



**BRIEFING PAPER**

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# Energy: The Renewables Obligation

By Gabrielle Garton  
Grimwood and  
Dr Elena Ares

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## Summary

### What is the Renewables Obligation?

The [Renewables Obligation \(RO\)](#) was introduced in 2002 as a support scheme for renewable electricity projects. It provides participants with support per MWh of renewable electricity generated at a fixed rate for 20 years.

### When is the scheme closing?

The scheme is due to close to all new entrants in April 2017 and be replaced with Contracts for Difference. It has already closed to solar PV and onshore wind generation.

### How does the RO work?

The RO places an obligation on UK suppliers of electricity to get an increasing proportion of their electricity from renewable sources. Companies do this through purchasing a Renewable Obligation Certificate (ROC) issued to an accredited generator for renewable electricity generated. It is proof that a certain amount of electricity has been generated from a renewable source.

A renewable generator therefore has two sources of income: income generated from the sale of electricity to the wholesale market (which does not distinguish between renewable and non-renewable energy) and income from the sale of ROCs.

Originally, one ROC was issued for each megawatt hour (MWh) of eligible renewable output generated. Since April 2009, the RO has been banded to provide more targeted levels of support to different renewables, to reflect differences in technology costs and market readiness.

Since April 2010, Feed-In Tariffs (FITs) have been available for schemes of 5 MW or smaller, aimed at increasing microgeneration, and so schemes have had the choice of applying for either FITs or ROs (but not both).

The Commons Library briefing on [feed in tariffs](#) provides more information and the briefing [Energy policy overview](#) looks more broadly at current issues. Other briefings on energy matters are available on parliament's topic pages for [energy](#) and [climate change](#).

## 1. Overview: the RO in brief

The scheme is due to close to all new entrants in April 2017, to be replaced with Contracts for Difference (CfD). It has already closed to solar PV and onshore wind generation.

The RO provides participants with support per MWh of renewable electricity generated at a fixed rate for 20 years. It does this by placing an obligation on UK suppliers of electricity to get an increasing proportion of their electricity from renewable sources. Companies do this through purchasing a Renewable Obligation Certificate (ROC) issued to an accredited generator for renewable electricity generated. It is proof that a certain amount of electricity has been generated from a renewable source.

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Since April 2010 feed-in tariffs (FITs) have been available for schemes of 5 MW or smaller, aimed at increasing microgeneration. Since then schemes had the choice of applying for either FITs or ROs (but not both). See the [Library Briefing Paper on Feed in Tariffs](#) for further information

The [Renewables Obligation \(RO\)](#) was introduced in 2002 to support renewable electricity projects.

The Commons Library briefings [Feed-in tariffs](#) (CBP 06200, 21 March 2016) and [Energy policy overview](#) (CBP 07582, 23 June 2016) look more broadly at current issues.

## 2. The RO scheme in detail

When the scheme was initially introduced suppliers met their obligation by submitting ROCs to the regulator Ofgem, equivalent to a percentage of the electricity supplied to customers.

For generators, each MWh of renewable energy received 1 ROC regardless of the technology used. This had the effect of encouraging growth in the most developed, cheaper, forms of generation - such as onshore wind - at the expense of less advanced technologies.

The [Renewables Obligation Order 2009](#) came into force on 1 April 2009.<sup>1</sup> It introduced banding for different technologies, fixing the rates from 2009 to 2013 to provide certainty for generators.

The legislation set the amount of MWh that need to be generated to be able to claim one ROC according to how developed a technology was. For example onshore wind generators could claim 1 ROC/MWh generated, offshore wind could claim 2 ROC/MWh.

Banding was reviewed again in 2013 and levels set up to 2017, at between 0.1 and 5 ROC/MWh depending on the technology, with some bands fixed until 2017 and others reducing over time. The full table of [the banding levels for the banding review period \(2013-17\)](#) is available on the gov.uk website.<sup>2</sup>

### 2.1 Supplier Obligation

Schedule 1 of the regulations sets the level of ROC obligation for suppliers as a percentage per MWh of electricity they generate, for each year up to 2037. The targets are:

Calculation of the ROC obligation		
<i>Obligation period</i>	<i>ROCs/MWh supplied</i>	<i>ROCs/MWh supplied</i>
	<i>Great Britain</i>	<i>Northern Ireland</i>
2009/10	0.097	0.035
2010/11	0.104	0.04
2011/12	0.114	0.05
2012/13	0.124	0.063
2013/14	0.134	0.063
2014/15	0.144	0.063
2015/16	0.154	0.063
Every year until 2036/37	0.154	0.063

This figure, though, is superseded, if the predicted level of ROCs that will be available is higher.

<sup>1</sup> SI 2009/785

<sup>2</sup> DECC, [A table summarising the banding levels for the banding review period \(2013-17\) in England and Wales](#) (undated)

If this is the case, this higher figure is used to calculate the number of ROCs that need to be submitted per MWh supplied. The trend in increase of the obligation level, together with that of the buy-out price, has been [set out by Ofgem](#):

#### Buy-out prices and obligation levels 2010-11 – 2016-17

OBLIGATION PERIOD (1 APRIL - 31 MARCH)	BUY-OUT PRICE	OBLIGATION FOR ENGLAND & WALES AND SCOTLAND (ROCS/MWH)	OBLIGATION FOR NORTHERN IRELAND (ROCS/MWH) 2010-2011
2010-11	£36.99	0.111	0.0427
2011-12	£38.69	0.124	0.055
2012-13	£40.71	0.158	0.081
2013-14	£42.02	0.206	0.097
2014-15	£43.30	0.244	0.107
2015-16	£44.33	0.290	0.119
2016-17	£44.77	0.348	0.142

Source: Ofgem, [Renewables Obligation \(RO\) buy-out price and mutualisation ceilings for 2016-17](#), 17 February 2016

## 2.2 Options for meeting the RO

Suppliers can fulfil the RO in one of three ways:

- presenting Ofgem with Renewables Obligation Certificates (ROCs) to the full value of their obligation. They either generate it themselves or purchase it from the market.
- using a buy-out clause which allows them to pay a set amount per MWh for any shortfall. This buy level is set by Ofgem every year as set out in the table above.
- using a combination of ROCs and buy-out.

At the end of an obligation period the buyout fund is recycled pro rata to all suppliers who presented ROCs. This return of funds is factored in by suppliers when they decide whether to buy ROCs or contribute to the buy-out fund. The result is the ROC price being higher than the buy-out price when there is a shortage of certificates. ROCs are also tradable. Auction price for an [April 2016 e-ROC auction](#) was £41.81 per ROC.<sup>3</sup>

Ofgem publishes an annual report on the RO. The most recent [report for 2014-15](#) provides an overview:

<sup>3</sup> ePower, [e-ROC Auction, another record month!](#), 24 June 2016

- We issued 71.3 million ROCs compared to 62.8 million in 2013-14. This was marginally less than the total UK supplier obligation of 71.9 million ROCs.
- This represented 55.7TWh of renewable generation, equivalent to 18.6% of the total electricity supplied in the UK; 19.9% when the 3.8TWh of generation by FIT installations is added.
- 29.4 million tonnes of carbon dioxide emissions were avoided from renewable generation under the scheme, a 19.6% increase from 24.6 million tonnes in 2013-14.
- 71.3 million ROCs were presented by suppliers, which is 99.1% of the total obligation, the highest proportion since the RO began. The previous highest was 98.2% in 2013-14.
- The amount of the buy-out and late payments were the smallest ever – £24.7 million was redistributed to suppliers.
- Each ROC was worth £43.65 (recycle value was £0.35 plus £43.20 buy-out price).<sup>4</sup>

## 2.3 The Levy Control Framework

Energy companies recover the cost of the renewables obligations through consumer's bills. The [Levy Control Framework](#) (LCF) was established by the DECC and HM Treasury in 2011 to cap the cost of levy-funded schemes, including the RO, and ensure that DECC "achieves its fuel poverty, energy and climate change goals in a way that is consistent with economic recovery and minimising the impact on consumer bills". It sets annual limits on the overall costs of all DECC's low carbon electricity levy-funded policies until 2020/21. There are three components to the LCF:

- Renewables Obligation (RO)
- Feed-in-tariffs scheme (FITs) and
- Contracts-for-Difference (CfDs, which will replace the RO)

In November 2013, the National Audit Office produced [a report](#) on spending under the LCF and concluded that the Framework is a valuable tool supporting control of the costs to consumers from pursuing energy policy objectives.<sup>5</sup>

The Commons Library briefing [Energy policy overview](#) discusses the LCF at more length. (CBP 07582, 23 June 2016)

<sup>4</sup> Ofgem, [Renewables Obligation \(RO\) Annual Report 2014-15](#), 23 March 2016

<sup>5</sup> NAO, [DECC: The Levy Control Framework](#), HC 815, 27 November 2013

## 3. Closure of the RO scheme

Following concerns about the escalating cost of the scheme and the impacts of larger solar PV scheme, some closures have already been implemented:

- new solar PV generating capacity in Great Britain greater than 5MW on 31 March 2015<sup>6</sup>
- new solar PV generating capacity in Great Britain 5MW or less on 31 March 2016<sup>7</sup>

The RO is due to close in 2017 as part of the [Electricity Market Reform \(ERM\)](#), although it will remain to open to existing participants until 2037.<sup>8</sup>

### 3.1 Closure to new entrants in 2017

The RO is being replaced by CfDs. These are a system of reverse auctions intended to give investors the confidence and certainty they need to invest in low carbon electricity generation.

CfDs work by fixing the prices received by low carbon generators per MWh, reducing the risks they face due to variations in energy prices. Generators agree to supply electricity at an agreed strike price, receiving support when wholesale prices are lower than the strike price and paying back any surplus when wholesale prices are higher than the strike price.

### 3.2 Early closure to onshore wind in 2016

In June 2013, the Government published its [response to a call for evidence on the costs of onshore wind](#) within the RO.<sup>9</sup> The aim of it was to update assumptions on costs for onshore wind. DECC's conclusion was there was no significant change and therefore decided not to commence a review of the band for onshore wind under the Renewables Obligation.

However, the [Conservative Party 2015 Manifesto](#) included the following pledge on onshore wind:

*We will halt the spread of onshore windfarms*

Onshore wind now makes a meaningful contribution to our energy mix and has been part of the necessary increase in renewable capacity. Onshore windfarms often fail to win public support, however, and are unable by themselves to provide the firm capacity that a stable energy system requires. As a result, we will end any new public subsidy for them and change the law so that local people have the final say on windfarm applications.<sup>10</sup>

<sup>6</sup> Ofgem, [Renewables Obligation \(RO\): Guidance on the closure of the scheme to large-scale solar PV](#), 13 April 2015

<sup>7</sup> Ofgem, [Renewables Obligation: Closure of the scheme to small-scale solar PV](#), 1 April 2016

<sup>8</sup> DECC, [2010 to 2015 government policy: UK energy security](#), 8 May 2016

<sup>9</sup> DECC, [Onshore wind call for evidence: Government response to Part A \(community engagement and benefits\) and Part B \(costs\)](#), June 2013

<sup>10</sup> [Strong leadership, a clear economic plan, a brighter, more secure future: the Conservative party manifesto 2015](#)

Following debate on how this could be interpreted, the Government announced on 18 June 2015, its intention to close the [RO for onshore wind](#) one year early, in 2016.<sup>11</sup>

This measure was introduced in the *Energy Bill 2015-16* in the Lords. Members of the House of Lords expressed concerns about the timing and quality of the Government's [impact assessment](#) and the lack of a formal consultation on the proposal to close the RO early.<sup>12</sup> The clause implementing the closure was controversial, and removed in the Lords. The Government re-introduced it in the Commons. The Lords made several attempts to increase the flexibility and exemptions that would apply to the 18 June 2015 cut-off date, but these were unsuccessful. There was also disagreement about the potential savings of an early closure, with many arguing that these were not significant.

Further details are in the Commons Library briefings [Energy Bill 2015-16: Background and changes in the Lords](#) (CBP 7466, 14 January 2016) and the [Energy Bill: Committee Stage](#) (CBP 07531, 8 March 2016).

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<sup>11</sup> DECC, [News story: Changes to onshore wind subsidies protect investment and get the best deal for bill payers](#), 18 June 2015

<sup>12</sup> DECC, [IA No: DECC0195: Onshore wind: closure of renewables obligation on 31st March 2016](#), 8 September 2015

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