

Business and Regulatory Impact Assessment for the Renewables Obligation (Scotland) Amendment Order 2014

Title of Proposed Regulation

Renewables Obligation (Scotland) Amendment Order 2014

Purpose and Intended Effect of Measure

Objectives

1. The prime objective of the Renewables Obligation (Scotland) Amendment Order 2014 (the ROS) is to ensure that the ROS remains capable of driving the substantial increases in renewable electricity in Scotland which will be necessary to help meet Scottish Government targets. The main changes introduced by this Order are:
 - Improvements to the reporting requirements on the use of biomass under the Renewables Obligation.
 - The introduction of two new bands aimed at supporting generation from offshore test and demonstration sites and pilot projects consisting of non-fixed turbines.
 - A number of transitional arrangements between the Renewables Obligation and the new Contracts for Difference under Electricity Market Reform, including preventing duplication of support and providing for a choice of support.
 - A reference to the latest Combined Heat and Power Quality Assurance (CHPQA) Standard, which has been tightened to reflect improvements in the efficiency of such schemes since the criteria were first developed.

Background

2. The Renewables Obligation mechanism was introduced in 2002, with separate Orders in England and Wales, Scotland (and later Northern Ireland). These combined to create an obligation on licensed electricity suppliers across the UK to source more energy from eligible sources of renewable electricity, such as wind, biomass, hydro, wave and tidal power. The obligation is currently the primary instrument via which renewable electricity generation targets in Scotland (the equivalent of 100% of gross electricity demand to be generated from renewable sources by 2020) and across the UK are being pursued.
3. From 1 April 2009, the UK obligation changed from an obligation based upon a percentage of a supplier's sales to an obligation to present a number of Renewable Obligation Certificates (ROCs) per megawatt hour (MWh) of a supplier's sales. The introduction of this change removed the direct link between the level of the obligation and the actual amount of renewable electricity required

to meet it. One ROC is no longer necessarily equivalent to 1 MWh of renewable electricity. This has changed the ROS from an obligation to produce evidence that a percentage of electricity supplied to customers comes from renewable sources, to one where suppliers are obliged to present a specified number of ROCs.

4. The UK Obligations therefore combine to require licensed electricity suppliers to produce a certain number of ROCs in respect of each megawatt hour of electricity that they supply to customers during a specified period. In 2014/15, this number will be 0.244 ROCs per MWh. Without the financial support provided by the obligations, most forms of renewable electricity would not be economic and the Scottish Government would not achieve its targets for increasing the supply of electricity from renewable sources.
5. The UK Government is introducing a new financial support mechanism for large scale low carbon electricity generation through its Electricity Market Reform programme which will replace the Renewables Obligation. The new support mechanism, Contracts for Difference (CfD), will be open to nuclear, carbon capture and storage and renewable electricity generators and is expected to open to applications later in 2014. There will be a transition period during which both the RO and the CfD are open for applications for support from new renewable generating capacity. The RO is being amended to take account of the existence of the CfD and the transition arrangements.

Rationale for Government Intervention

6. The ROS is currently the key driver in terms of meeting the Scottish Government's renewable electricity targets. The continued development of and support (at the right level) for renewable generation capacity in Scotland will also make a vital contribution towards meeting binding renewable energy targets for the UK as a whole, as imposed by the EU Renewable Energy Directive.
7. The market will not, without the intervention or additional support as supplied by the ROS, deliver the required development and deployment of renewable technologies to help achieve Scotland's renewables and carbon reduction targets. This is because mechanisms such as the carbon price floor are not yet sufficient on their own to support these higher cost technologies, while grant funding and other forms of support for innovation – although helpful to the sector's development – will not deliver the step changes in deployment necessary to meet the targets which exist.
8. The ROS, in tandem with the other UK ROs, needs to increase the proportion of renewable electricity to the levels required to meet the EU target. To do this, it needs to be structured in order to deliver the right levels of support over the right

period. Subject to Parliamentary procedure and State Aid approval, the Scottish Government plans to implement in April 2014 the changes set out in this note to maintain the effectiveness of the ROS.

Consultation

Within Government

9. The ROS and the related consultations have been subject to discussions within the Scottish Government's Energy and Climate Change Directorate, and circulated to colleagues in other Departments with an interest, notably including Marine Scotland and the Forestry Commission (Scotland). The UK wide nature of the RO mechanism has been reflected in regular discussions with colleagues in the Department of Energy and Climate Change, and the Department of Enterprise, Trade and Investment in Northern Ireland.

Public Consultation

10. This amending order is implementing decisions made following a number of consultations related to the renewables obligation.

Biomass sustainability criteria

11. A consultation on proposals to enhance the sustainability criteria for the use of biomass took place between 5 October 2012 and 11 January 2013. This consultation sought views on the following proposals:

- Expanded sustainability criteria for solid biomass and biogas, to take effect from October 2013.

12. Under global accounting rules the use of biomass is treated as being 'zero carbon' at the point of its use for energy because the emissions on combustion should theoretically be matched by the carbon taken up by replanting or regrowth.

13. However, there are other considerations over the lifecycle that need to be taken account of to ensure that total emissions from cultivating, harvesting, processing and transporting biomass do not exceed those of the fossil fuel avoided.

14. We received 25 responses to the consultation. Our response, published on 7 November 2013¹, explained that we had decided to proceed with the following which would take effect from 1 April 2014:

- New criteria to be brought in on a reporting basis from April 2014, with the intention for the criteria to become mandatory for generators of 1 MWe

¹ <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Obligation-12-13/BiomassSustainabilityConsultation>

capacity and above from April 2015. (i.e. generators will be required to demonstrate meeting the criteria to receive RO support).

- Generators of 1 MWe capacity and above to be required to submit an independent audit of the sustainability report.
- Tightened GHG lifecycle trajectories requiring operators to achieve larger savings than the current 60% emissions saving target compared to the EU fossil electricity average (285 kg CO₂eq per MWh) in a series of steps over time.
- From April 2020, biomass power, whether new or existing, co-firing or conversion, with or without CHP to be placed on the same GHG trajectory. The target from April 2020 will be 200 kg CO₂eq per MWh target (72% saving). This will reduce further to 180 kg CO₂eq per MWh target in 2025 (75% saving).
- Before April 2020, existing biomass power, co-firing and conversions, with and without CHP to remain on the current 285 kg CO₂eq per MWh target to reflect that long-term contracts are already in place.
- New dedicated biomass to be subject to a 240 kg CO₂eq per MWh target (66% saving) to reflect its higher cost of carbon savings.
- Tighter GHG targets to be applied as an annual average (subject to a ceiling) to allow generators to better manage procurement risks.
- New sustainable forest management criteria to be introduced, based on the UK Timber Procurement Policy (UK-TPP) principles for central Government. The UK-TPP draws on established sustainable forest certification schemes that cover a range of social, environmental and economic issues relating to forests.
- Sustainability criteria to be fixed until 1 April 2027 (with the proviso that changes may be made to take account of EU and international legislation), thereby providing greater certainty to biomass developers when signing long term feedstock contracts.

Offshore wind

15. An additional consultation on proposals for new bands for innovative offshore wind took place between 13 December 2012 and 7 March 2013. A summary of the 20 responses received, plus the Scottish Government's response was published on 12 June 2013². Our response proposed the introduction of two new bands for offshore wind:

- A band set at 2.5 ROCS aimed at supporting generation from offshore test and demonstration sites deploying innovative, new to market turbines; and
- A band set at 3.5 ROCS for pilot projects consisting of non-fixed turbines – e.g. floating turbines or those deploying 'tension' deployment systems.

² <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Obligation-12-13/ROCOffshoreWind>

RO transition

16. Both the UK and Scottish Governments consulted on the transition from the Renewables Obligation to the Contract for Difference during 2013³. Following an amendment to the Energy Act 2013 giving UK ministers additional powers over all UK ROs, the UK Government carried out a further more detailed consultation between 7 and 28 November 2013 on the arrangements for grace periods to apply at the RO closure date (March 2017)⁴. Consequently, the UK Government will publish a combined response to both consultations shortly. In the meantime, the main RO transition policy decisions implemented by this order mirror those being introduced across the UK, and include:

- Measures to prevent duplication of support for the same electricity, by ensuring that electricity supported under CfDs is not eligible for ROCS.
- New apportionment rules for input and output electricity to allow a generating station to have some of its generating capacity supported under the RO and some outside the RO.
- New requirements to ensure that new stations can't obtain preliminary accreditation or accreditation under the RO if they have entered into a CfD (subject to various exceptions).
- New choice of scheme rules to the effect that once a station has applied for a CfD in respect of any of that station's existing or additional capacity, it will not be able to register any further additional capacity under the RO.

CHPQA

17. The UK Government issued a number of consultations on the proposals to amend the calculation of CHP Quality Index for renewable CHP schemes. The UK Government's response was published in July 2013⁵.

Options, Costs and Benefits

Biomass sustainability criteria

18. The costs and impacts in this paper associated with introducing the changes to biomass sustainability criteria contained within the 2014 Order are drawn from the impact assessment published by DECC in February 2014⁶, and apply at a pan-UK level. This reflects both the combined and near identical nature of the

³ <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Obligation-12-13/ConsultationTransitionRO> and <https://www.gov.uk/government/consultations/transition-from-the-renewables-obligation-to-contracts-for-difference>

⁴ <https://www.gov.uk/government/consultations/renewables-obligation-ro-grace-periods>

⁵ <https://www.gov.uk/government/consultations/revising-certification-criteria-for-renewable-combined-heat-and-power-schemes>

⁶ http://www.legislation.gov.uk/ukia/2014/30/pdfs/ukia_20140030_en.pdf

Obligations as well as the consistent approach taken across the UK as regards these issues.

Policy option 0 – do nothing

19. With the on-going need for biomass feedstocks, maintaining existing sustainability criteria with GHG criteria set at 285kg CO₂eq per MWh could present future sustainability risks and fail to support the development of sustainable biomass supply chains.

Policy options 1 & 2 – tighter GHG emissions targets

20. Both of these policy options introduce new robust sustainability controls for use of solid biomass and biogas and introduce a requirement for an independent audit for plants above 1MWe. The new controls include a tighter GHG emissions targets reflecting pan-UK ambitions on carbon-reductions post-2020. The following two policy options were considered in setting a reducing GHG trajectory with steps in 2020 and 2025:

		From October 2013	From April 2020	From April 2025
Policy option 1 (final option to be implemented)	Dedicated Biomass after April 2013	240 kg CO ₂ eq/MWh	200 kg CO ₂ eq/MWh	180 kg CO ₂ eq/MWh
	Dedicated Biomass accredited before April 2013	285 kg CO ₂ eq/MWh	200 kg CO ₂ eq/MWh	180 kg CO ₂ eq/MWh
	Conversions & Co-firing	285 kg CO ₂ eq/MWh	200 kg CO ₂ eq/MWh	180 kg CO ₂ eq/MWh
Policy option 2	Dedicated Biomass after April 2013	200 kg CO ₂ eq/MWh	200 kg CO ₂ eq/MWh	No set target
	Dedicated Biomass accredited before April 2013	285 kg CO ₂ eq/MWh	200 kg CO ₂ eq/MWh	No set target
	Conversions & Co-firing	240 kg CO ₂ eq/MWh	240 kg CO ₂ eq/MWh	No set target

21. Tighter sustainability standards could reduce the the amount of biomass in electricity generation, which would have to be replaced by other technologies to meet renewable and GHG targets. The resource cost / benefit is uncertain and depends on the cost of alternative generation. For example if bioenergy is displaced by onshore wind there is assumed to be a resource benefit, however if it is replaced by offshore wind there is an overall resource cost.

22. Key monetised benefits consist of the value of higher GHG saving accruing due to the introduction of tighter GHG saving thresholds. GHG savings are estimated on a lifecycle basis and valued using the traded price of carbon. The majority of carbon savings accrue to biomass resources originating from overseas, given the relatively large proportion of imports compared to UK woody bioresources in the supply scenario. This is despite the additional emissions associated with international transport.

23. The resource savings, carbon benefits and NPV best estimate are summarised as follows:

		Best estimate (£m)
Policy option 1 (final option to be implemented)	Total resource cost range	-160
	Total carbon benefit range	80
	Total NPV range	240
Policy option 2	Total resource cost range	-110
	Total carbon benefit range	50
	Total NPV range	160

24. The intention of the policy is to ensure sustainability criteria changes are implemented in a way that minimises disruption to industry whilst ensuring the use of biomass is put on a sufficiently ambitious GHG trajectory.

25. Policy option 1 has a higher Net Present Value and is the preferred final option to be implemented, balancing higher GHG savings with the risk to biomass generators in terms of supply constraints and potential price premiums for more sustainable feedstocks. Feedback during the consultation suggested that a 200 kg CO₂eq per MWh target was achievable longer-term, providing flexibility was permitted for the GHG performance of a single individual consignment to allow for

possible events beyond the generators control, and that necessary certainty was provided by setting the GHG trajectory to cover the full RO period to April 2027.

26. While the optimal GHG trajectory is subject to considerable uncertainty, a target of 200 kg CO₂eq per MWh by 2020 is considered to be suitably ambitious. A step approach to reaching this target is considered appropriate given the uncertainty involved, industry feedback and the additional changes to sustainability reporting that will be made concurrently.

Innovative offshore wind

Policy option 0 – do nothing

27. Under the do nothing option the legislation would not be modified to include two new enhanced ROC bands for innovative offshore wind. This would mean that an appropriate level of support to demonstrate and prove new-to-market turbines deployed in test sites would not be available and thus risk a failure to realise vital cost reductions brought about by wider support for innovation.

Policy option 1 – introduction of two new bands for offshore wind

28. The introduction of two new enhanced ROC bands for innovative offshore wind would deliver limited additional support for innovative offshore wind generation, both from test centres and pilot projects comprising non-fixed turbines. The new support levels are limited in scope and are designed to apply to new-to-market offshore wind turbines. Their introduction is aimed at reducing the costs of generation from such sources and enabling them to make a greater contribution over the longer term towards meeting our binding EU targets.

29. Modelling based on the limited amount of confidential data submitted by consultees forecasts that the introduction of two new enhanced ROC bands for innovative offshore wind could result in the following outcomes:

- Based on a total installed capacity of 75 MW under each band, we estimate that the maximum additional costs of the bands at the levels proposed would be £26.5 million per year,
- Over the lifetime of the proposed measure this would be a maximum of £530 million.

Small / Micro Firms Impact

30. The major impact of the Obligation on the large majority of small businesses is likely to continue to come from increased costs of electricity which, while affecting all electricity consumers, will represent a larger proportion of income for smaller companies.

31. Small businesses involved in licensed electricity supply should not experience any additional burdens from this set of proposed amendments.

Legal Aid Impact Test

32. This test is not considered relevant to the changes to the ROS.

'Test Run' of Business Forms

33. The changes to the ROS do not involve business forms.

Competition Assessment

34. The ROS is a market-based instrument that operates in a competitive market for electricity. The rules of the ROS apply in a non-discriminatory way to all participants in the renewables industry and electricity sector. It is intended that this will remain the case. The proposed changes, coupled with the retention of the mechanism which recycles money from the buyout fund, should act as a positive incentive to competition between existing and new renewable generators, as well as licensed electricity suppliers.

Enforcement, Sanctions and Monitoring

35. The ROS, like all UK Renewable Obligations, is administered and enforced by Ofgem. Non-compliance is considered a breach of a 'relevant requirement' of the Electricity Act and Ofgem may impose appropriate sanctions. Ofgem reports annually on its administration of the Obligations and conducts regular audits in relation to compliance.

36. The changes proposed do not introduce any new powers of sanction.

Implementation and Delivery Plan

37. The Renewables Obligation (Scotland) Amendment Order 2014 is being laid before the Parliament during February 2014, and is due to come into force with effect from 1 April 2014.

Post-Implementation Review

38. The legislation requires the Scottish Government to carry out reviews of the ROS on an agreed timetable. The review whose outcome is delivered by this amending Order has been conducted in accordance with that timetable. The legislation also allows support levels to be reviewed at any time should evidence emerge or be produced which demonstrates that the costs of generating from a particular renewable source have changed.

39. The Scottish Government will continue to work closely with Scottish stakeholders, the other UK administrations and with Ofgem on future changes to the mechanism.

Summary and Recommendation

40. The recommendation is that the proposed changes be made to the ROS. This will maintain its effectiveness as part of a UK renewable electricity market, while supporting progress towards and the achievement of the Scottish Government's renewable electricity targets.

Declaration and Publication

41. I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.