

Fulcrum's comments on Feed In Tariffs

Summary:

The use of feed in tariffs to generate customer income from the export of surplus electricity from renewable electricity generation technology in the UK has the potential to stimulate carbon emission reductions from micro-renewables such as PV's.

If feed in tariffs (FIT's) are set to create a 'close to commercial level' payback, this would encourage engagement from the general public in relation to the global issues of climate change. However the introduction of official government legislation in the 2008 Energy Act to promote this form of renewable incentivisation will require careful implementation to control the impact on fuel poverty and the overall effectiveness of the UK carbon emission reduction strategy.

These issues were amongst those discussed in the recent government consultation on the UK Renewable Energy Strategy and the industry is awaiting the full outcome of the consultation. The issues are summarised further in Discussion Points 1 to 7.

Discussion points

1. UK mechanisms for incentivising renewable energy are likely to be facilitated via an allowable increase in supply tariffs, regulated by OFGEM, rather than via the general taxation system.

Unlike income taxation, which generally relates the payment burden to the size of income, this scenario is likely to create an unfairly distributed levy on electricity users by increasing electricity prices across the board. For example, in relation to FIT's for micro-generation technology, those members of the population that are least able to afford the costly micro-renewable technology would bear the increased cost of purchasing electricity without having the benefit of the offset income from being able to generate their own electricity.

2. With limited funds available, the UK renewable energy strategy should prioritise the most cost efficient means of producing renewable electricity. It has been established that the most cost effective generation technologies in terms of carbon emission reduction are at macro rather than micro scale.

Therefore over prioritisation of feed-in tariff mechanisms for micro-generation could have the effect of diverting limited funds into one of the less effective carbon reduction technologies and thus have the potential to reduce the overall effectiveness of the overall UK carbon emission reduction strategy.

RECOMMENDATION

Government consultation on the feed-in tariff issue is ongoing as it is not a simple 'quick win' issue due to the potential pitfalls described.

Maximising the benefits will require optimisation of the following issues:

- The potential benefits of consumer engagement from a promotion of microgeneration technology and the increased efficiencies from distributed as opposed to centralised generation (potentially around 5-7%) to be weighed up against the associated reduced funding that would be available for more cost effective low and zero carbon technology.
- The need to structure the mechanism such that the poor are protected from electricity price rises resulting from a need to fund the incentivisation. This may require additional government funding.
- Consideration of the value of electricity feed-in tariff compared with purchase price, in order that occupant interest in reducing energy use is encouraged.



3. The existing Renewables Obligation (RO) is an example of deployment of allowable increases in electricity supply tariffs to generate income, which could be used to pass on OFGEM regulated incentives to users.

The value of ROCs is set in quarterly auctions to a total value equal to the set penalty paid by energy generators who do not meet their renewable energy generation obligations.

The Government implemented changes to the system in April, introducing the idea of ROC 'banding' in order to facilitate a step up in renewable energy production to meet the RO target of 20% renewable electricity generation by 2020. The present grid renewables component is only 4.6%, whereas it should be more like 8% if we are to be on target to meet the 20% RO requirement.

Further, recent sectoral work by RAB shows that the EU 2020 target requires greater than 35% renewable energy in the grid by 2020 in order to meet the commitment, which makes it even more important that a cost efficient approach is taken.

The proposed increased level of overall ROC income has been analysed by DBERR as being achievable without undue increase in fuel poverty. The various banding levels for each technology have then been set taking into account their respective investment cost efficiency and income streams, and the need for further incentivisation in each case.

The increased level of ROC income to two ROCs, for example, for offshore

wind has been assessed as adequate to promote this potentially more cost efficient technology. The level of banding for microgeneration technologies has similarly increased to 2 ROCs, currently equating to approximately 8p/kWhr

The increase in incentivisation to a 2 ROC income may not be enough to cause a significant increase in the uptake of relatively cost inefficient microgeneration technology. However if the micro generation ROC allowance is increased further to combat this then another technology would have an associated reduction, having the effect of diverting limited funds to a less efficient technology.

4. An alternative solution would be to allow utility companies to set their own charging mechanisms and feed-in tariff market. Competition would prevent the required funding from being raised by increase in supply tariff (see Scottish and Southern and Good Energy approaches to this).

5. The German introduction of feed-in tariffs stimulated what is now a thriving PV manufacturing industry. However this having now been established and with China also being a strong market leader, a stimulation of the UK PV market is likely to only facilitate job production and manufacturing outside Britain.



6. The level of incentivisation in Germany is such that the export value is far in excess of the import cost. This has resulted in a tendency for customers to export all their on-site generated electricity to maximise income and has not created the behavioural link to reduced electricity consumption in the home.

7. The 2008 Energy Act proposes that FIT tariffs will be applicable to renewable generation under 5MW and CHP using any fuel up to 50kW. The Government will consult on FITs alongside a consultation on the RO this summer. The Government wants to engage non-energy professionals in small scale generation and FITs are intended to be a simple mechanism to provide certainty of reward. They are intended to incentivise technologies deployable now and in the short term, and not intended primarily as an innovation tool.

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