



**UK Department for Transport response to European Commission consultation:
Accounting methods and conditions for the 10% renewable energy in transport target – and on the need for additional types of biofuels being listed in Annex III of the Renewable Energy Directive**

Section A: Electricity from renewable sources in transport

1) How do you value the impact of the 10% target for renewable energy in transport by 2020 on the development of electric vehicles?

The Renewable Energy Directive (RED) transport target will not have a significant impact on the development of the electric vehicle (EV) market.

UK policy to support the early market for electric and other ultra low emission vehicles (ULEVs) is by:

- Developing a nationwide strategy to promote recharging infrastructure, informed by the eight Plugged-In Places pilot projects which will deliver up to 9,000 charging points, between 2010-13. The programme provides matched funding to local consortia, made up of businesses and other public partners
- Delivering the Plug-In Car Grant which began on 1 January 2011. The grant provides 25% of the cost of eligible cars up to a cap of £5k to private and business buyers, reducing the cost differential between ULEVs and traditional vehicles
- Consolidating existing support mechanisms for ULEV research and demonstration and support wider green growth opportunities and
- Encouraging efforts by UK businesses' to seize commercial opportunities in ULEV sector: working with key stakeholders to raise awareness and to develop and strengthen the capability of ULEV manufacturing and its associated supply chain in the UK.

2) Under what condition do you think it would be justified to count the whole amount of electricity in electric vehicles as renewable?

The UK does not project significant levels of off-grid recharging and does not currently have a mechanism to transfer credit for renewable electricity use between transport and other sectors. We would be interested in

understanding more about the potential measures to recognise off-grid recharging, and transferring renewable energy certificates between sectors. However these could be administratively complex and would only be worthwhile were they to deliver a cost-effective contribution to the RED targets.

3) What benefits do you expect the option you selected under (2) will have?

We do not have a preferred option – we would need more information about the measures envisaged.

4) What costs in terms of administrative burden do you expect the implementation of the option you selected under (2) will have?

We do not have a preferred option – we would need more information about the measures envisaged.

Section B: Hydrogen from renewable sources in transport

1) Which are in your view the most likely ways to produce hydrogen from renewable sources (partly or fully) by 2020?

There are realistically only two potential technologies for producing renewable hydrogen before 2020. These are either:

- (i) via electrolysis with renewable electricity; or
- (ii) via thermochemical or biochemical conversion of biomass

There are also many potential non-renewable pathways for the production of hydrogen. With uncertainties in timing, cost, embedded carbon emissions and efficiency still to be addressed, it is important that we do not close the door on any route and let the market determine the pathways.

2) For each option you selected under (2), if it would be used for transport, how would you suggest to calculate its contribution to the 10% target for renewable energy in transport?

The current omission of hydrogen use in transport may act as a barrier to the development of renewable hydrogen infrastructure and the deployment of hydrogen fuel cell vehicles. The UK welcomes the Commission's engagement with this issue and calls for an ongoing dialogue with Member States in developing a methodology.

Section C: Biomethane via the natural gas grid in transport

The UK supports the recommendation that Member States should be entitled to allocate biomethane supplied to the natural gas grid to different sectors on the basis of the gas usage in these sectors. As set out below we would also support the Commission in recognising certification schemes that link specific volumes of production to end users.

1) How do you value the impact of the 10% target for renewable energy in transport by 2020 on the development of methane vehicles fuelled by methane from the gas grid?

The RED transport target is not expected to have a significant impact on the development of methane fuelled vehicles.

2) Under what condition do you think it would be justified to count the whole amount of methane extracted from the gas grid for the use in vehicles as renewable?

There is an expectation that niche markets for off-grid biomethane use will continue to develop in the UK. The methods used to record national biomethane use and account for this use across sectors should be flexible to both on-grid and off-grid methane use.

Tradable certificate schemes, in which certificates are awarded for biomethane generation and can be transferred and redeemed by methane users, potentially allow an efficient and flexible route to accounting for biomethane use across sectors. The Commission should recognise such systems implemented by Member States.

3) What benefits do you expect the option you selected under (2) will have?

The use of tradable certificate schemes may allow targets to be met more cost effectively than if biomethane volumes must be traced from generation to end use to count towards targets. The flexibility of such approaches is likely to help facilitate the use of biomethane in transport.

4) What costs in terms of administrative burden do you expect the implementation of the option you selected under (2) will have?

The cost will vary depending on the methods implemented by Member States.

Section D: Energy content of biofuels

1) Do you think additional types of biofuels need to be listed in Annex III of the Directive? If yes, which ones and could you provide values?

It is reasonable to assume that as the renewable fuels industry develops there will be a diversification of biofuel used. It is therefore important that the Commission provides a transparent process by which stakeholders, including industry and member states, can initiate the process of adding fuels to Annex III.

The UK industry has indicated that there is interest in a large number of fuels and potential fuels, including: FAEE (Fatty Acid Ethyl Esters), Bio-TAME (Tertiary Amyl Methyl Ether), a wider variety of Fischer Tropsch derived fuels, aviation fuel and diesel fuel produced from sugars, co-processed Hydrotreated Vegetable Oil, bio-naphtha (as a bio-petrol) and biofuels produced from upgraded pyrolysis oils.

2) Do you think more precision in terms of decimals is necessary in the values in the Annex? If yes, could you provide such values?

For the purposes of reproducing and understanding the Annex V values it would be useful for the Commission to publish the full working behind Annex V, or provide the Annex III data to the same precision as used in developing Annex V.

Regarding the text of Annex III itself: there is variability in lower calorific values of biofuels, particularly where a single value is given in Annex III for a fuel that can be produced from a number of feedstocks. The addition of extra precision in the annex may therefore indicate a higher level of conformity in the energy content of the fuel than will actually be produced.