

Solar Photovoltaic Electricity Generation and Renewables Obligation Certificates

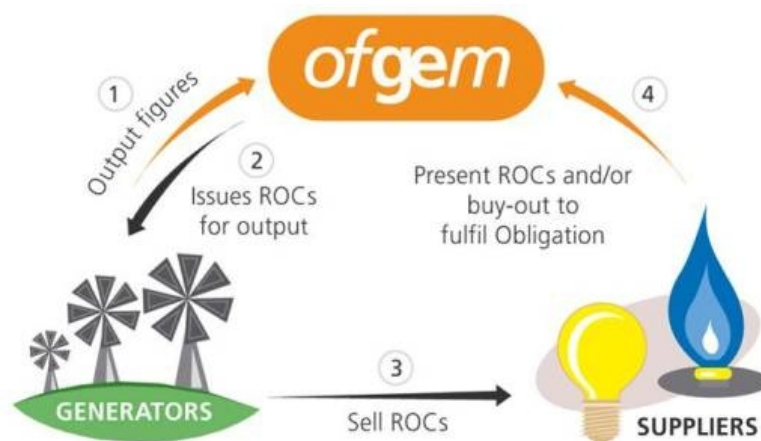
Introduction

An unexpectedly high uptake of the feed-in-tariff ("FiT") scheme caused the government to re-evaluate its likely effect on energy bills. The FiT will now operate on a reduced tariff with effect from October 2012. The reductions have prompted potential solar farm developers to consider the viability of Renewables Obligation Certificates ("ROCs") under the Renewables Obligation scheme as an alternative.

Small solar photovoltaic ("spv") electricity generators (50kW - 5MW) can currently choose between the FiT and ROCs. Spv Generators over 5MW are not eligible for the FiT and must operate under the ROC scheme.

Explaining the Scheme

ROCs have been criticised for their complexity, but the scheme can be reduced to a relatively simple tri-partite relationship as follows:



(Image source: [Department of Energy and Climate Change](http://www.dcc.gov.uk))

The Renewables Obligation requires UK electricity suppliers to provide an increasing specified proportion of electricity from eligible renewable sources (0.124 ROCs/MWh for 2012-2013). Ofgem issues a fixed number of ROCs to renewable electricity generators for every megawatt hour (MWh) of renewable electricity they generate.

Generators can then sell their ROCs to suppliers or traders at a premium in addition to the wholesale electricity price.

Suppliers then present ROCs to Ofgem to demonstrate compliance with their obligation for the year, either through generating renewable energy themselves, or by purchasing it from the market. If the supplier fails to present sufficient ROCs, they have to pay an equivalent amount into a buy-out fund (£40.71/ ROC for 2012-2013).

To incentivise suppliers, the buy-out fund is recycled pro rata to all suppliers who presented ROCs at the end of the ROC year. ROCs are also a tradable commodity which has created a market value for renewable energy.

Banding

In 2009, the Renewables Obligation Order introduced a system of banding to give a variable level of subsidy to different renewable energy technologies. The Government recently completed its review of the Renewables Obligation and has published new banding levels applicable from 1 April 2013 (see [ROC Review](#)). Spv will continue to receive 2 ROCs per MWh under the revised grading.

As with the FiT, the level of certification will be fixed from accreditation throughout the operation of the scheme (under current legislation). The tradable value attached to the ROC is not guaranteed.

Threats to the ROC

It is intended that new applications for eligibility as a generator under the scheme will cease on 31 March 2017 when the ROC is to be replaced by the Feed in Tariff Contract for Difference (see [Guide to the Energy White Paper](#)). Practically speaking, this is a relatively small window for a solar farm or any other renewable energy project to be designed, built and commissioned. While smaller projects might be able to go from green pasture to fully accredited solar farm in six months, a larger development could take a number of years to be completed.

Furthermore, ROCs are not to be issued in respect of any electricity generated by a generating station after 31 March 2037. In addition, a generator may only maintain its accreditation for a maximum of 20 years.

While the suppliers' obligation to source its electricity from renewable sources seems very likely to continue to be a requirement between now and 2037, banding is not settled to the same extent. The recent government consultation agreed that spv should continue to receive 2 ROCs/MWh until 31 March 2015, but this is likely to be stepped down beyond 2015. There is no certainty that banding will be maintained at this level beyond 2017 and the profitability of spv may decline as the tradable value is reduced. Any reduction in banding may, however, be offset by a decline in capital costs as spv technology continues to advance.

Finally, after the unexpectedly high take-up of the FiT, the Government is continually reviewing spv. Proposals are under consideration for removing spv installations below 5MW from ROCs entirely so that they will only be eligible for the FiT. This is to reduce the administrative burden on Ofgem who currently administer both ROCs and the FiT schemes, and to avoid perverse incentives in choosing between the FiT and ROCs.

Conclusion

ROCs provide a real incentive for electricity suppliers to generate using renewable sources. However, the relatively short time frame remaining for accreditation eligibility under the scheme, combined with the uncertainty associated with banding, may dissuade development. The scheme is also not assisted by threats to remove small scale spv from the ROC scheme altogether.