

2008 Energy Bill; Renewable Energy Tariff (RET)

New Clause 4

Renewable Energy Association Briefing

Context and Summary:

Action is urgently needed in the UK to accelerate the deployment of renewable energy. MPs from all parties during the 2nd reading debate recognised the Energy Bill to be out of date; the government calculates measures in the Energy Bill will deliver just 5% renewable energy by 2020. This is insufficient to meet the UK's 15% contribution towards the challenging new EU 20% renewable energy target or ambitious CO₂ targets. BERR proposes a further round of consultation starting in summer to address this substantial shortfall, which means new legislation could be years away. The industry has been consulted extensively (not least for the 2003 Energy White Paper) and now seeks a Parliamentary show of support for an accelerated timetable for the implementation of hard measures from BERR. The case for a feed-in tariff for smaller scale renewable electricity projects is well rehearsed in Parliament (the EDM 890 on feed-in tariffs has over 270 signatures) and has attracted the support of many MPs including Hillary Benn. This could work effectively alongside the RO.

There has been much consultation on measures for renewable heat – and a similar tariff-based approach has many merits. Anaerobic digestion (renewable gas) is also the subject of much attention, and lends itself to a feed in tariff approach.

The Clause aims to put in place the enabling legislation for a set of tariffs to cover all three of the sectors listed below. The detail of how each would work, including cost, would be the subject of consultation.

1. On-site renewable **electricity** generators i.e. householders and commercial entities which could produce power primarily for their own use e.g. warehouses, hospitals, supermarkets, factories etc. Please note this is *not* just microgeneration (which is equipment under 50kW capacity).
2. Producers of renewable **heat** including biomass/biogas CHP, biomass boilers, ground, air and water source heat pumps and solar thermal.
3. Producers of renewable **gas**, (i.e. those who purify biogas and feed it into the gas mains. This is sometimes referred to as bio-methane.)

Why a UK Renewable Energy Tariff?

The UK is almost at the bottom of the European league table for renewables, despite being one of the wealthiest economies in Europe with some of the most abundant renewable resources. Government policy in the UK has focussed on renewable merchant¹ power production through the Renewables Obligation (RO). However, renewables are inherently decentralised and their efficiency at smaller scales means

¹ This paper uses the term “merchant” power for power stations built for the export of power to the grid. Examples are wind farms, biomass power stations, hydropower schemes etc. We thus distinguish these types of project from “on-site” generation, where the objective is to produce power to meet the users own energy needs.

with the right support, individuals, communities, farmers, businesses and the public sector can also become active stakeholders in a sustainable energy system. A feed-in tariff has proven to be highly effective across Europe at stimulating wide investment and fresh enterprise and innovation in local, decentralised energy.

Germany is often cited as a comparator for UK renewables performance. It has a similar sized economy and also started from a low base for renewables 10 years ago. While the UK now achieves 2% renewables as a proportion of total energy, Germany achieves 8.5%², up from 7.5% in 2006. Thus in one year Germany achieved a percentage point increase. It took the UK 10 years to move from 1% to 2%. The German renewables industry turned over 24.6 billion euros in 2007 and now employs 249,000 people. German's feed-in tariff system is the cornerstone of this success.

In the UK current support mechanisms are insufficient and do not reach these key sectors. There are several reasons for this;

- The Renewables Obligation (RO) is too complex and the administrative arrangements too onerous for many onsite renewable electricity generators. The majority of Ofgem's administrative time is now spent dealing with the smallest generators. Indeed, as Ministers and Ofgem recognise, the RO was never designed with small scale generation in mind. It was targeted at merchant power and is effective in that role. The changes due to come into effect from April 2009 will not address these fundamental problems, but will merely double the reward for micro generation (up to 50kW capacity) by giving it double the financial reward³. The RET clause has the potential to support larger on-site generators.
- There is still no coherent UK policy for renewable heat despite nearly 5 years of consultation in this area. In fact the use of renewable heat is in decline in the UK. Existing grant programmes are piecemeal and erratic. The REA underlined in its recent submission to the latest BERR heat consultation that a support mechanism is now long overdue and the industry's strong preference is for a tariff – based measure⁴ (see REA's response to the BERR Heat Call for Evidence for detailed information) .
- At present renewable gas would lose its environmental credentials if fed into the gas grid for efficient use elsewhere. Therefore there is no commercial incentive to do this in the UK despite the push for Anaerobic Digestion in the treatment of waste and even though this can make better environmental and economic sense. Germany now has a target of 10% renewable gas as a proportion of the gas network by 2030. (See REA briefing on Biomethane Injection for further information).

² German Federal Environment Agency on Development of RE in Germany in 2007 (March 08)

³ Any generator 50kW or less will get two Renewable Obligation Certificates (ROCs) per MWh generated, rather than one.

⁴ REA members strongly prefer a metered production tariff to a Renewable Heat Obligation for many reasons including investment certainty, value for money, simplicity, reduced data needs before implementation and the difficulty of an RO-type mechanism in the fragmented and commercially unsophisticated heat market.

In Detail; what does new Clause 4 Renewable Energy Tariff propose?

At this stage Clause 4 only commits the Secretary of State to the establishment of a reward scheme for metered renewable energy and to do so within one year. The Clause leaves open until after consultation the detail of how a metered UK tariff would work, which scale and types of renewable technologies would qualify and the level of any Tariff.

It is intended that the Tariff works alongside the Renewables Obligation, offering support specifically for smaller-scale projects (i.e. on-site rather than merchant plant). REA expects the details to be finalised after focussed consultation.

Some paragraphs are explained in more detail.

Paragraph 3

Para 3 deals with the payments to be made for each unit (kilowatt hour) of renewable energy. A kilowatt hour can refer to a unit of electricity, a unit of gas or a unit of heat. The subsections refer to the payment levels (a), the size of plant (c), how payment levels can be adjusted (d) and costs of connection (e).

Subsection 3(b) covers the point at which the payment becomes due, and needs greater explanation.

3(b) Feed-In and Production Options

The new clause obliges energy suppliers to pay a tariff for renewable energy which is either produced or fed into a network. Given the clause provides the enabling legislation for three different types of renewable energy production it cannot be too specific. The wording in 3(b) therefore allows for flexibility. It may be that there is no public network; take for example the case of a biomass boiler providing process heat directly to a factory. Alternatively the generator may not be feeding into the public network, for example a PV panel on a warehouse roof may provide for the power needs of the unit itself, and export none onto the public network.

For this reason we have been careful to refer to the mechanism as a *production* tariff, rather than a *feed-in* tariff. However as the term feed-in tariff is so well known (due to its widespread use and commendable success elsewhere in Europe) people tend to refer to it as a “catch all” for describing a tariff-based mechanism as opposed to a tradable certificate mechanism.

Paragraph 5

This para lists what must be covered by the regulations, i.e. eligible sources (a), tariff levels (b), thresholds (c), interaction with the Renewables Obligation (d), terms and duration of the tariff arrangements (e), measurement of renewable energy production (f), regulation (g), the review process (h), and amendments to distribution and supply licences (i).

Subsection (J) covers “such other provisions as may be required for the efficient, cost-effective and transparent operation of the renewable energy tariff”. This requires further explanation.

The REA envisages that the tariffs would need to operate in a way which does not distort competition between energy suppliers. This is a common feature of many electricity feed-in tariff arrangements. In Germany there is a normalisation fund, which spreads the cost of meeting the feed-in tariff evenly across all suppliers in all

geographical regions. The end result is that electricity customers in the North of Germany, where most wind turbines are installed, do not pay more for electricity than those in the South. Unlike Germany, electricity supply companies in the UK are no longer regionally based, and there is no reason why one electricity supplier should have a greater proportion of onsite generators claim a tariff than another. Therefore there is no clear case for a central fund to ensure the burden falls evenly across suppliers.

However a central fund would certainly be required to pay the tariff in cases where there is no network, which will be the case for most heat projects. (Even though heat projects may not feed into a network, larger ones would still have their output metered. Heat is relatively easy to meter, indeed many commercial customers pay for woodchip based on a readings from the boiler heat meter. An added benefit is that this means of charging also provides an incentive to deliver quality fuel). Even small-scale technologies, such as domestic solar water heating panels, are now routinely manufactured with meters in Germany. Where metering is too expensive, REA suggests deeming output in lieu of actual metering. Para 5 subsection (f) allows for deeming.

There are various options for raising this central fund, including a levy on the relevant energy supplier, proceeds from the auctioning of EU ETS allowances or from CCL revenues. Clearly how the various tariffs would be paid for and at what level they would be set is a subject we would expect to be addressed in the consultation.

For any further information about a UK Renewable Energy Tariff please contact Leonie Greene at the REA lgreene@r-e-a.net