This draft is published to accompany the Government Response to the statutory consultation on the Renewables Obligation Order 2011. It is not the final version.

DRAFT STATUTORY INSTRUMENTS

2011 No.

ELECTRICITY

The Renewables Obligation (Amendment) Order 2011

Made	-	-	***
Coming into force	-	-	1st April 2011

This Order is made by the Secretary of State in exercise of the powers conferred by sections 32(1) and (2), 32C(1), (2), (3) and (5), 32J(3) and 32K(1) and (3) of the Electricity Act 1989(a) ("the 1989 Act") and section 2(2) of the European Communities Act 1972(b)("the 1972 Act") (as read with paragraph 1A of Schedule 2 to the 1972 Act(c)).

The Secretary of State is a Minister designated(\mathbf{d}) for the purposes of section 2(2) of the 1972 Act in relation to energy and energy sources.

This Order makes provision for a purpose mentioned in section 2(2) of the 1972 Act and it appears to the Secretary of State that it is expedient for the references to Annex 5 to Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources(e) in article 54(3D) and Schedules 1A, 1B and 3A inserted by this Order into the Renewables Obligation Order 2009(f) to be construed as references to Annex 5 to the directive as amended from time to time.

The Secretary of State has consulted the Gas and Electricity Markets Authority, the National Consumer Council(g), electricity suppliers to whom this Order applies, and such generators of electricity from renewable sources and other persons as considered appropriate in accordance with section 32L(1) of the 1989 Act.

In accordance with section 32L(2) of the 1989 Act and paragraph 2(2) of Schedule 2 to the 1972 Act a draft of this instrument was laid before Parliament and approved by a resolution of each House of Parliament.

Accordingly the Secretary of State makes the following Order:

⁽a) 1989 c.29, as substituted by section 37 of the Energy Act 2008 (c.32).

⁽b) 1972 c.68. Section 2(2) was amended by section 27(1)(a) of the Legislative and Regulatory Reform Act 2006 (c.51) and Part 1 of the Schedule to the European Union (Amendment) Act 2008 (c.7).

⁽c) Paragraph 1A of Schedule 2 was inserted by section 28 of the Legislative and Regulatory Reform Act 2006 and was amended by article 3 of S.I. 2007/1388 and Part 1 of the Schedule to the European Union (Amendment) Act 2008. (d) S.I. 2010/761.

⁽e) OJ L 140, 5.6.2009, p.16.
(f) S.I. 2009/785 amended by S.I. 2010/1107.

⁽g) Section 32L(1) of the 1989 Act refers to "the Council", this is defined in section 111(1) as substituted by section 30(4)(b) of the Consumers, Estate Agents and Redress Act 2007 (c.17).

Citation, commencement and extent

1.—(1) This Order may be cited as the Renewables Obligation (Amendment) Order 2011 and comes into force on 1st April 2011.

(2) Subject to paragraph (3), this Order extends to England and Wales only.

(3) Article 3 extends to England and Wales and Scotland only.

Preliminary

2.—(1) The Electricity Act 1989 is amended by article 3.

(2) The Renewables Obligation Order 2009 ("the 2009 Order") is amended by articles 4 to 17.

Amendments to section 32M of the Electricity Act 1989 (interpretation of sections 32 to 32M)

3.—(1) Section 32M(1) of the Electricity Act 1989 is amended as follows.

(2) After the definition of "banding provision" insert—

""bioliquid" has the meaning given by Article 2(h) of Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources;".

(3) In the definition of "fossil fuel", after "any substance" insert ", other than bioliquid,".

Amendments to article 2 of the 2009 Order (interpretation)

4.—(1) Article 2 of the 2009 Order is amended as follows.

(2) In paragraph (1) at the appropriate place insert—

""biomaterial" means the biodegradable fraction of-

- (a) products, waste and residues of biological origin from agriculture (including vegetal and animal substances), forestry and related industries (including fisheries and aquaculture); and
- (b) industrial, commercial and municipal waste;";

"fossil derived bioliquid" means bioliquid produced directly or indirectly from-

- (a) coal,
- (b) lignite,
- (c) natural gas (within the meaning of the Energy Act 1976(**a**)),
- (d) crude liquid petroleum, or
- (e) petroleum products (within the meaning of the Energy Act 1976);";

"greenhouse gas emission saving criteria" means the criteria set out in Schedule 1A;";

"land criteria" means the criteria set out in Schedule 1B;";

""phased offshore wind turbine" means a wind turbine which is registered under article 58A;";

""Renewables Directive" means Directive 2009/28/EC of the European Parliament and of the Council of 23rd April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, and references in this Order to Annex 5 to the Renewables Directive are to Annex 5 as amended from time to time;";

""residue" does not include waste;"; and

⁽a) 1976 c.76.

""sustainability information" means information submitted to the Authority by the operator of a generating station for the purpose of demonstrating that a bioliquid meets the greenhouse gas emission saving criteria and the land criteria;".

(3) In paragraph (1), for the definition of "total installed capacity", substitute—

""total installed capacity" means-

- (a) in relation to a generating station, the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption);
- (b) in relation to a wind turbine, the maximum capacity at which the turbine could be operated for a sustained period without causing damage to it (assuming there was no interruption to the wind powering it);".
- (4) In paragraph (2), after each reference to "waste", insert ", fossil derived bioliquid".
- (5) For paragraph (4), substitute—
 - "(4) The fuels referred to in paragraph (3) are—
 - (a) fossil derived bioliquid;
 - (b) bioliquid (not being fossil derived bioliquid);
 - (c) biomass (not being bioliquid);
 - (d) waste which constitutes a renewable source (not being bioliquid or biomass);
 - (e) fossil fuel including waste (other than waste falling within sub-paragraphs (a) to (d)).".

Amendments to article 3 (waste as a renewable source)

5.—(1) Article 3(2) of the 2009 Order is amended as follows.

- (2) At the end of sub-paragraph (a) omit "and".
- (3) For sub-paragraph (b), substitute—
 - "(b) in the case of waste that is a fossil derived bioliquid, is the energy content of the fossil fuel from which the fossil derived bioliquid is directly or indirectly derived expressed as a percentage of the energy content of the waste as a whole; and
 - (c) in all other cases, is the energy content of the fossil fuel from which the waste is in part composed or derived expressed as a percentage of the energy content of the waste as a whole.".

Amendment to article 4 (biomass and fuels which are to be treated as biomass)

6. In article 4(4) of the 2009 Order, after "not being waste", insert "or fossil derived bioliquid".

Fossil derived bioliquid

7. After article 4 of the 2009 Order (biomass and fuels which are to be treated as biomass), insert—

"Fossil derived bioliquid

4A.—(1) For the purposes of this Order, fossil derived bioliquid is to be treated as being in part composed of (or in part derived from) fossil fuel.

(2) Where fossil derived bioliquid (not being waste) is used, whether on its own or not, to fuel a generating station, the proportion of fossil derived bioliquid which is to be treated as being composed of (or derived from) fossil fuel—

(a) is to be determined by the Authority, and

(b) is the energy content of the fossil fuel from which the fossil derived bioliquid is directly or indirectly derived expressed as a percentage of the energy content of the fossil derived bioliquid as a whole.

(3) It is for the operator of the generating station to demonstrate to the Authority's satisfaction what proportion of the fossil derived bioliquid is to be treated as being composed of (or derived from) fossil fuel.

(4) When determining that proportion the Authority is entitled to have regard to any material (whether or not produced to it by the operator of the generating station) if, in its opinion, that material indicates what proportion of the fossil derived bioliquid is to be treated as being composed of (or derived from) fossil fuel.".

Amendments to article 17A (generating stations accredited for longer than 20 years)

8.—(1) Article 17A of the 2009 Order(a) is amended as follows.

- (2) In paragraph (1), for "paragraphs (2) and (3)" substitute "paragraphs (2), (3) and (4A)".
- (3) At the beginning of paragraph (3), insert "Subject to paragraph (4A),".
- (4) After paragraph (4), insert—

"(4A) This article does not apply in relation to the issue of ROCs in respect of the generation of electricity to which article 17AB (phased offshore wind turbines registered for longer than 20 years) applies."

Circumstances in which no ROCs are to be issued in respect of offshore wind generating stations

9. After article 17A of the 2009 Order (generating stations accredited for longer than 20 years) insert—

"Phased offshore wind turbines registered for longer than 20 years

17AB.—(1) This article applies in relation to the issue of ROCs in respect of the generation of electricity using a phased offshore wind turbine.

(2) ROCs are not to be issued in respect of any electricity generated using a phased offshore wind turbine, on or after the 20th anniversary of the date on which the phased offshore wind turbine was registered under article 58A (registration of phased offshore wind turbines) or 31st March 2037 (whichever is the earlier).

(3) Where the electricity generated by a generating station is generated in part using phased offshore wind turbines, but the amount of electricity so generated is not measured separately from electricity generated otherwise than by using those turbines, the electricity generated by it which is to be treated (for the purposes of paragraph (2)) as having been generated using those turbines is the relevant percentage (the relevant percentage for these purposes being the total installed capacity of those turbines at the date of generation of the electricity expressed as a percentage of the station's total installed capacity at that date).

Electricity generated using unregistered offshore wind turbines

17AC.—(1) This article applies to a generating station which—

- (a) is offshore;
- (b) generates electricity from wind; and
- (c) in the case of a generating station accredited before 1st April 2011, has added additional capacity on or after that date.

⁽a) Article 17A was inserted by article 8 of S.I. 2010/1107.

(2) ROCs are not to be issued in respect of any electricity generated by a generating station to which this article applies using an unregistered offshore wind turbine.

(3) Where the electricity generated by a generating station is generated in part using unregistered offshore wind turbines, but the amount of electricity so generated is not measured separately from electricity generated otherwise than by using those turbines, the electricity generated by it which is to be treated (for the purposes of paragraph (2)) as having been generated using those turbines is the relevant percentage (the relevant percentage for these purposes being the total installed capacity of those turbines at the date of generation of the electricity expressed as a percentage of the station's total installed capacity at that date.

(4) For the purposes of this article, a generating station is offshore if-

- (a) its turbines are situated wholly in offshore waters, and
- (b) it is not connected to dry land by means of a permanent structure which provides access to land above the mean low water mark.
- (5) In this article—

"additional capacity", in relation to a generating station, means capacity which does not form part of the capacity of the station as accredited; and

"unregistered offshore wind turbine", in relation to a generating station, means a wind turbine which—

- (a) in the case of a generating station accredited as at 31st March 2011, in the Authority's view, does not form part of—
 - (i) the capacity of the station as accredited; or
 - (ii) any additional capacity added to the station on or before 31st March 2011; and
- (b) is not registered under article 58A.".

Amendment to article 22 (circumstances in which no ROCs are to be issued in respect of electricity generated from renewable sources)

10. In article 22(1) of the 2009 Order, after every reference to "biomass" insert "(or fossil derived bioliquid)".

Circumstances in which no ROCs are to be issued in respect of electricity generated from bioliquid

11. After article 22 of the 2009 Order (circumstances in which no ROCs are to be issued in respect of electricity generated from renewable sources), insert—

"Circumstances in which no ROCs are to be issued in respect of electricity generated from bioliquid

22A.—(1) No ROCs are to be issued in respect of any electricity generated by a generating station from bioliquid unless the bioliquid meets the greenhouse gas emission saving criteria and the land criteria.

(2) It is for the operator of the generating station to demonstrate to the Authority's satisfaction that the bioliquid meets the greenhouse gas emission saving criteria and the land criteria.

(3) Where paragraph (4) applies, a mass balance system must be used for the purpose of demonstrating that bioliquid ("the relevant bioliquid") meets the greenhouse gas emission saving criteria and the land criteria.

(4) This paragraph applies where—

- (a) consignments of biomaterial from which the relevant bioliquid is made; or
- (b) consignments of the relevant bioliquid

with differing sustainability characteristics are mixed.

(5) For the purposes of paragraph (3), a mass balance system is a system which—

- (a) allows consignments of biomaterial or bioliquid with differing sustainability characteristics to be mixed ("the mixture");
- (b) provides for the sustainability characteristics of the consignments added to the mixture to be attributed to the consignments withdrawn from the mixture; and
- (c) requires the sustainability characteristics attributed to the sum of all the consignments withdrawn from the mixture to be the same, and in the same quantities, as the sustainability characteristics of the sum of all the consignments added to the mixture.
- (6) For the purposes of paragraphs (4) and (5)—
 - (a) the sustainability characteristics of a consignment of biomaterial are—
 - (i) the type of biomaterial; and
 - (ii) the information relating to the biomaterial to be used for the purpose of determining whether bioliquid made from the biomaterial meets the greenhouse gas emission saving criteria and the land criteria.
 - (b) the sustainability characteristics of a consignment of bioliquid are—
 - (i) the type of bioliquid; and
 - (ii) the proportion that meets the greenhouse gas emission saving criteria and the land criteria.

Common agricultural policy requirements

22B. No ROCs are to be issued in respect of any electricity generated by a generating station from bioliquid if—

- (a) the bioliquid is derived from biomaterial (not being waste) of agricultural origin cultivated in the European Union; and
- (b) the Authority is satisfied that the biomaterial referred to in sub-paragraph (a) was—
 - (i) cultivated in a manner that breached a statutory management requirement identified in entries 1 to 5 and 9 of the list in Annex 2 to Council Regulation (EC) No 73/2009(a) ("the 2009 Regulation"); or
 - (ii) obtained from land which does not meet the minimum requirements for good agricultural and environmental condition defined pursuant to Article 6(1) of the 2009 Regulation.".

Amendments to article 54 (information to be provided to the Authority where electricity is generated from biomass)

- 12.—(1) Article 54 of the 2009 Order(b) is amended as follows.
- (2) In the heading, after "biomass", insert "or fossil derived bioliquid".
- (3) In paragraph (1)(a), after "other than", insert "waste, biomass wholly derived from waste,".
- (4) Omit paragraph (3)(f).
- (5) After paragraph (3)(k), insert—
 - "(1) where the biomass was not a bioliquid—

⁽a) OJ L 30, 31.1.2009, p.16. Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003.

⁽b) Article 54 was amended by article 13 of S.I. 2010/1107.

- (i) the greenhouse gas emission saving from the use of the biomass to generate electricity;
- (ii) whether the biomass meets the land criteria;
- (iii) where the greenhouse gas emission saving from the use of the biomass to generate electricity is less than 60 percent, the main reasons why biomass with a greater greenhouse gas emission saving was not used;
- (iv) where the biomass does not meet the land criteria, the main reasons why biomass meeting the land criteria was not used; and
- (v) where any of the information specified in sub-paragraphs (l)(i) and (l)(ii) is not known—
 - (aa) the main reasons why that information is not known; and
 - (bb) the main reasons why biomass for which that information is known was not used.".
- (6) After paragraph (3) insert—

"(3A) For the purposes of paragraph (3)(1), the operator of the generating station must use one of the following as the greenhouse gas emission saving from the use of the biomass to generate electricity—

- (a) the actual saving; or
- (b) the default saving.

(3B) For the purposes of paragraph (3A)—

- (a) the actual saving is to be calculated in accordance with Schedule 3A; and
- (b) the default saving-
 - (i) in relation to biomass described in the first column of Part 1 of Schedule 3B is to be calculated in accordance with Part 2 of Schedule 3B;
 - (ii) in all other cases, is zero.

(3C) The default saving must not be used as the greenhouse gas emission saving from the use of biomass to generate electricity unless the annualised emissions from carbon stock changes due to land-use change, are equal to, or less than, zero.

(3D) For the purposes of paragraph (3C), the annualised emissions from carbon stock changes due to land-use change are to be calculated in accordance with paragraph 7 of Part C of Annex 5 to the Renewables Directive subject to the following modifications—

- (a) for "biofuel" substitute "biomass"; and
- (b) omit references to "or bioliquid".".

(7) After paragraph (5) insert—

"(5A) In this article, references to biomass, other than in paragraph (3)(1), include fossil derived bioliquid.".

Bioliquid sustainability audit report

13. After article 54 of the 2009 Order, insert—

"Bioliquid sustainability audit report

54A.—(1) This article applies to a generating station which generates electricity (wholly or partly) from bioliquid in respect of which the operator of the generating station has submitted sustainability information.

(2) In relation to each consignment of bioliquid used in a generating station to which this article applies, the operator of the station must, by the 31st May immediately following the obligation period during which the bioliquid referred to in paragraph (1) is used ("the

relevant date"), provide the Authority with a sustainability audit report meeting the requirements specified in paragraph (3).

(3) The requirements specified in this paragraph are that the sustainability audit report must—

- (a) be prepared by person who is not—
 - (i) the owner or operator of the generating station; or
 - (ii) a connected person, in relation to the owner or operator of the generating station;
- (b) confirm that the systems used by the operator of the generating station to produce the relevant sustainability information are accurate, reliable and protected against fraud;
- (c) evaluate the frequency and methodology of any sampling carried out for the purpose of obtaining or checking the data on which the operator relied in preparing the relevant sustainability information;
- (d) evaluate the robustness of the data on which the operator relied in preparing the relevant sustainability information; and
- (e) be prepared to an adequate standard.

(4) Subject to paragraph (5), it is for the operator of the generating station to demonstrate to the Authority's satisfaction that the sustainability audit report was prepared to an adequate standard.

(5) A sustainability audit report shall be deemed to have been prepared to an adequate standard if it complies with the International Standard on Assurance Engagements 3000(a) or equivalent.

(6) Where, in relation to bioliquid used in a generating station to which this article applies, the operator of the station fails to provide the Authority with a sustainability audit report meeting the requirements specified in paragraph (3) by the relevant date, the Authority must, in relation to any ROCs to which the operator would otherwise be entitled, postpone the issue of those ROCs (up to the specified number) until such time as the sustainability audit report is provided.

(7) For the purposes of paragraph (6), the specified number is the number of ROCs which the Authority has or estimates that it has or, but for this article, it would have issued in respect of the electricity generated by the bioliquid in relation to which a sustainability audit report meeting the requirements specified in paragraph (3) should have been provided.

(8) In this article "relevant sustainability information" in relation to a consignment of bioliquid, means the sustainability information submitted by the operator of the generating station in respect of the consignment.".

Amendment to article 57 (functions of the Authority)

14. In article 57 of the 2009 Order, after paragraph (1), insert—

"(1A) The Authority must, as soon as reasonably practicable after each obligation period, forward to the Secretary of State a summary of the sustainability information submitted during that period.".

⁽a) The International Standard on Assurance Engagements 3000 is set out from page 292 of Part II of the publication entitled "Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements" (2010 edition) (ISBN 978-1-60815-052-6) published by the International Federation of Accountants. Copies can be obtained from www.ifac.org.



Registration of offshore wind turbines

15. After article 58 of the 2009 Order (preliminary accreditation and accreditation of generating stations), insert—

"Registration of offshore wind turbines

58A.—(1) This article applies to a generating station which—

- (a) is accredited,
- (b) is offshore,
- (c) generates electricity from wind, and
- (d) in the case of a generating station accredited before 1st April 2011, has added additional capacity on or after that date.

(2) The operator of a generating station to which this article applies may apply to the Authority in writing for one or more wind turbines to be registered under this article in relation to the generating station.

(3) For each wind turbine to which the application relates, the application must-

- (a) identify the location, or the proposed location, of the wind turbine; and
- (b) specify the total installed capacity of the wind turbine.

(4) Following receipt of an application meeting the requirements of paragraph (3), the Authority must register the wind turbines to which the application relates, if the Authority is satisfied that—

- (a) in the case of a station accredited as at 31st March 2011, the wind turbines do not form part of—
 - (i) the accredited capacity of the station; or
 - (ii) any additional capacity forming part of the station on or before 31st March 2011;
- (b) where the wind turbines form part of the accredited capacity of the station-
 - (i) the date of receipt of the application was no later than 5 years after the date on which the station was accredited; and
 - (ii) the Authority has not registered other wind turbines forming part of the accredited capacity of the station, on more than 4 separate occasions;
- (c) where the wind turbines form part of additional capacity of the station-
 - (i) the date of receipt of the application was no later than 5 years after the date on which that additional capacity first formed part of the station; and
 - (ii) the Authority has not registered other wind turbines forming part of that additional capacity, on more than 4 separate occasions; and
- (d) where the wind turbines form part of the accredited capacity of the station and no other wind turbines have been registered under this article in relation to the station, the total installed capacity of the wind turbines to which the application relates is at least 20% of the accredited capacity of the station.

(5) The Authority must notify the applicant in writing of its decision on an application to register a wind turbine under this article.

(6) In providing written notification under paragraph (5), the Authority must specify the date on which the registration of the wind turbine is to take effect.

(7) For the purposes of this article a generating station is offshore if—

- (a) its wind turbines are situated wholly in offshore waters, and
- (b) it is not connected to dry land by means of a permanent structure which provides access to land above the mean low water mark.

(8) In this article, in relation to a generating station—

"accredited capacity", means the capacity of the station as accredited;

"additional capacity", in relation to a generating station, means capacity which does not form part of the accredited capacity of the station.".

Greenhouse gas emission saving criteria and land criteria

16. After Schedule 1 to the 2009 Order, insert-

"SCHEDULE 1A Articles 22A and 22B GREENHOUSE GAS EMISSION SAVING CRITERIA

The greenhouse gas emission saving criteria

1. Bioliquid meets the greenhouse gas emission saving criteria if-

- (a) the greenhouse gas emission saving from its use to generate electricity is equal to or greater than the minimum greenhouse gas emission saving applicable to the bioliquid at the time when it is used; or
- (b) the bioliquid was-
 - (i) produced by an installation that was producing bioliquid on 23 January 2008; and
 - (ii) used to generate electricity before 1 April 2013.

Minimum greenhouse gas emission saving

2. For the purposes of paragraph (1), the "minimum greenhouse gas emission saving" is—

- (a) 35 percent, in respect of bioliquid used to generate electricity before 1st January 2017;
- (b) 50 percent, in respect of bioliquid used to generate electricity during 2017;
- (c) 50 percent, in respect of bioliquid that was-
 - (i) produced by an installation that started producing bioliquid before 1st January 2017; and
 - (ii) used to generate electricity on or after 1st January 2018;
- (d) 60 percent, in respect of bioliquid that was-
 - (i) produced by an installation that started producing bioliquid on or after 1st January 2017; and
 - (ii) used to generate electricity on or after 1st January 2018.

Calculating the greenhouse gas emission saving

3. For the purposes of paragraph (1), the operator of a generating station must use one of the following as the greenhouse gas emission saving from the use of a bioliquid to generate electricity—

- (a) the default saving;
- (b) the actual saving; or
- (c) the mixed saving.

4. The default saving must not be used as the greenhouse gas emission saving from the use of a bioliquid to generate electricity unless—

- (a) the bioliquid is described in the first column of Part A or Part B of Annex 5 to the Renewables Directive(a);
- (b) the annualised emissions from carbon stock changes caused by land-use change, as calculated in accordance with paragraph 7 of Part C of Annex 5 to the Renewables Directive(b), are equal to, or less than, zero; and
- (c) in the case of a bioliquid described in the first column of Part A of Annex 5 to the Renewables Directive, the biomaterial from which the bioliquid is made—
 - (i) is cultivated outside the European Union;
 - (ii) is cultivated in an area included in a list submitted under article 19(2) of the Renewables Directive; or
 - (iii) is waste or residue (other than residue from agriculture, aquaculture or fisheries).

5. The mixed saving must not be used as the greenhouse gas emission saving from the use of a bioliquid to generate electricity unless the bioliquid is described in the first column of a table in Part D or Part E of Annex 5 to the Renewables Directive(c).

6. For the purposes of paragraph (3)—

- (a) the default saving for a bioliquid described in the first column of Part A or Part B of Annex 5 to the Renewables Directive is the percentage, or the result of the calculation, which corresponds to that description in the third column of Part A or Part B of that Annex;
- (b) the actual saving is to be calculated in accordance with Part C of Annex 5 to the Renewables Directive;
- (c) the mixed saving is to be calculated as the sum of the factors of the formula in paragraph 1 of Part C of Annex 5 to the Renewables Directive(d), but (subject to sub-paragraph (d) below) using disaggregated default values for the bioliquid for some of the factors, and actual values for the bioliquid for all of the other factors; and
- (d) the disaggregated default values for cultivation in the first table in Part D of Annex 5 to the Renewables Directive must not be used in the calculation of the mixed saving unless the biomaterial from which the bioliquid is made—
 - (i) was cultivated outside the European Union;
 - (ii) was cultivated in an area included in a list submitted under article 19(2) of the Renewables Directive; or
 - (iii) is waste or residue (other than residue from agriculture, aquaculture or fisheries).

7. For the purposes of paragraph (6)—

- (a) the disaggregated default values for a bioliquid described in the first column of a table in Part D or Part E of Annex 5 to the Renewables Directive are the values, or the results of the calculations, which correspond to that description in the third column of that table in Part D or Part E of Annex 5; and
- (b) the actual values are to be calculated in accordance with Part C of Annex 5 to the Renewables Directive.

⁽a) Part A is entitled "Typical and default values for biofuels if produced with no net carbon emissions from land-use change". Part B is entitled "Estimated typical and default values for future biofuels that were not on the market or were on the market only in negligible quantities in January 2008, if produced with no net carbon emissions from land-use change".

⁽**b**) Part C is entitled "Methodology".

⁽c) Part D is entitled "Disaggregated default values for biofuels and bioliquids". Part E is entitled "Estimated disaggregated default values for future biofuels and bioliquids that were not on the market or were only on the market in negligible quantities in January 2008".

⁽d) The formula set out in paragraph 1 of Part C of Annex 5 to the Renewables Directive is used to calculate the greenhouse gas emission saving from the use of bioliquid for the purposes of that Part.

SCHEDULE 1B LAND CRITERIA

Interpretation

1. In this Schedule—

"continuously forested area" means land of an area of more than one hectare-

- (a) with trees more than five metres tall and with a tree canopy cover of more than 30 percent; or
- (b) which is planted with trees, which trees—
 - (i) have the capacity to grow to a height of more than five metres; and
 - (ii) collectively have the capacity to provide a tree canopy cover of more than 30 percent;

"designated for nature protection purposes" means designated pursuant to the law of the United Kingdom or of any part of the United Kingdom or pursuant to the law of any country or territory outside the United Kingdom, for the purpose of protecting the natural environment;

"lightly forested area" means land of an area of more than one hectare-

- (a) with trees more than five metres tall and with a tree canopy cover of between 10 percent and 30 percent, or
- (b) which is planted with trees, which trees—
 - (i) have the capacity to grow to a height of more than five metres; and
 - (ii) collectively have the capacity to provide a tree canopy cover of between 10 percent and 30 percent;

"primary forest" means forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed; and

"wetland area" means land that is covered with or saturated by water-

- (a) permanently; or
- (b) during a significant part of the year.

Land criteria

2. Subject to paragraphs (3) to (5), fuel meets the land criteria if-

- (a) the biomaterial from which it was made was not obtained from—
 - (i) land which at any time during or after January 2008 was—
 - (aa) primary forest; or
 - (bb) designated for nature protection purposes;
 - (ii) land that was peatland in January 2008;
 - (iii) a former continuously forested area;
 - (iv) a former lightly forested area; or
 - (v) a former wetland area; or
- (b) the biomaterial from which it was made was waste or residue (other than residue from agriculture, aquaculture, fisheries or forestry).

Exceptions

3. Paragraph (2)(a)(i)(bb) does not apply to biomaterial obtained from land designated for nature protection purposes if the production of that biomaterial did not interfere with the nature protection purposes for which the land was designated.

4. Paragraph (2)(a)(ii) does not apply to biomaterial obtained from land that was peatland if the cultivation and harvesting of that biomaterial did not involve the drainage of previously undrained soil.

5. Paragraph (2)(a)(iv) does not apply to biomaterial obtained from a former lightly forested area if the greenhouse gas emission saving from the use of the fuel made from the biomaterial is equal to or greater than the minimum greenhouse gas emission saving applicable to the fuel at the time when it is used to generate electricity.

6. For the purposes of paragraph (5)—

- (a) where the fuel is a bioliquid—
 - (i) the greenhouse gas emission saving is to be calculated in accordance with Part C of Annex 5 to the Renewables Directive; and
 - (ii) the minimum greenhouse gas emission saving is to be determined in accordance with paragraph (2) of Schedule 1A;
- (b) in all other cases—
 - (i) the greenhouse gas emission saving is to be calculated in accordance with Schedule 3A; and
 - (ii) the minimum greenhouse gas emission saving is 60 percent.

Former continuously forested area and former wetland area

7. For the purposes of paragraph (2)—

- (a) biomaterial was obtained from a former continuously forested area if the land-
 - (i) was a continuously forested area in January 2008; and
 - (ii) was not a continuously forested area when the biomaterial was obtained from it; and
- (b) biomaterial was obtained from a former wetland area if the land-
 - (i) was a wetland area in January 2008; and
 - (ii) was not a wetland area when the biomaterial was obtained from it.

Former lightly forested area

8. For the purposes of paragraphs (2) and (5), biomaterial was obtained from a former lightly forested area if the land—

- (a) was a lightly forested area in January 2008; and
- (b) was not a lightly forested area or a continuously forested area when the biomaterial was obtained from it.".

Actual saving and default saving from the use of biomass

17. After Schedule 3 to the 2009 Order, insert—

"SCHEDULE 3A

ACTUAL SAVING FROM THE USE OF BIOMASS

1. The actual saving in relation to the use of biomass by a generating station to generate electricity is $\frac{198 - X}{198}$.

2. In paragraph (1), X is the total emissions from the use of the biomass and is equal to—

(a) in relation to biomass used by a combined heat and power generating station,

$$\frac{E}{\eta_{el}} \left(\frac{\eta_{el}}{\eta_{el} + C_h \times \eta_h} \right);$$

(b) in any other case, $\frac{E}{\eta_{el}}$.

3. In this Schedule—

(a)
$$\eta_{el}$$
 is equal to $\frac{A}{F}$ where-

- (i) A is the total amount of electricity generated by the generating station during the obligation period; and
- (ii) F is the energy content of all of the fuels used in generating that electricity during the obligation period;

(b)
$$\eta_h$$
 is equal to $\frac{H}{F}$ where -

- (i) F has the same meaning as in sub-paragraph (a)(ii); and
- (ii) H is the energy content of all of the heat supplied to any premises by the generating station during the obligation period;
- (c) C_h is equal to—
 - (i) where T is less than 423 kelvin, 0.3546;

(ii) in any other case,
$$\frac{T-273}{T}$$
;

- (d) E is the total emissions from the production of the fuel before energy conversion and is to be calculated in accordance with Part C of Annex 5 of the Renewables Directive subject to the following modifications of that Annex—
 - (i) in paragraph 1 of Part C—
 - (aa) for "and use of transport fuels, biofuels and bioliquids" substitute "of biomass, before conversion into electricity";
 - (bb) for "E = total emissions from the use of the fuel" substitute "E = total emissions from the production of the fuel before energy conversion";
 - (ii) omit paragraphs 3 and 4 of Part C;
 - (iii) in paragraph 7 of Part C-
 - (aa) for "biofuel" substitute "biomass";
 - (bb) omit "or bioliquid" in each place in which those words occur;
 - (iv) in paragraph 13 of Part C, for "biofuels and bioliquids" substitute "biomass";
 - (v) for paragraphs 16 and 17 of Part C, substitute-

"16. Emission saving from excess electricity from cogeneration shall be taken to be zero for biomass.

17. Where a fuel production process produces, in combination, the energy carrier for which emissions are being calculated and one or more other products ("co-products"), greenhouse gas emissions shall be divided between the energy carrier or its intermediate product and the co-products in proportion to their energy content.";

- (vi) in paragraph 18 of Part C, for "biofuels and bioliquids" substitute "biomass"; and
- (vii) omit paragraph 19 of Part C; and
- (e) T is the maximum temperature in degrees kelvin of heat or steam which is (or may be) supplied by the generating station to any premises.

SCHEDULE 3B

Article 54

DEFAULT SAVING FROM THE USE OF BIOMASS

PART 1

DEFAULT GREENHOUSE GAS EMISSIONS FROM THE PRODUCTION OF BIOMASS

Biomass	Default greenhouse gas emissions from the production of biomass before conversion into electricity
Wood chips from forest residues (European temperate continental forest)	1
Wood chips from forest residues (tropical and subtropical forest)	25
Wood chips from short rotation forestry (European temperate continental forest)	4
Wood chips short rotation forestry (tropical and sub- tropical forest)	28
Wood briquettes or pellets from forest residues (European temperate continental forest) – using wood as process fuel	2
Wood briquettes or pellets from forest residues (tropical or subtropical forest) – using natural gas as process fuel	20
Wood briquettes or pellets from forest residues (tropical or subtropical forest) – using wood as process fuel	17
Wood briquettes or pellets from forest residues (European temperate continental forest) – using natural gas as process fuel	5
Wood briquettes or pellets from short rotation forestry (European temperate continental forest) – using wood as process fuel	4
Wood briquettes or pellets from short rotation forestry (European temperate continental forest) – using natural gas as process fuel	22
Wood briquettes or pellets from short rotation forestry (tropical and sub-tropical forest) – wood as process fuel	22
Wood briquettes or pellets from short rotation forestry (tropical and sub-tropical forest) – natural gas as process	40

fuel	
Charcoal from forest residues (European temperate continental forest)	41
Charcoal from forest residues (tropical and sub-tropical forest)	50
Charcoal from short rotation forestry (European temperate continental forest)	46
Charcoal from short rotation forestry (tropical and sub- tropical forest)	57
Wheat straw	2
Bagasse briquettes – wood as process fuel	17
Bagasse briquettes – natural gas as process fuel	35
Bagasse bales	20
Palm kernel	27
Rice husk briquettes	28
Miscanthus bales	7
Biogas from wet manure	8
Biogas from dry manure	7
Biogas from wheat and straw (wheat whole plant)	21
Biogas from maize as whole plant (maize as main crop)	34
Biogas from maize as whole plant (maize as main crop) – organic agriculture	19

PART 2

DEFAULT SAVING FROM THE USE OF BIOMASS

1. The default saving in relation to the use of biomass by a generating station to generate electricity is $\frac{198 - X}{198}$.

2. In paragraph (1), X is the total emissions from the use of the biomass and is equal to— (a) in relation to biomass used by a combined heat and power generating station,

$$\frac{E}{\eta_{el}}\left(\frac{\eta_{el}}{\eta_{el}+C_h\times\eta_h}\right);$$

(b) in any other case, $\frac{E}{\eta_{el}}$.

3. In this Schedule—

- (a) η_{el} , η_h , C_h and T have the same meaning as in Schedule 3A; and
- (b) E is the number which corresponds to the description of the biomass in the second column of Part 1 of this Schedule.".

Transitionals

18. Nothing in this Order is to affect—

(a) the issue and revocation of a renewables obligation certificate in respect of electricity generated before 1st April 2011, and anything which falls to be done or determined (whether by the Authority or some other person) in relation to such issue or revocation, under the 2009 Order;

- (b) any obligations or requirements imposed on an operator of a generating station or some other person in respect of the obligation period ending on 31st March 2011, and anything which falls to be done or determined (whether by the generator or some other person) in relation to any such obligations and requirements, under the 2009 Order;
- (c) any obligations and functions of the Authority in respect of that obligation period, and anything which falls to be done or determined (whether by the Authority or some other person) in relation to it, under the 2009 Order.

Signatory text

Address Date Name Parliamentary Under Secretary of State Department

EXPLANATORY NOTE

(This note is not part of the Order)

This Order amends the Electricity Act 1989 and the Renewables Obligation Order 2009 ("the 2009 Order") and makes transitional provision.

The 2009 Order imposes an obligation ("the renewables obligation") on all electricity suppliers which supply electricity in England and Wales. Suppliers must produce, by a specified day, a certain number of renewables obligation certificates ("ROCs") in respect of each megawatt hour of electricity that each supplies during a specified period known as an obligation period. The renewables obligation is administered by the Gas and Electricity Markets Authority ("the Authority") who issue ROCs to renewable electricity generators in respect of their renewable output.

Articles 3 to 7, 10, 11, 13, 14 and 16 implement, in relation to the renewables obligation, articles 17 to 19 of Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC ("the Renewables Directive"). All other articles of this Order do not implement European Union obligations.

Article 3 amends the definition of "fossil fuel" in section 32M of the Electricity Act 1989, to remove bioliquids produced directly or indirectly from coal, lignite, natural gas, crude liquid petroleum or petroleum products from the scope of the definition of fossil fuel. In consequence, bioliquids produced directly or indirectly from those products will fall within the definition of renewable sources set out in that section. Article 3 also inserts into that section a definition of "bioliquid".

Article 4(2) inserts new definitions into article 2 of the 2009 Order, including a definition for fossil derived bioliquid (which is a sub-category of all bioliquids). Article 4(3) substitutes the definition of "total installed capacity".

Article 4(4) amends article 2(2) of the 2009 Order to set out the meaning of references to the energy content of a fossil derived bioliquid in any month during which the fossil fuel proportion of that fossil derived bioliquid varies. Article 4(5) amends article 2(4) of the 2009 Order to set out how the provisions of the 2009 Order apply if fossil derived bioliquid is mixed with other categories of fuel (such as biomass which is not a bioliquid).

Articles 5 and 6 amend the provisions in articles 3 and 4 of the 2009 Order for determining the fossil fuel proportion of waste and of biomass.

Article 7 inserts a new article 4A into the 2009 Order. The new article 4A sets out how to determine the proportion of a fossil derived bioliquid which is to be treated as being composed of fossil fuel. ROCs will not be issued in respect of the generation of electricity attributed to the

proportion of the fossil derived bioliquid which is treated as being composed of fossil fuel (Part 5 of the 2009 Order).

Articles 8, 9 and 15 amend article 17A of the 2009 Order and insert new articles 17AB, 17AC and 58A. For those offshore generating stations that register turbines under the new article 58A, the new article 17AB provides that the 20 year maximum period for receipt of ROCs for the generation of electricity from each registered turbine will run from the date of registration of the turbine (and not from the date of accreditation of the generating station). The new article 58A imposes restrictions on those turbines which are eligible to be registered and on when registration may take place. The new article 17AC prevents the issue of ROCs in respect of electricity generated by a wind turbine which is eligible to be registered under article 58A, but which has not been registered under that article.

Article 10 amends article 22 of the 2009 Order to widen the exceptions to the circumstances in which no ROCs are to be issued.

Articles 11 and 16 insert new articles 22A and 22B and new Schedules 1A and 1B into the 2009 Order. The new articles 22A and 22B set out additional circumstances in which ROCs are not to be issued in respect of electricity generated from bioliquid. The new article 22A includes a requirement that no ROCs are to be issued in respect of any electricity generated using bioliquid that does not meet the greenhouse gas emission saving criteria (which are set out in the new Schedule 1A) and the land criteria (which are set out in the new Schedule 1B).

Articles 12 and 17 amend article 54 of the 2009 Order and insert new Schedules 3A and 3B. Article 54 of the 2009 Order requires certain information to be provided to the Authority where electricity is generated from biomass. The amendments made by article 12 extend these information requirements to fossil derived bioliquids, but remove them from fuels that are, or are derived from, waste. The amendments also impose new information requirements where electricity is generated from biomass (other than bioliquid), including information requirements relating to the greenhouse gas emission saving from the use of the biomass to generate electricity (which is to be calculated in accordance with the new Schedules 3A or 3B as applicable).

Article 13 inserts a new article 54A into the 2009 Order, requiring operators of generating stations claiming ROCs for the generation of electricity from bioliquid to provide a bioliquid sustainability audit report and to make related provision.

Article 14 amends article 57 of the 2009 Order, to require the Authority to provide certain information to the Secretary of State.

Article 18 makes transitional provision in respect of the obligation period ending on 31st March 2011.

The European Commission has adopted guidelines (OJ L 151, 17.6.2010, p.19) to serve as the basis for the calculation of land carbon stocks as required by paragraph 10 of Part C of Annex 5 to the Renewables Directive.

A transposition note is annexed to the explanatory memorandum which is available alongside the Order on the legislation website of The National Archive (www.legislation.gov.uk). Impact assessments of the effect that this Order will have on the costs of business and the voluntary sector are available alongside the Order on that website.