



REA/Chatham House/Imperial College London – Launch of the Peer Review on Biofuels Scenario modeling – 22 October 2009

Q & A

Q. The Gallagher Review published in July 2008, recommended a slow down in biofuels inclusion because of the uncertainty about the effects of crops being used for biofuels. What has changed since then?

A. Nothing has materially changed since last summer, but this is the first time such a review has been conducted for the UK and EU. The work by the REA and Imperial College is a contribution to getting specific facts on biofuels feedstock potential in the EU and UK into the debate. The Gallagher Review expressed concern about the possible indirect land use impacts and this work goes some way to demonstrating that the effects could be less than might have been thought, particularly for cereals. The starting point for the model was the assumption that domestic food requirements would be satisfied and that EU cereal exports would continue at current levels through to 2020.

Q. Won't this big increase in use of biofuels result in indirect land use change in this country or elsewhere in the world?

A. The EU has sufficient feedstock to deliver up to 80% of its RED obligation through domestic production without increasing the overall land area used for arable crops in the EU 27. This should be achieved through a combination of increases in yield and some use of currently unused agricultural land.

Q. Won't this increase in biofuels result in a loss of habitat for wildlife, such as birds, in the UK?

A. The conservation of our wildlife is important in the UK. Production of feedstocks for biofuels should not impact on traditional habitats.

Q. How can you be sure that increased biofuels production will not affect exports from Europe of crops such as wheat?

A. It is important that the amount of EU grain used for food in the EU and abroad is maintained. This is why the REA model assumes that EU grain exports will

continue as they do at present, and the work shows that this can be done while still delivering 80% of the biofuels required. Changes in international patterns will be a function of international commodity prices which will fluctuate as they have always done.

Q. One way or another don't biofuels result in deforestation?

A. The control of deforestation must be a global responsibility and has to be dealt with irrespective of the production of biofuels. We agree with the Gallagher report which said "Stronger policies are needed to slow rates of deforestation particularly in South America, Africa and parts of South-East Asia."

Q. What checks will there be to ensure that the biofuels produced are sustainable and do not cause ILUC?

A. The UK has had carbon and sustainability criteria as part of the RTFO since 2008. These criteria will continue under the RED from the end of 2010. However, they will be mandatory and will be supplemented by rules on Indirect Land Use Change. The UK and EU sustainability schemes are global firsts for biofuels.

Q. Have we really got enough land to produce enough crops for food and fuel?

A. The REA model looks at the availability of biofuel feedstocks for the EU and the UK. In the EU 27 there are 7.18 million hectares of mainly rotational set-aside land available for productive use. In the UK the figure is just over 400,000 hectares. This is enough to produce up to 80% of our needs.

Q. You say that this increased production will not affect the food supply chain, but how can that be the case?

A. There is huge potential worldwide for additional land to be used to produce crops, and for growers to become more efficient. Sadly, even when Europe had surpluses of crops, people still went hungry. Worldwide, daily food production is over 4lb per person, but over half the food produced is wasted. The biggest problems with food supply are not shortage of land but political instability and lack of investment. Some experts believe that the additional markets provided by biofuels could help to stimulate crop production in many countries, and bring with it investment in infrastructure boosting the economies of these countries. These crops are still suitable for food and can easily be diverted into food production in times of crisis

Q. Where will all the additional crops that will be required come from?

A. As the peer review shows, up to 80% will come from EU and UK production.

Q. Will this lead to the introduction of GM crops in order to increase yields?

A. No.

Q. Does this mean that there will be more bioethanol rather than biodiesel?

A. The peer review demonstrates that there will be more feedstock available in the EU and UK for bioethanol production than for biodiesel production. However, the extent to which these fuels will be taken up by the market will be a matter for Government.

Q. I thought that the future of road transport was electric cars. Shouldn't we be concentrating on developing electric vehicles and ensuring that electricity production comes from renewable sources?

A. The problem of climate change and the contribution to carbon emissions from the transport sector is so great that all solutions will be needed in the short to medium term. The development of electric vehicles powered by renewable electricity will require major changes which will not be accomplished in the short term and certainly not by 2020.

Q. How big a contribution will biogas make to the 2020 targets?

A. It is difficult to put a precise figure on the contribution from biogas. There will be competing uses for biogas from the power and heat sectors.

Q. What about advanced or second generation biofuels? Doesn't it make more sense to wait for that technology to be available?

A. Advanced biofuels are being developed now, but investment will rely on the development of a market. As the peer review points out very few advanced biofuels will be available on a commercial scale to make a significant contribution to the 2020 target. The market should be developed with first generation sustainable biofuels, allowing investment to be made in advanced biofuels with the confidence that there will be a market.

Q. When will advanced biofuels made from substances such as wood, straw or municipal waste be available, and what contribution will they make to the 2020 targets?

A. The contribution that will be made by these advanced biofuels will be limited by 2020. However, the existence of a biofuels market will give investors confidence to put money into further research and development.

Q. Why is it so important that the government reaches these targets? Isn't this just another piece of legislation imposed on us from Europe?

A. The Renewable Energy Directive is part of the EU's effort to reduce the effects of climate change. It is now widely accepted that climate change is one of the greatest challenges facing the world. The UK is at the forefront of efforts to reach a positive conclusion at the Copenhagen Summit in December. This is not just an issue for the UK and the EU, but for the global community.

Q. If we build all the biofuels plants we require, how many new jobs will be created?

A. Given a clear and consistent government policy, with no further changes, and the right level of investment – which will undoubtedly follow – the development of the biofuels industry in the UK could lead to a significant numbers of green jobs being created.

Q. Can we really meet this target if the RTFO continues at the current planned levels?

A. The slow down in the targets as a result of the Gallagher review has deterred investors in the UK. However, a clear and consistent policy from next year would do much to restore confidence. This should include government targets for inclusion of biofuels that increase steadily between 2010 and 2020. This will allow investment in UK agriculture and biofuel production, and ensure that we do not to rely heavily on imports which will help to improve fuel security.

Q. In an ideal world what do you want to the Government to do to help to meet this target?

A. The Government should set out a clear and consistent policy to enable investment in biofuels to be made with confidence in the UK. A linear trajectory between 2010 and 2020, whereby biofuel inclusion targets increase steadily, would do much to restore investor confidence. The Government should also give

additional support to the commercialisation of advanced biofuels and to R & D aimed at increasing crop yields.