

PIU Energy Review Cabinet Office

A submission from the British Association for Biofuels and Oils (BABFO)

BABFO exists to promote the use of the renewable, environmentally friendly road transport fuels, biodiesel and bioethanol. It has a membership drawn from all sectors of the nascent biofuels industry - major international and national companies (Cargill, ICI, ABF/British Sugar), used cooking oil collectors and refiners, farmers, academics and interested private companies and individuals.

Road transport is a leading and growing user of energy from finite fossil fuel. It is also a major and growing source of air pollution. It accounts for 34% of UK energy uptake and 23% of greenhouse gas emissions.

The Government wish to encourage diverse and environmentally friendly sources of energy. Renewables will, by general consent, play an increasing part in this policy. BABFO believes that biodiesel and bioethanol (hitherto neglected in the UK) can make a major contribution to this laudable aim in the road transport sector. Biodiesel is energy positive - for each unit of energy into the production process on a life cycle basis, atleast 2 units are produced and 4 units if the co-product straw is used for power generation (as in the Ely straw burning power station). Biodiesel thus has the capacity to atleast double transport fuel energy. No other fuel in prospect has this to offer. (Ref. Levington Report herewith). Bioethanol is also energy positive but to a lesser extent. Research into more efficient crops is, however, likely to improve the energy balance of bioethanol considerably.

The IPPR submission to the PIU suggests a revised energy policy objective : *" to ensure Britain has an energy system that can deliver energy services at a competitive cost using supplies that are secure, diverse and environmentally sustainable"*. BABFO agrees that the status quo is environmentally unsustainable and considers that for road transport energy, the biofuels meet these criteria almost exactly.

BABFO believes that liquid biofuels from UK farmland could make a major environmentally sustainable contribution to UK energy supplies. Such a development would also reduce greenhouse gas emissions, improve local air quality and provide the beleaguered UK rural economy with a much appreciated new market. Biodiesel and bioethanol are tried and tested. Markets for these fuels currently flourish in other major EU countries with supportive tax regimes (Germany, France, Italy, Spain) Given the right fiscal framework, markets for these fuels would be quickly established in the UK.

The Government has stated that it wishes the UK to be a world leader in biofuels for road transport. BABFO looks to the Government for the necessary support to achieve this. BABFO believes that a viable biodiesel industry could rapidly be established using mainstream agricultural resources re-enforced by re-cycled used cooking oils.

Biodiesel is potentially an immediate contributor to increasing energy in the road transport sector. BABFO believes that within 10 years, British agriculture could be producing 10% of the nation's diesel requirements (ie 1.5mtpa) from some 10% of the farmland. The EU is proposing a draft directive requiring 2% of road transport fuel to be from biosources by 2005 and 6% by 2010. The 2005 figure would involve 300.000tpa of biodiesel and could be achieved if the correct signals were given now by Government.

There is thus a major and immediate case now for moving spare farmland to those crops which can, from proven technology, quickly and easily produce energy in the form of liquid road transport fuel. Foot & Mouth has regrettably increased substantially the amount of under used land in England.

The environmental and economic credentials of biodiesel were recently acknowledged in part by the announcement of a 20p rebate on biodiesel from Budget 2002. However this rebate recognizes only partially the green house gas benefits from biodiesel and ignores tailpipe emission benefits, safety, biodegradability, renewability and supply diversity benefits of biodiesel. The 20p rebate will not be sufficient to bring forward worthwhile amounts of the fuel at the present level of crude oil prices.

There is an odd contrast between the 20p rebate for biodiesel and the near 40p rebate given to the gas fuels CNG and LPG. These are both finite fossil fuels which do nothing to create or re-cycle energy. When they are burnt, they are gone leaving a residue of greenhouse gas and depleted world

supplies Biodiesel by contrast is sustainable, renewable, creates energy (through the utilization each year of the sun's energy) and re-cycles carbon thus aiding the concept of a Low Carbon (dioxide) economy.

The DTI appear to consider biodiesel as being a possible medium term contributor to energy supplies. We believe that such an assessment grossly underestimates the potential. The fuel is proven, widely used in Europe and elsewhere, warranties have been given by leading European engine manufacturers and capital and land is available now to grow the crops and establish esterification plants in the UK. By contrast, the DTI forecast that 90% of gas requirements will have to be imported by 2020.

If the EU draft proposals (which have been framed very much with energy conservation in mind) become mandatory, 300,000tpa of biodiesel would be required in the UK by 2005. This is certainly possible and easily within the Government's power to achieve. All that is required is an early Treasury statement that the rate of duty on biodiesel will be at a level of 35-40p below ULSD from Budget 2002. (ie a similar rate to that already given to the gas fuels). BABFO considers this level of rebate to be justified on environmental grounds alone. However, the case for biofuels is made even more compelling if energy considerations are included in the assessment. As set out above, each unit of energy put into producing the fuel (on a "cradle to grave basis") is doubled (or quadrupled if the by-products are efficiently used for energy production).

There is one further irrefutable logical reason for such a duty rebate. It is this: The heavy rate of fuel duty was introduced to curb the use of finite, polluting fossil fuel ie to limit the extent to which this source of energy is consumed. Biodiesel is to a large extent, renewable, re-cycles carbon and is far less polluting than fossil diesel.

It would therefore, be logical and entirely consistent with stated policy aims for the Government to seriously promote this fuel - introducing a fiscal framework which is more than mere tokenism and which will lead to the development of a commercially viable new rural industry.