

# Meeting future demand for oil - considering alternatives to biofuels - A Greenergy perspective



## Summary

---

Greenergy 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. The company has extensive worldwide sourcing experience, with manufacturing operations in the UK and a blending facility in Rotterdam from which we supply customers across Europe.

In this Perspective, Greenergy presents the following:

- The overall aim of biofuels is to reduce whole of life CO<sub>2</sub> emissions compared to their petroleum alternative.
- In calculating their carbon benefit, biofuels are usually compared with petrol or diesel made from conventional sources of crude oil.
- However, world demand for crude oil is set to increase further over the next twenty years and those crude oil reserves which are easiest to find, extract and refine are already heavily explored.
- As resources are further depleted, new crude oil reserves are increasingly heavy with higher sulphur content and are therefore more energy intensive to extract from the earth and then refine.
- Much of the investment in new crude oil reserves is in oil sands. These generate high levels of CO<sub>2</sub> emissions due to the energy intensive production processes required to extract the oil. Petrol and diesel derived from oil sands is around three times more carbon intensive than petrol and diesel derived from crude oil.
- In Canada, one of the world's largest producers of oil sands, there has been a steady increase in CO<sub>2</sub> emissions over the last ten years. The single largest contributor to this growth is oil sands.
- Rather than comparing biofuel with petrol or diesel derived from conventional oil reserves, it may be more accurate instead to compare biofuels against marginal world oil production, being the new sources of crude oil such as oil sands that are now being developed and which biofuels would displace at the margin.