardwood would include material deriving from a broadleaf tree

such as oak, walnut, maple, poplar, birch, ash and softwood from a coniferous one such as pine, spruce, cedar, fir.

- 3.18 We hope that by simplifying the reporting requirement in this way, generators will in practice be able to report more information. We realise that even with this revised reporting requirement it may not be practically possible in some cases to report exact figures, for example where large consignments of mixed wood are used. Ofgem guidance/ reporting proforma currently enables generators to provide estimates of the tree species and we intend to also apply this approach with the new definitions so that generators can estimate the proportions of hardwood and /or softwood in each consignment.
- 3.19 The requirement to report under the RO would not replace any obligations under the EU Timber Regulation¹⁷ (EUTR) which requires operators who place timber or timber products (including woodfuel) on the internal market for the first time to use a due diligence system which includes where appropriate, the common name of tree species and its full scientific name. In addition, those that trade in timber and timber products are required to keep specific information to enable such products to be traced for five years. To help the forest industry meet the requirements of this new legislation, the National Measurements Office (the body responsible for the enforcement of the Regulation), industry representatives, Forestry Commission England (FCE) and Forestry Commission Scotland (FCS) have co-operated to offer a simple approach for the timber industry in England¹⁸.
- 3.20 **We will include an additional requirement to report on whether any of the wood used was likely to have come from protected or threatened species (and if so, to name that species).** Generators should check against the Convention on International Trade in Endangered Species (CITES)¹⁹ and The International Union for Conservation of Nature (IUCN) 'Red List of threatened species' tool when completing this information²⁰.
- 3.21 As experience is gained with the EUTR, information on tree species may become more readily available to generators. We will keep this RO reporting requirement under review to ensure it provides useful information that contributes to our work on bioenergy.

Economic Impacts

- 3.22 We consider that these changes will make the requirement more workable and help reduce the administrative burden on industry, whilst at the same time increasing the accuracy and value of the reported information. We believe that there is a low risk that any protected species are currently being used by the domestic bioenergy industry. This reporting provision, together with other controls on the legality of wood under the EUTR will help to future-proof the provision if biomass supplies start to be sourced from a wider international market, including from developing countries.

¹⁷ Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market. The regulation applies from 3 March 2013. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:295:0023:0034:EN:PDF>

¹⁸ Further information is on the Forestry Commission website at: <http://www.forestry.gov.uk/england-eutr>

¹⁹ Further information is on the CITES website at: <http://www.cites.org/>

²⁰ See ICUN Red List of threatened species at: <http://www.iucnredlist.org/about/introduction>

Proposal 3 – To provide exemptions from the Timber Standard for certain categories of wood for the RHI and RO

Original proposal on arboricultural residues, diseased trees and trees removed for ecological reasons

3.23 We proposed providing exemptions from the Timber Standard for residues from arboriculture, diseased wood, and trees being removed from areas which are being restored for ecological reasons. Feedback from industry indicated that compliance with the Timber Standard could be very difficult for these types of woody materials, without significant bureaucracy and it was suggested that failure to exempt this material could lead to it being disposed of in an unsustainable manner, either by burning in situ without energy recovery or sent to landfill.

We asked:

Consultation Question

3. Do you agree that the Timber Standard should no longer apply to residues from arboriculture, diseased wood and wood removed for ecological reasons?

Summary of responses

	Arboricultural Residues		Diseased Wood		Wood Removed for Ecological Reasons	
Agree	36	83%	30	70%	28	65%
Disagree	2	5%	7	16%	6	14%
No comment on Proposed Exemption	3	7%	4	9%	7	16%
No comment on Question 3	2	5%	2	5%	2	5%
TOTAL	43	100%	43	100%	43	100%

Main messages from responses

- There was strong support for the proposed exemptions - particularly for arboricultural residues - from generators, biomass supply chains and trade associations on the basis that bioenergy is a more sustainable end use for this low value wood than landfill or burning in situ (in accordance with waste hierarchy).
- Many highlighted the difficulties and cost and burden of demonstrating compliance with the Timber Standard for these lower value woody materials, particularly where they originate from outside of forestry land.
- The point was made by some that that arboricultural residues were previously 'exempt' from the land criteria under the Renewable Energy Directive as they were not considered a forestry material and were deemed to come from settlement land.
- There was general recognition that clear and robust definitions are required to cover each of the proposed exemptions. It was suggested that DECC and Ofgem would need

to provide further information on the documentary evidence generators could use to demonstrate to independent auditors that these woody materials meet the definitions.

- Arboricultural residues were seen as the most difficult to define. One or two organisations were unclear what sort of evidence could be used to determine whether a residue is from arboriculture and consider there is significant room for interpretation and this could present opportunities for industry to operate contrary to DECC's policy intent.
- Around one fifth of the responses that addressed this question expressed some concern about the impacts of exempting diseased wood and wood removed for ecological reasons on wider forestry sustainability policies and practices. A few of these organisations suggested that these types of wood should only be exempt from the Timber Standard if there is a condition to carry out compensatory replanting.
- A few organisations and companies suggested that wood removed as a result of planning consent following statutory consultation, clearance for large scale public infrastructure or stumps and brash left on site after forestry harvesting operations (and which is usually too expensive to remove and can hinder restocking) should also be excluded from the Timber Standard.
- Some organisations questioned whether exempted categories would be deemed as automatically meeting the Timber Standard. If not some users might prefer that the Timber Standard continues to apply so they can demonstrate sustainability.
- A few organisations (mainly NGOs) disagreed with the proposals and suggested that unless biomass comes from certified areas – in which case compliance with the Timber Standard is straightforward - it will never be possible for a third party to confirm that wood really does meet one of the definitions.
- A number of respondents flagged the need for the forthcoming CPET practical guidance on the Timber Standard to be issued as soon as possible. In addition a few generators suggested that DECC should consider deferring making compliance with the Timber Standard a mandatory condition of financial incentive payments to allow industry a longer lead in time to test the procedures with their supply chains.

Post Consultation decisions

Arboricultural residues

- 3.24 Responses to the consultation from a range of stakeholders confirmed that it is likely to be very difficult and in some cases impossible for arboricultural residues which often come from urban areas to meet the sustainability provisions set out in the Timber Standard, which were principally designed for larger scale forestry. We also received some further evidence that in the absence of a viable outlet in the energy market these materials are being disposed of by burning in situ or in landfill. We consider that enabling a market for this material is a more sustainable option.
- 3.25 **We will therefore deem arboricultural residues to be sustainable under the Timber Standard for the RO and RHI (and the CfD).** We consider arboricultural residues to be material from woody plants and trees planted for landscape or amenity value that are removed as part of tree surgery usually in gardens, parks or other populated settings, and utility arboriculture such as the verges of roads and railways. It is considered sustainable to use this material for bioenergy rather than to see it burn in situ or go to landfill. Such non-waste material would be deemed to have come from a sustainable source.

- 3.26 Where an operator, RHI participant or biomass supplier seeks to use this route to market, it is our intention that material that is 'deemed sustainable' will be able to count towards the 'legal and sustainable' proportion of woodfuel under the Timber Standard for Heat and Electricity (for clarity, the fact that material is deemed to be sustainable will not remove the requirement for legality). At least 70% of material must come from a legal and sustainable source, with the remainder from a legal source. Users of this material will still have to demonstrate that it complies with the relevant greenhouse gas emissions criteria under the RO, RHI and CfDs.
- 3.27 Where industry seeks to use this route to market under the RO and RHI it will be for the operator to provide the administrator (Ofgem) with evidence that has been verified as part of the annual sustainability audit reports which allow the administrator to determine that the relevant definition has been met. Suppliers seeking authorisation of their fuels on the RHI Biomass Suppliers List (BSL) will be required to provide evidence to the BSL Administrator showing the relevant definition has been met. These changes will be incorporated into the RO Order, forthcoming RHI sustainability legislation, and the systems and processes of the RHI Biomass Suppliers List²¹.
- 3.28 Operators or participants that self-report can discuss with the independent auditors the type of evidence which they would consider acceptable for verification, bearing in mind that it may be a legal requirement under the EUTR to collect information about the origin of such material. We would expect that the following information might be used in some circumstances - copies of invoices (including estimates of mass or volume of material supplied) from tree surgeons or arboricultural companies, local authority contracts for municipal park work, Utility Highways Agency and Network Rail contracts for road/ track clearing.
- 3.29 Material deemed sustainable for the purposes of the Timber Standard will still have to comply with any other relevant regulations such as the legality provisions under the EUTR²².
- 3.30 Generators and RHI participants using arboricultural residues could still choose to demonstrate compliance with the Timber Standard if they wish and are able to do this.

Economic Impacts

- 3.31 We expect this proposal to lead to a reduction in the administrative burden of fuel suppliers and some generators. It is also expected to lead to a reduction in the amount of arboricultural residues being diverted from bioenergy to landfill. It has not been possible to quantify this impact, due to a lack of data on arboricultural residues currently going to landfill and the proportion expected to be diverted to bioenergy following this change.

Diseased trees

- 3.32 We considered carefully the range of views put forward on this aspect of the proposal. We have also discussed further with technical experts at the Forestry Commission in order to better understand the potential impacts that exempting this material could have on UK and international sustainable forest management and disease control policies.
- 3.33 As a result of this further analysis we have identified potential serious unintended consequences of the proposed exemptions on wider sustainable forest management

²¹ Further information on the RHI Biomass Suppliers is at <http://www.gov.uk/register-biomass-supplier>

²² Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market. The regulation applies from 3 March 2013. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:295:0023:0034:EN:PDF>

practices. These relate to the need to protect forest cover internationally and ongoing efforts to improve the resilience of UK woodlands against the growing threat of disease, pests and climate change. **We have therefore decided not to exempt diseased trees from the Timber Standard.** Evidence provided by the Forestry Commission has identified the increased risk of disease in woodlands which could potentially lead to large volumes of timber being released onto the market. The Government is keen to ensure that, by requiring this material to meet the Timber Standard, sustainable forest management systems that ensure restocking and disease control practises remain in place.

- 3.34 In recent years, there has been an acceleration in the rate at which forest pests have spread around the world resulting in severe pest problems on several continents. Causes include global trade moving pests and diseases inadvertently via consignments of wood or in wood packaging and climate change altering the geographic range of pests and pathogens. The scale of some pest and disease outbreaks is large and the management of pest and disease outbreaks is becoming part of everyday sustainable forest management planning and practice.
- 3.35 The accelerating threat of pests and diseases presents a severe management challenge and the Forestry Commission is working with forest owners and managers to ensure that increasing woodland resilience to pest and disease is factored into forest management plans and management operations. Demand for renewable heat, driven by the RHI, is helping to increase the area of woodland in productive management and hence increasing opportunities to adjust species and age structure within woodlands.
- 3.36 The Government's approach to sustainable forest management is set out in the UK Forest Standard²³ (UKFS). Through the regulatory mechanisms of felling licences and forest plans, the UKFS requires sustainable forest management to be practiced and in particular owners and managers have to restock felled areas and thus avoid forest loss. Restocking also provides an opportunity to replace diseased trees with a mix of less susceptible species, and thus build resilience in woodland. Most other countries operate comparable controls aimed at avoiding forest loss.
- 3.37 Where forests are affected by disease, the Forestry Commission look to ensure that as much timber as possible is harvested for use by the wood processing and biomass industries. Where disease or pest outbreaks do occur, sanitation felling is sometimes used to restrict the area of woodland affected. Wherever possible, timber harvested during these operations is sold to traditional users of wood, however where this is not possible the bio-energy market can provide a useful way to finance harvesting operations and to help ensure the areas are restocked.
- 3.38 As major areas of forest world-wide are currently affected by diseases, it is expected that affected trees will make a significant contribution to the supply of material to the energy market. Exempting such material from the Timber Standard could lead to deforestation due to controls being bypassed and the loss of opportunities to restock could limit the possibilities of building future woodland residence.

Economic Impacts

- 3.39 As diseased wood is not currently exempted from the Timber Standard, this decision will have no additional economic impacts relative to the status quo.

²³ Forestry Commission (2011) The UK Forestry Standard <http://www.forestry.gov.uk/ukfs>

Trees being removed from areas for ecological reasons

- 3.40 As with the previous proposal, we considered carefully the range of views put forward on this aspect of the proposal to exempt trees removed for ecological reasons from the Timber Standard. Again, we have also discussed further with technical experts at the Forestry Commission in order to better understand the potential impacts that exempting this material could have on UK and international sustainable forest management policies.
- 3.41 While trees removed in this category are only likely to form a minor component of supply, any decision to remove trees will be subject to regulatory controls and processes, such as Environmental Impact Assessments in the EU. Where trees cleared for ecological reasons originate from areas managed as part of a wider forest, it should not be difficult to meet the Timber Standard as part of the normal arrangements for forest management. These include international certification schemes, approved forest plans and felling licences - or comparable controls in other countries. Where these do not apply, there would still be relevant approvals and, for fuel wood sold in the EU, due diligence would be required under the EUTR.
- 3.42 We also noted that the Government's Open Habitats Policy²⁴ in England provides a mechanism for managing woodland removals for the restoration of open habitats. We are therefore not satisfied that an exemption for material removed from forested land is necessary.
- 3.43 Where trees are removed for ecological reasons on non-forest land (for example, to restore heathlands, moorland, unimproved grasslands, bog or wetlands etc. by removing small trees²⁵ or shrubs that are encroaching), we believe that a range of evidence would also be available. This could include the name of the ecological project, its location, links to websites with project information, the Environmental Impact Assessment, the amount of material in total expected to be extracted for bioenergy purposes and, where relevant, the name and reference number of any grant awarded.
- 3.44 However, as with arboricultural residues, it is unlikely that this evidence would meet the provisions of the Timber Standard which is oriented towards forestry mechanisms. **We have therefore concluded that material removed for ecological reasons where it originates from non-forest land will be deemed to have come from a sustainable source under the Timber Standard for the RO and RHI (and the CfD).** Again, such non-waste material would be deemed to have come from a sustainable source as set out in paragraphs 3.26 to 3.30 above.
- 3.45 The UK Forestry Standard²⁶ defines forest land as "land predominately covered in trees (defined as land under stands of trees with a canopy cover of at least 20%), whether in large tracts (generally called forests) or smaller areas known by a variety of terms (including woods, copses, spinneys or shelterbelts)".

Economic Impacts

- 3.46 We expect that this proposal will result in a reduction in the administrative burden on generators and fuel suppliers. It is also expected to lead to a reduction in the amount of trees removed for ecological reasons being diverted from bioenergy to landfill. It has not been possible to quantify this impact, due to a lack of data on trees removed for

²⁴ Forestry Commission (2010) [http://www.forestry.gov.uk/pdf/eng-oh-policy-march2010.pdf/\\$FILE/eng-oh-policy-march2010.pdf](http://www.forestry.gov.uk/pdf/eng-oh-policy-march2010.pdf/$FILE/eng-oh-policy-march2010.pdf)

²⁵ For trees to come under the UK felling regulations, they need to be more than 8cm in diameter. Further information on felling licenses is at <http://www.forestry.gov.uk/england-fellinglicences>

²⁶ Forestry Commission (2011) The UK Forestry Standard <http://www.forestry.gov.uk/ukfs>

ecological reasons currently going to landfill and the proportion expected to be diverted to bioenergy following this change.

Other exemptions

- 3.47 We have considered the suggestion from some respondents to exempt additional categories of wood such as wood cleared for construction of buildings and public infrastructure projects but have decided not to implement this at this stage. Any exemption would need to apply to both domestic and internationally sourced wood and whilst we are aware of some systems in place in the UK to verify this sort of material, such as statutory planning consents, we do not know what sort of information might be available internationally. We will however, review this position if further evidence comes to light.
- 3.48 The Central Point of Expertise for Timber²⁷ (CPET) is currently developing advice notes²⁸ to support the Timber Standard implementation and we expect to publish these in the autumn.

Original proposal on wind blow

- 3.49 We asked for evidence on the potential use of ‘wind blow’ in bioenergy and asked for views on whether wind blow should also be exempt from the Timber Standard and if so how it might be defined and what sort of evidence could be used to determine that wind blow wood is being correctly reported.

Consultation Question

4. Do you have information about the actual or potential use of ‘wind blow’ as a woodfuel? In particular what sort of quantities are likely to arise, where it is most likely to occur , what currently happens to it - both in the UK and internationally?

Consultation Question

5. Do you consider that the Timber Standard should no longer apply to ‘wind blow’? If yes, what pieces of evidence could be provided to ensure that material is not falsely reported as ‘wind blow’?

Summary of responses

	Wind Blow Exemption	
Agree	27	63%
Disagree	10	23%
No comment	6	14%
TOTAL	43	100%

²⁷ Further information on CPET is at <https://www.gov.uk/government/groups/central-point-of-expertise-on-timber>

²⁸ CPET intends to produce 3 advice notes to support the Timber Standard: Woodfuel Bioenergy and Sustainable Forest Management Advice Note; Checklist for Regional Supply Base Evaluation; Mass Balance Guidance for non-certified woodfuel.

Main messages from responses

- Some evidence was provided on wind blow potential in the US. Information on the UK position was provided by the Forestry Commission.
 - The location and quantity of wind blow is hard to predict. Major hurricanes can produce large quantities in multiple states in the US. Tornados and other storms also produce wind blow but not over such a large area.
 - Some US landowners have suggested that the amount of material that falls into the wind blow category is less than 1%.
 - Domestically, this is normally well under 1%, unless there is a major wind event, such as the storm that affected England in 1989 or Scotland in 1968 (where 1.6 m cubic metres of timber were blown down).
- There was broad support across a range of stakeholders for exempting wind blow to help salvage material which would not otherwise be used and where it would encourage restocking. It was suggested that if it is of timber quality, markets dictate it will go to sawmills, but if left on the ground for too long (which can happen in small inaccessible areas, or when there is a “glut” due to a catastrophic wind event) bioenergy could provide a useful and sustainable outlet.
- The point was made by some that in the UK, wind blow can be marketed without a felling licence so it is difficult to produce the paper trail needed for Timber Standard Compliance. Conversely a number of respondents suggested that if the material originates from a certified UK forest it should be possible to comply with the Timber Standard fairly easily.
- There was general recognition from a number of stakeholders that it could be hard to find evidence that material really does originate from this source.
- In the UK, it was suggested that local Forestry Commission officers could verify wind blow falling in their area. Other suggested methods included photography - i.e. weighing at the extraction site and photographing before and after it is cleared to provide a basic audit trail. One respondent suggested that a European system called Global Monitoring for Environment and Security Services Element (GSE) 2 for monitoring forestry could potentially be extended to monitoring and verifying wind blow.
- Some respondents from US considered that exemption is not needed. Wind blow is subject to federal and state forestry regulations and to certification requirements for certified lands so they were confident it could meet the Timber Standard. Others suggested that US forestry regulators in different states would be able to verify and provide documentary evidence confirming the source as wind blow.
- A few organisations suggested that DECC should consider widening exemption to include trees affected by ‘natural disasters’, for instance trees brought down by tsunamis or flooding.
- One organisation disagreed with the proposal on the basis that reliance on third party verification of the origin of the material could lead to misuse.

Post consultation decisions

- 3.50 **After careful consideration we have decided not to proceed with the proposal to exempt wind blow at this stage.** As with the arguments we set out in relation to diseased trees, we are concerned that an exemption to the Timber Standard could potentially impact on sustainable forest management practices. We consider that, in most cases, wind blow can be dealt with within a forest management plan (or equivalent). It is better that such wind blow events are dealt with and encouraged to follow the normal forest management avenues. As such, in most cases, and for the majority of supply, it should not be difficult for owners or managers to provide the necessary evidence of compliance with the Timber Standard.
- 3.51 We note that in some parts of the US, sophisticated mapping information seems to be available to identify wind blow together with formal verification processes by forestry authorities. In the UK, whilst wind blow does not strictly speaking require a Felling Licence, in practice most forest areas affected by wind blow are submitted for approval. This is because additional standing trees are usually cleared at the same time in proposals to amend forest plans.
- 3.52 A number of respondents including those in the US suggested that the majority of wind blow material would originate from certified forests or forests or woodland covered by management plans endorsed by national or local forestry authorities and as such the material should be able to comply with the Timber Standard.
- 3.53 Trees all over the world are affected by the wind and this is a normal part of forest management. However, when “catastrophic wind events” occur, such as hurricanes, tsunamis or exceptional gales, (winds of 80 + mph in the UK) this can result in extensive areas of damage and huge volumes of timber on the ground. In such situations, normal timber markets may become swamped with material and as the skilled contractors to harvest such material are limited, the timber may degrade in the months it takes before it can be extracted. If we receive new evidence that significant quantities of this material are being disposed of unsustainably because of difficulties in meeting the Timber Standard, and a viable means of identifying the material is proving to be difficult to obtain, we would look again at a possible exemption.

Economic Impacts

- 3.54 As wind blown trees are not currently exempted from the Timber Standard this decision will have no additional economic impacts relative to the status quo.

Original proposal on saw mill residues

- 3.55 We proposed not to exempt non waste saw mill residues from the Timber Standard. We expressed concerns that such derogation could, depending on future market prices, create a financial incentive to adapt sawmill processing techniques to produce more residues than is necessary during the production process.

We asked:

Consultation Question	
6.	Do you agree that the Timber Standard should continue to apply to non waste residues from sawmill processes?

Summary of responses

	Non-waste residues from sawmill processes	
Agree	11	26%
Disagree	26	60%
No comment	6	14%
TOTAL	43	100%

Main messages from responses

- The majority of respondents who addressed this question, strongly disagreed with the proposal not to exempt sawmill residues from the Timber Standard and considered that DECC concerns that an exemption might encourage saw mill operators to deliberately produce more residues were unfounded.
- The chain of custody for residues from a manufacturing operation is impractical (and in some cases impossible) to trace back to the stump or location of harvest.
- The higher market value of solid wood products is considered sufficient incentive to minimize the production of residues. It is difficult to identify any scenario under which it is economically viable for a producer of saw grade quality logs to intentionally downgrade round wood to increase the production of lower grade raw materials for biomass use. Such action would erode shareholder value and ultimately endanger the viability of the business.
- Non-waste residues from sawmills will be created with or without the biomass industry, as not all wood fibre can be used for saw logs.
- Changing specification of sawmill equipment is technically difficult and would result in lengthy period of 'downtime'.
- Not exempting residues from the Timber Standard places significant quantities of sawmilling residues at risk of less desirable outcomes such as landfilling or incineration.
- Discouraging the use of saw mill residues will have unintended consequences in sustainability terms, as additional certified standing timber will be harvested in its place for bioenergy use. It was suggested that this is already having an impact in the UK with more biomass customers seeking to contract for FSC certified wood (of which there is a limited supply) rather than continuing the use of non-waste residues.
- Independent auditors should be able to determine if sawmill equipment has been deliberately changed to make more residues. If this happens the residues would then be classified as products (and would fall outside the scope of any exemption and need to comply with the Timber Standard).
- Some organisations pointed to conflict with the Renewable Energy Directive (RED) which they suggested does not require the demonstration of compliance with the land criteria for process residues.
- Three NGOs agreed with the proposal based on the rationale set out in the consultation document.
- Some respondents suggested that compliance with the Timber Standard would not be difficult to prove given that a paper chain should be in place for the original saw logs entering the sawmill. This was countered by a number of respondents claiming that in practice the paper work is attached to the timber /primary products derived from the

timber so that it is almost impossible for generators to link to the residues that form part of their fuel consignment.

Post consultation decision

- 3.56 We have considered carefully the strong case put forward by the majority of respondents in support of an exemption for non-waste processing residues from sawmills. In particular, we have assessed the evidence relating to the price differences between the various outputs from sawmills both within the UK and internationally and the technical information highlighting the practical difficulties that sawmill operators might face in adapting equipment to produce more residues than is necessary. In light of this evidence, we consider that the risk of sawmill operators deliberately producing more residues to circumvent sustainability rules is low.
- 3.57 However, we also noted from the consultation response and further discussions with technical experts at the Forestry Commission that sawmills have a saw log conversion efficiency of 50-60%. This means that up to 50% of the saw log intake is turned into wood chips and sawdust. This material is used by the wood panel and biomass sectors. In 2013, consumption of softwood saw logs by GB sawmills was 6m green tonnes which means that in the region of 3m tonnes of sawmill non waste residues were produced. We do not believe that it would be appropriate to exempt such a large volume of material from the Timber Standard.
- 3.58 In the UK, this volume is to a large extent covered by independent certification systems such as FSC and PEFC. Internationally, significant volumes of timber reaching sawmills are also certified by such schemes. Sawmill non waste residues will have the same paper chain as the saw logs they came from. As part of the certification of their process, traditional users of sawmill non waste residues are well used to accounting for non waste residues in their feedstock mix typically documenting, on a monthly mass balance basis, the level of certified material used. We therefore consider that it may be possible for the biomass supply chains to use similar evidence to demonstrate the origin of material.
- 3.59 **We have therefore decided not to exempt sawmill residues at the present time from the Timber Standard under the RO, RHI and CfDs.** Given the volume of material involved, we consider a cautious approach is appropriate in this case.
- 3.60 We will work with CPET to address the issues raised by stakeholders within the upcoming guidance notes. Processors have to comply with the legality provisions under the EUTR concerning the origin of material, and the availability of evidence from sawmills may become less onerous to collect once suitable systems are in place.

Economic Impacts

- 3.61 As sawmill residues are not currently exempted from the Timber Standard this decision will have no additional economic impacts relative to the status quo.

Proposal 4-To add 'highly biodiverse grasslands' to the list of protected land types for the RHI and the RO

Original consultation proposal

- 3.62 The European Commission is expected to adopt a Regulation in Autumn 2014 defining 'highly biodiverse grasslands' for the purposes of the sustainability criteria for bioliquids. We proposed to also add this protected land type to the land criteria for non-wood solid

and gaseous biomass under the RO and RHI. The introduction of the provision at this stage should help to avoid biomass being sourced from such grasslands and will maintain consistency in the land criteria requirements between bioliquids and solid and gaseous biomass.

Consultation Question

7. Do you agree that highly biodiverse grassland should be included as one of the protected land types within the land criteria under the Renewables Obligation and Renewable Heat Incentive?

Summary of responses

	Highly Biodiverse Grassland	
Agree	27	63%
Disagree	2	5%
No comment	14	33%
TOTAL	43	100%

Main messages from responses

- There was broad support for the proposal across a range of stakeholders.
- One organisation flagged that some Anaerobic Digestion operators are likely to be using grass silage as feedstock. This could originate from specifically planted wild flower mix grasses or by using grass silage harvested as part of grassland management. It was suggested that we should ensure that the additional regulation does not act as a discouragement to these practices and that evidence required proving that harvesting is necessary to preserve grassland status remains straightforward.
- One respondent questioned the need to implement this regulation given that it is aimed at bioliquids and biofuels rather than woody and solid biomass.

Post consultation decision

- 3.63 **We have decided to add ‘highly biodiverse grasslands’ to the list of protected land types in the land criteria for non-wood solid and gaseous biomass under the RO, RHI (and in the CfDs).** This is subject to the adoption by the European Commission of a regulation establishing the criteria and geographical ranges for the purpose of bioliquids²⁹. The introduction of the provision at this stage should help to avoid biomass being sourced from such grasslands. It will maintain consistency in the land criteria requirements between bioliquids and solid and gaseous biomass. This helps to simplify the administration of the various bioenergy financial support schemes and reduces the complexity for parties in the supply chain and auditors verifying the data. At the stage at which the biomass is grown it may not be known whether it will be used at the station in

²⁹ A draft of the Commission Regulation can be found at <http://ec.europa.eu/transparency/regcomitology/index.cfm?do=search.documentdetail&R4F9Jjqc7JwOIZKU6R+jkO3VHGpxAa2+I3dJHmMDDvSBuE2177sL3dMBpRfefPrJ>

liquid or solid form, therefore if the evidence requirements for all fuel states are consistent, it will be easier for parties further up the supply chain.

- 3.64 We do not consider that this change will have a significant impact on biomass supplies for the electricity and heat sectors.
- 3.65 We note that although grassy materials tend to be used mainly in the production of liquid fuels for transport, some forms of grass and silage are beginning to be used more widely to provide feed stocks for Anaerobic Digestion Plant.
- 3.66 However, the draft EC regulation does not prohibit the harvesting of materials from highly biodiverse grassland if it would cease to be grassland in the absence of human intervention and evidence is provided that the harvesting is necessary to preserve its grassland status.

Economic Impacts

- 3.67 We expect the amount of biomass used for electricity and heat generation in the UK that is sourced from highly biodiverse woodlands to be very low. We therefore expect this proposal to have very little or no additional economic impact on generators relative to the status quo.

Proposal 5 – Averaging of Greenhouse Gas Emissions across the year in the RO

Original consultation proposal

- 3.68 We proposed a revised approach and methodology for assessing and if appropriate issuing ROCs in respect of individual biomass consignments which exceed the GHG threshold, but are below the GHG ceiling. This would mean that ROCs would be issued on a monthly basis only for those individual consignments that meet the GHG threshold. For any consignments that are above the GHG threshold but below the ceiling ROCs would be withheld until the end of the obligation period. At the end of the obligation period, the annual average GHG emissions from all of the consignments of solid and gaseous biomass would be calculated, and only if it is below the GHG threshold, would the withheld ROCs be issued.
- 3.69 Previously, we suggested that ROCs or payments under CfDs on biomass consignments that exceed the GHG target but are below the maximum ceiling should be paid at the end of the month if the monthly GHG emission average is at or below the target. A similar process would then operate at the end of the year if the annual average is found to be at or below the GHG target.

We asked:

Consultation Question

- | | |
|----|--|
| 8. | Do you agree with our proposed revised approach and methodology for assessing and if appropriate issuing ROCs in respect of individual biomass consignments which exceed the GHG threshold, but are below the GHG ceiling? |
|----|--|

Summary of responses

	GHG threshold	
Agree	19	44%
Disagree	7	16%
No comment	17	40%
TOTAL	43	100%

Main messages from responses

- Of the 26 responses from a range of stakeholders (including generators) that addressed this question, over two thirds agreed that using the proposed annual average reconciliation method rather than the monthly method was more appropriate and would reduce the risk of issuing more ROCs to generators than they might be entitled to. There was general agreement with the proposed default GHG value to be used where GHG information was unavailable or could not be verified.
- There was also recognition that it may further incentivise generators to work to reduce the GHG emissions associated with their fuels to below the target over the whole year to ensure that they are able to compensate for any months where the GHG threshold would not have been met.
- Some generators have suggested further clarification is required on how the GHG averaging methodology will work in practice (including the definition of a consignment, the scope of circumstances when the default GHG value will be employed, and how the GHG emission value of an individual consignment is treated within the annual reconciliation process where the value exceeds the ceiling or the default GHG value is employed).
- Two organisations put forward alternative proposals for amending the definition of 'consignment' set out in Ofgem guidance.
- Two generators disagreed with the proposal as they considered it would mean generators will face greater uncertainty with regards to cash flow under both the Renewables Obligation and CfD regimes, particularly the latter where there will be immediate cash settlement rather than certificate issue followed by redemption. It was suggested that the impact will be greatest on smaller generators using a few consignments over the year.
- One of these generators and one organisation suggested using a rolling average rather than final annual average.
- Several responses flagged the importance of aligning the GHG reporting procedures under the RO, RHI and CfD. They suggested that the annual reporting date for CfD generators should match the RO date, which is especially important in the case of dual-scheme plants. Some CHP generators suggested biomass CHP operators should only have to report under one scheme (i.e. RO).

- One organisation opposed the proposal in full because it considered that any biomass consignments that exceed the GHG threshold should never be issued ROCs. They suggest that the proposed averaging approach 'would be in conflict with the principles established under the RED for liquid biofuels'.

Post consultation decisions

- 3.70 As set out in the August 2013 Government Response to the consultation on enhancing sustainability criteria for biomass under the RO³⁰, it is our intention that from April 2015, generators of 1MW and above will be issued with ROCs only if the solid biomass or biogas that they use meets or is below a GHG emissions threshold. However, in order to recognise that some consignments of biomass could through no fault of the generator exceed the GHG threshold, the threshold will be applied as an annual average. This is subject to the provision that the consignment of biomass must not exceed an overall ceiling.
- 3.71 Averaging will be available to new-build dedicated biomass (with and without CHP) from April 2015. It will also be available to all other biomass generating stations using solid biomass and biogas from April 2020. Details of the GHG thresholds and overall ceilings for solid biomass and biogas under the RO are at Annex B. The GHG emissions thresholds will not apply to waste, animal excreta, landfill gas or sewage gas.
- 3.72 We have considered carefully the alternative methodologies suggested by a small number of stakeholders both through this consultation and as part of wider discussions with industry in respect of the drafting of biomass CfD sustainability terms and conditions.
- 3.73 We note that one generator favoured the system based on monthly plus annual averaging. We remain concerned that this approach could result in generators receiving more ROCs or CfD payments than they are entitled to relative to using annual averaging only. This would require Government to take action to claw back the overpayments. This would be administratively burdensome and would create a period of uncertainty over the validity of those ROCs which were issued on a monthly basis for consignments that exceeded the GHG threshold. There are also restrictions on the circumstances in which a ROC can be revoked and there may be cases in which future ROCs cannot be withheld, for example, because the station has ceased to claim ROCs.
- 3.74 Two of the responses suggested that we should assess any consignment that exceeded the GHG threshold against a rolling annual average and provided that this rolling annual average is at or below the threshold, proceed with issuing the ROC/ making the CfD payment. It is our view that this approach could again require clawback of ROCs/ the CfD payment if consignments used at the end of the RO obligation period increased the final annual average GHG figure. It could also act as a disincentive for generators to reduce overall GHG emissions throughout the year and potentially lead to situations where generators are choosing to make use of biomass with a higher carbon impact /GHG profile by offsetting against consignments that fall below the threshold.
- 3.75 This is clearly at odds with our policy intent which is that financial support should generally be available only where the biomass used is at or below the target. We would only expect consignments to exceed the target in exceptional circumstances for example

³⁰ DECC (2013) Government Response to the consultation on proposals to enhance sustainability criteria for the use of biomass feedstocks under the Renewables Obligation
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/231102/RO_Biomass_Sustainability_consultation_-_Government_Response_22_August_2013.pdf

where there is a need to change or divert transport of biomass due to inclement weather conditions.

- 3.76 **We therefore intend to introduce a GHG annual averaging process in the RO and forthcoming CfDs in accordance with the methodology proposed in the consultation document.** This means that the issue of ROCs or payments under the CfD in respect of any biomass consignment that exceeds the GHG target (but is below a maximum ceiling) will be deferred until the end of the reporting year. At this point the annual average GHG for all consignments used will be calculated and outstanding payments on any consignments that exceeded the GHG target will only be made if the overall annual average is at or below the target. A flow chart setting out the steps involved in this process is at Annex C.
- 3.77 The annual average calculation will include all biomass used by the station which results in the generation of electricity (other than bioliquid, animal excreta, landfill gas, sewage gas or waste) even where ROCs are not issued. It would include biomass that breaches the ceiling or for which the GHG emissions are not known. Where the GHG emissions from a consignment are not known, or cannot be sufficiently verified, we will assign a default value to that consignment, for the purpose of the calculation of the annual average GHG emissions. This will be set at 91g/ CO₂ eq per MJ or 327.6 kg/CO₂eq per /MWh³¹. This is in line with the fossil fuel comparator for electricity production given in the Renewable Energy Directive.
- 3.78 The annual average calculation will take into account the energy content of each consignment. This is in line with the approach used to calculate a generating station's renewable output for the allocation of ROCs as set out in Articles 25 and 26 of the Renewables Obligation Order 2013³².

Economic Impacts

- 3.79 DECC analysis based on Ofgem GHG data for 2011/2012 and 2012/2013 suggests that this proposed change would have had no impact on ROC payments made to generators during this period. This analysis did not weight consignments based on energy content. At the time of carrying out the analysis, the approach to weighting consignments of feedstock had not yet been determined.

Carbon Stocks

- 3.80 Two of the consultation responses raised general concerns about the adequacy of the sustainability criteria, in particular in relation to forest carbon stocks. On 24 July we published the Biomass Emissions and Counterfactual Model (BEAC). This tool allows the investigation of the impact on whole life cycle carbon emissions of biomass sourced from North America to produce electricity, so allowing changes in the amount of carbon stored in forests over the lifetime of a biomass supply chain to be taken into account.

³¹ The EC's default values for GHG emissions savings for the various biomass feedstocks only provide the carbon intensity of the fuel itself, and not the electricity produced, which is what needs to be reported to Ofgem. Therefore, before reporting to Ofgem, the operator must perform a single calculation using the default value and the actual conversion efficiency of the plant. This calculation is set out in Step 11 of Table 6 of Ofgem's 'Renewables Obligation: Sustainability Guidance at (<https://www.ofgem.gov.uk/ofgem-publications/87988/renewablesobligationsustainabilitycriteriaguidance.pdf>)

³² DECC (2013) The Renewables Obligation (Amendment) Order 2013 http://www.legislation.gov.uk/uksi/2013/768/pdfs/uksi_20130768_en.pdf

- 3.81 We are currently considering the implications arising out of the BEAC modelling. The sustainability criteria set out in the August 2013 Government Response³³ seek to protect certain types of land and to cover a range of GHG emissions. We recognise that the criteria do not address the preservation of land carbon stocks except where the reported use of land changes. We will seek to bring these issues into our on-going work on sustainability, including our assessment of the effectiveness of the current regime, and if appropriate propose changes to the criteria for bioenergy.

³³ DECC (2013) Government Response to the consultation on proposals to enhance sustainability criteria for the use of biomass feedstocks under the Renewables Obligation
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/231102/RO_Biomass_Sustainability_consultation_-_Government_Response_22_August_2013.pdf

Annex A – List of respondents

A.W. Jenkinson Forest Products
AVIH
Bowland Bioenergy Ltd
CLA
Confor
CPL Industries
Drax Group plc
Ecofuels llc
Ecotricity Group Ltd
EDF Energy
Energy Power Resources Ltd (EPRL)
Enviva Biomass.
Estover Energy Ltd
Forest Heat Energy Ltd
Forestry Commission England
Forestry Commission Scotland
Fram Renewable Fuels L.L.C.
Friends of the Earth
Green Circle Bio Energy
Greensphere Capital
Hampshire Woodfuel Cooperative Ltd
Helius Energy plc
Herriard Estates
Iggesund Paperboard (Workington) ltd
LC Energy
Plum Creek Timber Company
Renewable Energy Association
Rural Development Initiatives
RWE
Sembcorp Utilities (UK) Ltd
South East Wood Fuels Ltd
Specflue
Stewart Timber & Forestry
Sustainable Energy Association
The Earth Partners
The RSPB
The Westervelt Company
U.S. Industrial Pellet Association
UPM & UPM Tilhill
Weyerhaeuser Company
Wood Panel Industries Federation
Woodsure

and one response from an individual

Annex B - Details of GHG thresholds and ceilings for RO generators using solid biomass and/or biogas

The August 2013 Government response set out the following GHG thresholds and ceilings for RO generators using solid biomass or biogas:

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

- **240 kg CO₂eq per MWh from 1 April 2014 to 31 March 2020**
- **200 kg CO₂eq per MWh from 1 April 2020 to 31 March 2025**
- **180 kg CO₂eq per MWh from 1 April 2025 to 31 March 2030**

(ii) *All other biomass power*

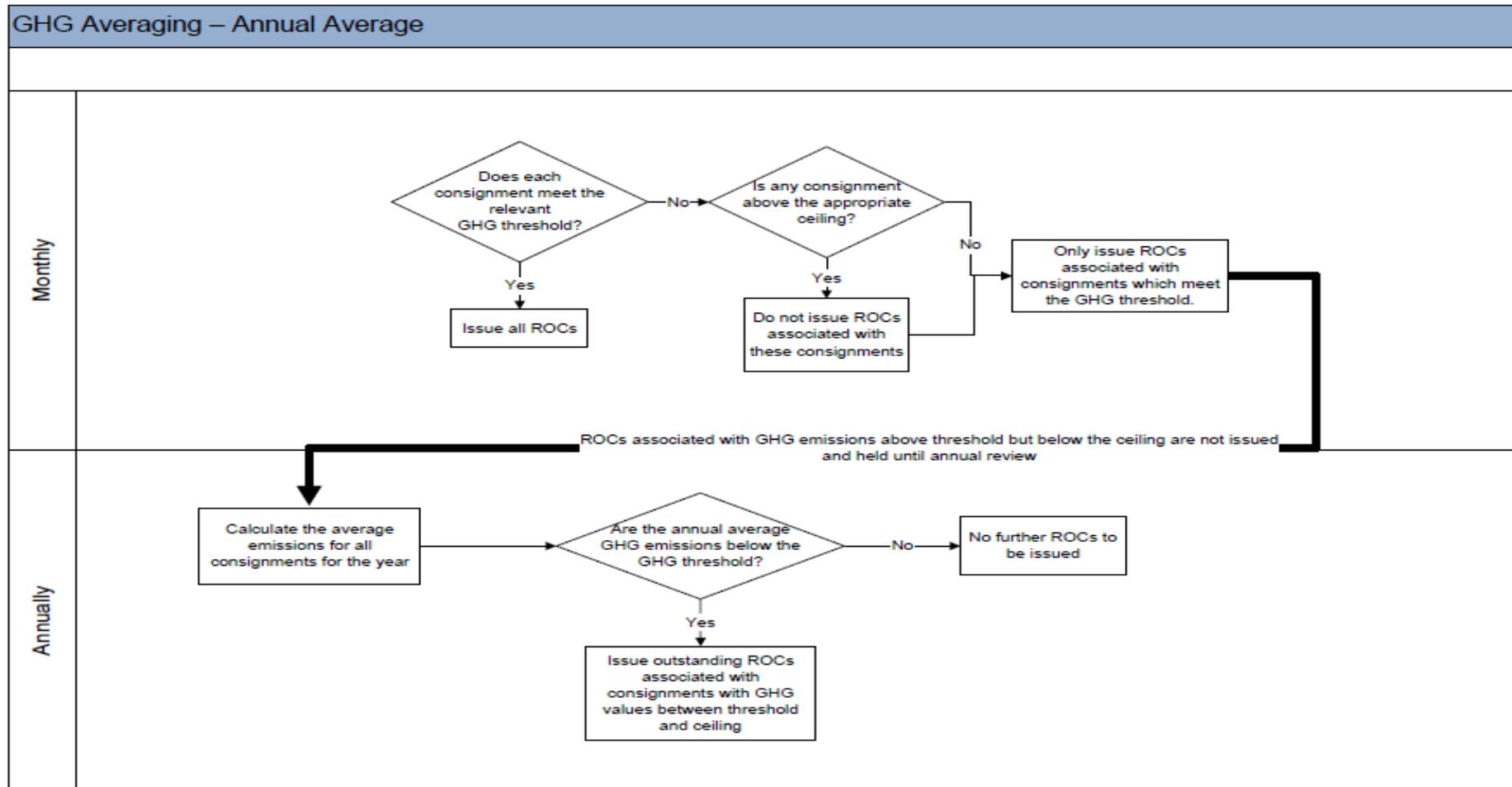
- **285 kg CO₂eq per MWh from 1 April 2014 to 31 March 2020**
- **200 kg CO₂eq per MWh from 1 April 2020 to 31 March 2025**
- **180 kg CO₂eq per MWh from 1 April 2025 to 31 March 2030**

(iii) In order to recognise that individual consignments could through no fault of the generator exceed the threshold, the threshold will be applied as an annual average. This is subject to the provision that the consignment of solid biomass or biogas feedstocks must not exceed the ceiling of:

- **285 kg CO₂eq per MWh from 1 April 2014 to 31 March 2020**
- **270 kg CO₂eq per MWh from 1 April 2020 to 31 March 2025**
- **260 kg CO₂eq per MWh from 1 April 2025 to 31 March 2030**

(iv) Averaging will be available to new-build dedicated biomass (with and without CHP) from April 2015 when we intend 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 CO₂eq per MWh target.

Annex C - Flow chart showing approach to annual averaging of GHG emissions for issue of ROCs.



© Crown copyright 2014

Department of Energy & Climate Change

3 Whitehall Place

London SW1A 2AW

www.gov.uk/decc

URN 14D/290