Climate Change Agreements – Accounting for renewable energy

1. The Climate Change Agreements (CCAs) make provision for certain forms of energy supplied from renewable sources not to be counted as part of a facility's energy consumption. This note clarifies the arrangements, in particular with respect to electricity generated from renewable energy sources. It should be noted that these arrangements have changed a number of times through the life of the agreements. Operators should check that they are compliant with the current arrangements.

On-site Renewables

Renewable Heat

2. Where heat energy is produced from qualifying renewables (see paragraph 13 of this paper) there is no need for that energy to be counted as part of the Target Unit's (TU) energy consumption – see paragraph 2.8 of Schedule 2 to the underlying agreements (Option 2) or the umbrella agreements (Option 3). It should be recognised that it is good practice to monitor energy use to ensure it is used efficiently.

Renewable Electricity

3. Electricity generated from an on-site eligible renewable energy source that has been registered with Ofgem (or Ofreg in Northern Ireland) for the purposes of obtaining Renewable Obligation Certificates (ROCs, or NIROCs in Northern Ireland) or for receipt of a Feed in Tariff (FiT) must be declared as part of the TU's overall consumption (see the next paragraph). Only electricity that has not been produced by a registered eligible renewable energy source can be omitted from a facility's energy consumption for the purposes of CCAs.

Off-site Renewables

Renewable Heat

4. As for paragraph 2 above. Heat energy supplied to a TU from an off-site qualifying renewable energy source does not need to be counted as part of the TU's energy consumption.

¹ As defined by the Renewables Obligation Order 2002, the Renewables Obligation (Scotland) order 2002, the Northern Ireland Renewables Obligation Order 2005 and subsequent amendments – see list of relevant documents at the end of this note.

Renewable Electricity

5. For electricity that is generated by off-site renewables there are a number of cases, as follows:

- (a) If the electricity is supplied through a licensed electricity supplier and the supplier relies on the energy for the purpose of fulfilling any obligation imposed on it, or that energy has been produced by a generator registered for a FiT payment, then the energy should be counted as part of the TU's energy consumption. Relevant obligations may include the England and Wales Renewable Obligation, the Renewables (Scotland) Obligation and the Northern Ireland Renewables Obligation. Generators registered for a FiT payment are also in this category. The units of electricity consumed should be multiplied by 2.6 to convert to primary energy, as set out in paragraph 2.13 of schedule 2 to the underlying agreements.
- (b) If such energy is supplied through a licensed electricity supplier, but the supplier does not rely on the energy to fulfil any obligation imposed on it and the generator is not registered for a FiT payment, then the energy need not be counted as part of the TU's energy consumption. This could be demonstrated, for example, by the TU holding a Levy Exemption Certificate (LEC) for this electricity from a renewable energy source that was ineligible for ROCs and FiTs (eg municipal and industrial waste).
- (c) If such energy is supplied through a bilateral contract between a renewable energy generator and the TU and has not been registered by the generator as an eligible renewable energy source for the purpose of obtaining ROCs or a FiT payment, then the energy need not be counted as part of the TU's energy consumption. However, it would be necessary to demonstrate that the energy was:
 - i. supplied from a qualifying renewable source² as set out in the list at the end of this note.
 - ii. not supplied from a generator registered with Ofgem (or Ofreg in Northern Ireland) for the purposes of obtaining ROCs (NIROCs in Northern Ireland) or a FiT payment.
- 6. In (5b) above, the electricity generator will need to be accredited by Ofgem and subsequently receive LECs to demonstrate that the energy is supplied from a qualifying renewable source. The LEC will then be sold with the electricity to the supplier. The supplier will need to use the certificate to demonstrate to HM Revenue & Customs (HMRC) that the electricity was generated from a qualifying source and is, therefore, eligible to be sold, free of levy, to a TU.

² See:

http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&id=HMCE_CL_000281&propertyType=document

- 7. Suppliers need to meet their renewables obligations. In England and Wales, Scotland and Northern Ireland, generators of electricity from eligible renewable sources are able to register with Ofgem to receive ROCs. These can be sold with, or separately from, the electricity to a supplier. The supplier uses the ROCs to demonstrate their progress towards meeting their annual Renewables Obligation. ROCs are tradable. It should be noted that the renewable energy sources which qualify for LECs are not necessarily the same as sources that qualify for ROCs.
- 8. There is no way of knowing whether electricity that is sold free of Climate Change Levy (CCL) (backed up by an LEC) is also used by an electricity supplier to meet the relevant Renewables Obligation or is in receipt of a FiT. However, it will almost certainly be the case that suppliers will claim all qualifying renewables supplies towards their Renewables Obligations. Consequently, it must be assumed that any renewable energy that is eligible for ROCs and supplied to TUs by a licensed supplier, will be used by the supplier to help meet a Renewables Obligation, or when this is not the case, that the TU is in receipt of a FiT.
- 9. Therefore, for the purposes of the agreements, the Secretary of State will assume that all levy-free renewable electricity that is eligible for a ROC that is supplied through licensed suppliers has been used to meet a Renewables Obligation or has received a FiT payment, unless otherwise proven. As a result, all of this electricity must be assumed to fall into category (a) above. It should all be counted as part of a TU's electricity consumption and multiplied by the 2.6 factor to convert to primary energy.
- 10. There may be two variants to (5c). If the generator is not deemed to be a utility by HMRC for the purposes of the CCL, the energy will be outside the scope of the levy and no levy will be applied. However, the generator would not then need to apply for an LEC to demonstrate that the energy has been generated by a qualifying renewable source. Therefore, the TU will need to gain some other form of statement from the generator to show that the energy was generated by a qualifying renewable source. This statement will need to be sufficient to satisfy any auditor appointed by the Secretary of State as part of the arrangements for the agreements.
- 11. It is also possible that, in some instances, the generator in (5c) will be deemed to be a utility by HMRC. If so, the generator would need to apply for an LEC to demonstrate that the energy has been generated by a qualifying renewable source. A copy of this certificate could be used by the TU to show that the energy had been generated from such a source. However, it would have to be clear that the energy was supplied direct to the TU by a generator that was not a licensed supplier.
- 12. The list of qualifying renewable sources is intended to be consistent with the list of energy sources that the Government decides should be exempt from the levy. This list was originally set by the Climate Change Levy (General) Regulations

2001/838, but has been subsequently modified by a number of statutory instruments.

- 13. The current list (but see paragraph 14) of qualifying renewables for CCL exemption is as follows:
- Biomass³, including inter alia:
 - Plants and parts of plants:
 - Straw.
 - Hay and grasses.
 - Crops (eg maize).
 - Biomass wastes:
 - Waste wood.
 - Forestry residues.
 - Landfill gas.
 - Sewage sludge.
 - Biogas produced by digestion, fermentation or gasification of biomass.
 - Animal and fish oils, fats and tallow.
 - Biomass fraction of mixed materials:
 - Biomass fraction of textile wastes.
 - Biomass fraction of composites containing wood.
 - Biomass fraction of municipal and industrial wastes⁴.
 - Fuels whose components and intermediate products have all been produced from biomass:
 - Bioethanol.
 - Biodiesel.
 - Biomethanol.
 - Biogas.
- Wind energy.

For guidance, a fuller list of what is considered CO₂ neutral biomass for the purposes of emissions monitoring by the European Commission is defined on pages 32 and 33 in their publication http://europa.eu.int/comm/environment/climat/pdf/c2004 130 en.pdf but see para 13 of this note.

³ Statutory Instrument 2003 No 604 added biomass as a renewable source to the original list but excluded peat.

⁴ Paragraph 47 of Statutory Instrument 2001 No 838 defines the eligibility of **municipal and industrial wastes** with the presumption that only 50% of the energy output is deemed renewable (ie not more than 50% of the energy content of the waste is derived from fossil fuel). Generators can make a case to the relevant authority (Ofgem in Great Britain and Ofreg in NI) that the station has more than 50% of its input fuel's energy content from non-fossil fuel sources. Where the relevant authority determines that more than 98% of the input fuel is from plant or animal sources the fuel will be considered to be fuelled 100% by renewable energy.

- Hydro power, excluding hydro power from plants exceeding 10 MW output.
- Tidal power.
- Wave energy.
- Photovoltaics.
- Photoconversion.
- Geothermal hot dry rocks.
- Geothermal aquifers.
- Municipal and industrial wastes.
- 14. This list should be treated as guidance only. HMRC and Ofgem, as, respectively, the department responsible for collecting the CCL and the organisation administering the levy exemption for renewables, can advise on the eligibility of a given scheme and technology. Further guidance is provided in the Ofgem Publication 'Climate Change Levy Exemption for Renewables: Guidance for Generators and Suppliers'. See reference 9 in the list at the end of this document. Any correspondence with HMRC or Ofgem on the eligibility of a given scheme or technology related to a CCA TU, should be copied to the relevant AEA Sector Facilitator.

Other relevant publications

- 1. Notice CCL1/4 'Electricity from Renewable Sources' June 2004 see: http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&id=HMCE_CL_000281&propertyType=document
- 2. The Renewables Obligation Order 2005 see: http://www.opsi.gov.uk/si/si2005/draft/20052230.htm
- 3. The Renewables Obligation (Scotland) Order 2005 see: http://www.opsi.gov.uk/legislation/scotland/ssi2005/20050185.htm
- 4. The Northern Ireland Renewables Obligation Order 2005 see: http://www.detini.gov.uk/cgi-bin/get_builder_page?page=1493&site=5&parent=21&prevpage=53
- 5. Renewable energy technologies eligible under the ROs see: http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-obligation/what-is-renewables-obligation/page15633.html
- 6. Renewables Obligation Order 2006 (Amendment) Order 2007 Final Decisions January 2007 URN 07/648 http://www.berr.gov.uk/files/file37597.pdf
- 7. Implementation proposals for the Carbon Reduction Commitment (CRC), see: http://www.defra.gov.uk/environment/climatechange/uk/business/crc/index.htm contains examples of treatment of on-site and off-site renewables in CRC which parallel those for CCA).
- 8. Feed-in Tariffs Government's Response to the Summer 2009 Consultation, see: http://www.decc.gov.uk/assets/decc/Consultations/Renewable%20Electricity%20Financial%20Incentives/1_20100204120204_e_@_FITsconsultationresponseandGovdecisions.pdf
- 9. Climate Change Levy Exemption for Renewables: Guidance for Generators and Suppliers, Ofgem, 1st November 2008. http://www.ofgem.gov.uk/Sustainability/Environment/cclrenexem/Documents1/Revised_guidance_for_1_Nov_08.pdf