



## **Transport Energy Taskforce Working Group 1: Evidence and Modelling**

Friday 12<sup>th</sup> December 2014, 10:30 - 13:30

National Farmer's Union, King's Building, Smith Square, SW1P 3JJ

TE-WG1-M-02

### **MINUTES**

#### **Actions**

**DfT to circulate 2020 scenarios model**

**Stakeholders to submit alternate sources of advanced and conventional biofuel price/cost projections**

**Stakeholders to submit further information on biodiesel blending constraints**

**Stakeholders to submit suggestions and rationale for alternative 2030 biofuel supply scenarios**

#### **Attending**

Ausilio Bauen - E4Tech

Jonathan Murray - LowCVP

Ceris Jones - National Farmers Union

Grant Pearson - Ensus

Claire Wenner - Renewable Energy Association

Peter Smith - Cargill

Aaron Berry - DfT

Thomas Robertson - DfT

Michael Humphries – DfT

Hugh Tucker - UKPIA

Nigel Tait - Shell

Marta Chrusch - BP

Chetal Owens - DEFRA

Keith James - WRAP

Chris Malins – ICCT

Michael Goldsworthy - NNFCC

#### **1 Welcome**

The chair welcomed everyone to the meeting, and gave the group a brief overview of the agenda.

#### **2 Minutes of modelling workshop and matters arising**

The minutes of the modelling workshop were reviewed, and the secretariat updated the working group on actions from it. Any queries on the minutes were invited; as there were none, the minutes were approved.

### **3 Discussion of WG1 Terms of Reference**

The chair went through and elaborated on the proposed terms of reference. There was a request to distribute the DfT model used in the 2020 forecasts, to which DfT agreed. It was agreed that members would send in questions on the data sent out to DfT, to be dealt with by the next meeting.

**Action: DfT to circulate 2020 scenarios model**

### **4 Presentation of 2030 transport fuel demand scenarios**

DfT presented 2030 projections of transport fuel demand and electric vehicle (EV) uptake. It was queried whether the trajectories of EV uptake were over-ambitious, namely regarding 2020. There were queries on the cost and infrastructure assumptions for the EV projections. The issue of strains on infrastructure of so many EVs, particularly on distribution, was noted.

The chair presented energy demand projections of the International Energy Association (IEA) to 2050, and DfT presented some of their own. Both highlighted that they predicted a large share of biofuels in 2050. The importance of public perceptions in implementing such policy, considering some of the media attention around biofuels, was noted.

It was suggested that a shift from diesel to petrol would both improve the environmental outlook in itself and provide a more favourable environment for biofuels. However, it was noted that even a reversal in the current dieselisation trend would take a while to have a significant effect on the car fleet.

There was widespread agreement that even with high assumptions of EV takeup to 2030, liquid fuels would still be dominant energy sources, and that thus biofuels would still have a role to play.

### **5 2020 scenarios modelling updated**

DfT presented the latest of outputs of its 2020 modelling. There was a request for graphs comparing greenhouse-gas emissions savings. It was queried whether used cooking oil (UCO) biodiesel might have some indirect emissions effects, and asked if these should be investigated.

Questions were raised on the biofuel cost projection used in the modelling. DfT acknowledged these concerns, and invited attendees to submit any alternate sources. The feasibility of the level of high-blend biodiesel in the model was questioned; DfT replied that there was nowhere else suppliers could go in that situation. It was suggested that suppliers might just pay the buyout price, especially if there were not sufficient business certainty post-2020.

The level of foreign competition for advanced biofuels and UCO was raised as a possible concern. Discussion on the availability of advanced biodiesel in 2020 implied that there should be some online, but not a great deal.

It was asked if there were any alternatives to crop biodiesel in the lower waste scenarios. High blend (>10%) crop ethanol was suggested, but it was noted that it would be very difficult to implement this by 2020. E15 was suggested as a possible intermediary measure, though this would encounter similar issues.

Possible public backlash against high levels of crop biodiesel were noted, and counter-measures discussed. A low-level crop cap, lower than that currently proposed at the EU level, was suggested, though some noted that this would take flexibility away from suppliers in an uncertain environment. It was also observed that different uses of diesel (eg offroad), and the difference between winter and summer blends could bring down the maximum possible blend further than currently modelled. DfT requested further information from stakeholders on this. Currently DfT assume that 6.8% can be blended across the market for B7.

There was some discussion of what assumption should be used for biodiesel blending into non road gasoil. Consensus seemed to agree with the current assumption that no biodiesel will be blended into gasoil.

**Action: Stakeholders to submit alternate sources of advanced and conventional biofuel price/cost projections**

**Action: Stakeholders to submit further information on biodiesel blending constraints**

## **6 Presentation and discussion of initial 2030 biofuels options**

DfT presented some initial modelling of possible 2030 biofuels scenarios. The advanced biofuels price projections were queried; DfT agreed, adding that it had its own concerns, and invited attendees to submit alternate sources. It was noted that part of the reason for the costs was that the projections are based upon fewer large plants, whereas current trends suggest initial plants will be smaller (and thus relatively more expensive).

The possibility of converting conventional biofuel plants to advanced was noted. The level of advanced biofuels assumed to be available in 2030 was thought by some to be an over-estimate, though others noted that current technological trends suggested a considerable amount of advanced biodiesel could be available by then, and that the scenarios were believable in terms of availability. Some asked if the RTFO would be a sufficiently strong tool to encourage investment in such new, high-risk technology. One stakeholder suggested that policy certainty, through a mechanism such as the RTFO, was 'necessary but not sufficient' to secure investment.

The chair presented some projections of the EU-wide availability of advanced biofuels. Doubts were raised that cost-effective bio-butanol could come online. There were requests to reproduce the models with some constraints on advanced fuels.

It was suggested that investment in 1G ethanol has been funded largely by agricultural producers, and that it is unclear who will fund investment into advanced biofuel. Some questioned to what degree advanced ethanol would provide greenhouse gas savings over

conventional ethanol, and suggested that the possibility of reducing the emissions of conventional ethanol should not be ignored.

During the discussion, it was suggested that there could be alternative scenarios for 2030. In response DfT invited stakeholders to submit suggestions for alternative 2030 biofuel supply scenarios.

**Action: Stakeholders to submit suggestions and rationale for alternative 2030 biofuel supply scenarios**

## **7 Conclusion**

DfT concluded the meeting by presenting the main conclusions from the modelling thus far, and uncertainties to be examined. They emphasised the need for more data on advanced fuels, and on predicted prices/costs for biofuels more generally.

It was noted that more options were available, including around possible ethanol blends, to 2030, but that higher blends such as E20 would need to start being planned soon. There was a request for suggestions of scenarios to model.