



SHEPHERD+ WEDDERBURN

ROC Banding Proposals

The Department of Energy and Climate Change (DECC) has published its proposed levels of banded support under the Renewables Obligation (RO) for the period 2013-17. This announcement brings to an end a period of uncertainty within the renewables industry over the extent of cutbacks to renewables subsidies. Responses to the consultation should be submitted by 12 January 2012.

The RO, introduced by the Utilities Act 2000, provides subsidies to renewable technologies which allow them to compete effectively with fossil fuel generation. The RO operates via a banding system, which allows DECC to vary the level of support provided, in order to promote particular technologies according to their costs, relative maturity, and potential for future development. The RO will prove crucial in meeting the UK's goals under the Renewable Energy Roadmap, and 2009 Renewable Energy Directive.

As is to be expected in the current economic climate, the consultation puts a clear emphasis on reducing costs. The RO is subject to the Levy Control Framework, which caps the amount that can be spent over the current Comprehensive Spending Review period (2011-15). At the current levels of banding, this cap would be exceeded by £130m in 2013/14 and £290m in 2014/15. Accordingly, DECC propose to maximise deployment of the cheapest renewables technologies, notably biomass, and minimise the generation needed by the most expensive technologies. Under the proposals, DECC expect large-scale renewable energy to generate 70-75TWh/y by the end of the banding period in 2017.

Key to DECC's proposals is the conversion of coal generating power stations to biomass. This technology makes use of existing infrastructure, and prolongs the life of old coal-fired stations that would otherwise be decommissioned. DECC believe that the current level of support (1.5 ROCs) is significantly higher than necessary. As the current level is not grandfathered, investment may be deterred as stakeholders await a significant cut in subsidies. The new proposed band of 1 ROC will provide certainty to investors, while saving £1bn over the banding period. Additionally, a new band for biomass conversions is proposed for generators that propose to convert to biomass before 1 April 2013. Generators in this new band will receive 1.5 ROCs/MWh for any generation before this date, and a rate of 1 ROC thereafter. The rate of 1 ROC will be grandfathered. DECC also propose a new "co-firing" band, which will allow larger power stations to partly switch to biomass. The subsidy will be 1ROC, which will be grandfathered. Bioliquids will be treated as other biomass. However, there will be a cap of 4% on the use of bioliquids by electricity generators to meet their renewables targets.

The new proposals also place emphasis on the potential of wave and tidal energy. Such technologies are not ready for large scale development, but DECC seeks to increase investment in these areas by supporting projects with a subsidy of 5 ROCs for capacity up to 30MW per generating station.

Under the new banding proposals, support will be reduced for both onshore and offshore wind. Onshore wind support will be reduced by 10% to reflect long term cost movements and to deter poorly sited projects which are more expensive to develop. Offshore wind projects accredited in 2015/16 will have support reduced to 1.9 ROCs, with support for projects accredited in 2016/17 further reduced to 1.8 ROCs. These staggered reductions will mirror the projected fall in the costs of offshore wind projects. An industry led task force was established earlier in October by DECC with the aim of

creating an action plan to reduce the costs of development, construction and operation of offshore wind farms. The new banding proposals will also reduce support for hydro-electricity, standard pyrolysis and gasification, energy from waste with combined heat and power, and landfill gas.

The proposals described above will apply in England and Wales only, although they are designed to operate in conjunction with renewables obligations in place in Scotland and Northern Ireland. DECC note in their consultation that the three mechanisms should be as consistent as possible, to avoid deterring investors with large portfolios that cross these jurisdictions. To this end, the Scottish Ministers have published a review of the Renewables Obligation Scotland (ROS) bandings which mirror DECC's proposals, with two exceptions. Firstly, whilst the DECC tidal and wave subsidy of 5 ROCs will apply up to a limit of 30MW, a further subsidy of 2 ROCs will be available for projects exceeding this limit. Secondly, the Scottish Ministers have expressed concerns over DECC's reliance on biomass, given potential restrictions on the UK's supply of biomass. Consequently, the Scottish Ministers wish to put in place a maximum capacity threshold for biomass, beyond which no subsidy would be given. Consultation responses are to be given by 13 January 2012.

The table below shows the current and proposed bandings under the DECC consultation.

Proposed bandings under the Renewables Obligation consultation

Renewable electricity technologies	Current support, ROCs/MWh ¹	Proposed ROC support/MWh ²	Other proposed changes
Advanced gasification	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17 Call for evidence	Proposed change to definition and merger with advanced pyrolysis
Advanced pyrolysis	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17 Call for evidence	Proposed change to definition and merger with advanced gasification
Anaerobic digestion	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Biomass conversion	No current band but eligible to claim 1.5ROCs under current banding arrangements	1 Call for evidence	Proposal for a new band.
Co-firing of biomass	0.5	0.5	Changes proposed to add fossil derived bioliquids.
Co-firing of biomass (enhanced)	No current band but 0.5 ROCs under current banding arrangements	1 Call for evidence	Proposal for a new band.

Renewable electricity technologies	Current support, ROCs/MWh ¹	Proposed ROC support/MWh ²	Other proposed changes
Co-firing of biomass with CHP	1	1	Changes proposed to add fossil derived bioliquids, to exclude enhanced co-firing and to close this band to new accreditations from 1 April 2015.
Co-firing of energy crops	1	1	Changes proposed to the definition of energy crops and to exclude enhanced co-firing.
Co-firing of energy crops with CHP	1.5	1.5 Call for evidence	Changes proposed to the definition of energy crops, to exclude enhanced co-firing and to close this band to new accreditations from 1 April 2015.
Dedicated biomass	1.5	1.5 to 31 March 2016 1.4 from 1 April 2016	Changes proposed to exclude biomass conversions and to add fossil-derived bioliquids
Dedicated energy crops	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	Changes proposed to the definition of energy crops and to exclude biomass conversion.
Dedicated biomass with CHP	2	2 in 2013/14 and 2014/15	Changes proposed to add fossil derived bioliquids, to exclude biomass conversion and to close this band to new accreditations from 1 April 2015.
Dedicated energy crops with CHP	2	2 in 2013/14 and 2014/15 Call for evidence	Changes proposed to the definition of energy crops, to exclude biomass conversion and to close this band to new accreditations from 1 April 2015.
Energy from waste with CHP	1	0.5 Call for evidence	
Geothermal	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Geopressure	1	1	

Renewable electricity technologies	Current support, ROCs/MWh ¹	Proposed ROC support/MWh ²	Other proposed changes
Hydro-electric	1	0.5	
Landfill gas	0.25	0 Call for evidence	
Microgeneration	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Onshore wind	1	0.9	
Offshore wind	2 in 2013/14; 1.5 from 2014/15 onwards	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Sewage gas	0.5	0.5 Call for evidence	
Solar photovoltaic	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Standard gasification	1	0.5 Call for evidence	Proposed change to definition and merger with standard pyrolysis
Standard pyrolysis	1	0.5 Call for evidence	Proposed change to definition and merger with standard gasification
Tidal impoundment (range) – tidal barrage (<1GW)	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Tidal impoundment (range) – tidal lagoon (<1GW)	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Tidal stream	2	5 up to a 30MW project cap. 2 above the cap.	
Wave	2	5 up to a 30MW project cap. 2 above the cap.	

The Scottish Government Proposals are shown in the table below.

Renewable electricity technologies	Current support, ROCs/ MWh¹	Proposed ROC support/ MWh²	Change
Advanced gasification	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17 Call for evidence	Changes proposed to the definition of this band, plus merger with advanced pyrolysis.
Advanced pyrolysis	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17 Call for evidence	Changes proposed to the definition of this band, plus merger with advanced gasification.
Anaerobic digestion	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Biomass conversion	No current band, but eligible to claim 1.5 ROCs under current banding arrangements.	1	Proposal for a new band.
Co-firing of biomass	0.5	0.5	Changes proposed to add fossil derived bioliquids.
Co-firing of biomass (enhanced)	No current band but eligible to claim 0.5 ROCs under current banding arrangements	1	Proposal for a new band.
Co-firing of biomass with CHP	1	1	Changes proposed to add fossil derived bioliquids, to exclude advanced co-firing and to close this band to new accreditations from 1 April 2015.
Co-firing of energy crops	1	1	Changes proposed to the definition of energy crops, and to exclude advanced co-firing.
Co-firing of energy crops with CHP	1.5	1.5	Changes proposed to the definition of energy crops, to exclude advanced co-firing and to close this band to new accreditations from 1 April 2015.

Renewable electricity technologies	Current support, ROCs/ MWh¹	Proposed ROC support/ MWh²	Change
Dedicated biomass	1.5	1.5 until 31 March 2016; 1.4 from 1 April 2016	Scottish Govt seeking views on possibility of capacity threshold for eligibility.
Dedicated energy crops	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	Changes proposed to the definition of energy crops, and to exclude biomass conversion.
Dedicated biomass with CHP	2	2 in 2013/14 and 2014/15	Scottish Govt seeking views on possibility of capacity threshold for eligibility. Proposal to close this band to new accreditations from 1 April 2015.
Dedicated energy crops with CHP	2	2 in 2013/14 and 2014/15	Changes proposed to the definition of energy crops, to exclude biomass conversion and to close this band to new accreditations from 1 April 2015.
Energy from waste with CHP	1	0.5	
Geothermal	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Geopressure	1	1	
Hydro-electric	1	0.5	
Landfill gas	0.25	0	
Microgeneration	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Onshore wind	1	0.9	
Offshore wind	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Sewage gas	0.5	0.5	
Solar photovoltaic	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Standard gasification	1	0.5 Call for evidence	Proposed change to definition and merger with standard pyrolysis.

Renewable electricity technologies	Current support, ROCs/MWh¹	Proposed ROC support/MWh²	Change
Standard pyrolysis	1	0.5 Call for evidence	Proposed change to definition and merger with standard gasification.
Tidal impoundment - tidal barrage (<1 GW)	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Tidal impoundment - tidal lagoon (<1 GW)	2	2 in 2013/14 and 2014/15; 1.9 in 2015/16 and 1.8 in 2016/17	
Tidal stream	3	5	We are seeking views on the introduction of a project cap to accompany this higher band.
Wave	5	5	As above.

¹ Different levels of support may apply to certain types of generating station accredited before 1 April 2009. The default rate of 1 ROC/MWh applies to eligible generation that does not fall within any other banding provision. In Scotland, certain microgenerators receive 2 ROCs/MWh.

² Years refer to obligation periods under the RO / ROS. For example, 2013/14 refers to the period 1 April 2013 to 31 March 2014.