Transport for London

1. How should a biofuel sustainability system be designed?

Q1.1

The UK has been developing sustainability criteria for Biofuels as part of its proposed Renewable Fuels Transport Obligation. The EU Sustainability Criteria should be as strong as possible. The UN also published a report on 8 May highlighting these concerns. It is therefore imperative that DG TREN ensures that this system is designed from the outset to ensure only those fuels from sustainable sources are permissible under the scheme.

The way forward outlined seems feasible, subject to the following comments:

Transport for London believes the EU system should allow for the scope to be amended as necessary to incorporate such fuels as and when required. TfL is keen to see the production of hydrogen from renewable sources such as biogas, and would encourage DG TREN to make provision for the inclusion of hydrogen in the EU scheme.

Transport for London believes that each Member State must have a system in place that is robust and provides a consistent approach, rather than relying on a series of voluntary measures. Consideration should be given to how sustainability criteria results to end-users, as well as the length of time it take for this information to filter down after is has been submitted to the EU. Consumers must be given the option of assessing for themselves which particular fuel suppliers are providing the best fuels from a sustainability and ethical point of view. One solution is to use a simple logo to award to fuels that comply with the standards of the sustainability assessment, similar to the Fair Trade symbol.

Q1.3

The sustainability criteria should also include the potential impact of biofuels on local air quality. There have only been a small number of studies undertaken to investigate how using biodiesel effects exhaust emissions. Very few of these studies are applicable to modern vehicles, but results indicate that using biodiesel can increase emissions of oxides of nitrogen (NO_X) and also possibly of particles; but emissions depend on the engine technology, vehicle type, test cycle, biofuel type and blend and more research needs to be conducted to ascertain the local effects of using biofuels. Test data for ethanol shows that its use increases emissions of hydrocarbons, compared to mineral fuel and this can lead to increases in the concentrations of ground level ozone.

A proposal for a full range of sustainability criteria is listed at Appendix 1 below.

Q1.5

In addition to preventing major biodiversity loss, the list of sustainability criteria should also penalise biofuels that are sourced from land that had previously been relied upon for food growing.

Q 3.1

The definition for second-generation biofuels should include other criteria for minimum greenhouse gas emissions.

Q 3.3

Yes, we agree that second-generation biofuels should only benefit if they offer greenhouse gas emissions savings.

Q4.2

Transport for London supports and encourages the principle of high blend biofuels, but questions whether they will they help meet the targets quickly? It is more difficult to provide pure blend biofuels and they need more time to be developed. E95 would need specially designed engines. It may be better to use splash blending in the short term whilst these technologies and pure blends are developed.

Transport for London would be interested in trialling high blend biodiesel, once the EU has ensured that the sustainable development system is in place. There is a much higher fuel consumption rate with high blend biofuels, so we need incentives like differential duty. Fiscal incentives for biofuels should be are set at a level such that the pump price remains competitive with petrol and diesel. At a 5% blend the impact on reduced fuel consumption will be small, but at higher blends such as E85, this could lead to increased fuel consumption of around 25-30%, which would mean the pump price of E85 would need to be set lower to remain competitive with diesel and petrol.

The EU could also consider the potential of fuel derived from recycled cooking oils and whether these should be promoted.

Q4.5

A review date should be set, at a time when there is scope to put any recommended changes into place and ensure they have a chance to work before the final target dates.

Yours faithfully

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Appendix 1 – Transport for London Proposals for Biofuels Sustainability Criteria

1.1 Firstly, a robust assessment of whole life carbon emissions, on a well-to-wheel basis, is needed to allow data from different fuels to be easily compared. All sources of carbon emissions need to be taken into account, the results must be independently checked and a standard methodology used for the assessment. In addition, estimated carbon emissions from different data sources may vary considerably in each step in the life cycle analysis. Would it be useful for assessment to include a measure of how robust the estimated emissions are for each of these steps? Potential sources of carbon emissions that may not be fully accounted for, but must be considered, include:

(a) the increased carbon emissions caused by clearing and burning plant material;
(b) carbon released from the oxidation of organic matter over time from soils or peat bogs as biofuel crops are grown;
(c) reliable assessment of associated carbon emissions from husbandry, fertiliser use, transport etc.

1.2 Secondly, a robust sustainability assessment, independently audited, is required to ensure the impacts are properly understood and documented. For example:

(a) contamination from pesticide and fertilizer use;
(b) impact of water use and whether a suitable volume is available for local people;
(c) increased destruction of virgin habitats and/or ecosystems;
(d) displacement and destruction of indigenous and/or endangered species;
(e) food shortages caused by crops being used for fuel in preference to food, which could lead to widespread hunger and starvation;
(f) fuel and food prices do not increase to a point where local people face shortages;
(g) whether land use issues will lead to the displacement of local peoples, use of poor farming techniques, poor working conditions and loss of suitable land for food production;
(h) adverse impact on local jobs and local incomes in areas where biofuel crops are grown;
(i) impact on biodiversity and set-aside land caused by increased pressure to grow biofuels in Europe (ie intensively farmed monoculture and whether genetically modified crops will be selected);
(j) impact on local air quality