The International Transport Forum and OECD Joint Transport Research Centre
Round Table on

Biofuels – Linking Support to Performance

Paris, 12 June 2007

Following a meeting of 40 leading transport, energy and environmental experts in Paris on the merits of biofuels for improving the sustainability of transport fuels, Jack Short, Secretary General of the International Transport Forum, expressed concern that few biofuels seem to offer much in the way of climate protection or oil security and are a very expensive way of addressing these concerns.

There is a high degree of uncertainty over the net greenhouse gas emissions from producing and consuming biofuels in place of gasoline or diesel. Some may even produce higher emissions than petroleum. Of currently produced fuels ethanol from sugar cane produced in Brazil is by far the best, partly because sugar is easier to turn into alcohol than starch (from wheat or corn) and partly because waste cane pulp is used to fuel Brazil’s distilleries.

Distillation takes a lot of energy and in many other countries ethanol is produced using natural gas or coal to heat the stills – emitting large quantities of CO₂.

Biodiesel performs no better. Second generation biofuels promise improvement, but there are major uncertainties. Pilot plants are now coming on stream to prove the technologies at demonstration scale but large scale production appears to depend on large scale subsidies and would create similar pressures on land use and the natural environment as conventional biofuel production.

Impacts on land fertility, soil erosion, water abstraction, water pollution and biodiversity can be severe unless the very best farming practices are employed. Only relatively small amounts of biofuels are being produced today and vast amounts of land – needed for food, timber and wildlife – would be required to make a significant contribution to oil substitution and security.

The cost of this production is high. In 2007, four billion dollars in the US, fully one quarter of the total farm subsidy budget, and expected to grow to 16 billion dollars under current biofuels targets. Support for biofuels already totals around 15 billion dollars a year in the OECD as a whole. Much cheaper ways of saving fuel and CO₂ emissions are available in the transport sector and elsewhere in the economy.
Subsidies to biofuels also have the negative side-effect of making transport fuels cheaper, which reduces incentives for energy efficiency and tends to increase kilometers driven.

Many countries have biofuels production targets. California has legislated for a more effective, less costly approach with a fuel carbon content target covering oil, gas, hydrogen, fuel cells etc, as well as biofuels. The European Union is now considering introducing a similar system, which might take over from simple production targets.

While production targets remain in place, it makes sense to try and rank the performance of biofuels and prefer the better kinds. Several governments are working on systems of certification to achieve this, starting with a voluntary registration system in the UK from April 2008.

Jack Short supported moves to get certification systems in place rapidly, at least on a voluntary basis, as simple targets for increasing biofuel production without certification are likely to boost production of the poorest performing, but cheapest ways of growing and processing biofuels. A number of OECD Governments are working to coordinate certification systems to avoid the creation of unnecessary new barriers to trade although existing import tariffs already limit the development of an international market in biofuels.

The papers and conclusions of the Round Table will be published under the title Biofuels – Linking Support to Performance and feed into the debate on Transport and energy: the challenge of climate change at the upcoming International Transport Forum in Leipzig.