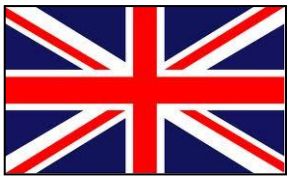

Renewable energy policy database and support – RES-LEGAL EUROPE

National profile: United Kingdom

Client: DG Energy

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Berlin, 19 December 2012

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United Kingdom – summary text

In the United Kingdom RES-E are supported through a feed-in tariff, a quota system and a tax regulation mechanism. RES-E electricity is connected to the grid under the principle of non-discrimination, RES-E plant operators are granted the right to access the grid and grid operators are obliged to expand the grid if this is necessary to accept all generated RES –E from a plant.

As for RES-H&C a subsidy and a price-based mechanism are available for supporting RES-H installations. Furthermore a quota system for biofuels for transport is in place.

A training programme for RES-E plant installers is in place, as well as a certification programme for RES-E installations. An overarching renewable energy strategy relating to RES-E has been laid down and implemented.

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 2012 (The Feed-in Tariffs (Specified Maximum Capacity and Functions) Order 2012, No. 2782) • 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	10.07.2012	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/2009/140/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	17.07.2012	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.	(CCL). Part IV of the CCL GenReg 2001 lays down the exemption of electricity from renewable sources from the levy.
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/2000/17/contents*	*http://www.legislation.gov.uk/uksi/2001/838/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 2012, No. 2782	
Full name			
Name (English)			
Abbreviated form	EnA 2008	FTO 2012	
Entry into force	26.11.2008	01.12.2010	
Last amended on	10.07.2012		
Future amendments			
Purpose	The EnA 2008 regulates fundamental issues related to energy supply in Great Britain.	The FTO 2012 amends 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/ukpga/2008/32*	*http://www.legislation.gov.uk/uksi/2012/2782/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 2012 • ROO 2009	
Contact Authority	http://www.decc.gov.uk/	
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	**General information**	Wind energy, solar PV energy, biogas, hydro-energy are eligible. Installations using these technologies are eligible as long as their specified maximum capacity does not exceed 5MW (art. 3 FTO 2012). Plants between 50 kW and 5 MW are entitled to choose between the fixed-rate system and the Renewables Obligation (art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2012).
	Wind energy	Eligible (art 2 (2), 3 FTO 2012). 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. 4-6 FTO 2012).
	Solar energy	PV installations are eligible (art 2 (2), 3 FTO 2012). . 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. 4-6 FTO 2012).
	Geothermal energy	
	Biogas	Eligible (art 2 (2), 3 FTO 2012). Plants shall be accredited under the ROO-FiT process, a process for accreditation based on the existing ROO process (artt. 4-6 FTO 2012).
	Hydro-power	Only “traditional” hydro is eligible. Tidal and wave energy are not eligible (Arts. 2 (2), 3 FTO 2012). 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) (artt. 4-6 FTO 2012).
	Biomass	

<table>
<tr><td rowspan="3">Amount</td><td>General information</td><td>An inflation-indexed payment rate table is published every year prior to 1 February by the Gas and Electricity Markets Authority (art. 16 FTO 2012).</td></tr>
<tr><td>Wind energy</td><td>Payment rates
<table><tr><td>Capacity</td><td>GBP per kWh</td></tr><tr><td>≤ 1.5kW</td><td>0.21</td></tr><tr><td>1.5 - 15 kW</td><td>0.21</td></tr><tr><td>15kW - 100kW</td><td>0.21</td></tr><tr><td>100kW - 500kW</td><td>0.175</td></tr><tr><td>500kW - 1.5MW</td><td>0.095</td></tr><tr><td>> 1.5MW</td><td>0.0448</td></tr></table></td></tr>
<tr><td>Solar energy</td><td>Payment rates: 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.
<table><tr><td>Capacity</td><td>GBP per kWh</td></tr><tr><td>up to 4kWp</td><td>• H: 0.1544
• M: 0.1390
• L: 0.0710</td></tr></table></td></tr>
</table>

<table>
<tr>
<td></td>
<td></td>
<td>
<table>
<tr><td>4kWp - 10kWp</td><td>• H: 0.1399
• M: 0.1259
• L: 0.0710</td></tr>
<tr><td>10kWp - 50kWp</td><td>• H: 0.1303
• M: 0.1173
• L: 0.0710</td></tr>
<tr><td>50kWp - 150kWp</td><td>• H: 0.1150
• M: 0.1035
• L:0.0710</td></tr>
<tr><td>150kWp - 250kWp</td><td>• H: 0.11
• M: 0.099
• L:0.0710</td></tr>
<tr><td>250kWp - 5MWp</td><td>0.0710</td></tr>
<tr><td>Stand-alone</td><td>0.450</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geothermal energy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biogas</td>
<td>Payment rates
<table>
<tr><th>Capacity</th><th>GBP per kWh</th></tr>
<tr><td>up to 250kW</td><td>0.147</td></tr>
<tr><td>250kW - 500kW</td><td>0.136</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><td rowspan="4"></td><td></td><td><table><tr><td>> 500kW</td><td>0.0896</td></tr></table></td></tr>
<tr><td>Hydro-power</td><td>Payment rates<table><tr><td>Capacity</td><td>GBP per kWh</td></tr><tr><td>up to 15kW</td><td>0.21</td></tr><tr><td>15kW - 100kW</td><td>0.196</td></tr><tr><td>100kW – 50kW</td><td>0.121 – 0,1550</td></tr><tr><td>500kW - 2MW</td><td>0.121</td></tr><tr><td>> 2MW</td><td>0.0448</td></tr></table></td></tr>
<tr><td>Biomass</td><td></td></tr>
<tr><td rowspan="6">Degression</td><td>General information</td><td>An inflation-indexed payment rate table is published every year prior to 1 March by the Gas and Electricity Markets Authority in cooperation with the Secretary of State (art. 16 FTO 2012).</td></tr>
<tr><td>Wind energy</td><td></td></tr>
<tr><td>Solar energy</td><td></td></tr>
<tr><td>Geothermal energy</td><td></td></tr>
<tr><td>Biogas</td><td></td></tr>
<tr><td>Hydro-power</td><td></td></tr>
</table>

	Biomass	
Cap	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).	
Addressees	**Entitled party**. Operators of accredited eligible installations (Arts. 4-6 FTO 2012). **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. 4-6 FTO 2012).	
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 2012).
Flexibility Mechanism		
Distribution of costs	**State**	
	Consumers	The FIT payments, borne by the licencees (Schedule A of Standard Condition 33 in conjunction with Arts. 4-6 FTO 2012), are usually included in the final consumers' energy bills.
	Plant operator	

	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. 25-30 FTO 2012).

Quota system

Abbreviated form of legal source(s)	• ROO 2009 • ROO SCO 2009 • ROO NI 2009 • EA 1989 • EnA 2008	
Contact Authority	http://www.decc.gov.uk/	
Summary	Under the Renewables Obligation Orders, electricity suppliers are obliged to prove that a certain percentage of electricity supplied to final consumers within the United Kingdom 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). Hereinafter all information will refer to ROO 2009, as the wording and content of the rules and regulations of ROO SCO and ROO NI are broadly the same. Important differences in the ROO SCO for Scotland and the ROO NI for Northern Ireland will be pointed out explicitly. This framework supports systems or plants above 5 MW. Plants between 50 kW and 5 MW located in Great Britain (England, Wales and Scotland) are entitled to choose between the ROC scheme and the FIT (Art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2010).	
Eligible technologies	**General information**	In the United Kingdom, all renewable electricity generation technologies are eligible under the Renewables Obligation Orders (art.14 ROO 2009). Plants eligible for the Feed-in Tariff Scheme are not eligible for ROCs (art. 17B ROO 2009). The ROC scheme supports plants above 5 MW. Plants between 50 kW and 5 MW located in Great Britain (England, Wales and Scotland) are entitled to choose between the ROC scheme and the FIT (Art. 17B, 17D ROO 2009 in conjunction with art. 3 FTO 2010). Plants that were commissioned prior to 01/01/1990 and have not been substantially renewed since 31/12/1989 are ineligible (art.18 ROO 2009).

<table>
<tr><td></td><td>Wind energy</td><td>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)</td></tr>
<tr><td></td><td>Solar energy</td><td>Eligible</td></tr>
<tr><td></td><td>Geothermal energy</td><td>Eligible</td></tr>
<tr><td></td><td>Biogas</td><td>Plants generating electricity from landfill and sewage gas are eligible</td></tr>
<tr><td></td><td>Hydro-power</td><td>Eligible with the following exception:
Large plants (> 20 MW) that were commissioned before 1 April 2002 (art.17 (4) ROO 2009) are ineligible</td></tr>
<tr><td></td><td>Biomass</td><td>Eligibility of plants that generate electricity from biomass (source: Department for Energy and Climate Change):
<table>
<tr><th>Type of waste\Type of generating station</th><th>Mixed waste</th><th>Waste that is purely biomass</th><th>Energy crops, agricultural waste and forestry material</th></tr>
<tr><td>Incineration</td><td>Ineligible</td><td>Eligible*</td><td>Eligible*</td></tr>
<tr><td>Pyrolysis, gasification and</td><td>Eligible for the biomass fraction</td><td></td><td></td></tr>
</table></td></tr>
</table>

		anaerobic digestion	of waste	Eligible*	Eligible*
		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 a generator can undertake. However, suppliers can only meet 12.5% of their obligation from co-fired ROCs.)	Eligible*

* The proportion of fossil fuels shall not exceed 10% (art. 3 and 4 ROO 2009).

Amount

Amount of quota and period of application

Obligation period	**Number of ROCs / MWh of electricity supplied in Great Britain**
1 April 2009 – 31 March 2010	0.097
1 April 2010 – 31 March 2011	0.104
1 April 2011 – 31 March 2012	0.114
1 April 2012 – 31 March 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

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]	2 MWh
Co-firing of biomass	
Onshore wind	1 MWh
Hydro-electric	
Co-firing of energy crops	
Energy from waste with CHP	
Geopressure	
Co-firing of biomass with CHP	
Standard gasification	
Standard pyrolysis	
Offshore wind[1]	2/3 MWh

Dedicated biomass	
Co-firing of energy crops with CHP	
Wave[1]	1/2 MWh
Tidal-stream	
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 MWh
Co-firing of biomass	
Onshore wind	1 MWh
Hydro-electric	
Electricity generated from landfill gas	
Co-firing of energy crops	
Energy from waste with CHP	
Geopressure	
Co-firing of biomass with CHP	
Standard gasification	
Standard pyrolysis	
Offshore wind[1]	2/3 MWh
Dedicated biomass	
Co-firing of energy crops with CHP	
Wave[1]	1/2 MWh
Tidal-stream	

		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[1]	
		Geothermal	
		Tidal impoundment – tidal barrage	
		Tidal impoundment – tidal lagoon	
		Qualifying new hydro stations[3]	
		Qualifying new hydro stations[3]	1/3 MWh
		Qualifying new anaerobic digestion stations[4]	
		Qualifying new onshore wind stations[5]	1/4 MWh
		Qualifying new hydro stations[3]	
		Qualifying new anaerobic digestion stations[4]	
		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 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— (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).
	Minimum price per certificate	
	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).
	Yearly Average Certificate Price	
International applicability	**International certificate trade**	
	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**	Electricity suppliers may satisfy their quota as follows: • **Submission of certificates of origin.** Suppliers may satisfy their quota by presenting tradable green certificates (Renewable Obligation Certificates - ROCs, NIROCs (Northern Ireland) or SROCs (Scotland) – art. 2 ROO 2009). These certificates are issued to the plant operators for every MWh of electricity from renewable sources they produce. The preconditions for the issuing of certificates are laid down by the Renewables Obligation Orders (ROO 2009, ROO SCO 2009, ROO NI 2009), which differ for England/ Wales, Scotland and Northern Ireland, but whose content is basically the same. • **Buy out.** Suppliers may satisfy their quota obligation by paying a certain amount of money to the regulatory authority. On 1 April 2009, the buy-out price was set at 37.19 GBP per MWh (art. 43 ROO 2009). Each year, this buy-out price rises or decreases with the retail price index (art. 43 (4) ROO 2009). For the period 2012-2013, the buy-out price was set at 40.71 GBP per MWh (Ofgem Information Note 04.02.2011). The regulatory authorities collect the buy-out payments received within one obligation period (1 April – 31 March) in a fund and then distribute it amongst all

		British electricity suppliers that have satisfied their quota obligation. The proportion a supplier receives bears to the number of his ROCs (art. 45 ROO 2009). • **Late payment.** Please see the "Amount" section
	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	
Contact Authority	http://www.decc.gov.uk/	
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).	
Eligible technologies	**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.
	Solar energy	Eligible.
	Geothermal energy	Eligible, including plants applying the hot-dry-rock technology.
	Biogas	Eligible.
	Hydro-power	Eligible under the following conditions:

<table>
<tr><td></td><td></td><td>The plant capacity shall not exceed 10 MW (§ 47 (1), (2) CCL Gen Reg 2001). Large hydro generating stations are currently ineligible.
Stations powered by waves and tidal flows are eligible.</td></tr>
<tr><td></td><td>Biomass</td><td>Eligible, including electricity generated from urban, industrial, agricultural and forestry waste and from energy crops.</td></tr>
<tr><td>Amount</td><td colspan="2">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:
<table>
<tr><th>Obligation period</th><th>Amount of CCL in £ (GBP)/kWh</th><th>Source</th></tr>
<tr><td>base rate</td><td>0.00430</td><td>Schedule VI, § 42 FA 2000</td></tr>
<tr><td>1 April 2007 – 31 March 2008</td><td>0.00441</td><td>Section 171 FA 2006</td></tr>
<tr><td>1 April 2008 – 31 March 2009</td><td>0.00456</td><td>Section 13 FA 2007</td></tr>
<tr><td>1 April 2009 – 31 March 2011</td><td>0.00470</td><td>Section 19 FA 2008</td></tr>
<tr><td>1 April 2011 – 1 April 2012</td><td>0.00485</td><td>Section 17 FA 2010</td></tr>
<tr><td>1 April 2012 –1 April 2013</td><td>0.00509</td><td>Section 23 FA 2011</td></tr>
<tr><td>1 April 2013 – onwards</td><td>0.00524</td><td>Schedule 30 FA 2012</td></tr>
</table></td></tr>
<tr><td>Addressees</td><td colspan="2">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.</td></tr>
</table>

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	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	10.07.2012	30.08.2012	
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 1989 • CUSC	
Contact Authority	http://www.nationalgrid.com/uk	
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 **(qualitative criteria)**	( ) Priority to renewable energy (X) Non-discrimination	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.
Capacity limits **(quantitative criteria)**	A given plant operator must not exceed the connection entry capacity specified in the connection agreement (sec. 2.2.4 CUSC).	
Distribution of costs		
	State	
	Consumers	
	Grid operator	
	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)	
Contact Authority	http://www.nationalgrid.com/uk	
Overview	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). The claim arises when the agreement is concluded (sec. 3.2.2 CUSC). **Entitled party.** The persons entitled are the plant operators. **Obligated party.** The obligated party is the grid operator.	
Procedure	**Process flow**	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). The claim arises when the agreement is concluded (sec. 3.2.2 CUSC).
	Deadlines	
	Obligation to inform	
Priority to renewable energy **(qualitative criteria)**	( ) Priority to renewable energy (X) Non-discrimination	The grid operator is obliged to grant access to the grid without discriminating against 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).	
Distribution of costs	Grid operation 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.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)	
Contact Authority	http://www.nationalgrid.com/uk	
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 obliged to expand the grid (6.9.2 CUSC).	
Procedure	**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).
	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.vi CUSC), the remaining amount is paid by 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 2011 • EPA 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	30.07.2012	21.07.2012	
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	
Contact Authority	www.decc.gov.uk/	
Summary	The Renewable Heat Premium Payment (RHPP) provides once-only financial support to households in the United Kingdom, 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.	
Eligible technologies	**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.
	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 and location: England, Scotland and Wales: • Aerothermal: GBP 850 • Hydrothermal: GBP 1,250 • Biomass: GBP 950 • Geothermal: GBP 1,250 • Solar Thermal: GBP 300 Northern Ireland • Aerothermal: GBP 1,700 • Hydrothermal: GBP 3,500 • Biomass: GBP 2,500 • Geothermal: GBP 3,500 • Solar Thermal: GBP 320	
Addressees	**Entitled Party**: householders in the United Kingdom	
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		
Distribution of costs	**State**	The RHPP is partially funded by the State.

	Consumers	
	Plant operator	
	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	
Contact Authority	www.decc.gov.uk/	
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).
Amount	**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
	Biogas	p 7.1 per kWth
	Biomass	<u>Capacities below 200 kWth</u> • First 12 months: p 8.3 per kWth • Afterwards: p 2.1 per kWth <u>Capacities between 200 and 1,000 kWth</u> • 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
Degression	**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	
	Hydrothermal	
	Biogas	
	Biomass	
	Geothermal energy	
	Solar Thermal	
Cap		
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		
Distribution of costs	**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	
	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)

<table>
<tr><td>Abbreviated form of legal source(s)</td><td colspan="2">• RTFO 2007</td></tr>
<tr><td>Contact Authority</td><td colspan="2">http://www.dft.gov.uk</td></tr>
<tr><td>Summary</td><td colspan="2">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.</td></tr>
<tr><td rowspan="4">Eligible technologies</td><td>General information</td><td>Biodiesel and Bioethanol are eligible (Sec. 5.2 RTFO 2007)</td></tr>
<tr><td>Biofuels</td><td>Biodiesel and Bioethanol are eligible (Sec. 5.2 RTFO 2007)</td></tr>
<tr><td>Electricity</td><td></td></tr>
<tr><td>Hydrogen</td><td></td></tr>
<tr><td>Amount</td><td>Amount of quota and period of application</td><td>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).
<table>
<tr><th>Start of the obligation period</th><th>Quota (% of supplied fuel)</th></tr>
<tr><td>15 April 2008</td><td>2.5641</td></tr>
<tr><td>15 April 2009</td><td>3.8961</td></tr>
</table></td></tr>
</table>

		<table><tr><td>15 April 2010</td><td>4.1667</td></tr><tr><td>15 April 2011</td><td>4.7120</td></tr><tr><td>15 April 2012</td><td>5.2632</td></tr></table> (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 owns fossil fuel to be used in road vehicles and who supplies more than 450,000 litres of fossil fuel in the United Kingdom (Sec. 4 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 ("buy-out 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 re-distributed 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		
Distribution of costs	**State**	
	Consumers	Costs may be passed to end customers through an additional amount on the fuel price.
	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.
Summary of policies	An Action Plan for **specific skill training for installers** is planned in the Microgeneration Strategy, and should be ready in October 2012. 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 (original language)	Microgeneration Strategy	UK Renewable Energy Strategy	
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/meeting-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 Climate Change (DECC)	http://www.decc.gov.uk/		+44 300 060 4000	

Policy categories

Training programmes for Installers (Green Deal Skills Alliance)

Abbreviated form of legal source(s)	• Microgeneration Strategy	
Sector	RES-E	
Contact Authority	http://www.decc.gov.uk/	
Description	Under the umbrella of the Green Deal, the Microgeneration Certification Scheme allows certification of installers. In order to become certified installers, interested parties should apply to a MCS Certification Body.	
Addressees	Installers interested in receiving certification	
Competent authority	DECC	
Further information	http://www.microgenerationcertification.org	
Distribution of costs	**State**	
	Private Financing	
	European Union	
	Others	

Certification Programmes for RES installations (Microgeneration Certification Scheme)

Abbreviated form of legal source(s)	• Microgeneration Strategy
Sector	RES-E
Contact Authority	http://www.decc.gov.uk/
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
Sector	RES-E
Contact Authority	http://www.decc.gov.uk/
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