



COUNTRY POLICY PROFILE

United Kingdom

October 2014

**LOG FILE OF CHANGES IN SUPPORT
POLICIES AS COMPARED TO LATEST
MEMBER STATE PROGRESS REPORT**

The EurObserv'ER project

The EurObserv'ER Barometers monitor the renewable energy progress in each Member State of the European Union. Every two months a barometer dedicated to one particular renewable energy technology is published. Moreover, once a year an [Overview Barometer](#) collects the main indicators published during the year and completes these with additional renewable sectors which have not been detailed in the individual Barometers. Finally, the Overview Barometer also reports on socio-economic aspects: employment and turnover in the field of renewables, and the renewable energy investment climate. The country policy reports monitor policy developments by providing an overview of policy changes compared to the Member State Progress Reports.

All Barometers are available for download at <http://www.eurobserv-er.org/>. An overview of direct links to Barometers is available in Annex A.

New Barometer releases are announced on Twitter (https://twitter.com/eurobserv_er).



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Abstract

United Kingdom is legally committed to meeting 15% of the UK's energy demand from renewable sources by 2020. The country considers renewables will also have a crucial role to play in the UK energy mix in the decades beyond, making the most of the UK's abundant natural resources. To increase and accelerate the use of renewable energy, the UK has introduced a number of legislative tools.

A Renewables Obligation (RO) which provides incentives for large-scale renewable electricity generation by making UK suppliers source a proportion of their electricity from eligible renewable sources.

A Feed-in Tariffs (FITs) scheme –which pays energy users who invest in small-scale, low-carbon electricity generation systems for the electricity they generate and use, and for unused electricity they export back to the grid.

A Renewable Heat Incentive (RHI) which pays commercial, industrial, public, not-for-profit and community generators of renewable heat for a 20-year period.

A Renewable Heat Premium Payment (RHPP) which gives one-off payments to householders, communities and social housing landlords to help them buy renewable heating technologies like solar thermal panels, heat pumps and biomass boilers.

A Renewable Transport Fuel Obligation which makes companies that supply more than 450,000 litres of fuel per year source a percentage from renewable sources.

Besides its instruments, the British government is working to the implementation of the Electricity Market Reform (EMR), which will also provide support for the production of renewable electricity from 2014 onwards. EMR introduces two key mechanisms to provide incentives for the investment required in our energy infrastructure.

The Contracts for Difference (CFD), which provide long-term price stabilisation to low carbon plants, allowing investment to come forward at a lower cost of capital and therefore at a lower cost to consumers and the Capacity Market, which provides a regular retainer payment to reliable forms of capacity (both demand and supply side), in return for such capacity being available when the system is tight.

Abbreviations

| | |
|-------|---|
| BTL | Biomass-to-Liquids |
| CHP | Combined heat and power plant |
| EEAG | Environmental and energy aid guidelines |
| EU-27 | European Union, 27 Member States (excludes Croatia) |
| EU-28 | European Union, 28 Member States (includes Croatia) |
| FiP | Feed-in premium (scheme) |
| FiT | Feed-in tariff (scheme) |
| GHG | Greenhouse gas(es) |
| GHG | Greenhouse gas |
| ktoe | Kiloton oil equivalent |
| MSW | Municipal solid waste |
| NREAP | National Renewable Energy Action Plan |
| PV | Photovoltaic energy |
| RE | Renewable energy |
| RED | Renewable Energy Directive |
| RES | Renewable energy sources |
| RMSW | Renewable Municipal solid waste (renewable fraction in MSW) |
| RQS | Renewable quota scheme |
| TSO | Transmission system operator |

Renewable energy mix and 2020 target

The 2012 share of renewable energy in the United Kingdom amounted to 4.2% and the target for 2020 has been defined as 15% (source: 'The State of Renewable Energies in Europe', [2013 edition](#)). This objective implies, in the shortest time, a major change in the country's energy structure. The strong points of the country are their wind offshore and biogas (landfill gas) sector and the country is also very active in the solid biomass power sector. UK has the largest wind resource in Europe, especially at sea; the North Sea and the Irish Sea are particularly suitable due to their shallow depth and their steady winds.

Table Renewable energy production in the 27 Member States of the European Union (EU-27) and the corresponding figures for the United Kingdom. Data have been expressed in ktoe and refer to the year 2012

| [ktoe, 2012] | European Union (27 countries) | United Kingdom | Contribution of United Kingdom to EU-27 |
|------------------|----------------------------------|----------------|--|
| Hydro* | 29408 | 438 | 1.5% |
| Wind* | 17089 | 1606 | 9.4% |
| Solar PV | 5732 | 102 | 1.8% |
| Solar thermal** | 2116 | 153 | 7.2% |
| Solid Biomass*** | 74804 | 1496 | 2.0% |
| Biogas | 6212 | 583 | 9.4% |
| MSW**** | 4426 | 310 | 7.0% |
| Geothermal | 7825 | 68 | 0.9% |
| Biofuels | 11711 | 880 | 7.5% |
| Ocean energy | 44 | 0 | 0.0% |

* Normalised electricity generation

** Including electricity generation from Concentrated Solar Power

*** Including liquid biomass

**** Municipal Solid Waste only regards the renewable fraction in the waste

Source: EurObserv'ER, 2014 (www.eurobserv-er.org)

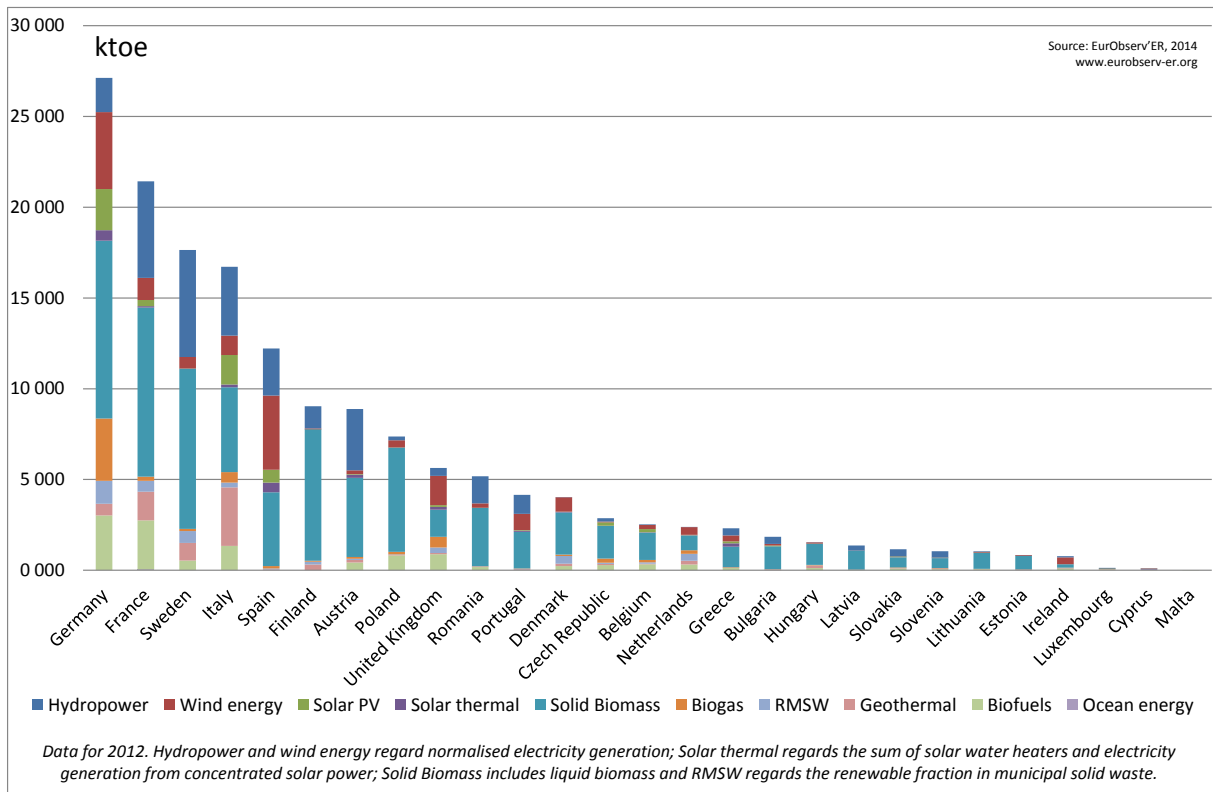


Figure Renewable energy production in the European Union Member States. Data have been expressed in ktOE and refer to the year 2012. Source: EurObserv'ER, 2014 (www.eurobserv-er.org)

Recent RES Policy Developments

The current EurObserv'ER policy profile is listing recent policy changes in the EU Member States. Starting point for this monitoring is the situation as it has been described in the country's Progress Report (which were due end of 2013). All Renewable Energy Progress Reports are available in English language from www.eurobserv-er.org (translated versions).

| Date | Technology | Policy change |
|--------------|---|---|
| January 2014 | All renewables | The European Commission released the Progress Report for the United Kingdom in January 2014. See Section 2 (page 10) to Section 4 (page 45) for a description of policy measures and support schemes. |
| January 2014 | Renewable electricity | The UK Government launched the new Renewables support mechanism that replaces the Renewable Obligation (RO) for projects over 5MW. The Contract for Difference (CfD) mechanism is a radical change from the RO and is likely to be the only bankable support scheme for projects being delivered after mid-2016. The Administrative Strike Prices (the reference prices) published in the December 2013 final Delivery Plan are available here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/360269/Updated_Final_AF.pdf |
| March 2014 | Heat pumps, Biomass only boilers, biomass pellet stoves, solar thermal panels | The Renewable Heat Premium Payment (RHPP) householder voucher scheme closed on 31 March 2014. Homeowners can now apply for the Domestic Renewable Heat Incentive scheme (RHI) instead. |
| April 2014 | Heat pumps, Biomass only boilers, biomass pellet stoves, solar thermal panels | The Domestic RHI scheme opened on 9 April 2014. It is a financial incentive scheme designed to encourage uptake of renewable heating among domestic consumers. The domestic RHI is targeted at, but not limited to, homes off the gas grid. Those without main gas have the most potential to save on fuel bills and decrease carbon emissions. The scheme will cover single domestic dwellings and will be open to homeowners, private landlords, social landlords and self-builders. It will not be open to new build properties other than self-build. The domestic RHI will pay the following tariffs per unit of heat generated for seven |

| | | |
|----------------|---|--|
| | | <p>years:</p> <p>Air-source heat pumps: 7.3p/kWh Ground and water-source heat pumps: 18.8p/kWh</p> <p>Biomass-only boilers and biomass pellet stoves with integrated boilers: 12.2p/kWh</p> <p>Solar thermal panels (flat plate and evacuated tube for hot water only): 19.2 p/kWh</p> <p>The tariffs have been set at a level that reflects the expected cost of renewable heat generation over 20 years. Payments will be made on a quarterly basis.</p> |
| July 2014 | PV | <p>New tariff rates for the Feed-in Tariff scheme from 1 October 2014 to 31 December 2014, for photovoltaic installations only. https://www.ofgem.gov.uk/ofgem-publications/89096/fitpaymentratetableforpublication1october2014pvtariffs.pdf</p> <p>Range: 6.38 p/kWh to 14.38p/kWh</p> |
| July 2014 | Biogas (Anaerobic Digestion), hydro, Wind | <p>New tariff rates for the Feed-in Tariff scheme from 1st October 2014 to 31st March 2015, for non-photovoltaic installations only. https://www.ofgem.gov.uk/ofgem-publications/89098/fitpaymentratetableforpublication1october2014nonpvtariffs.pdf</p> |
| September 2014 | | <no policy changes to be reported> |
| October 2014 | | <no policy changes to be reported> |
| November 2014 | | <yet to come> |

Note to the reader: the above overview had been compiled with care. However, in case you miss recent developments please be invited to inform EurObserv'ER on policy changes in a Member State. For communication use e-mail (policy@eurobserv-er.org) or Twitter (https://twitter.com/eurobserv_er).

Glossary

The Renewables Obligation (RO)

The British government introduced the Renewables Obligation (RO) in 2002 to provide incentives for the deployment of large-scale renewable electricity in the UK.

The RO requires licensed UK electricity suppliers to source a specified proportion of the electricity they provide to customers from eligible renewable sources. This proportion (known as the 'obligation') is set each year and has increased annually.

This is how the RO works:

1. The level of the annual obligation on electricity suppliers is published by 1 October in the year before it comes into effect, eg the obligation for the financial year starting 1 April 2013 was published on 28 September 2012.
2. Eligible renewable electricity generators report the amount of renewable electricity they generate on a monthly basis to the Office of the Gas and Electricity Markets (Ofgem).
3. Ofgem issues Renewables Obligation Certificates (ROCs) to electricity generators relating to the amount of eligible renewable electricity they generate.
4. Generators sell their ROCs to suppliers (or traders), which allows them to receive a premium in addition to the wholesale electricity price.
5. Suppliers present their ROCs to Ofgem to demonstrate their compliance with the RO. Suppliers who do not present enough ROCs to meet their obligation must pay a penalty (known as the 'buy-out price').
6. The money Ofgem collects in the buy-out and late payment funds is re-distributed on a pro-rata basis to suppliers who presented ROCs.

The RO will close to new generators on 31 March 2017. Electricity generation that is accredited under the RO will continue to receive its full lifetime of support (20 years) until the scheme closes in 2037. (source gov.uk)

Feed-in Tariffs scheme

The British government introduced the Feed-in Tariffs (FITs) scheme on 1 April 2010. FITs support organisations, businesses, communities and individuals to generate low-carbon electricity using small-scale (5 megawatts (MW) or less total installed capacity) systems.

How the FITs scheme works:

1. An organisation, business, community or individual installs a small-scale low-carbon electricity generation system (solar photovoltaic (PV), wind, hydro, micro-CHP or anaerobic digestion).
2. The generator registers the installation with a licensed electricity supplier (if 50 kilowatts (kW) or less) or with the [Office of the Gas and Electricity Markets \(Ofgem\)](#) (if over 50kW).
3. The licensed supplier or Ofgem checks the generator is eligible for the FITs scheme and processes the generation data.
4. The supplier pays the generator a generation tariff for any electricity generated and, where applicable, an export tariff for any surplus electricity exported to the grid. (source gov.uk)

Renewable Heat Incentive (RHI)

The Renewable Heat Incentive (RHI) is the world's first long-term financial support programme for renewable heat. The RHI pays participants of the scheme that generate and use renewable energy to heat their buildings. By increasing the generation of heat from renewable energy sources (instead of

fossil fuels), the RHI helps the UK reduce greenhouse gas emissions and meet targets for reducing the effects of climate change.

There are two parts to the RHI:

- Domestic RHI – launched 9 April 2014 and open to homeowners, private landlords, social landlords and self-builders
- Non-domestic RHI – launched in November 2011 to provide payments to industry, businesses and public sector organisations (source gov.uk)

Renewable Transport Fuels Obligation

The Renewable Transport Fuel Obligation (RTFO) supports the government's policy on reducing greenhouse gas emissions from vehicles by encouraging the production of biofuels that don't damage the environment.

Under the RTFO suppliers of transport and non road mobile machinery (NRMM) fuel in the UK must be able to show that a percentage of the fuel they supply comes from renewable and sustainable sources. Fuel suppliers who supply at least 450,000 litres of fuel a year are affected. This includes suppliers of biofuels as well as suppliers of fossil fuel.

The RTFO only covers biofuels used in the transport and NRMM sectors. For information on using bioliquids or biomass to generate heat or electricity see the Ofgem website.

<https://www.ofgem.gov.uk/environmental-programmes/renewables-obligation-ro/information-generators/biomass-sustainability>

Contracts for Difference (CfDs)

CfDs support new investment in all forms of low-carbon generation (renewables, nuclear, CCS) and have been designed to provide efficient and cost-effective price stabilisation for new generation, by reducing exposure to the volatile wholesale electricity price.

Low carbon generation projects will apply for a CfD and depending on whether the technology is 'established' or 'less established', the project may have to compete in an auction in order to receive a contract. CfDs will require generators to sell energy into the market as usual but, to reduce exposure to changing electricity prices, CfDs provide a variable top-up from the market price to a pre-agreed 'strike price'. At times where the market price exceeds the strike price the generator is required to pay back the difference thus protecting consumers from over-payment.

The CfD will be implemented through a bilateral contract between the Generator and the Low Carbon Contracts Company Ltd (LCCC).

The payments to be made to generators will be calculated and paid out by the LCCC. The cost of CfDs will be met by consumers via the supplier obligation, a levy on electricity suppliers. (source: <http://www.energy-uk.org.uk/>)

References

EurObserv'ER, 2014, www.eurobserv-er.org

<https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies>

<https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>

<https://www.ofgem.gov.uk/ofgem-publications/89098/fitpaymentratetableforpublication1october2014nonpvtariffs.pdf>

<https://www.ofgem.gov.uk/publications-and-updates/feed-tariff-scheme-tariff-table-1-october-2014-pv-only>

<http://www.energy-uk.org.uk/>

Annex

EurObserv'ER Barometers published are all available for download. Direct links to all EurObserv'ER publications:

Biofuels Barometer

(July 2014, PDF, English language, 14 pages)

http://www.eurobserv-er.org/pdf/baro222_en.asp

Solar Thermal Barometer (CSP and solar water heaters)

(May 2014, PDF, 18 pages, English language, 3.6 MB)

http://www.eurobserv-er.org/pdf/baro221_en.asp

Solar Photovoltaic Barometer

(April 2014, PDF, 16 pages, English language, 2.9 MB)

http://www.eurobserv-er.org/pdf/baro-jdp11_en.asp

Wind Power Barometer

(February 2014, PDF, English, 14 pages, 2.8 MB)

http://www.eurobserv-er.org/pdf/baro-jde14_en.asp

'The State of Renewable Energies in Europe', 2013 edition

(January 2014, PDF, English language, 200 pages, 12 MB)

<http://www.eurobserv-er.org/pdf/bilan13-gb.asp>

Solid Biomass Barometer

(December 2013, PDF, English language, 14 pages, 2.9 MB)

http://www.eurobserv-er.org/pdf/baro219_en.asp

Heat Pump Barometer

(October 2013, PDF, English language, 18 pages, 2.5 MB)

<http://www.eurobserv-er.org/pdf/baro218.asp>

Biogas Barometer

(December 2012, PDF, English/French language, 14 pages, 2.0 MB)

<http://www.eurobserv-er.org/pdf/baro212biogasEu.asp>

Renewable Municipal Waste Barometer

(December 2012, PDF, English/French language, 12 pages, 1.9 MB)

<http://www.eurobserv-er.org/pdf/baro212mswEu.asp>