Electricity Market Reform

A consultation response from Agri Energy

Introduction to Agri Energy

Agri Energy is one of the largest distributors of fresh cooking oil to the catering industry in the UK and is the largest collector of waste cooking oil in the country, collecting from over 60,000 catering establishments. It has ten depots, three bio-refineries capable of processing Used Cooking Oil (UCO) into renewable bioliquid or industrial oil, and employs 350 people. Agri Energy collects UCO from food manufacturers and the retail and catering sectors, preventing it from being dumped illegally, and turns it into bioliquid for renewable energy production.

UCO is recognised as a hugely versatile and efficient energy source that can be used across the electricity, heat, Combined Heat and Power (CHP) and transport sectors. UCO derived bioliquids generate far fewer carbon emissions than traditional fossil fuels and avoid a host of contentious issues traditionally associated with biofuels such as the "food vs. fuel" debate and the clearance of land for the production of fuel crops.

The benefits of UCO in renewable energy

Agri Energy produces bioliquids for use in heat and power and produces transport biodiesel from UCO and tallow. As UCO is a waste oil, its use as an energy source does not result in any of the harmful environmental effects that biofuels made from virgin crops can cause, such as Indirect Land Use Change, higher food prices, or the destruction of natural habitats in the Third World.

The use of UCO as a feedstock for biofuels bring additional benefits by recycling a waste product that may otherwise be poured down the drain, causing significant harm to the environment and human health. Dumped UCO has been a major problem in the UK. It costs utility companies £15m a year to unblock drains and sewers where cold oil has been deposited and then congealed and solidified. The UK produces around 300,000 tons per annum of waste oil and tallow; equal to 3 million megawatts of energy.

UCO is widely acknowledged to be one of the most sustainable feedstocks for biofuels, generating far fewer greenhouse gas emissions than fossil fuels. Figures from the UK's Renewable Fuels Agency show that when used as a transport fuel, UCO can deliver emissions savings of around 85%, although this can vary and at collection UCO can deliver greenhouse gas savings of around 90-95% compared to a fossil fuel. Research from the NNFCC published in February 2011 shows the desirability of using bioliquids in heat, CHP and transport and concludes that this fuel source could make a significant contribution to renewable het generation as well as a more limited contribution to electricity generation.

UCO and other waste oils as biofuels therefore bring significant advantages in terms of resource and cost efficiency, as well as a reduction in greenhouse gas emissions and fossil fuel use, that cannot be delivered by first generation biofuels and those produced from virgin crops.

Background to Electricity Market Reform

Despite the clear environmental and sustainability benefits offered by waste derived bioliquids, current DECC policy in many ways acts as a disincentive to their use. Bioliquids are currently excluded from grandfathered support under the Renewables Obligation, excluded from the forthcoming Renewable Heat Incentive (except in the case of small scale domestic boilers), and are not yet eligible for support through Feed-in-Tariffs. In the case of UCO in biodiesel, the 20p fuel duty differential that this fuel enjoys over regular petrol will come to an end in

April 2012, while the Department for Transport has delayed its consultation into the future of the Renewable Transport Fuels Obligation.

This lack of policy cohesion has in some ways been caused by the confusion between sustainable and non-sustainable bioliquids. While DECC and the DfT are rightly concerned about the indirect environmental impacts of first generation biofuels, currently policy often treats all bioliquids as if they were the same, when they clearly are not. This policy uncertainty has meant that sustainable bioliquid and biodiesel producers have often not received a clear direction from the Government. Research from the NNFCC suggests that many bioliquid technologies have been unable to become financially viable owing to the lack of a coherent policy framework as well as a lack of proper support through the RO or FITs.

In order to create certainty for investors and ensure that bioliquids derived from waste products are able to play a full role in adding to the UK's diverse energy mix, Agri recommends that the following reforms to the existing system of incentives are carried out:-

- Bioliquids produced from wastes and residues should receive grandfathered support through the Renewables Obligation via the creation of a "waste derived bioliquids" banding category.
- The benefits of waste derived bioliquids in producing renewable heat, particularly through CHP, should be recognised by abolishing the 0.5 ROC uplift in the RO for CHP and replacing it with the inclusion of waste derived bioliquids within the RHI. Any reward for waste bioliquids in the RHI should be granted in proportion to the available heat which is successfully captured.
- Stability should be created for biodiesel producers who use UCO to make transport fuel, either by extending the 20p duty differential beyond 2012, or implementing a system of double certificates for waste biodiesel under the RTFO alongside a minimum certificate price. This would be in line with the requirements of the Renewable Energy Directive and is already being doing in countries like France and Holland.

Another option the Government could explore in terms of creating stability for sustainable biodiesel producers would be to make biodiesel eligible for Feed-in-Tariffs and provide them with a 20p per litre incentive in addition to receiving certificates. This would have the benefit of removing the instability and market fluctuations inherent in the tradable certificate system set up through the RTFO, while also encouraging producers to manufacture more transport fuel from renewable and sustainable sources. While we recognise that the Government is committed to the RTFO in the short term as the best means of supporting the renewable transport fuels industry, in the medium to long term DECC should consider the benefits of bringing biodiesel under the same incentive system as renewable energy used to generate heat and power.

Response to Electricity Market Reform proposals

Agri believes that all the evidence suggests it is possible for the UK to meet its existing obligations under the Climate Change Act and international agreements for a drastic reduction in emissions and an increase in the generation of heat and power from renewable sources. However, we also agree with the conclusions of the recently published Evaluation of bioliquid feedstocks and heat, electricity and CHP technologies", which highlighted the fact that the full potential for bioliquids in generating renewable heat and power has not yet been realised owing to the lack of a coherent policy framework, as well as a lack of grandfathered support through the Renewables Obligation or the existing FIT system.

The ERM consultation is broad and wide ranging and a welcome contribution to the debate surrounding the challenges of Britain's future energy security. Over the next ten years we will need to drastically reduce the carbon output of our electricity generation while at the same time replacing the gap in our energy mix that will emerge from the phasing out of old or unserviceable coal and nuclear power stations. In terms of transport fuel, market fluctuations and the vulnerability of the hydrocarbon market to geopolitical events outside the

control of the UK Government means it would be sensible for the UK to invest in alternatives to fossil fuels through research into more varied feedstocks for biodiesel and by adopting a police framework which promotes and encourages the domestic production of low carbon alternative fuels.

Agri broadly agrees with the recommendations of the consultation, and the combination of carbon price increases, an expansion of Feed-in-Tariffs and emissions performance standards appears to be a sensible way forward.

In addition, we would make the following observations:-

- Support mechanisms based on the power price will take no consideration of fluctuations in biomass price. Therefore, the scheme proposed in the consultation will support technologies such as wind, solar and waste more effectively than schemes which are fuelled by biomass. Investors may be reluctant to invest in biomass fuelled technologies where there is a significant risk that fuels may become too expensive to use.
- When examining the cost of converting waste to energy, the cost of collection must be taken into account. The current slow level of Anaerobic Digestion power production is largely due to the fact that the total cost of starting up segregated food waste collections and processing this is too high when compared to the cost of dumping food waste in landfill and general waste collections.
- In the longer term, it may be worth DECC's time considering a combination of Renewables Obligation and Feed-in-Tariff support, with Feed-in-Tariffs replacing the banding system. This would have the advantage of keeping a market based support system that responds to the supply and demand of renewable energy as well as giving fixed payments to support technologies that require a greater level of support. In other words all technologies would receive 1 ROC per MW and some technologies would receive a Feed-in-Tariff per MW in addition. The best form of Feed-in-Tariff would be the 'Minimum Price Contract' or CfD as described in the document.