



Department
of Energy &
Climate Change

Consultation on changes to grandfathering policy with respect to future biomass co-firing and conversion projects in the Renewables Obligation

12 December 2014

General information

Purpose of this consultation

This consultation invites views on the proposal that the support rate under the Renewables Obligation (RO) for future biomass co-firing and conversion projects should no longer be covered by our grandfathering policy; and that this change would apply to combustion units that move into the mid-range, high-range co-firing or biomass conversion bands under the RO from the date of the publication of this consultation document.

Issued: 12 December 2014

Respond by: 26 January 2015

Enquiries to:

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Tel: 0300 068 5404
Email: deccebiomass@decc.gsi.gov.uk
Consultation reference: 14D/459

Territorial extent:

England and Wales only.

How to respond:

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Responses should be emailed to: deccebiomass@decc.gsi.gov.uk

Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at: <https://www.gov.uk/government/consultations/changes-to-grandfathering-policy-with-respect-to-future-biomass-co-firing-and-conversion-projects-in-the-renewables-obligation>

Other versions of the document in Braille, large print or audio-cassette are available on request by contacting us as above. As there is a need to consult promptly on this issue a Welsh version of this document has not been produced.

Confidentiality and data protection:

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

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

Quality assurance:

This consultation has been carried out in accordance with the Government's consultation principles, which can be found here:

<https://www.gov.uk/government/publications/consultation-principles-guidance>

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

DECC Consultation Co-ordinator
3 Whitehall Place
London SW1A 2AW
Email: consultation.coordinator@decc.gsi.gov.uk

Background

1. The Government is committed to cost effective renewable energy as part of a diverse, low carbon and secure energy mix. Alongside gas and low carbon transport fuels, nuclear power and carbon capture and storage, renewable energy supports energy security, helps us meet our decarbonisation objectives and brings green growth to all parts of the UK.
2. The Government's 2012 Bioenergy Strategy¹ set out how biomass can have an important transitional role in contributing to the cost effective delivery of our renewable target. When biomass is sourced sustainably, conversion of coal power or biomass co-firing stations or units to full biomass generation offers a quick, cost effective way to rapidly decarbonise electricity generation in the short to medium term, as well as contributing to security of supply through the extension of the lifetime of generating assets, during the transition to other more sustainable low-carbon generation.
3. The Government has set out how it will support biomass conversions as a transitional part of the renewable energy mix alongside ensuring that we have sufficient deployment of other, more scalable low carbon technologies with longer term potential in order to drive down costs and make those technologies competitive with other renewables and fossil fuels in the next decade.
4. The Renewables Obligation (RO) has been the main financial mechanism since 2002 by which the Government incentivises the deployment of large-scale renewable electricity generation in the UK. As part of the UK's Electricity Market Reform, the RO will close to new capacity in 2017 as we transition to the Contract for Difference (CfD), which is expected to provide support for large-scale renewables in a more cost effective way.
5. Following the last comprehensive review of support levels under the RO, a number of new bands were created to support the full or partial conversion of coal-fired power stations to generate renewable electricity from biomass – these are set out in Annex A. A combustion unit might change bands from month to month depending on the proportion of biomass used in the month. In this consultation document, this is described as moving between the co-firing or conversion bands.
6. The scale of some of the combustion units that might be used for co-firing or conversion to biomass is potentially significant for the RO. In some cases, big changes in the levels of biomass generation in a combustion unit can be made relatively quickly without the need for any formal prior notification where the generating station is already accredited under the RO.
7. To increase the visibility and predictability of future generation from biomass co-firing and conversion, a voluntary cost control mechanism was introduced. Long term stability and sound operation of the RO is in the interests of all of its participants. Under the voluntary mechanism, the operators of co-firing stations and biomass conversions are asked to pre-notify DECC of their generating intentions in advance of each obligation period. The information provided is used for budgetary purposes and to inform the setting of the renewables obligation each year. The voluntary mechanism allows us to monitor the rate of likely deployment and, if necessary, take action to control spend.

¹ <https://www.gov.uk/government/publications/uk-bioenergy-strategy>

The Issue

8. The RO places an obligation on electricity suppliers to submit a specified number of renewables obligation certificates (ROCs) for each megawatt hour of electricity they supply. It is assumed that electricity suppliers pass on the costs of this obligation to consumers through their energy bills. The Government is committed to ensuring the costs of schemes such as the RO are kept under control and for this reason the Government established the Levy Control Framework (LCF).
9. The LCF enables Government to control the costs of supporting low carbon electricity paid for through consumers' energy bills and reflects the importance Government places both on delivering low carbon electricity generation, and keeping consumer bills affordable. The LCF sets annual limits on the projected costs of all DECC's low carbon electricity levy-funded schemes until 2020/21.² In addition to the RO, these schemes comprise the Feed-in Tariff scheme (FITs) and CfDs, including investment contracts under the final investment decision enabling for renewables (FIDeR) process (i.e. the early form of CfDs).
10. The LCF acts as the budgetary constraint under which renewable and low carbon electricity policy is made. If spend under one scheme in the LCF increases unsustainably, it will increase pressure on bills unless it is matched by cost reductions elsewhere. The Government takes potential risks to the LCF very seriously and has already demonstrated that it will act where necessary to ensure that costs are contained and that consumers receive value for money from schemes supported under it.
11. DECC's scenarios at the time of the final Electricity Market Reform Delivery Plan set out illustrative deployment scenarios for biomass conversions ranging from 1.7 to 3.4GW of deployment of biomass conversions and co-firing by the end of the decade.³ These scenarios were for illustration only, and were not exhaustive. The allocation of budget to the three CfD pots in October 2014 assumed that LCF expenditure was in line with our medium estimates of expenditure.⁴ The medium estimates made assumptions about deployment of different technologies under the RO, as well as spend estimates under FITs, the FIDeR process and from the first allocation round of CfDs.
12. However, we now have evidence, partially gathered through the voluntary notification mechanism and partially from market intelligence, which suggests that deployment of biomass conversions will be higher than our medium estimates that were used to set the CfD budgets. This new evidence indicates that an additional biomass conversion unit can be expected on top of what we expected at the time of CfD budget setting. We need to take this increased possibility of an additional biomass conversion very seriously as biomass conversions represent very large amounts of renewable generating capacity (typically around 0.5GW of generating capacity – a significant proportion of the projected deployment range) and can sometimes convert very quickly. On its own, an additional biomass conversion unit would not bring deployment above the EMR Delivery Plan deployment range. Although less likely, we are aware of other units also outside our

² The LCF annual limits to 2020/21 were set out in Annex D of the draft EMR Delivery Plan. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223654/emr_consultation_annex_d.pdf

³ <https://www.gov.uk/government/publications/electricity-market-reform-delivery-plan>

⁴ <https://www.gov.uk/government/publications/cfd-budget-notice>

medium estimates which, if they also converted under the RO, could result in deployment exceeding the range set out in the EMR Delivery Plan. This must be seen in the context of the significant uncertainty around what biomass projects will deploy and when.

13. Additional levels of biomass co-firing and conversions under the RO could result in expenditure very close to the LCF upper limits later this decade, considering the CfD budgets announced to date, medium estimates of spend on other LCF schemes and the sums provisionally earmarked for carbon capture and storage (CCS) projects. DECC must also take into account and manage a number of other levy spending risks – for example, if total deployment under the RO or FITs schemes is higher than our medium estimates, or if generating stations have higher load factors than those assumed when allocating CfDs or investment contracts. The combined effect of additional levels of biomass co-firing and conversion under the RO, alongside these other spending risks that DECC must manage, would present a proportionately higher risk of breaching the LCF upper limits later in this decade.
14. Any increase in spend for one technology or support scheme under the LCF will reduce the level of support available for others.⁵ This is a particular issue in relation to additional levels of co-firing or biomass conversion as it may lead to there being less budget than expected available for future allocation through the CfD auctions to projects in technology groupings one and two, which are technologies that are likely to contribute more to longer-term decarbonisation and to have greater cost reduction potential than biomass co-firing and conversions. Any deployment of a technology under the RO that is higher than the medium estimates assumed at the time of budget allocations is potentially more than can be afforded, and results in adverse consequences for Government's management and use of the LCF as a whole.
15. If a higher proportion of the LCF is necessarily allocated to the RO to cover the costs of the additional levels of co-firing or biomass conversion, the proportion of the LCF which is available for deployment under CfDs would be reduced. Government's view is that the CfD presents a more cost effective mechanism in the medium to long term than the RO, in almost all circumstances. The CfD provides for earlier certainty of support levels than the RO and greater stability of revenue streams by providing a fixed strike price, which means that investors are protected from wholesale price volatility and should therefore benefit from a reduced cost of capital, making the development of low carbon generation cheaper for both investors and consumers.
16. As noted above, the Government's policy is to have a diverse mix of technologies within the UK's energy portfolio. Whilst biomass conversion and co-firing are cheaper means of producing renewable electricity compared to new-build generation, this should only be seen as a transitional technology; such plants have a lower efficiency than new-build generation and are unlikely to be able to generate combined heat and power (CHP). Additionally, without significant development in CCS technology, emissions from such biomass plants are likely to be too high if we are to meet our longer term decarbonisation targets. This is therefore a technology for the short-term to help us meet our 2020 renewables target and to help our transition to a low-carbon power sector.⁶

⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/310272/competitive_allocation_government_response.pdf

⁶ <https://www.gov.uk/government/publications/uk-bioenergy-strategy>

17. We also need to ensure that we have sufficient deployment of more scalable and long term low carbon technologies in order to drive down costs and make those technologies competitive with other renewables and fossil fuels in the next decade. We want to have control over future spending to give us the flexibility to use the limited budget in the most appropriate way – which may be on more transitional technologies, or may be for other low carbon technologies. The CfD provides greater control through the ability to hold allocation rounds and to set the budgets for the technology groupings.
18. Although the budget for biomass conversions under the enduring CfD regime has yet to be released, it is the Government's intention to hold a second CfD allocation round from October 2015. Decisions on budget for that allocation round will be taken next year. The decision not to allocate budget to biomass conversion (through a third technology grouping) in the first CfD allocation round does not imply that DECC would not release budget in future rounds for biomass conversions.

Proposed changes to grandfathering policy with respect to future biomass co-firing and conversion projects in the RO

Details of the proposal

19. Grandfathering is a policy which allows that once a generating station is accredited and receiving support under the RO, the level of support that it receives⁷ would not change for the lifetime of its support under that scheme. In the case of additional capacity, grandfathering applies to the level of support at the time that the additional capacity is added to the station. Originally grandfathering policy did not apply to biomass at all, and it still does not apply to combustion units generating within the low-range co-firing band.
20. In April 2013 grandfathering policy was extended to the biomass conversion and mid-range co-firing bands, as well as to the high-range co-firing band from April 2014.⁸ For these bands, however, the grandfathering policy operates in a different way: once the generating station has been accredited under the RO, grandfathering applies to the level of support at the date that the combustion unit moves into the mid-range, high-range or biomass conversion band. Grandfathering then applies for as long as the combustion unit remains in the same band, and ceases to apply as soon as the combustion unit moves into another band. For example, a combustion unit moving from mid-range co-firing to high-range co-firing would no longer have their mid-range co-firing support levels grandfathered. They would, instead, have their high-range co-firing support levels grandfathered at the level applying on the date that the unit moved to high-range co-firing. A combustion unit is treated as moving into a new band from the moment it starts generating electricity in respect of which ROCs under that new band are issued. Full

⁷ In terms of ROCs per MWh.

⁸ The biomass conversion bands are referred to in the RO legislation as “unit conversion” and “station conversion” depending on whether or not all of the combustion units at the generating station have been fully converted to biomass.

details of how the current grandfathering policy applies to the mid-range, high-range and biomass conversion bands are set out in the July 2012 publication.⁹

21. In order to discourage future biomass conversions from taking place under the RO and future movements up the RO biomass bands, we propose that the support rate under the RO for combustion units that move to a higher biomass support band, including those that enter the RO for the first time, should no longer be covered by our grandfathering policy. Subject to a number of exceptions set out below, we propose that grandfathering policy would no longer apply to combustion units, which take any of the following actions from the date of the publication of this consultation document:
 - a) accrediting as biomass co-firing or conversions under the RO; or,
 - b) moving from the low-range co-firing band into the mid- or high-range co-firing or biomass conversion bands under the RO; or,
 - c) moving from the mid-range co-firing band into the high-range co-firing or biomass conversion bands under the RO; or,
 - d) moving from high-range co-firing band to a biomass conversion band under the RO.
22. Grandfathering policy would no longer cover combustion units that do any of the above for the first time from the date of the publication of this consultation. These combustion units would not regain the benefit of grandfathering policy if they subsequently moved back down the biomass bands at a later date.
23. We expect that this withdrawal of grandfathering would reduce the likelihood of existing combustion units moving up RO bands, and reduce the likelihood of new combustion units accrediting under the RO or moving up the RO bands.
24. Should combustion units move up the RO biomass bands in the future, this proposal would improve our ability to manage the budgetary impact, for example by changing their support levels should the conditions be met for a banding review.
25. Although our immediate concern is the risk of additional biomass conversions under the RO, we also propose to remove grandfathering from future movements up into the mid-range and high-range co-firing bands. This is because combustion units wishing to fully convert could decide to generate at these co-firing bands instead. The size of some combustion units means that generation at the mid-range or high-range co-firing bands would still represent a lot of additional biomass generating capacity, and could still have an impact on expenditure under the LCF.

When would the change take effect?

26. We propose to link the change to our grandfathering policy to the date of publication of this document 12 December. Subject to the exceptions below, support levels would not be grandfathered for any combustion unit accredited from this date, or for any units which move up the RO biomass bands from this date. The timing is to ensure that anyone making investment decisions from this date forwards is aware of the proposed change to our grandfathering policy. Any investment decisions made from 12 December should therefore take this proposal into account, and recognise the risk that if the proposal is

⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65543/6598-fact-sheet-grandfathering-and-cost-control-for-bi.pdf

adopted, combustion units moving into mid-range, high-range co-firing or biomass conversion bands after today will no longer be covered by our grandfathering policy and their support levels could be changed in future, should there be a banding review.

27. A banding review for biomass co-firing or conversion could be carried out if certain conditions were met – for example, if the Government was satisfied that the costs of either had fallen significantly. The proposed removal of grandfathering would mean that, if the Government reduced the level of support under the RO for biomass co-firing or conversion as a result of a banding review, it would no longer be our policy to protect the units affected by these proposals from changes in the level of their support.
28. The proposals on grandfathering specifically apply to combustion units accrediting or moving into the mid-range, high-range co-firing or biomass conversion bands in the future. The proposals **do not** apply more widely to other technologies or schemes. In particular, the proposals do not apply to:
 - a) dedicated biomass, with or without CHP. In the case of dedicated biomass without CHP, this is already covered by our policy only to support 400MW of new-build under the RO band for dedicated biomass;
 - b) all other biomass technologies – dedicated biomass with CHP, energy from waste, advanced conversion technologies, anaerobic digestion, sewage gas and landfill gas – as these technologies deploy at a significantly smaller scale, and with greater notice, and so pose less risk to the LCF;
 - c) combustion units which have already received RO support under the biomass conversion bands before the date of this consultation;
 - d) any combustion units which have already received RO support under the mid-range or high-range bands before the date of this consultation - they would only be affected if they were to move to a higher band after the date of publication of this consultation, and were not covered by the proposed exceptions below; and,
 - e) grandfathering policy on biomass sustainability which is set out in the Government response to the consultation on proposals to enhance the sustainability criteria for the use of biomass feedstocks under the (RO).¹⁰

Proposed exceptions

29. We will be taking into account the position of generators who have already acted on the basis that grandfathering would continue to cover combustion units moving into the mid-range, high-range co-firing or biomass conversion bands in the future. We have considered how best to do so whilst maintaining our overall objectives to secure long term electricity supply and decarbonise electricity generation, while minimising costs to the consumer.
30. As such, we propose a grace period for any combustion unit which can meet either of the following two criteria:
 - a) is the subject of an investment contract awarded through the FIDeR process, where that contract is terminated under the State aid condition in the contract because of a negative or conditional State aid decision, or a delay in a State aid

¹⁰https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/231102/RO_Biomass_Sustainability_consultation_-_Government_Response_22_August_2013.pdf

decision being obtained. For these units, the commitment to convert has already been made and was factored into our planning. A grace period would mean that these combustion units would not lose grandfathering merely because of delays to their conversion caused by the State aid process;

- b) has in any month before the publication of this document moved into the mid-range or high-range co-firing bands. These bands were in part created as stepping stones to full conversion, and a grace period might enable any units that have already received support under these bands to complete their transition to full conversion.

31. We propose that units meeting either of these two criteria would have 12 months within which they could move to full conversion and become covered by our grandfathering policy at that band. For units with investment contracts, the 12 months would run from the termination of the investment contract in the circumstances described above. For units already in the mid-range or high-range co-firing bands, the 12 months would run from the date of this consultation document.

Alternative options considered

32. Our preferred option to improve our ability to manage the budgetary impact of additional deployment of biomass under the RO is to make the changes to our grandfathering policy described above. This option can be implemented quickly as it does not require changes to the RO legislation. This is important because it may be possible for some combustion units to convert in a very short period of time. Not only would this undermine the implementation of any action to control costs, but it may also have an impact on security of supply. Electricity generation capacity would be reduced in the short term because the early conversion of a unit or units would require taking the unit(s) offline, reducing the volume of capacity on the system until the conversion works were completed and the converted unit or units were once again generating at full capacity. For these reasons, alternative options requiring amendments to the RO legislation were discounted.
33. Another alternative would be to take action to constrain other technologies or schemes under the LCF. However, as explained above, as biomass co-firing and conversion is a transitional technology, and given the cost-control advantages of the CfD, we propose to address the risk of additional deployment of biomass co-firing and conversion through changes to our grandfathering policy for the RO.

Impact of our proposals

34. The impacts of the proposal will depend on the investment decisions of biomass co-firing and conversion plants. The intention of the policy change is to reduce the likelihood of additional mid-range and high-range co-firing projects, as well as conversions, occurring under the RO. The precise impact will be difficult to quantify, although by removing grandfathering it is expected that more flexibility will be maintained within the LCF to allocate funding to CfDs in future years. This potentially includes biomass conversions as well as technologies in groups one and two and CCS. Co-firing of biomass is not eligible for support under the CfD.

Next Steps

35. We will aim to publish a Government response as soon as possible after the consultation closes on 26 January 2015, following careful consideration of consultation responses and evidence received.
36. As set out in March 2014, in the Government response to the RO transition consultation, the Government believes “that a mechanism to increase stability across biomass co-firing and conversion bands, and to ensure budgetary predictability and control within the RO, will be required”.¹¹ This was reiterated in October’s Explanatory Note to the CFD Budget notice.¹² Although the proposals in this consultation document should improve budgetary control, they might not be sufficient on their own, especially to achieve the higher levels of stability that may be needed in the RO once it is closed to new entrants in 2017. Therefore, we may develop and consult on further mechanisms to increase stability and predictability across the RO biomass co-firing and conversion bands in the future.

Consultation Questions

Consultation Questions	
1.	<p>Do you agree with the proposal that the support rate under the RO for combustion units which:</p> <ul style="list-style-type: none"> a) accredit as biomass co-firing or conversions under the RO; or, b) move from the low- range co-firing band into the mid- or high-range co-firing or biomass conversion bands under the RO; or, c) move from the mid-range co-firing band into the high-range co-firing or biomass conversion bands under the RO; or d) move from high-range co-firing into a biomass conversion band under the RO; <p>should no longer be covered by our grandfathering policy?</p>
2.	<p>Do you agree that the withdrawal of grandfathering as proposed should apply to accreditations and to movements between the biomass bands that take place at any time from the date of the publication of this consultation document?</p>
3.	<p>Do you agree with our proposed exceptions and are there any additional exceptions we should make to this proposal?</p>
4.	<p>Do you have any other comments on the subject matter of this consultation?</p>

¹¹https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/289078/Transition_and_Grace_Periods_Government_Response_-_12_Mar_2014.pdf

This was subsequently reiterated in our RO solar consultation on 13 May 2014.

<https://www.gov.uk/government/consultations/consultation-on-changes-to-financial-support-for-solar-pv>

¹²https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/360278/Explanatory_Note_To_Set_Out_The_Wider_Context_Of_The_CFD_Budget_Notice_Alternative_Version.pdf ; see footnote (2)

ANNEX A: BIOMASS SUPPORT LEVELS UNDER THE RO

1. Following the last comprehensive review of support levels under the RO, a number of new bands were created to support the full or partial conversion of coal-fired power stations to generate renewable electricity from biomass. A unit-by-unit approach was also adopted for these new bands, recognising that generating stations with more than one combustion unit might decide to fully or partially convert each unit on an individual basis.
2. The new bands were as follows:

Band	Description	Support level (ROC/MWh)
Low-range co-firing of biomass	Less than 50% biomass co-fired in a unit	0.3 (increasing to 0.5 from 2015/16)
Mid-range co-firing of biomass (other than bioliquids)	50% - less than 85% biomass co-fired in a unit	0.6
High-range co-firing of biomass (other than bioliquids)	85% - less than 100% biomass co-fired in a unit	0.9
Biomass conversion	Electricity generated by a unit using 100% biomass	1.0

3. Co-firing at lower percentages involves lower risk and lower investment requirements than co-firing at higher percentages or full conversion. This was reflected in the banding. The bands may also be used as stepping stones to higher levels of co-firing or conversion. The bands are based on the percentage of biomass used in the combustion unit in each month. This means that a combustion unit might change bands from month to month depending on the proportion of biomass used in the month.

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URN 14D/459