

## **A Scottish marine feed-in tariff?**

Submission to the Scottish Government's consultation on the Renewable Obligation (Scotland)

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This response advocates the introduction of a marine feed-in tariff for Scotland instead of the proposed banding of the Renewables Obligation Scotland.

A feed-in tariff (FIT) is a financial support involving paying set, guaranteed, tariffs for renewable energy for a long term period (eg 15 years). FITs are used successfully in continental Europe to promote renewable energy, for instance in Germany. The tariffs are funded out of electricity consumers' bills, an approach it shares with the Renewables Obligation Scotland (ROS).

A FIT system has strong advantages over the ROS mechanism because it can precisely target financial support for particular technologies in a way that is both transparent and cost-effective. Although the Scottish Government already has powers to alter the type of support under the ROS, there would need to be legislation at Westminster to introduce a Scottish FIT. However, the Westminster Government is going to have a review about the possibility of a FIT for microgeneration, so there may be a legislative window in the relatively near future. Of course a (Scottish) marine FIT would extend the concept much wider than microgeneration.

The Scottish Government has suggested banding of the ROS to take effect in 2009. This involves discussing a preference from the Scottish Government for a system in which wave and tidal stream technologies receive 'multiple' renewable obligation certificates (ROCs). What this means in practice is that wave power could receive, say, 5 ROCs, and tidal stream machines could receive, say, 3 ROCs (because they are thought to be currently cheaper than wave power machines). This would be a lot better than BERR's (Westminster/Whitehall) proposals, but it would be inferior to a well organised FIT system.

A key problem with the ROS is that its effectiveness is compromised by both financial and political uncertainty. In financial terms, nobody knows how much the incentives will add up to since the value of a ROC can vary between £30 per MWh and £50 per MWh and the wholesale value of the electricity could vary from £20 per MWh to in excess of £60 per MWh. So the value of the ROS funding for wave power (assuming the earlier mentioned Scottish multiple ROC suggestion) could vary from anything between £170 per MWh, which would be too low, to over £310 per MWh. The upper figure would be more attractive, and also reflects current market conditions, but market conditions could bring down the prices quite dramatically. In addition there is political uncertainty about the ROS, because it could well be abolished or dramatically altered by future administrations. This would almost certainly undermine the Scottish marine renewables programme. In short the financial and political uncertainty not only deters investment but it also makes raising capital more expensive since there is a much higher risk element than would be the case with a FIT. In turn, this increases the cost of the projects themselves.

Financial and political uncertainty would be avoided using a FIT system. The tariffs would be clearly set out in legally binding long term contracts (power purchase agreements). These would still be valid whatever the changes in future market prices or legislation.

### **How would a marine FIT align with the Renewables Obligation?**

There is a ready-made mechanism for aligning a Scottish marine FIT with the RO. An institution called the Non-Fossil Purchasing Agency (NFPA) does this job in respect of the Non-Fossil Fuel Obligation (NFFO) contracts that were allocated for renewable energy schemes in the 1990s. The NFPA is responsible for issuing contracts to the individual renewable energy schemes and the NFPA also sells the value of the renewable energy through regular auctions. This money is used to pay the renewable generators.

In the case of a marine FIT, some extra income would be needed because the Scottish marine FIT is likely to be more generous than the support for (at least) wave power under the main RO. To cover this, it would be necessary to have a device like the one used in Ireland to fund the feed-in tariffs for renewables. This is the 'Public Service Obligation' (PSO) which is a precept added on to all energy consumption on a pence per KWh basis<sup>i</sup>. So, in the case of a Scottish marine FIT, all electricity consumers in Scotland would pay an extra precept proportional to their electricity consumption. This precept, which would vary from month to month, but which would be a very small percentage of the total electricity price, would cover the difference between the amount of money paid to the marine renewable generators and the amount of income from the NFPA's auctions of marine renewable electricity.

In summary, we believe that a Scottish marine FIT would be a far superior mechanism for achieving the Scottish Government's stated policy aim of promoting renewable energy in order to tackle climate change.

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<sup>i</sup> In fact the Irish PSO has recently been set at zero since the cost of the wind power in Ireland is now significantly less than the cost of buying electricity from fossil fuel power stations. However, even though some renewables such as onshore wind power are currently cheaper than fossil fuels, the capital intensive nature of renewables mean that even in the case of a relatively mature technology such as onshore wind power long term financial guarantees, or power purchase agreements, are necessary. Such long term guarantees are necessary to give sufficient confidence to investors and banks to persuade them to invest in, and lend money to, the projects.