

# VoS Brief

Views of Scotland Briefing Paper no 2, November 2003

## The ROC Scam

The government's wind policy will not cut CO<sub>2</sub> emissions

### Synopsis

- Under the RO schemes, suppliers must buy some electricity from licenced 'renewables' generators. Those who fail suffer a 'buyback' penalty.
- At year end, the money is shared *pro rata* amongst suppliers whether targets are met or not: customers pay up whatever happens.
- There are no mechanisms for measuring if emissions are being cut – suppliers get the money regardless.
- There is pressure exclusively to develop on-shore wind power despite its acknowledged limitations.
- The DTI estimates that the ROC scam/scheme will be worth £1,000 million a year to energy companies by 2010.
- The net result is to starve potentially more effective technologies (e.g. wave, tidal) of R&D funds.

### Introduction

DESPITE THE NON-SEQUITUR, Friends of the Earth suggests (see below) that New Labour's Renewables Obligations scheme is a model of fair-minded concern for the environment.

This is not true. The implications of the scheme become clear if one understands a little of how ROC trading works. Although OFGEM papers are freely available, we are grateful to the (English) electricity trader who explained it to us – while stressing that to be caught discussing matters nominally in the public domain was more than her job was worth.

This fact sheet attempts to lift the veil of secrecy over a subsidy scam diverting millions of pounds from the development of viable renewables into the bank accounts of energy providers.

### The Climate Change Levy

The CCL is a levy of £4.30/MWh on business users of fossil-fuel electricity (a major CO<sub>2</sub> pollutant) and nuclear-generated electricity (which, whatever its problems, isn't). Commercial electricity consumption is about 65 per cent of total demand.

The money is collected by government but

returned to business as cuts in employers' National Insurance contributions. Frequently described as 'fiscally neutral', it penalises heavy electricity users (manufacturing) but subsidises labour-intensive businesses.

The money is not paid to generators or suppliers but it does effectively raise the price of conventional electricity by 10 to 20 per cent and makes 'renewables' seem more competitive.

### The Renewables Obligation

The 'renewable' regulations, administered by OFGEM, oblige electricity suppliers to buy a proportion of what they sell from licenced 'renewable' generators. The scheme is increasingly dominated by on-shore wind.

The percentage of their total product that suppliers must provide from 'renewables' is called the Renewables Obligation or the Renewables Obligation (Scotland) – RO/ROS. Approved generators issue a Renewables Obligation Certificate (ROC) to suppliers with every unit they sell. Each October, OFGEM checks that suppliers have acquired enough ROCs during the year to meet their targets. For various reasons, some suppliers will not

## Apologists for the DTI's ROC Scam

‘ Fulfilment of [the] obligation is validated through a system of tradable green certificates. Generators will be issued with certificates for every unit of green power that they create. Suppliers will have to purchase these certificates in order to demonstrate to the regulator that they have satisfied their quota each year. The green

certificates therefore [! – VoS] become a tradeable commodity. They allow the mechanism to operate efficiently, flexibly and competitively whilst giving the financial support through the guaranteed market that helps the renewable power industry grow. ’

Extract from a Friends of the Earth, Scotland Press Release

be able to buy enough 'renewables' and so the scheme allows them to buy surplus ROCs from other suppliers – ROCs are a tradeable commodity. If a supplier fails to meet its target or buy enough ROCs from elsewhere, it must pay OFGEM a penalty of £30 for every MWh it sells. This is officially known as the buyback price. Energy traders call the scheme the ROC Pot.<sup>2</sup>

### 'Renewables' and price increases

Sources differ in their estimates of the absolute price of 'renewables'. A paper from the Welsh Assembly is categorical:

This effectively gives renewable generators a 3.0 p/kWh premium over other sources of electricity. When combined with the Climate Change Levy (CCL) exemption, the price suppliers might be willing to pay for renewables is 2.0p/kWh (wholesale price) + 3.0p/kWh (RO) + 0.43p/kWh (CCL exemption) = 5.43p/kWh. At this price many renewables are economic.<sup>3</sup>

This assumes that suppliers never come even close to meeting targets or to negotiating favourable terms with generators. This is unlikely.

It is equally disingenuous to argue that 'renewables' are viable without price fixing. Government has no intention of even trying to make them competitive. The RO establishes a minimum price (at least until the wind-power bubble bursts) and guarantees demand. Rewards for astute operators will be substantial. Environmental issues are not germane.

To what extent the RO will increase prices is not clear. Ex-Energy Minister Brian Wilson used frequently to forecast a six per cent rise. This would probably be true if wholesale prices stay at around £15/MWh until the RO target reaches 10 per cent and suppliers generally meet their targets. However, customers of suppliers incurring substantial buyback penalties could face prices rises of up to 15 per cent.

But these low electricity prices are unviable as the collapse of British Energy and TXU Europe suggests. Energy sector commentators are now forecasting substantial Europe-wide price hikes.

On the other hand, if suppliers tend to meet targets and wholesale prices rise to £25/MWh,

increases due to the RO will be negligible – unless, of course, government increases the buyback price, due for review in 2005.

### How the ROC Scam works

On the face of it, the buyback sets a ceiling – why should anyone buy a ROC for, say, £40 when the OFGEM penalty is only £30? But ROCs can – and do – sell for much more.

After the annual inspection and buyback collection are complete, OFGEM returns the ROC Pot money to suppliers *pro rata* to their contribution to 'renewables' targets. A supplier responsible for, say, five per cent of the 'renewables' sold gets five per cent of the Pot – regardless of whether national or individual targets are met.

A ROC is currently about double the typical wholesale price of electricity. Domestic and commercial users must pay a premium for a significant government-stipulated proportion of total demand. In other words, OFGEM levies money from the customers of suppliers which do not meet the target and gives it to the shareholders of suppliers which do.

Energy traders speculate on how big the annual handout might be and buy and sell ROCs to each other in anticipation either of doing well out of the scheme or of off-loading them for more money than they expect the Pot to provide. This

is why ROCs can – and do – sell for more than the buyback price. Energy suppliers 'compete' with each other not to lower prices or improve service but for a larger share of the Pot.

Generators and suppliers are not obliged to reduce emissions (the efficacy of a technology on the local or system level is never examined), cut demand or improve efficiency.

In short, the Renewables Obligation is a customer-subsidised commodity trading scheme, not an environmentally-driven incentive.

The sums involved are substantial. In 2001, the UK consumed 311,000 GWh of electricity. The RO/ROS target is currently three per cent of supply – 9,400 GWh. A typical premium of £10/MWh (the

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#### **Brief No 2**

**The ROC Scam - wind power, hand-outs and consumer levies.**

**Topics currently under preparation include 'Wind and the Politics of Wind' (looking at wind-power in an overall context), an analysis of the second 'Public Attitudes' survey and the risks to peat habitat at the hands of wind-power developers.**

difference between buyback price and current wholesale price) represents a levy on customers of £100 million per year at this year's RO of three per cent. Again, this is raised whether emissions are cut or not.

UK demand is increasing by one per cent a year and could be 325,000 GWh by 2010, when the RO will be ten per cent<sup>4</sup>. A premium of £10/MWh would thus be worth some £350 million annually.

Clearly, if every supplier meets its target there will be no ROC Pot. All suppliers will benefit equally from the renewables subsidies: the trough will be just as full but there will be no battle of the snouts. However, given the pressure to increase 'renewable' targets to increasingly dangerous levels, traders do not anticipate this in the medium-term future.

Why should they? Scottish New Labour has already set a totally unviable 40 per cent renewables target for 2020 and the SNP has called for this to be increased. The smaller parties (Greens, SSP) seem unable either to evaluate New Labour's energy policies or to develop their own. Ironically, they have become part of the problem.

And in the longer term, as conventional and

nuclear plant is phased out due to its age? Well, that's not what traders are paid to think about.

The transport ministry escalates road building and refuses to tax aircraft fuel. The DTI continues to underwrite export of coal-fired power stations to Asia while making no significant UK moves toward energy conservation. These policies cause far more CO<sub>2</sub> emissions than wind power will ever save.

Energy pundits say that OFGEM's New Electricity Trading Arrangements (NETA) also create more CO<sub>2</sub> than wind power can save because they favour cheap fuel (coal) and the 'flexible' running of power plant which reduces efficiency.

That aside, imagine the impact that could be made on emissions long-term if the £2,000 million that the electricity industry is set to receive over the next seven years from the ROC Scam were used to fund a genuine R&D drive.

The scheme in place is, by any reckoning, a government-sponsored cartel of which the Mafia would have been proud.

And it's a scam that looks set to run.

## Notes

<sup>1</sup> After privatisation, the electricity industry in England and Wales was divided into suppliers and generators. In Scotland, Scottish and Southern Energy and ScottishPower function as generator, distributor and supplier – regulatory changes to address this are generally acknowledged as ineffective.

<sup>2</sup> Unlike state pensions, the buyback is index-linked and is, at the time of writing, £30.51.

<sup>3</sup> WAG, EDC (2003), p 38.

<sup>4</sup> The DTI's forecast of a one per cent annual increase in demand between now and 2010 is seen by many as very optimistic and it is not supported by the record.

## ROCs in a nutshell

GENERATORS PRODUCE 'renewable' electricity and sell it to suppliers. For each unit sold they issue a Renewables Obligation Certificate (ROC).

Annually, OFGEM checks that suppliers have met the target. Those who don't pay £30 for each MWh they fall short. The money collected is paid to all suppliers *pro rata* to their contribution to the total renewables produced.

By way of an illustration, imagine that this year's total UK demand is 10,000MWh and that the RO target is 10 per cent, i.e. 1,000 MWh.

Spinning Rackets PLC (SR) is a supplier which sells 2,000MWh during the year to customers all over the UK. Of this, 500MWh is 'renewable' product from Fastbuck Wind Ltd which earns Spinning Rackets 500 ROCs. SR sells the electricity at a modest profit.

It has contributed 500MWh – 50 per cent of the annual target – although it was obliged to supply only 200MWh (10 per cent of 2,000MWh). It therefore has 300 ROCs to spare.

For whatever reason, no other supplier sells any

'renewable' electricity during the year. Between them, therefore, the errant suppliers must pay £24,000 into the ROC Pot – 800 x £30. This they must raise from their customers – who have already paid once for electricity generated from coal, gas or whatever.

Even though the target has only been met by half, *all* of the £24,000 goes to Spinning Rackets. So it gets (say) £30/MWh from its customers *and* £48/MWh from the ROC Pot: £78/MWh! None of the ROC Pot has to go into things like independent research.

Alternatively, SR can sell its surplus ROCs. Other suppliers, anticipating a share of the Pot, pay £65 each. SR ends up with £81/MWh: dividends are up and the director gets a bonus but no-one bothers to see if emissions are down.

But perhaps SR's dealers are jumpy or the rival suppliers are shrewd. They pay £45, so SR only gets £55/MWh. Rivals keep prices down, SR's dividends are static and the director gets a smaller bonus. Of course, in the real world it's much more complex but, even so, it's a good little number, is it not?