



Renewable energy policy database and support – RES-LEGAL EUROPE

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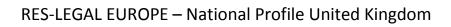


RES-E support schemes

Summary of support schemes

| Overview | In the United Kingdom, the generation of electricity from renewable sources is regulated through a combination of a feed-in tariff system and a quota system in terms of a quota obligation and a certificate system. Under the feed-in tariff, accredited producers whose plants have a capacity of less than 5 MW can sell their electricity at fixed tariff rates established by the Gas and Electricity Market Authority (Ofgem). Under the quota system, electricity suppliers of more than 5 MW capacity are obliged under the Renewables Obligation Orders to supply a certain proportion of electricity from renewable sources ("quota") to their customers. A supplier's quota is deemed satisfied if he presents a certain number of green certificates. Furthermore, in the United Kingdom commercial and industrial users of traditional energy sources are subject to a Climate Change Levy (CCL), a tax on the consumption of fossil energy. Electricity from renewable sources is exempt from this tax. |
|---------------------------|--|
| Summary of support system | Feed-in tariff. In Great Britain, eligible renewable energy plants with a capacity of up to 5MW must generally undergo an accreditation process, which may differ according to plant size and energy source. Once this process is completed and the plant has resulted accredited, the electricity exported to the grid by the plant is bought by a FiT licensee, i.e. an electricity supplier, at rates fixed by the FTO 2010 and corrected yearly by the Gas and Electricity Markets Authority. This system only applies in Great Britain, i.e. Scotland, England and Wales. The Order is not applicable in Northern Ireland. As confirmed by Ofgem, plants between 50 kW and 5 MW are entitled to choose between the above-mentioned system and the Renewables Obligation (art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2010). Renewable Obligation (quota system). In the United Kingdom, electricity generated from renewable sources is also promoted through a quota system in terms of a quota obligation and a certificate system. The Renewables Obligation Orders (ROO 2009, ROO SCO 2009, ROO NI 2009) impose on |







| | electricity suppliers the obligation to prove that a certain proportion of electricity supplied was generated from renewable sources (art. 5 ROO 2009). To this end, they shall present Renewables Obligation Certificates (ROCs, SROCs in Scotland, NIROCs in Northern Ireland) to the regulatory authority Ofgem (in charge of England, Scotland and Wales and receiving NIROCs on behalf of NIAUR, the regulatory authority of Northern Ireland). The quota system supports plants above 5 MW, although plants between 50 kW and 5 MW are also entitled to choose between the fixed-rate system and the Renewables Obligation (art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2010). • Tax regulation mechanisms. In the United Kingdom, electricity generated from renewable sources is eligible for tax relief. The Climate Change Levy, which was introduced by the Finance Act 2000, applies to the consumption of electricity from traditional sources only (sec. 30 in conjunction with schedule VI, § 19 (1) FA 2000). |
|----------------------|--|
| Technologies | All technologies used in the generation of electricity from renewable sources are eligible. |
| Statutory provisions | FTO 2010 (The Feed-in Tariffs (Specified Maximum Capacity and Functions) Order 2010, No. 678) EA 1989 (The Electricity Act 1989, c.29) ROO 2009 (The Renewables Obligation Order 2009, No. 785) ROO SCO 2009 (The Renewables Obligation (Scotland) Order 2009, No. 140) ROO NI 2009 (The Renewables Obligation (Northern Ireland) Order 2009, No. 154) FA 2000 (The Finance Act 2000, c.17) CCL GenReg 2001 (Climate Change Levy (General) Regulations 2001, No 838) EnA 2008 (The Energy Act 2008, c. 32) |

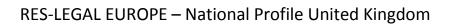




Basic information on legal sources

| Name of legal source (original language) | The Electricity Act 1989, c.29 | The Renewables Obligation Order 2009, No. 785 | The Renewables Obligation (Scotland) Order 2009, No. 140 |
|---|---|--|--|
| Full name | | | |
| Name (English) | | | |
| Abbreviated form | EA 1989 | ROO 2009 | ROO SCO 2009 |
| Entry into force | 27.07.1989 | 01.04.2009 | 01.04.2009 |
| Last amended on | 09.11.2011 | 01.04.2011 | 01.04.2011 |
| Future amendments | | | |
| Purpose | The act opens the electricity and gas markets in Great Britain. | Protecting the climate by increasing the proportion of renewable energy in total energy supply to 15% by 2020. | This order applies to the territory of Scotland. It aims at protecting the climate by increasing the proportion of electricity from renewable sources in the UK's total electricity supply to 15% by 2020. |
| Relevance for renewable energy | Sections 32, 32 A-M of the act authorise the issuing of the Renewables Obligation Orders and thus the introduction of the quota obligation and the certificate system. Furthermore, the act includes general provisions on the access of electricity to the | The order aims at promoting renewable energy sources in England and Wales. | The order aims at promoting renewable energy sources within the territory of Scotland. |

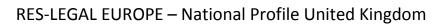






| | grid. | | |
|---|--|---|--|
| Link to full text of legal source (original language) | http://www.legislation.gov.uk/ukpga/1989/ 29/contents | http://www.legislation.gov.uk/uksi/2009/ 785/contents/made | http://www.legislation.gov.uk/ssi/2009/1 40/contents/made |
| Link to full text of legal source (English) | | | |

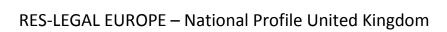






| Name of legal source (original language) | The Renewables Obligation (Northern Ireland) Order 2009, No. 154 | The Finance Act 2000, c.17 | Climate Change Levy (General) Regulations 2001, No 838 |
|--|--|---|--|
| Full name | | | |
| Name (English) | | | |
| Abbreviated form | ROO NI 2009 | FA 2000 | CCL GenReg 2001 |
| Entry into force | 01.04.2009 | 21.03.2000 | 01.04.2001 |
| Last amended on | 01.04.2011 | 22.04.2011 | 01.04.2012 |
| Future amendments | | A new version of the Finance Act (FA) including amendments and complementary provisions is approved every year. The version currently in force is FA 2011, which applies to the fiscal year of 2011/2012. | |
| Purpose | This order applies to the territory of Northern Ireland. It aims at protecting the climate by increasing the proportion of electricity from renewable sources in the UK's total electricity supply to 15% by 2020. | First and foremost, the Act aims at regulating state revenue and reducing national debt. | The CCL GenReg 2001 finalises the rules established by the FA 2000 on the CCL. |
| Relevance for renewable energy | The order aims at promoting renewable energy sources within the territory of | The FA 2000 introduced the Climate Change Levy (CCL) for the very first time | The regulation establishes detailed regulations on the Climate Change Levy |







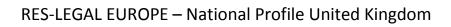
| | Northern Ireland. | (section 30 FA 2000 in connection with schedule VI FA 2000 in connection with part IV of the CCL GenReg 2001). It provides fiscal benefits for the use of electricity from renewable sources. Among other things, the FA 2010 set the amount of CCL for the period after 1 April 2011. | |
|--|---|--|--|
| Link to full text of legal source (original language) | http://www.legislation.gov.uk/nisr/2009/ 154/contents/made | http://www.legislation.gov.uk/ukpga/200 0/17/contents | http://www.legislation.gov.uk/uksi/2001/8 38/contents/made |
| Link to full text of legal source (English) | | | |





| Name of legal source (original language) | The Energy Act 2008, c. 32 | The Feed-in Tariffs (Specified Maximum Capacity and Functions) Order 2010, No. 678 | |
|--|---|--|--|
| Full name | | | |
| Name (English) | | | |
| Abbreviated form | EnA 2008 | FTO 2010 | |
| Entry into force | 26.11.2008 | 01.04.2010 | |
| Last amended on | 05.09.2011 | | |
| Future amendments | | 01.08.2012 | |
| Purpose | The EnA 2008 regulates fundamental issues related to energy supply in Great Britain. | The FTO 2010 establishes the feed-in tariff support scheme | |
| Relevance for renewable energy | Section 37 of the EnA 2008 fundamentally amends the rules and regulations of the EA 1989. The amendments to sections 32 to 32C of the EA 1989 are especially important, as these sections are the legal basis for the quota and certificate systems. Section 41 introduces the feed-in tariff system. | This act only relates to renewable energy | |
| Link to full text of legal source (original language) | http://www.legislation.gov.uk/ukpqa/2008/ 32 | http://www.legislation.gov.uk/uksi/2010/6 78/contents/made | |
| Link to full text of legal source | | | |







| (English) | | |
|-----------|--|--|
| | | |





Further information

| Institution (name) | Website | Name of contact person (optional) | Telephone number (head office) | E-mail (optional) |
|--|----------------------------------|-----------------------------------|--------------------------------|-------------------|
| Department for Business, Innovation and Skills (BIS) | http://www.bis.gov.uk/ | | +44 207 215 50 00 | |
| Office of Gas and Electricity Markets (Ofgem) – regulatory authority | http://www.ofgem.gov.uk/ | | +44 207 901 72 95 | |
| Department for Environment Food and Rural Affairs (Defra) | http://www.defra.gov.uk/ | | +44 207 082 81 71 | |
| NIAUR – Northern Ireland Regulator | http://www.niaur.gov.uk/ | | +44 289 031 15 75 | |
| HM Revenue and Customs (HMRC) – national tax and customs authority | http://www.hmrc.gov.uk/index.htm | | | |
| Department of Energy and Climate Change (DECC) | http://www.decc.gov.uk/ | | +44 300 060 4000 | |



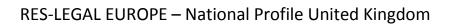


Support schemes

Feed-in tariff

| Abbreviated form of legal source(s) | FTO 2010ROO 2009 | |
|-------------------------------------|--|--|
| Summary | The feed-in tariff system in Great Britain came into effect in 2010 and aims to support small-scale RES-E plants (less than 5 MW, however plants between 50 kW and 5 MW located in Great Britain are entitled to choose between this system and the quota system "Renewables Obligation" – art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2010). Plants using eligible sources must undergo an accreditation process, which may differ according to plant size and energy source. Once this process is completed and a plant has resulted accredited, the electricity exported to the grid by the plant is bought by a FiT licencee, i.e. an electricity supplier, at the rates fixed by the FTO 2010 and corrected yearly by the Gas and Electricity Markets Authority. The FTO 2010 applies only to Great Britain, i.e. England, Wales and Scotland. The Order does not apply to Northern Ireland. | |
| Eligible technologies | Wind energy, solar PV energy, biogas, hydro-energy a Installations using these technologies are eligible as lo specified maximum capacity does not exceed 5MW (art. 3 Plants between 50 kW and 5 MW are entitled to choose be fixed-rate system and the Renewables Obligation (art. 17 2009 in conjunction with art. 3 FTO 2010). | |
| | Wind energy | Eligible (art 2 (3), 3 FTO 2010). In order to be accredited, installations of less than 50 kW shall take part in the Microgeneration Certification Scheme, an independent scheme that certifies microgeneration products of less than 50 kW and installers in accordance with consistent standards. Alternatively, installations between 50 kW and 5 MW shall complete a process for accreditation based on the existing |

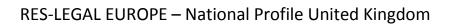






| | | ROO process (thus called ROO-FiT Process) (artt. 5-7 FTO 2010). |
|--------|---------------------|---|
| | Solar energy | PV installations are eligible. In order to be accredited, installations of less than 50 kW shall take part in the Microgeneration Certification Scheme, an independent scheme that certifies microgeneration products of less than 50 kW and installers in accordance with consistent standards. Alternatively, installations between 50 kW and 5 MW shall complete a process for accreditation based on the existing ROO process (thus called ROO-FiT Process) (artt. 5-7 FTO 2010). |
| | Geothermal energy | |
| | Biogas | Eligible (Arts. 2 (3), 3 FTO 2010). Plants shall be accredited under the ROO-FiT process, a process for accreditation based on the existing ROO process (Arts. 5-7 FTO 2010). |
| | Hydro-power | Only "traditional" hydro is eligible. Tidal and wave energy are not eligible (Arts. 2 (3), 3 FTO 2010–). In order to be accredited, installations under 50 kW shall be commissioned after 31 March 2012 and take part in the Microgeneration Certification Scheme, an independent scheme that certifies microgeneration products of less than 50 kW and installers in accordance with consistent standards. Alternatively, installations between 50 kW and 5 MW should complete a process for accreditation based on the existing ROO process (thus called ROO-FiT Process) (Arts. 5-7 FTO 2010). |
| | Biomass | |
| Amount | General information | An inflation-indexed payment rate table is published every year prior to 31 March by the Gas and Electricity Markets Authority (art. 13 |

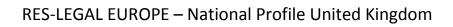






| | FTO). |
|--------------|---|
| Wind energy | Payment rates (Payment rate table of 1 April 2012 in conjunction with art. 13 FTO). Capacity GBP per kWh ≤ 1.5kW 0.358 1.5 - 15 kW 0.28 15kW - 100kW 0.254 100kW - 500kW 0.206 500kW - 1.5MW 0.104 > 1.5MW 0.049 |
| Solar energy | Payment rates (Payment rate table of 1 April 2012 in conjunction with art. 13 FTO): depending on efficiency parameters of as outlined in Annex 2 of Schedule A of Standard Condition 33, three rates ("higher" - H, "middle" - M and "lower" - L) for PV installations are provided. Capacity GBP per kWh up to 4kWp H: 0.21 M: 0.168 L: 0.09 |

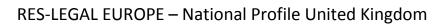






| | 10kWp - 10kWp 10kWp - 50kWp 50kWp - 250kWp 250kWp - 5MWp Stand-alone | H: 0.168 M: 0.134 L: 0.09 H: 0.152 M: 0.122 L: 0.09 H: 0.129 M: 0.103 L:0.09 | |
|-------------------|--|--|--------------------------|
| Geothermal energy | | | |
| Biogas | Payment rates (Payment 13 FTO). Capacity up to 250kW 250kW - 500kW | GBP per kWh 0.147 0.136 0.099 | 2012 in conjunction with |
| Hydro-power | Payment rates (Pay | ment rate table of 1 April | 2012 in conjunction with |







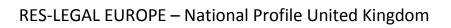
| | | art. 13 FTO). | | |
|--------------------|---|--|-------------|--|
| | | Capacity | GBP per kWh | |
| | | up to 15kW | 0.219 | |
| | | 15kW - 100kW | 0.196 | |
| | | 100kW - 2MW | 0.121 | |
| | | > 2MW | 0.049 | |
| | Biomass | | | |
| | General information | An inflation-indexed payment rate table is published every year prior to 31 March by the Gas and Electricity Markets Authority in cooperation with the Secretary of State (art. 13 FTO). | | |
| | Wind energy | | | |
| Degression | Solar energy | | | |
| | Geothermal energy | | | |
| | Biogas | | | |
| | Hydro-power | | | |
| | Biomass | | | |
| Сар | The FIT Scheme does not specify a cap. | | | |
| Eligibility period | The tariffs are guaranteed for 20 years, except the tariff for PV, which is guaranteed for 25 years (art. 6 (1) (d) EA 1989 in conjunction with Annex 1 Schedule A of Standard Condition 33). | | | |





| | Entitled party. Operators of accredited eligible installations (Arts. 5-7 FTO). | | |
|-----------------------|--|--|--|
| Addressees | Obligated party . All FiT licensees, i.e. either electricity suppliers that provide electricity, alone or with their affiliates, to more than 50,000 households and are thus required to participate in the FIT Scheme, or smaller supply companies that decide to participate in the scheme on a voluntary basis (Schedule A of Standard Condition 33 in connection with Arts. 5-7 FTO). | | |
| Procedure | Process flow | In practice, after installing a plant of 50 kW or less, the owner is obliged to inform the energy supplier of his choice. The supplier will then include the installation in the Central FIT register. The owners of plants of more than 50 kW shall direct their applications to the Gas and Electricity Markets Authority (Ofgem). | |
| | Competent authority | The Gas and Electricity Markets Authority (Ofgem) (art. 2 FTO). | |
| Flexibility Mechanism | | | |
| | State | | |
| | Consumers | The FIT payments, borne by the licencees (Schedule A of Standard Condition 33 in conjunction with Arts. 5-7 FTO), are usually included in the final consumers' energy bills. | |
| | Plant operator | | |
| Distribution of costs | Grid operator | | |
| | European Union | | |
| | Distribution mechanism | The Ofgem carries out a process of levelisation to make sure that the costs of participating in the FIT scheme are proportionate for each licensee. Every licensee makes a certain payment to a levelisation fund which is then redistributed by the Ofgem to the different | |







| | licensees (Arts. 22-35 FTO). The actual FIT payments are not |
|--|--|
| | accounted for in this system (art. 25 (3)(c) FTO). |

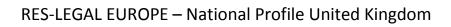




Quota system

| Abbreviated form of legal source(s) | ROO 2009 ROO SCO 2009 ROO NI 2009 EA 1989 EnA 2008 | |
|-------------------------------------|--|---|
| Summary | final consumers within the United Kingd Renewables Obligation Certificates (ROC of England, Scotland and Wales and receinformation will refer to ROO 2009, as t same. Important differences in the ROO STATES This framework supports systems or plant | rs, electricity suppliers are obliged to prove that a certain percentage of electricity supplied to flom was generated from renewable sources (art. 5 ROO 2009). To this end, they shall present $\mathbb{C}s$, SROCs in Scotland, NIROCs in Northern Ireland) to the regulatory authority Ofgem (in charge eiving NIROCs on behalf of NIAUR, the regulatory authority of Northern Ireland). Hereinafter all the wording and content of the rules and regulations of ROO SCO and ROO NI are broadly the SCO for Scotland and the ROO NI for Northern Ireland will be pointed out explicitly. In the ROC scheme and the FIT (Art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2010). |
| Eligible technologies | In the United Kingdom, all renewable electricity generation technologies are eligible Renewables Obligation Orders (art.14 ROO 2009). Plants eligible for the Feed-in Ta are not eligible for ROCs (art. 17B ROO 2009). The ROC scheme supports plants ab Plants between 50 kW and 5 MW located in Great Britain (England, Wales and Sc entitled to choose between the ROC scheme and the FIT (Art. 17B, 17D RO conjunction with art. 3 FTO 2010). Plants that were commissioned prior to 01/01/1990 and have not been substantial since 31/12/1989 are ineligible (art.18 ROO 2009). | |
| | Wind energy | Both onshore and offshore wind energy stations are eligible with the following exceptions: • Offshore wind turbines cease to be eligible for ROCs after 20 years from their |

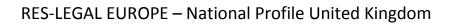






| accreditation date or on 31st March 2037 (whichever is the earlier) (art. 17AA ROO 2009) | | | |
|--|--|--|--|
| Eligible | Eligible | | |
| Eligible | | | |
| Plants generating elect | ricity from landfill and | d sewage gas are eligik | ole |
| Eligible with the following exception: • Large plants (> 20 MW) that were commissioned before 1 April 2002 (art.17 (4) ROO 2009) are ineligible | | | |
| Eligibility of plants that Climate Change): Type of waste\Type of generating station | generate electricity f Mixed waste | Waste that is purely biomass | Energy crops, agricultural waste and forestry material |
| Pyrolysis, gasification and anaerobic digestion | Ineligible Eligible for the biomass fraction of waste | Eligible* Eligible* | Eligible* |
| | Eligible Plants generating electrons Eligible with the following and inclinate Change): Type of waste\Type of generating station Incineration Pyrolysis, gasification and | Eligible Plants generating electricity from landfill and Eligible with the following exception: • Large plants (> 20 MW) that were conception are ineligible Eligibility of plants that generate electricity for Climate Change): Type of waste\Type of generating station Incineration Ineligible Pyrolysis, gasification and Eligible for the biomass fraction | Eligible Plants generating electricity from landfill and sewage gas are eligible Eligible with the following exception: • Large plants (> 20 MW) that were commissioned before 2009) are ineligible Eligibility of plants that generate electricity from biomass (source: Climate Change): Type of waste\Type of generating station Mixed waste Waste that is purely biomass Incineration Ineligible Eligible for the biomass fraction |

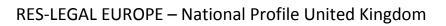






| | | Combined heat and power (CHP) | Eligible for the biomass fraction of waste produced as good quality CHP | Eligible* | Eligible* |
|--------|---|-------------------------------|---|---|----------------------|
| | | Co-firing | Ineligible | Eligible* (There are no restrictions on the amount of co-firing | Eligible* |
| | | | | a generator can undertake. However, suppliers can only meet 12.5% of their obligation from co- fired <u>ROCs</u> .) | |
| | | * The proportion of fos | sil fuels shall not exce | ed 10% (art. 3 and 4 RC | 00 2009). |
| | Amount of quota and period of application | Obligation period | | Number of ROCs / supplied in Great Brit | / MWh of electricity |
| | | 1 April 2009 – 31 Mare | ch 2010 | 0.097 | |
| | | 1 April 2010 – 31 Mar | ch 2011 | 0.104 | |
| Amount | | 1 April 2011 – 31 Mar | ch 2012 | 0.114 | |
| | | 1 April 2012 – 31 Marc | ch 2013 | 0.158 | |
| | | (Schedule 1 ROO 2009) | | | |
| | | Obligation period | | Number of ROCs / | / MWh of electricity |







| | | supplied in Northern Ireland |
|--|--|---|
| | 1 April 2009 – 31 March 2010 | 0.035 |
| | 1 April 2010 – 31 March 2011 | 0.040 |
| | 1 April 2011 – 31 March 2012 | 0.050 |
| | 1 April 2012 – 31 March 2013 | 0.081 |
| | | |
| | (Schedule 1 ROO 2009) | |
| Adjustment of quotas | | |
| Number of certificates according to technology | England, Wales and Scotland | |
| technology | Generation type | Amount of electricity to be stated in a |
| | | renewables obligation certificate |
| | Electricity generated from landfill gas ^{1,2} | 4 MWh |
| | Electricity generated from sewage gas ^{1,2} | |
| | Co-firing of biomass | 2 MWh |
| | Onshore wind | |
| | Hydro-electric | |
| | Co-firing of energy crops | |
| | Energy from waste with CHP | |
| | Geopressure | 1 MWh |
| | Co-firing of biomass with CHP | |
| | Standard gasification | |
| | Standard pyrolysis | |
| | Offshore wind ¹ | |
| | Dedicated biomass | 2/3 MWh |
| | Co-firing of energy crops with CHP | |
| | Wave ¹ | 4/2 1 1 1 1 |
| | Tidal-stream | 1/2 MWh |





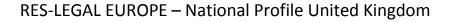
| Advanced gasification | |
|--|------------------------|
| Advanced pyrolysis | |
| Electricity generated by gas formed by the | |
| anaerobic digestion of material that is | |
| neither landfill material nor sewage | |
| Dedicated energy crops | |
| Dedicated biomass with CHP | |
| Dedicated energy crops with CHP | |
| Solar photovoltaic* | |
| Geothermal | |
| Tidal impoundment – tidal barrage | |
| Tidal impoundment – tidal lagoon | |
| Enhanced tidal stream | 1/3 MWh (ROO SCO 2009) |
| Enhanced wave | 1/5 MWh (ROO SCO 2009) |

(Schedule 2 Part 2 ROO 2009)

¹ If the station was accredited on 11th July 2006 at the latest with no interruptions of accreditation to date and is neither a co-firing station nor a microgenerator that has had a declared capacity of more than 50kW at any time after 31 March 2009, the amount of electricity to be stated in a renewable obligation certificate is 1 MWh (art. 30 (3) ROO 2009).

² For electricity generated using additional capacity which was operational before 1 April 2011, the amount of electricity to be stated in a renewable obligation certificate is 1 MWh (art. 30 (5) ROO 2009). Power stations accredited as at 31 March 2009, with no interruptions to date, which are neither co-firing stations nor microgenerators that have had a declared capacity of more than 50 kW after 31 March 2009, and whose installed capacity is greater than is was on 31st March 2011, are to state 1 MWh in a renewable obligation certificate as regards the electricity generated using the original capacity of the power station. This





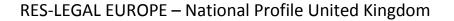


principle applies where the electricity generated using the original capacity is measured separately from the one generated using additional capacity. In any other case, the ROC scheme applies to the percentage of electricity which was generated using the station's original capacity (art. 31 (4) ROO 2009).

Northern Ireland

| Generation type | Amount of electricity to be stated in a renewables obligation certificate | |
|--|---|--|
| Electricity generated from sewage gas ^{1,2} | 2.0404/5 | |
| Co-firing of biomass | 2 MWh | |
| Onshore wind | | |
| Hydro-electric | | |
| Electricity generated from landfill gas | | |
| Co-firing of energy crops | | |
| Energy from waste with CHP | 1 MWh | |
| Geopressure | | |
| Co-firing of biomass with CHP | | |
| Standard gasification | | |
| Standard pyrolysis | | |
| Offshore wind ¹ | | |
| Dedicated biomass | 2/3 MWh | |
| Co-firing of energy crops with CHP | | |
| Wave ¹ | | |
| Tidal-stream | | |
| Advanced gasification | 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 | |
| Advanced pyrolysis | 1/2 MWh | |
| Electricity generated by gas formed by the | | |
| anaerobic digestion of material that is neither | | |







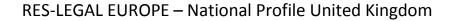
| landfill material nor sewage | |
|--|-----------------|
| Dedicated energy crops | |
| Dedicated biomass with <u>CHP</u> | |
| Dedicated energy crops with CHP | |
| Solar photovoltaic ¹ | |
| Geothermal | |
| Tidal impoundment – tidal barrage | |
| Tidal impoundment – tidal lagoon | |
| Qualifying new hydro stations ³ | |
| Qualifying new hydro stations ³ | 1/2 8484/6 |
| Qualifying new anaerobic digestion stations ⁴ | 1/3 MWh |
| Qualifying new onshore wind stations ⁵ | |
| Qualifying new hydro stations ³ | 1/4 8 4 3 4 1 5 |
| Qualifying new anaerobic digestion stations ⁴ | 1/4 MWh |
| Qualifying new solar photovoltaic stations ⁶ | |
| | |

(Schedule 2 Part 2 ROO NI 2009)

¹ If the station was accredited on 11th July 2006 at the latest with no interruptions of accreditation to date and is neither a co-firing station nor a microgenerator that has had a declared capacity of more than 50 kW at any time after 31 March 2009, the amount of electricity to be stated in a renewable obligation certificate is 1 MWh (art. 28 (3) ROO NI 2009).

² For electricity generated using additional capacity which was operational before 1 April 2011, the amount of electricity to be stated in a renewable obligation certificate is 1 MWh (art. 28 (5) ROO NI 2009). Power stations accredited as at 31 March 2009 with no interruptions to date, which are neither co-firing stations nor microgenerators that have had a declared capacity of more than 50 kW at any time after 31 March 2009, and whose installed







capacity is greater than is was on 31st March 2011, are to state 1 MWh in a renewable obligation certificate as regards the electricity generated using the original capacity of the power station. This principle applies where the electricity generated using the original capacity is measured separately from the one generated using additional capacity. In any other case, the ROC-scheme applies to the percentage of electricity generated using the station's original capacity (art. 29 (4) ROO NI 2009).

- ³ "Qualifying new hydro station" means a hydro generating station which—
- (a) was first accredited after 31st March 2010, and
- (b) did not have a total declared net capacity in excess of 1 megawatt at any time after 31st March 2011 (art. 27 (3) ROO NI 2009).

The amount of electricity to be stated in each NIROC in relation to a qualifying new hydro station which:

- has not had a declared net capacity in excess of 20 kilowatts at any time after 31st March 2010, ¼ megawatt hour;
- has had a declared net capacity in excess of 20 kilowatts but not in excess 250 kilowatts at any time after 31st March 2010, 1/4 megawatt hour;
- has had a declared net capacity in excess of 250 kilowatts at any time after 31st March 2010, ½ megawatt hour (art. 27B ROO NI 2009).
- ⁴ "Qualifying new anaerobic digestion", means a generating station which—
- (a) generates electricity from gas formed by the anaerobic digestion of neither material which is sewage nor material in a landfill.
- (b) was first accredited on or after 1st April 2011, and
- (c) has not had a declared net capacity in excess of 5 megawatts at any time on or after 1st April 2011 (art. 27 (3) ROO NI 2009).

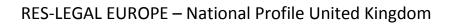
The amount of electricity to be stated in each NIROC which is issued in relation to a qualifying





| Yearly Average Certificate Price | |
|----------------------------------|---|
| Fees and penalty charges | If a supplier fails to satisfy his quota obligation, he shall make a "late payment". The late payment is the sum of the buy-out price plus interest of 5 percentage points above the base rate of the Bank of England (art. 44 (6) ROO 2009). |
| Minimum price per certificate | |
| Minimum price per certificate | (a) generates electricity from onshore wind, (b) was first accredited after 31st March 2010, and (c) has not had a declared net capacity in excess of 250 kilowatts at any time after 31st March 2010 (art. 27 (3) ROO NI 2009). The amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a qualifying new onshore wind station is ¼ megawatt hour art. (27A ROO NI 2009). 6 "Qualifying new solar photovoltaic station" means a generating station which— (a) generates electricity from the direct conversion of sunlight into electricity, (b) was first accredited after 31st March 2010, and (c) has not had a declared net capacity in excess of 50 kilowatts at any time after 31st March 2010 (art. 27 (3) ROO NI 2009). The amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a qualifying new solar photovoltaic station is ¼ megawatt hour art. (27A ROO NI 2009). |
| | new anaerobic digestion station which: - has not had a declared net capacity in excess of 500 kilowatts at any time on or after 26th April 2010, ¼ megawatt hour; - has had a declared net capacity in excess of 500 kilowatts at any time on or after 26th April 2010, 1/3 megawatt hour (art. 27C ROO NI 2009). 5"Qualifying new onshore wind station" means a generating station which— |







| International applicability | International certificate trade | | |
|-----------------------------|---|--|--|
| international applicability | Flexibility Mechanism | | |
| Addressees | Obligated party. The persons obligated to satisfy a quota according to the Renewables Obligation Orders are those electricity suppliers that supply electricity to final consumers within the United Kingdom (art. 5 (1) ROO 2009). Since 1 November 2007, electricity suppliers within Northern Ireland have been subject to a different obligation. A SEM (Single Electricity Market) was created for the Irish island (Northern Ireland and the Republic of Ireland). NIROCs are only issued to electricity produced from eligible sources and sold on the SEM market. For further information please see: www.allislandproject.org. | | |
| Procedure | Process flow | | |





| | Competent authority | The Gas and Electricity Markets Authority (Ofgem) | | |
|-----------------------|------------------------|--|--|--|
| Distribution of costs | State | | | |
| | Consumers | The costs of the quota system are borne by the consumers through the electricity price. | | |
| | Plant operator | | | |
| | Grid operator | | | |
| | European Union | | | |
| | Distribution mechanism | Suppliers tend to pass the cost of compliance with the RO on to consumers through their energy bills, as confirmed by the website of DECC. | | |

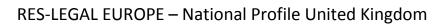




Tax regulation mechanism (Climate Change Levy)

| Abbreviated form of legal source(s) | FA 2000 CCL GenReg 2001 EA 1989 | | |
|-------------------------------------|---|---|--|
| Summary | The Climate Change Levy (CCL) is a climate protection tax, which is levied on the consumption of electricity from non-renewable sources by commercial and industrial final consumers and the public sector (section 30 in connection with schedule VI, §§ 3, 5 FA 2000). Electricity from non-renewable sources shall mean electricity generated from traditional sources, gas, LPG (liquefied petroleum gas) and coal (for the definition of "renewable source" please see art. 32 EA 1989). The CCL aims at reducing greenhouse gases and promoting energy-efficiency in final consumers. The Climate Change Levy is collected from the electricity suppliers, who pass it on to their consumers through the electricity price. Electricity from renewable sources is exempt from this tax (schedule VI, § 19 FA 2000 in connection with part IV of the CCL GenReg 2001). | | |
| | General information | The Climate Change Levy favours any type of generation of electricity from renewable sources (for an overview of the individual technologies eligible for exemption please see HM Revenues & Customs notice CCL1/4 "Electricity from renewable sources" of May 2012). | |
| | Wind energy | Eligible. | |
| Eligible technologies | Solar energy | Eligible. | |
| | Geothermal energy | Eligible, including plants applying the hot-dry-rock technology. | |
| | Biogas | Eligible. | |
| | Hydro-power | Eligible under the following conditions: The plant capacity shall not exceed 10 MW (§ 47 (1), (2) CCL Gen Reg 2001). Large hydro generating stations are currently ineligible. | |







| | Biomass | | Stations powered by waves and tidal flows are eligible. | |
|------------|---|---|--|---------------------------|
| | | | Eligible, including electricity generated from urban, industrial, agricultural and forestry waste and from energy crops. | |
| | The amount of tax benefit equals the amount of | tax benefit equals the amount of the CCL which the suppliers are exempt from. Amount of the CCL per kWh of electricity: | | |
| | Obligation period | Amount of CCL in £ (GBP)/kWh | | Source |
| | base rate | | 0.00430 | Schedule VI, § 42 FA 2000 |
| Amount | 1 April 2007 – 31 March 2008 | 0.00441 | | Section 171 FA 2006 |
| Amount | 1 April 2008 – 31 March 2009 | 0.00456 | | Section 13 FA 2007 |
| | 1 April 2009 – 31 March 2011 | 0.00470 | | Section 19 FA 2008 |
| | 1 April 2011 – 1 April 2012 | 0.00485 | | Section 17 FA 2010 |
| | 1 April 2012 – onwards | 0.00509 | | Section 23 FA 2011 |
| Addressees | Entitled party. The Climate Change Levy is levied on the consumption of traditional sources of energy. Thus, the final consumers are subject to tax. However, the levy is collected from the electricity suppliers, who then pass it on to the final consumers through the electricity price or the electricity bill. For this reason, the suppliers of electricity from renewable sources are directly exempt from the obligation to pay the CCL (schedule VI, § 19 FA 2000). | | | |
| | Obligated party. The suppliers' statutory entitlement to exemption goes hand in hand with the state's obligation to grant this exemption. | | | |
| Procedure | Process flow | | The suppliers of renewable energy sources shall hold a licence in order to be exempt from the obligation to pay the levy (schedule VI, § 19 FA 2000). This licence is issued under the following conditions: | |





| | | Electricity consumer – electricity supplier. Suppliers are exempt from the CCL only if the consumer's electricity supply agreement includes a "Renewable Source Declaration" (Schedule VI, § 19 (1 B) FA 2000). This declaration is a standardised statement in which the electricity supplier declares to have supplied a certain amount of electricity that was generated from renewable sources. Unless he is the producer of the electricity, the supplier may purchase the amount of renewable energy he is obliged to supply from other producers of electricity (Schedule VI, § 19 (2) FA 2000). Electricity supplier – electricity producer. In order for the CCL exemption to take effect, suppliers and generators must notify the Revenues & Customs office that prescribed conditions can be met (Source: 3.4, 3.5 HM Revenues & Customs notice CCL1/4 "Electricity from renewable sources" of May 2012). One of the prescribed conditions is to provide legible records relating to Levy Exemption Certificates (LEC), which the regulatory authority allocates to the producers of electricity on a monthly basis. The number of certificates depends on the amount of electricity generated from renewable sources. These certificates document the amount of electricity from renewable sources supplied; they accompany the electricity until it reaches the final consumer, who can then claim to be relieved from the levy (Source: 3.1, 3.4 HM Revenues & Customs notice CCL1/4 "Electricity from renewable sources" of May 2012). |
|-----------------------|---------------------|---|
| | Competent authority | The scheme is overseen by Ofgem and the Director General of Electricity Supply in Northern Ireland (3.1 CCL1/4). |
| Flexibility Mechanism | | |
| Distribution of costs | State | The cost of exemption from the Climate Change Levy is borne by the state in |





| | | terms of lower tax revenue. |
|--|------------------------|-----------------------------|
| | Consumers | |
| | Plant operator | |
| | Grid operator | |
| | European Union | |
| | Distribution mechanism | |





RES-E grid issues

Overview

| Overview of grid issues | In the United Kingdom access of renewable energy plants to the grid is subject to the general provisions of energy law. Renewable energy sources are not given priority. |
|-------------------------|---|
| Connection to the grid | Plant operators are contractually entitled to connection to the grid by the grid operator. The grid operator is not obliged to give priority to renewable energy when connecting plants to the grid. |
| Use of the grid | A given plant operator is contractually entitled against the grid operator to use the grid. The grid operator is obliged to enter into this contract without discriminating against certain plant operators. The grid operator has no obligation to give priority to renewable energy like, for example, an obligation to purchase electricity. |
| Grid development | A given plant operator may be contractually entitled to a grid development by the grid operator. The grid operator is obliged to enter into this contract without discriminating against certain plant operators. Electricity from renewable energy sources is not given priority. |
| Statutory provisions | The Electricity Act 1989 (EA 1989) The Connection and Use of System Code (CUSC) |

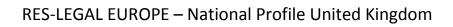




Basic information on legal sources

| Name of legal source (original language) | The Electricity Act 1989, c.29 | ty Act 1989, c.29 The Connection and Use of System Code (CUSC) | |
|---|---|---|--|
| Full name | | | |
| Name (English) | | | |
| Abbreviated form | EA 1989 | CUSC | |
| Entry into force | 27.07.1989 | 18.09.2001 | |
| Last amended on | 09.11.2011 | 15.05.2012 | |
| Future amendments | | | |
| Purpose | The act opens the electricity and gas markets in Great Britain. | Regulating the conditions for the use of the British grid. | |
| Relevance for renewable energy | Sections 32, 32 A-M of the Act authorise the issuing of the Renewables Obligation Orders and thus the introduction of the quota obligation and the certificate system. Furthermore, the Act includes general provisions on the access of electricity to the grid. | Producers of electricity from renewable sources have to become a party to the CUSC in order to be entitled to conclude bilateral connection agreements according to the guidelines of the standard form agreements. | |
| Link to full text of legal source (original language) | http://www.legislation.gov.uk/ukpga/1989/29/contents | http://www.nationalgrid.com/uk/Electricity /Codes/systemcode/contracts/ | |







| Link to full text of legal source (English) | | |
|---|--|--|
| | | |





Further information

| Institution (name) | Website | Name of contact person (optional) | Telephone number (head office) | E-mail (optional) |
|--|--------------------------------|--------------------------------------|--------------------------------|-------------------|
| Office of Gas and Electricity Markets (Ofgem) – regulatory authority | http://www.ofgem.gov.uk/ | | +44 207 901 72 95 | |
| National Grid – transmission grid operator | http://www.nationalgrid.com/uk | | +44 192 665 30 00 | |



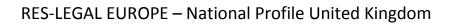


Grid issues

Connection to the grid

| Abbreviated form of legal sources | EA 1989CUSC | | |
|-----------------------------------|--|---|--|
| Overview | Plant operators are contractually entitled to connection to the grid by the grid operator. The grid operator is obliged to enter into these contracts (sec. 16 par. 1 EA 1989 in conjunction with sec. 1.3 CUSC). A claim for connection arises on the date on which a given connection agreement is concluded (sec. 1.3 CUSC). Entitled party. The persons entitled are the plant operators. Obligated party. The person obligated is the grid operator in charge (sec. 16 par.1 EA 1989 in conjunction with sec. 1.3 CUSC). | | |
| Procedure | Process flow | Plant operators are contractually entitled to connection to the grid by the grid operator. The grid operator is obliged to enter into these contracts (sec. 16 par. 1 EA 1989 in conjunction with sec. 1.3 CUSC). A claim for connection arises on the date on which a given connection agreement is concluded (sec. 1.3 in conjunction with Schedule 2 Exhibit 1 CUSC). | |
| | Deadlines | Time limits on connection depend on the terms of a given connection agreement (sec. 2.13.4 in conjunction with Schedule 2 Exhibit 3 CUSC). | |
| | Obligation to inform | | |
| Priority to renewable energy | () Priority to renewable energy | The grid operator is obliged to connect plants to his grid according to non-discriminatory criteria. Electricity generated from renewable energy sources is not given priority. | |







| (qualitative criteria) | (X) Non-discrimination | | |
|-------------------------|--|---|--|
| Capacity limits | A given plant operator must not exceed the | e connection entry capacity specified in the connection agreement (sec. 2.2.4 CUSC). | |
| (quantitative criteria) | | | |
| | | | |
| | State | | |
| | Consumers | | |
| | Grid operator | | |
| Distribution of costs | Plant operator | Connection costs are covered by Connection Charges paid by the plant operator to the grid operator (Sec. 2.14 CUSC). | |
| | European Union | | |
| | Distribution mechanism | The grid operator sustains the connection costs Connection charges are paid by each plant operator to the grid operator in order for the grid operator to recover such costs with a reasonable rate of return (sec. 14.2.1 CUSC) | |

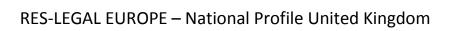




Use of the grid

| Abbreviated form of legal sources | The Connection and Use of System Code (CUSC) | | |
|-----------------------------------|--|---|--|
| | Plant operators are contractually entitled against the grid operator to use the grid. The grid operator is statutorily obliged to enter into such contracts (sec. 1.3 CUSC). | | |
| Overview | The claim arises when the agreement is concluded (sec. 3.2.2 CUSC). | | |
| | Entitled party. The persons entitled are the | e plant operators. | |
| | Obligated party. The obligated party is the | grid operator. | |
| | | Plant operators are contractually entitled against the grid operator to use the grid. The | |
| | Process flow | grid operator is statutorily obliged to enter into such contracts (sec. 1.3 CUSC). | |
| Procedure | | The claim arises when the agreement is concluded (sec. 3.2.2 CUSC). | |
| | Deadlines | | |
| | Obligation to inform | | |
| Priority to renewable energy | () Priority to renewable energy The grid operator is obliged to grant access to the grid without discrimination | | |
| (qualitative criteria) | (X) Non-discrimination | certain users. Electricity from renewable sources is not given priority. | |
| Curtailment | A given plant operator must not exceed the connection entry capacity specified in the connection agreement (sec. 2.2.4 CUSC). | | |
| | Grid operation costs are grouped under the Transmission Network Use of System Charge (TNUoS). TNUoS is split between generators | | |
| Distribution of costs | (27%) and energy suppliers (73%) (Sec. 1.14 | 4.14 CUSC). | |
| | State | | |







| Consumers | |
|------------------------|---|
| Grid operator | |
| Plant operator | Plant operators pay 27% of TNUoS (sec. 14.15.vi CUSC), the remaining amount is paid by energy suppliers. |
| European Union | |
| Distribution mechanism | The grid operator sustains the costs of installing, operating and maintaining the grid. Energy suppliers and plant operators cover such costs through the TNUoS paid to the grid operator. |

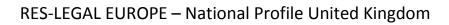




Grid development

| Abbreviated form of legal source | The Connection and Use of System Code (CUSC) | | |
|---|---|--|--|
| Overview | A given plant operator may be contractually entitled to the expansion of the grid by the grid operator. This plant operator has to file with the grid operator a request for the expansion of the grid. The grid operator is obliged to make a "modification offer". If the offer is accepted by the plant operator, the connection agreement will be varied to include the terms on which the grid will be modified (6.9.2 CUSC). Entitled party. The persons entitled to the expansion of the grid are the plant operators (6.9.2 CUSC). | | |
| | Obligated party. The grid operator is oblig | ed to expand the grid (6.9.2 CUSC). | |
| | Process flow | A given plant operator may be contractually entitled to the expansion of the grid by the grid operator. This plant operator has to file with the grid operator a request for the expansion of the grid. The grid operator is obliged to make a "modification offer". If the offer is accepted by the plant operator, the connection agreement will be varied to include the terms on which the grid will be modified (6.9.2 CUSC). | |
| Procedure | Enforcement of claims | A claim for the expansion of the grid arises when a given connection agreement is varied to include the terms on which the grid will be modified (6.9.2.4 CUSC). | |
| | Deadlines | The scope and the limits of a claim for grid development depend on the provisions set out in a given connection agreement (6.9.2.4 CUSC). | |
| | Obligation to inform | | |
| Regulatory incentives for grid expansion and innovation | | | |
| Distribution of costs | Grid development and reinforcement costs are grouped under the Transmission Network Use of System Charge (TNUoS). TNUoS is | | |







| | split between generators (27%) and energy suppliers (73%) (Sec. 1.14.14 CUSC). | | |
|--------------|---|--|--|
| | State | | |
| | Consumers | | |
| | Grid operator | | |
| | Plant operator Plant operators pay 27% of TNUoS (sec. 14.15. suppliers. | | |
| | European Union | | |
| | Distribution mechanism | The grid operator sustains the costs of installing, operating and maintaining the grid. Suppliers and plant operators cover such costs through the TNUoS paid to the grid operator. | |
| Grid studies | http://www.decc.gov.uk/en/content/cms/meeting_energy/network/ensg/ensg.aspx http://www.nationalgrid.com/uk/Electricity/OffshoreTransmission/ODIS/CurrentStatement/ | | |





RES-H&C support schemes

Summary of support systems

| Overview | In the UK, a subsidy and a price-based mechanism are available for supporting RES-H installations. | |
|----------------------------|---|--|
| Summary of support schemes | The Renewable Heat Incentive (RHI) is the main instrument for funding RES-H sources in the United Kingdom by supporting RES-H installations with a fixed amount per kWth produced. As of now the scheme is only open for non-domestic installations. Domestic installations are covered by the Renewable Heat Premium Payment (RHPP), which provides a once-only subsidy to households that apply for the scheme for installing RES-H generators. The RHPP is meant to be discontinued in 2013. Contextually, the RHI is likely to be extended to domestic installations. | |
| Technologies | Aerothermal; Hydrothermal; Biogas; Biomass; Geothermal; Solar thermal. | |
| Statutory provisions | RHISR 2011EPA 1990 | |





Basic information on legal sources

| Name of legal source (original language) | The Renewable Heat Incentive Scheme Regulations 2011 | The Environmental Protection Act 1990 | |
|---|---|---|--|
| Full name | The Renewable Heat Incentive Scheme Regulations 2011 | The Environmental Protection Act 1990 | |
| Name (English) | The Renewable Heat Incentive Scheme Regulations 2011 | The Environmental Protection Act 1990 | |
| Abbreviated form | RHISR 2011 | EPA 1990 | |
| Entry into force | 27.11.2011 | 02.06.2011 | |
| Last amended on | | | |
| Future amendments | | | |
| Purpose | This act introduces a support scheme for renewable heat sources | This act provides for improved control of pollution arising from different industrial and non-industrial processes as well as for the protection of the environment in different aspects. | |
| Relevance for renewable energy | This act applies to RES only. | This act is the legal basis for the Renewable Heat Premium Payment | |
| Link to full text of legal source (original language) | http://www.legislation.gov.uk/uksi/2011/2860/made | http://www.legislation.gov.uk/ukpga/1990/43 | |
| Link to full text of legal source (English) | | | |





Further information

| Institution (name) | Website | Name of contact person (optional) | Telephone number (head office) | E-mail (optional) |
|---|-------------------|--------------------------------------|--------------------------------|--------------------------------|
| Department of Energy and climate change (DECC) | www.decc.gov.uk/ | | +44 300 060 4000 | correspondence@decc.gsi.gov.uk |
| Office of the Gas and Electricity Markets (Ofgem) | www.ofgem.gov.uk/ | | +44 845 200 2122. | Renewable@ofgem.gov.uk |



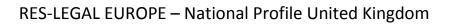


Support schemes

Subsidy (Renewable Heat Premium Payment)

| Abbreviated form of legal source(s) | ● EPA 1990 | | |
|-------------------------------------|---|--|--|
| Summary | The Renewable Heat Premium Payment (RHPP) provides once-only financial support to households in England, Scotland and Wales, for purchasing RES H installations. As confirmed by DECC, this scheme has been established under the Energy Saving Trust, as indicated in Sec 153.1.y EPA 1990. It is intended to run until 31 March 2013. | | |
| | General information | Aerothermal, Hydrothermal, Biomass, Geothermal and Solar thermal are eligible. | |
| | Aerothermal | Eligible (air source heat pump), if the house is not heated by gas from the grid. | |
| | Hydrothermal | Eligible (water source heat pump), if the house is not heated by gas from the grid. | |
| Eligible technologies | Biogas | | |
| | Biomass | Eligible (biomass boiler), if the house is not heated by gas from the grid. | |
| | Geothermal energy | Eligible (ground source heat pump), if the house is not heated by gas from the grid. | |
| | Solar Thermal | Eligible | |
| Amount | Amounts differ according to the technology: | | |







| | Aerothermal: GBP 850 Hydrothermal: GBP 1,250 Biomass: GBP 950 Geothermal: GBP 1,250 Solar Thermal: GBP 300 | |
|-----------------------|--|--|
| Addressees | Entitled Party: householders in England, Scotland | and Wales |
| Procedure | Process flow | Applications are submitted directly online. If the conditions for the subsidy are satisfied, the corresponding amount is granted. |
| | Competent authority | The Energy Saving Trust on behalf of DECC, as confirmed by the Energy Saving Trust. |
| Flexibility mechanism | | |
| | State | The RHPP is partially funded by the State. |
| | Consumers | |
| | Plant operator | |
| Distribution of costs | Grid operator | |
| | European Union | |
| | Distribution mechanism | Funding for the RHPP is taken from the budget of the Energy Saving Trust, which is in turn funded in part by the Government and in part through its private members. |

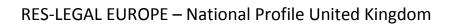




Price-based mechanisms

| Abbreviated form of legal source(s) | • RHISR 2011 | |
|-------------------------------------|---|--|
| Summary | The Renewable Heat Incentive (RHI) is a scheme targeted at supporting RES-H installations with a fixed amount per kWth produced. This scheme is currently targeted at non-domestic installations, though it would be opened to domestic ones as well in the future. | |
| Eligible technologies | General information | Hydrothermal. Biogas, Biomass, Geothermal and Solar thermal are eligible technologies, provided the installations are used to heat a space, water or for carrying out a process (Art. 3.2 RHISR 2011) except biomethane, whose producers should be paid also when the purpose is injection in the gas grid (Art. 3.3 RHISR 2011). Plants must in any case have been commissioned on or after 15th July 2009 (Art. 12.1.a RHISR 2011). CHP plants using these sources may also be eligible. In any case, CHP plants using these sources are not eligible if they are accredited under the Renewable Obligation Order 2009 or the Renewables Obligation (Scotland) Order 2009, or is /has at any time since its accreditation been a "qualifying CHP station" as defined in Art. 2 of the Renewable Obligation Order (Art. 9, RHISR 2011). Plants must also comply with the technical requirements related to metering and steam measuring outlined in Part 2, Chapter 3 of the RHISR 2011. |
| | Aerothermal | |







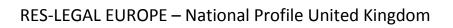
| Hydrothermal | Eligible (heat pumps using surface water as source). The coefficient of performance must be at least 2.9. For plants under 45 kWth certification and accreditation under the Microgeneration Certification Scheme is required (Art.8, RHISR 2011). Capacity is limited to 100 kWth (Schedule 3 RHISR 2011). |
|-------------------|---|
| Biogas | Eligible up to a capacity of 200 kWth. For plants under 45 kWth certification and accreditation under the Microgeneration Certification Scheme is required (Art. 11, RHISR 2011). CHP plants using biogas are also eligible, provided the above requirements are respected (Art. 9, RHISR 2011). |
| Biomass | Eligible (solid biomass). For plants under 45 kWth certification and accreditation under the Microgeneration Certification Scheme is required (Art. 5, RHISR 2011). No capacity limitations are imposed, though capacity impacts on the tariff level. Solid biomass contained in municipal waste is also eligible (Art. 6, RHISR 2011). CHP plants using biomass are eligible if they use solid biomass contained in municipal waste as (Art. 9, RHISR 2011). |
| Geothermal energy | Shallow Geothermal: Eligible (heat pumps using the ground as energy source, except for energy located and extracted from at least 500 metres beneath the surface of solid earth). The coefficient of performance must be at least 2.9. For plants under 45 kWth certification and accreditation under the Microgeneration Certification Scheme is required (Art.8, RHISR 2011). Capacity is |





| | | limited to 100 kWth (Schedule 3 RHISR 2011). | |
|--------|---------------------|---|--|
| | | Deep Geothermal : Eligible if the plant generates heat using naturally occurring energy located and extracted from at least 500 metres beneath the surface of solid earth (Art. 10, RHISR 2011). CHP plants using deep geothermal are also eligible, provided the above requirements are respected (Art. 9, RHISR 2011). The minimum capacity is 100 kWth (Schedule 3 RHISR 2011). | |
| | Solar Thermal | Eligible up to a capacity of 200 kWth. For plants under 45 kWth certification and accreditation under the Microgeneration Certification Scheme is required (Art. 7, RHISR 2011). | |
| | General information | Amounts are published in Section 3 of the RHISR and updated regularly on the website of DECC. | |
| | Aerothermal | | |
| | Hydrothermal | p 4.7 per kWth | |
| Amount | Biogas | p 7.1 per kWth | |
| | Biomass | Capacities below 200 kWth First 12 months: p 8.3 per kWth Afterwards: p 2.1 per kWth Capacities between 200 and 1,000 kWth First 12 months: p 5.1 per kWth Afterwards p 2.1 per kWth | |







| | | Capacities of 1,000 kWth and above: p 1 per kWth |
|--------------------|--|---|
| | Geothermal energy | Shallow geothermal: p 4.7 per kWth |
| | | Deep geothermal: p 3.4 per kWth |
| | Solar Thermal | p 8.9 per kWth |
| | General information | Prices are adjusted yearly (every 1 April) according to the percentage increase or decrease in retail prices for the previous calendar year (Art. 37.7 RHISR 2011). |
| | Aerothermal | |
| Degression | Hydrothermal | |
| | Biogas | |
| | Biomass | |
| | Geothermal energy | |
| | Solar Thermal | |
| Сар | | |
| Eligibility period | 20 years (Art. 37 RHISR 2011) | |
| Addressees | Entitled party: owners of accredited RHI installations payments (Art. 3.2 RHISR 2011). | |
| Procedure | Process flow | 1 – The applicant provides a written application for accreditation complete with the documents and information requested in Schedule 1 of the RHISH (Art. 22.2 RHISR 2011). |





| | | 2 – The authority checks the presented information and may require some additional pieces or provide an inspection on site (Art. 22.3-4 RHISR 2011). 3 – If the Authority believes the application is correct and the installation is eligible, the Authority will accredit the installation by including it in a registry, notifying the applicant and providing a statement of eligibility indicating accreditation date, applicable tariff, process and timing for meter readings, details of the frequency and timetable for payments and tariff lifetime / end date (Art. 22.6 RHISR 2011). |
|-----------------------|------------------------|---|
| | Competent authority | The RHI is administered by Ofgem, as stated on the website of the Department of Energy and Climate Change (DECC). |
| Flexibility Mechanism | | |
| | State | The RHI is being funded from the general government spending, as stated on the website of the Department of Energy and Climate Change (DECC). |
| | Consumers | |
| Distribution of costs | Plant operator | |
| | Grid operator | |
| | European Union | |
| | Distribution mechanism | |





RES-T support schemes

Summary of support schemes

| Overview | A quota system for biofuels is in place. |
|----------------------------|---|
| Summary of support schemes | A quota system for biofuels is in place in the United Kingdom since 2007. Fuel suppliers for transport are obliged to satisfy a specified quota amount of biofuels in the total supplied fuel. There is a certificate system for providing proof of compliance. |
| Technologies | Biofuels |
| Statutory provisions | • RTFO 2007 |

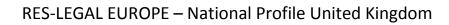




Basic information on legal sources

| Name of legal source (original language) | The Renewable Transport Fuel Obligation Order 2007 | |
|---|--|--|
| Full name | | |
| Name (English) | | |
| Abbreviated form | RTFO 2007 | |
| Entry into force | 26.10.2007 | |
| Last amended on | 07.12.2011 | |
| Future amendments | | |
| Purpose | This act establishes a quota scheme for biofuels. | |
| Relevance for renewable energy | Biofuels receive additional support thanks to the scheme introduced by this act. | |
| Link to full text of legal source (original language) | http://www.legislation.gov.uk/uksi/2007/ 3072/contents/made | |
| Link to full text of legal source (English) | | |







Further information

| Institution (name) | Website | Name of contact person (optional) | Telephone number (head office) | E-mail (optional) |
|-----------------------------|-----------------------|--------------------------------------|--------------------------------|-------------------|
| Department for Transport | http://www.dft.gov.uk | | +44 0300 330 3000 | |



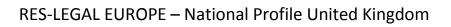


Support schemes

Biofuel quota (Renewable Transport Fuel Obligations)

| Abbreviated form of legal source(s) | • RTFO 2007 | | |
|-------------------------------------|---|--|--|
| Summary | A quota system for biofuels is in place in the United Kingdom since 2007. Fuel suppliers for transport are obliged to satisfy a specified quota amount of biofuels in the total supplied fuel. There is a certificate system for providing proof of compliance. | | |
| | General information Biodiesel and Bioethanol are eligible (Sec. 5.2 RTFO 2007) | | |
| Eligible technologies | Biofuels | Biodiesel and Bioethanol are eligible (Sec. 5.2 RTFO 2007) | |
| Englishe teenhologies | Electricity | | |
| | Hydrogen | | |
| Amount | Amount of quota and period of application | Quotas are expressed in % of the total fossil fuel supplied by the obligated party. In case the supplied amount is less than 10 million litres, the first 450,000 litres are deducted (Art. 4.4 – 4.5 RTFO 2007). Start of the obligation period supplied fuel) 15 April 2008 2.5641 15 April 2010 4.1667 | |





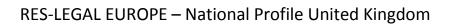


| | | 15 April 2011 4.7120 15 April 2012 5.2632 (Art. 4.4 – 4.5 RTFO 2007) |
|------------|---|---|
| | Adjustment of quotas | Article 4 of RTFO 2007, setting the quotas, is amended with subsequent acts (latest one in 2011). |
| | Fees and penalty charges | In case the supplier does not own sufficient certificates, it will need to pay a penalty fee ("buy-out price") of GBP 0.30 per litre to the Authority (Art. 17.4 RTFO 2007). |
| Addressees | Obligated Party : every transport fuel supplier who ow 450,000 litres of fossil fuel in the United Kingdom (Sec. 4 | ns fossil fuel to be used in road vehicles and who supplies more than RTFO 2007). |
| Procedure | Process flow | Suppliers must apply for a Renewable Transport Fuel (RTF) certificate account no later than 28 days after having been indicated as an obligated supplier by the Authority (Art. 7.1-7.2 RTFO 2007). With the account in place, obligated parties can apply for RTF certificates. After receiving such an application, the Authority checks that the supplied information is correct and that all requirements for applying outlined in Art. 16.3 RTFO 2007 are satisfied (Art. 17 RTFO 2007) |
| | | If all information is correct and requirements are satisfied, the Authority issues an RTF certificate to the obligated supplier. Each RTF certificate equals to one litre of supplied renewable fuel for transport (Art. 17 RTFO 2007). |





| | | At the end of each obligation period, the Authority notifies the number of certificates that the supplier is supposed to have in order to satisfy its obligation (Art. 21 RTFO 2007). In case the supplier does not own sufficient certificates, it will need to pay a penalty fee ("buyout price") of GBP 0.30 per litre to the Authority (Art. 17.4 RTFO 2007). The buy-out fees are collected into a buy-out fund, which is then redistributed to all obligated suppliers according to the number of certificates they surrendered (Art. 22.3.a RTFO 2007). |
|-----------------------|------------------------|---|
| | Competent authority | The Office of the Renewable Fuels Agency (Art. 6.1 RTFO 2007). |
| Flexibility Mechanism | | |
| | State | |
| | Consumers | Costs may be passed to end customers through an additional amount on the fuel price. |
| Distribution of costs | European Union | |
| | Others | |
| | Distribution mechanism | Suppliers may sustain additional costs to comply with the obligation Such additional costs may be passed to end customers through an additional amount on the fuel price. |











Policies

Summary of policies

| Overview | In the United Kingdom a certification scheme for solar thermal installations and an R&D policy are currently available. A plan for vocational training of installers is being developed. |
|----------------------|---|
| | An Action Plan for specific skill training for installers is planned in the Microgeneration Strategy, and should be ready in October 2012. |
| Summary of policies | The Microgeneration Certification Scheme is aimed at providing an assessment and an approval that a RES installation complies with specific standards. Depending on the technology, requirements may vary but are nevertheless usually linked to an internationally recognized standard (e.g. EN 12975-1: 2006 for solar thermal installations). |
| | The UK Renewable Energy Strategy commits about 50m GBP until 2015 aimed at developing innovation in areas like offshore wind, marine energy, waste and biomass. |
| Statutory provisions | Microgeneration Strategy UK Renewable Energy Strategy |

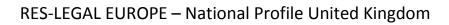




Basic information on legal sources

| Name of legal source | Microgeneration Strategy | UK Renewable Energy Strategy | |
|---|---|---|--|
| (original language) | | | |
| Full name | | | |
| Name (English) | | | |
| Abbreviated form | Microgeneration Strategy | UK Renewable Energy Strategy | |
| Entry into force | 22.06.2011 | 12.07.2011 | |
| Last amended on | | | |
| Future amendments | | | |
| Purpose | The purpose of this strategy is to remove non-financial barriers to microgeneration | The purpose of this strategy is to set a strategy for developing RES in the next years for the UK | |
| Relevance for renewable energy | This policy sets frameworks for certification of installations and for training of installers. | To set a strategy for developing RES in the next years for the UK | |
| Link to full text of legal source (original language) | http://www.decc.gov.uk/assets/decc/11/meet ing-energy-demand/microgeneration/2015- microgeneration-strategy.pdf | http://www.decc.gov.uk/assets/decc/11/meeting- energy-demand/renewable-energy/2167-uk- renewable-energy-roadmap.pdf | |
| Link to full text of legal source (English) | | | |







Further information

| Institution (name) | Website | Name of contact person (optional) | Telephone number (head office) | E-mail (optional) |
|--------------------------|-------------------------|-----------------------------------|--------------------------------|-------------------|
| Department of Energy and | http://www.decc.gov.uk/ | | +44 300 060 4000 | |
| Climate Change (DECC) | | | | |
| | | | | |





Policy categories

Training programmes for Installers (Green Deal Skills Alliance)

| Abbreviated form of legal source(s) | Microgeneration Strategy | |
|-------------------------------------|---|--|
| Description | An Action Plan for specific skill training for installers is planned in the Microgeneration Strategy, however no further information is available. The Action Plan will be supporting the Green Deal and will be ready by the launch of the Green Deal in October 2012. | |
| Addressees | | |
| Competent authority | | |
| Further information | | |
| Distribution of costs | State | |
| | Private Financing | |
| | European Union | |
| | Others | |

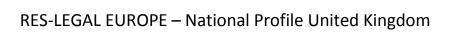




<u>Certification Programmes for RES installations (Microgeneration Certification Scheme)</u>

| Abbreviated form of legal source(s) | Microgeneration Strategy | |
|-------------------------------------|---|---|
| Description | The Microgeneration Certification Scheme (MCS) is aimed at providing an assessment and an approval that a RES installation complies with specific standards. Depending on the technology, requirements may vary but are nevertheless usually linked to an internationally recognized standard (e.g. EN 12975-1: 2006 for Solar thermal installations). As outlined in the Product Certification Scheme Requirements for the different technologies, the MCS certification is a recognized, third-party assessment: • that the product meets the standard; • that the manufacturer has staff, processes and systems in place to ensure that the product delivered meets the standard. This assessment is based on evidence on the above two points as well as on periodic audits of the manufacturer including testing as appropriate, and on compliance with the contract with the certification body for listing and approval, including agreement to rectify faults as appropriate (Source: Product Certification Scheme Requirements). | |
| Addressees | Private companies that wish to participate in the MCS. | |
| Competent authority | DECC | |
| Further information | http://www.microgenerationcertification.org | |
| Distribution of costs | State | |
| | Industry | The scheme is industry-funded, as confirmed by the MCS helpdesk. Companies / owners of installations that wish to be certified under the scheme will have to sustain related costs. Initially the scheme was |

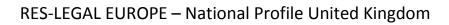






| | funded by DECC, however by now it has switched to this new funding scheme, as confirmed by the MCS helpdesk. |
|------------------|--|
| System Producers | |
| European Union | |
| Others | |







RD&D Policies (UK Renewable Energy Strategy)

| Abbreviated form of legal source(s) | UK Renewable Energy Strategy |
|-------------------------------------|---|
| Description | This strategy commits about 50m GBP until 2015 aimed at developing innovation in areas like offshore wind, marine energy, waste and biomass. |
| Addressees | Addressees are outlined in the calls related to the Strategy. In the latest one at the time of research (Offshore Wind Component Technologies Development and Demonstration Scheme, May 2012), eligible applicants were private companies or consortia of such companies involved in developing innovative technologies that would cut costs of wind power. |
| Competent authority | DECC |
| Further information | http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/renewable-energy/2167-uk-renewable-energy-roadmap.pdf |