Carbon benefits of Biofuels - A Green*ergy* perspective

There has been much discussion about the extent to which various biofuels provide genuine reductions in greenhouse gas emissions. This paper summarises Green*ergy*'s views on this subject and is one of a series of Green*ergy* Perspectives on a variety of issues around biofuels.

Summary

Green*ergy* is a significant producer and supplier of petroleum and biofuels into the UK transport fuels market, supplying over 15% of the UK's overall petrol and diesel market and approximately one third of the biofuels market. Green*ergy* has extensive worldwide sourcing experience, with manufacturing operations in the UK and a blending facility in Rotterdam from which we supply customers across Europe. Green*ergy* is also a supplier of high percentage biofuel blends, the fastest growth area within the biofuels market, in particular B50 for commercial usage and E95 for buses.

In this Perspective, Green*ergy* reviews the range of carbon benefits from current biofuels production and looks at the reasons for the differences in the published figures.

Many biofuels have much lower carbon emissions that their fossil alternatives but the range of emissions savings varies widely and some biofuels have little carbon benefit. The science of determining the carbon benefits of biofuels is still developing and one of the reasons for the range quoted in different sections of the media is attributable to different ways of counting the carbon. When counting the carbon benefits of biofuels, emissions from changes in land use need to be considered. In some cases the emissions from land use changes such as peat burning or deforestation may outweigh the benefits of the carbon reduction from the use of the biofuel.

In general the carbon benefits of biofuels produced from efficient crop production in tropical countries with high yields and low fertiliser inputs are higher than those from crops produced in cooler regions with higher levels of inputs.

The carbon benefits of sustainably produced biofuels should be the basis on which government promotes their use. This kind of incentivisation will promote incremental improvements in existing biofuel production processes by rewarding those biofuels with higher carbon benefits over those with lower carbon benefits. This distinction needs to be based on sound science.