



Public consultation on Indirect Land Use Change and Biofuels A response to from Living Fuels Ltd

An introduction to Living Fuels

Living Fuels is a British subsidiary of the £54m AIM-listed renewable energy company Renewable Energy Generation. Living Fuels has researched and developed a process to purify Used Cooking Oil (UCO) into a fuel grade product known as LF100. LF100 is an 'End of Waste' fuel, in the sense that the UCO is relieved of unsuitable constituents and processed to recover a fuel which in all respects represents an improvement upon, and is environmentally preferable to, a range of natural or manufactured virgin fuels.

LF100 is a bioliquid designed for use in large scale power generation and Combined Heat and Power (CHP) applications, although its main use is in small to medium scale embedded generation and CHP plant. A regulatory position statement from the UK's Environment Agency in July 2010 exempted Living Fuels from requiring an environmental permit for LF100 under the requirements of the Waste Incineration Directive, recognising that the UCO used to refine the fuel has ceased to be a waste and that its use is no worse environmentally than burning a virgin fuel comparator.

This paper has been produced in response to the European Commission's consultation on Indirect Land Use Change on biofuels as a case study to demonstrate that not all biofuels are responsible for ILUC, and to highlight the need for any new regulatory measures to take into consideration the importance of sustainable bioliquids in helping EU member states meet their targets for renewable energy use and carbon emission reductions.

Waste derived bioliquids: a clean and sustainable energy source

Bioliquids have been controversial in recent years, with concern being raised in the UK Government's Gallagher Review that growing crops for fuel rather than food contributed to higher prices and the destruction of natural habitats. However, bioliquids produced from UCO have none of these concerns. As UCO is a recovered waste material which has fulfilled its primary purpose, bioliquids produced from waste oils do not cause Indirect Land Use Change and are acknowledged by the UK's Department for Energy and Climate Change (DECC) as one of the most sustainable forms of renewable energy, a voiding a host of contentious issues traditionally associated with biofuels and the "food vs. fuel" debate.

The use of UCO as a renewable energy source can help EU member states meet their challenging targets for carbon emission reductions and an increase in the amount of fuel generated from renewable sources. LF100 in particular generates far fewer greenhouse gas emissions than fossil fuels when used in heat, electricity and CHP applications. DECC's evidence base supports the environmental case for the use of UCO in small-to-medium scale CHP solutions as the most efficient energy use of this resource, as well as providing the highest greenhouse gas savings when compared to other bioliquid feedstocks.

The environmental benefits of UCO as a bioliquid feed stock

The UK's Chartered Institute of Environmental Health estimates that 170,000 tonnes of fats, oils and grease are emptied into the country's sewage system each year. Britain spends some £20m per year on clearing blocked drains as a result of UCO that is disposed of irresponsibly. This has a knock on effect of being one of the major causes of flooding in the UK, as blockages caused by the solidifying of UCO can prevent water from dispersing effectively. The illegal disposal of UCO not only clogs up drains and damages watercourses, but wastes unused energy that can be used as a feedstock for bioliquids and generate low carbon power for use in heat, electricity and CHP systems, delivering a cleaner alternative to fossil fuels. The total amount of UCO that is poured into the drainage system each year is equivalent to powering 170,000 homes, or a city the size of Sheffield.

UCO is therefore a far more environmentally sustainable feedstock for biofuels than virgin crops, and as such should be viewed separately as part of any discussion at European level on the need for policy action to remedy Indirect Land Use Change that may be caused as a result of biofuel production.

Consultation response

Q1. Do you consider the analytical work referred to in the consultation and/or other analytical work in this field provides a good basis for determining how significant Indirect Land Use Change resulting from the production of biofuels is?

We are disappointed that while the Commission cites the UK's Renewable Fuels Agency figures that biodiesel produced from UCO can deliver greenhouse gas savings of around 85%, and mention is made of the Gallagher Review's recommendation that biofuels policy be focused on incentivising biofuels made from waste and residues, there is no attempt within the Commission's evidence base to distinguish between waste derived biofuels such as those produced from UCO, and other, less sustainable bioliquids. The Commission does not appear to have given sufficient thought to the sustainability benefits of such fuels, nor does it give sufficient consideration to the fact that UCO can be used across a variety of different uses, not just as a transport fuel but in heat, power and CHP systems.

Living Fuels would stress that no policy decision should be made regarding ILUC and biofuels until proper consideration has been carried out to the sustainability and environmental benefits offered by bioliquids produced using UCO and other waste streams.

Q2. On the basis of the available evidence, do you think that EU action is needed to address Indirect Land Use Change?

As explained above, bioliquids produced from UCO not only deliver greater greenhouse gas savings than traditional fossil fuels but do not result in Indirect Land Use Change. Living Fuels would therefore emphasise that should any EU action be taken to address ILUC, the impact on the sustainable bioliquids industry must first be considered and no action taken which would unfairly penalise the industry for a phenomenon that they do not contribute towards.

Q3. If action is to be taken, and if it is to have the effect of encouraging greater use of some categories of biofuel and/or less of other categories of biofuel than would otherwise be the case, it would be necessary to identify these categories of biofuel on the basis of analytical work. As such, do you think it is possible to draw sufficiently reliable conclusions on whether ILUC of biofuels may vary according to feedstock type, geographical location or land management?

The most effective way of separating biofuels which cause ILUC from those which do not would be to create a category of 'waste derived' biofuels which would encompass bioliquids produced from wastes, residues or 'End of Waste' materials under the Waste Incineration Directive. Such biofuels would be required to meet the sustainability requirements for greenhouse gas savings set out in the Renewable Energy Directive and demonstrate that they do not impact on land with a high biodiversity value.

Q4. Based on your responses to the above questions, what course of action do you think should be appropriate?

Of the various options listed in the Commission's consultation paper, Living Fuels' view is that the best course of action would be to encourage a greater use of UCO and waste derived bioliquids at the expense of those produced from virgin crops, since this will allow member states' to take full advantage of the greenhouse gas saving and waste management benefits offered by sustainable bioliquids like LF100, while avoiding the "food vs. fuel" issues typically associated with biofuels produced from virgin crops. As explained in this response, bioliquids made from UCO enjoy the significant advantage that they do not contribute to ILUC, and this should be reflected in any future EU policy.

