



IEAGHG Information Paper; 2013-IP6: New Report on Implications of Biofuels

The Chatham House and independent policy think tank in the UK has just published a report entitled: The Trouble with Biofuels: Costs and Consequences of Expanding Biofuel Use in the United Kingdom.

A summary of the paper and the full report for those that are interested can be found at/downloaded at: <http://www.chathamhouse.org/publications/papers/view/190783>

Whilst the paper focuses on the UK there is a broader European wide element here; the EU biofuels Directive (2003/03/EC) The directive entered into force in May 2003, and stipulates that national measures must be taken by countries across the EU aiming at replacing 5.75% of all transport fossil fuels (petrol and diesel) with biofuels by 2010. Note: an earlier IP (2013-IP1) pointed out some of the unexpected consequences globally of this Directive. The issues identified in this paper/report will be equally applicable to other EU Members states as they implement the EU biofuels directive.

The main conclusions drawn are:

Biofuel use in the United Kingdom is set to increase significantly despite continued sustainability concerns

In the current financial year (2013/14) UK biofuel use will increase to 5 per cent of transport volumes, the highest level ever.

An earlier government-commissioned review of UK biofuel policy recommended that biofuel use not surpass this level unless major sustainability issues are addressed. However, EU targets for 2020 would see this exceeded several times over.

Current biofuel standards do not ensure biofuel use is sustainable

Agricultural biofuel use increases the level and volatility of food prices, with detrimental impacts on the food security of low-income food-importing countries.

Agricultural biofuel use also indirectly drives expansion of agriculture into areas of high carbon stock such as rainforest or peatland, resulting in indirect land-use change, the emissions from which may outweigh any greenhouse gas savings the biofuels are able to offer.

Biodiesel from waste products such as used cooking oil or tallow offer the most favourable sustainability characteristics; however, the risk of indirect emissions increases at higher levels of use and may already be material.

Neither indirect land-use change nor food security is addressed in UK sustainability criteria. In the absence of such safeguards, increasing biofuel consumption could have significant environmental and social consequences outside the United Kingdom. It is unclear whether such safeguards will be agreed at the EU level.

Biofuels are not a cost-effective means to reduce emissions from road transport

The current generation of biofuels provides an expensive means of reducing emissions from road transport. Carbon abatement costs, excluding emissions from indirect land-use change, are broadly in the range of \$165–\$1,100 per tonne of carbon dioxide equivalent (CO₂e). This compares unfavourably with an appraisal price of around \$87 per tonne.



Accounting for emissions from indirect land-use change increases abatement costs for agricultural biofuels to between \$330 and \$8,500 per tonne of CO₂e depending on the feedstock used. Biodiesel from vegetable oils is found to be worse for the climate than fossil diesel.

The 5 per cent biofuel target is likely to cost UK motorists in the region of \$700 million (£460 million) in the current financial year (2013/14).

If the UK is to meet its EU obligations, the annual cost to UK motorists is likely to rise to around \$2 billion (£1.3 billion) a year by 2020.

In the news

Biofuels: 'Irrational' and 'Worse than Fossil Fuels'
BBC News, 15 April 2013

Biofuels to Cost U.K. Motorists \$707 Million, Chatham House Says
Bloomberg, 15 April 2013

Analysts Fear Biofuel Increase in EU will Harm Environment
City AM, 15 April 2013

John Gale

April 2013