

D1 Oils plc

Submission of Written Evidence to the Treasury Select Committee

Climate change and the Stern Review: the implications for HM Treasury policy on tax and the environment

Summary

1. The Stern Review urges the UK to take strong action now to avoid the worst impacts of climate change. The Government has taken steps to encourage both consumers and industry to help in this task, but it is clear that policy and fiscal incentives will be necessary to accelerate development. Within the transport sector, the Renewable Transport Fuels Obligation (RTFO) is the key mechanism by which the UK Government intends to deliver its greenhouse gas emissions (GHG) targets.
2. D1 Oils plc (D1) is building a business in the agronomy, refining and trading of inedible vegetable oils to produce biodiesel. D1's primary feedstock is *Jatropha curcas*, an oilseed-bearing tree that grows in tropical and semi-tropical climates. D1 is the first and largest global operation involved in the research, cultivation and production of jatropha for sustainable biodiesel. D1 also designs, builds, owns, operates and markets its own proprietary biodiesel refinery technology. D1 currently operates 32,000 tonnes of biodiesel refining capacity in Middlesbrough
3. D1 supports the Government's announcement of the RTFO. We recognise that this innovative policy method, which builds on the government's earlier reduction of the duty paid on biofuels, will be fundamental to supporting the development of an efficient UK biofuels market. However, we would recommend a number of adjustments to the implementation of the RTFO to improve the potential for growth, competitiveness and sustainability of the UK biofuels industry:
 - To revise its biofuel blend targets upwards from 5% in 2010 to 10% in 2015 and 20% in 2020
 - To amend the current plan to reduce the levels of tax derogation that are the lever to encourage adoption of the RTFO targets
 - To ensure that the design of the scheme does not discourage the use of higher biofuel blends by large users such as road hauliers, bus companies and local authorities
 - To ensure that the carbon saving features of each biofuel are recognised commercially within the design detail of the RTFO

We would also recommend that the Government take the following actions:

- To support moves at EU level to ensure that sustainable biofuel feedstocks imported to member states, including jatropha, are exempt from import duty
- To engage with the auto industry to ensure progress is made to allow vehicle engine warranties to cover use of biofuels blends higher than 5%

Introduction to D1 Oils

1. D1 is a UK-based global producer of biodiesel from renewable crops. We are building a global supply chain that is sustainable and delivers value from “earth to engine” via agronomy, refining and trading of biodiesel and biodiesel feedstocks. Our core belief is that to develop an efficient long-term biodiesel business, we should not rely solely on traditional edible vegetable oils as raw materials for making biodiesel. Edible oils are an important food source and require good quality arable land, which is increasingly short supply particularly in developing countries. Rather we should develop new crops that can supply biodiesel feedstocks from plants, shrubs and trees producing inedible vegetable oils that will not compete with food crops for available arable land. These oil crops typically grow on a wider range of soil types and therefore need not displace food crops. Our long-term strategy is to import sustainable inedible oil feedstocks into Europe to use for biodiesel production. We are planting our preferred energy crop, *Jatropha curcas*, in a range of countries in the developing world.
2. In addition, we have developed our own biodiesel refinery technology in the UK. We commissioned four refineries in Middlesbrough in 2006. We plan to install further biodiesel capacity during 2007 at Middlesbrough and at our new site at Bromborough on Merseyside. All development and commissioning work was and continues to be UK-based.
3. Production of biodiesel commenced last year and this has all been sold into the UK transport market.

Why *Jatropha curcas*?

4. Traditional feedstocks for European production of biodiesel are rapeseed and soya oil, which are also used extensively in the food industries. Prices of these two core feedstocks have increased substantially over the last two years and are driven by events far removed from biodiesel or energy use. D1 embarked on a search for alternative feedstocks so as to reduce the risk of food market demand adversely affecting biofuels prices in this way.
5. D1 identified *Jatropha curcas* because it produces seeds with a high oil content. Under optimum conditions jatropha seeds can yield up to 40% oil content. Crude jatropha oil (CJO) is inedible and its price is not distorted by competing food uses. *Jatropha* also has the ability to tolerate a wide range of climates and soil conditions, and has a productive lifespan of over 30 years. The extracted CJO can be refined into high quality biodiesel. D1 Oils is committed to enabling developing countries to benefit from growing energy crops such as *jatropha* for the production of biodiesel. Developing countries have millions of hectares of land, currently unused, marginal, waste or degraded, that could be suitable for growing *jatropha*. We believe that *Jatropha curcas* has the potential to become one of the world's key energy crops.

RTFO Targets

6. The RTFO obligates fuel sellers to include a percentage of renewable fuels within their total fuel sales by volume. Fuel sellers will buy renewables (biodiesel for blending into diesel and bioethanol into petrol) from producers like D1. The percentage of renewable fuels required under the RTFO increases over time to reach 5% by 2010.
7. D1 believes that the UK's target of a 5% blend by volume from 2010 is not sufficiently ambitious. The UK target is less than the target of 5.75% by energy content by 2010 set by the European Commission. When calculated on the basis of energy content, the present UK target percentage amounts to only 3.5%.

8. The Government has not yet published its long term targets for beyond 2010. We believe that higher long-term targets for biofuel blends are essential for market development and we would urge Government to set more challenging goals for the uptake of biofuels. The European Commission announced on 10 January 2007 its recommendation that biofuels constitute a minimum of 10% by energy content of all transport fuels consumed in Europe by 2020. D1 would suggest that the Government consider altering its biofuels targets from a requirement of percentage by volume to a percentage by energy requirement and revising its targets upwards into line with Commission targets. Short of this, we would recommend that the Government raise its biofuels targets more aggressively to at least 10% by volume by 2015 and set a more ambitious long-term target of 20% by 2020.

RTFO Scheme Design

9. The principal mechanism to ensure fuel sellers comply with their obligation is a combination of excise duty relief and penalty payments, designed to reward biodiesel sellers with up to 35 pence per litre (ppl) of biodiesel or ethanol sold to fuel suppliers. This incentive is the encouragement to the renewable fuels industry to produce an alternative to mineral fuels and sits at the heart of the RTFO. It is the key element that will encourage or discourage investment in renewable fuels. However, it is already been announced that the level of the incentive will reduce to 30ppl within two years.
10. The fundamental economic issue influencing the development of the UK biofuels market is the differential between feedstock prices and biofuel sale prices. In the case of biodiesel, at current price levels for mineral diesel and edible vegetable oils biodiesel production and sales margins are under pressure. To encourage and sustain long-term investment in the UK biodiesel industry and minimise market risk, D1 believes that it is essential that the incentives incorporated into the RTFO are maintained at the highest possible level for a longer period than is currently envisaged.
11. D1 believes that it is essential that the biofuels industry receives further clarification on duty incentives. HM Treasury has announced that the excise duty incentive for biodiesel will be maintained at 20ppl in 2008/09, the first year of the RTFO, with a penalty/buy-out price of 15p in 2008/09, providing a combined incentive of 35ppl. It has been announced that this will fall to 30ppl in 2010/11. A firm commitment from the Government guaranteeing the 35p price for a longer period would better enable the industry to continue to plan, develop and expand and would encourage market stability. D1 would therefore encourage HM Treasury to clarify further how the excise duty incentive and buy-out price package will be split for the year 2010/11. We believe that the UK is in danger of not meeting its GHG emission reduction targets for transport because the incentive may not be sufficient to incentivise biodiesel producers.
12. D1 is also concerned that the design of the RTFO may stifle development of the market for biodiesel blends above 5%. D1 is one of the few companies currently making biodiesel and selling into the UK road transport market and we believe there is a significant appetite for high blend ratios, possibly up to 100%, from UK companies and public bodies running large fleets of lorries, buses and other vehicles. D1 is keen to develop this market and is actively working with road haulage companies in particular to identify the most efficient biodiesel blends. If encouraged, this sector could expand the total UK biofuels market substantially. However, as the RTFO is currently configured, biofuels producers who directly supply fuel to this market rather than working through oil companies and fuel distributors will be forced to bear a greater risk over the future price of buy back certificates. As a result there is concern that the RTFO actually could discourage the direct supply of higher biofuels blends.

13. We find it odd that a scheme aimed at reducing GHG should have this negative impact. A dual policy of promoting both low and high-blend biofuels has been pursued successfully in other parts of Europe, specifically in Germany and France, and we would welcome similar high blend initiatives in the UK. We believe that this design flaw should be remedied during the system design stage, as it has the potential to expand the total UK market for biodiesel beyond the 5% level if encouraged.

RTFO and Imported Feedstocks

14. Imported feedstocks will play a key role in the UK meeting its targets under RTFO. Currently UK agriculture can produce a significant proportion of the UK's demand for biodiesel and bioethanol, however it will be impossible to meet all demand from domestic agriculture. A mix of home production and imports will be needed.
15. The blends of renewable fuels required by the RTFO should create a demand for biodiesel of around for 1m tonnes per annum. Currently the UK has the capacity to produce around 720,000 tonnes of rapeseed biodiesel from the 570,000 hectares currently growing rapeseed in the UK. . However, this does not take into account the food industry's demand for rapeseed oil as a food product. Some 40% of rapeseed oil currently goes to food uses. There is potential to increase production using set-aside land to grow rapeseed oil. However, it is widely recognized that even with the use of set-aside land, UK agriculture will not be capable of meeting fully the 5% biodiesel target from domestic feedstock production. Furthermore, there are concerns around the expansion of rapeseed cultivation, particularly its sustainability as a monocrop, its need for frequent rotation and intensive use of fossil fuel fertilizers. Yields for set-aside lands are also questionable.
16. Imports of biodiesel and biodiesel feedstock will be a major part of the UK biofuels market under the RTFO regime. D1 believes that significant imports will be required to fulfill the 5% target and that blends of up to 20% can only be achieved under the RTFO using imports of sustainable fuels.

Carbon and Sustainability

17. The initial design of the RTFO considers all biodiesels to be equal. The reality is that producing biodiesel from alternative feedstocks from different countries results in different levels of carbon and GHG savings and different environmental impacts. This issue is particularly important given concerns over the sustainability of producing biodiesel from palm oil, particularly palm oil produced from South East Asian plantations located on land cleared of rainforest. D1 does not support the production of green fuels at the expense of rain forest that has its own intrinsic value not only as a source of biodiversity but also as an essential carbon sink and climate regulator. D1 is a member of the Roundtable on Sustainable Palm Oil (RSPO).
18. We believe that it is important that producers of biofuels which produce the greatest net environmental benefits should be rewarded most. We believe that net environmental benefits should be reflected in the commercial benefits under the RTFO, for example in the value accorded to certificates for fuel supplied. D1 is working closely with other companies and industry bodies to develop relevant criteria to evaluate carbon savings and sustainability of different feedstocks and is keen to introduce new, sustainable feedstocks such as jatropha for testing and evaluation.

Import Duties on Biofuel Feedstocks

19. D1 Oils believes that jatropha offers a viable and sustainable raw material for biodiesel and we expect imports of CJO for refining to begin in volume from 2008. Jatropha is an inedible feedstock that can be produced from a sustainable crop and as such matches the criteria for a number of the Government's environmental policies. We believe that under current EU customs codes, imports of crude jatropha oil are likely to be charged a duty rate of 2.7%. However, palm oil imported into the EU for refining into biodiesel is currently exempt from duty. D1 intends to apply for a similar exemption for jatropha and other sustainable inedible vegetable oils and would look for Government support in applying for this exemption. By facilitating duty free status, jatropha will be able to compete with other feedstocks and benefit considerably the agricultural sectors of developing countries. The import of high volumes of low-cost jatropha oil could contribute significantly towards meeting the UK's RTFO targets.
20. Furthermore, D1 urges the Government to consider the anomalous position whereby soya oil imported for refining into biodiesel is subject to duty while palm oil is exempt. At the current price levels for mineral diesel and vegetable oils, every additional feedstock cost further weakens the likelihood of the RTFO delivering the Governments targets. D1 believes the EU should instate a level playing field for biodiesel feedstock imports that accords soya and inedible oils, including jatropha, the same exempt status as palm oil.

Need for Improved Vehicle Warranties for Biofuels

21. In order for the RTFO targets to be achieved, it follows that regular engines must be able to run effectively on biofuels and that vehicle and engine manufacturers cover such use in their warranties. Many diesel vehicle and engine manufacturers and distributors continue to either completely discourage the use of biodiesel in their engines or to limit the warranty cover to only 5% blends. Vehicle manufacturers in the USA have already raised the level of biodiesel covered by their warranties to up to 20%. Many European manufacturers also warranty vehicles up to this level in the US market, but identical models of vehicle are only warrantied to 5% in the EU market.
22. D1 would therefore urge the Government to encourage vehicle and engine manufacturers to be more proactive in developing and modifying engines and parts to enable regular engines to use greater proportions of renewable fuel.

Conclusion

23. Currently biodiesel and bioethanol production is a fledging industry in the UK. The success of the RTFO and the extent to which the UK government succeeds in delivering its GHG reduction targets for transport depends to a very great extent on whether the incentives contained within the RTFO are sufficient to persuade companies to invest in new biodiesel and bioethanol capacity.
24. The UK biofuels industry has made significant strides in attracting development and building capacity. However, we believe that more ambitious targets for biofuels blends beyond 2010, coupled with a commitment to retain tax derogation levels at the higher level for longer, would be a significant additional encouragement to the industry. We would also like to ensure that important market sectors, particularly the higher blend market among road haulage companies, are not discouraged by the mechanism, and that sustainable feedstocks are given due commercial weight by the scheme.
25. We would also like to see the Government act at EU level to ensure that sustainable feedstocks are exempt from import duty. Furthermore, we would welcome greater

encouragement by the Government of vehicle and engine manufacturers to enable the same blend levels under warranties in the EU that are now common in markets such as the US.

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