



Transport Energy Taskforce

Working Group 1: Evidence and Modelling

Friday 6th February 2015, 10:30 - 13:30

Department for Transport, Great Minster House, 33 Horseferry Road, London, SW1P 4DR

TE-WG1-M-03

MINUTES

Actions:

DfT to send round clarifying note on NRMM

Stakeholders to submit estimates of likely ethanol blending scenarios

Stakeholders to submit views on likely and possible 2030 scenarios

Stakeholders to submit views on likely and possible supply trajectories to 2020

Attending

Ausilio Bauen - E4Tech

Jonathan Murray - LowCVP

James Mills - National Farmers Union

Grant Pearson - Ensus

Claire Wenner - Renewable Energy Association

Aaron Berry - DfT

Thomas Robertson - DfT

Michael Humphries – DfT

Nunzia Florio - UKPIA

Nigel Tait - Shell

Marta Chrusch - BP

Michael Goldsworthy – NNFFC

Ian Waller - FiveBarGate Consultants

1 Welcome

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

2 Minutes of last meeting and matters arising

The secretary went over the matters arising from the last meeting. The lack of bio-butanol modelled in the scenarios was raised as a concern, as several companies have begun projects in the USA. It was noted that Working Group 5 sources of information on alternative fuels were now coming in, and that co-operation with them would be required when writing the final report.

3 Comments on 2020 model

The range of possible scenarios in the model was raised as a reason not to overly constrain obligated parties. There was broad consensus that E10 would be needed to achieve the RED in 2020 without very high quantities of waste oils. Some raised questions over the treatment of non-road mobile machinery (NRMM) in the model; DfT clarified that it was not included in the RED denominator in the model. It was acknowledged that low sulphur gas oil was obligated in the RTFO unless suppliers 'overturned the presumption' that it was not used for NRMM purposes, and that suppliers were on the whole not providing evidence to overturn this presumption. The net effect is that low sulphur gas oil is effectively falling under the RTFO at present. The problems of blending biofuel into NRMM fuel was noted.

Some stakeholders requested that greenhouse gas savings be presented with and without ILUC, and/or that ILUC factors were presented as a range rather than as specific figures.

Action: DfT to send round clarifying note on NRMM

4 E10 effective blend levels

The primary constraints on E10 blending, and the provision of a 98 octane E5 protection grade, were identified as the number of pumps on station forecourts, and the ability of refineries to provide 98 octane fuel. Some CO₂ problems over 98 octane fuel were raised. Some thought that two 95 octane grades were more likely. Some considered it likely that the switch would occur on a regional basis, each region switching over in turn as refineries did so.

The high level of 98 octane petrol (around 40%) achieved by Finland was regarded as unique, and unlikely to be replicated in the UK. Finland's much smaller market size, and substantial government and industry commitment to the switch to E10, were noted as important factors in their relative success in E10 rollout.

For the UK, a market penetration of 10-20% 98 octane fuel was thought most likely (up from around 5% today) in response to an E10 rollout; stakeholders foresaw severe constraints and problems beyond this level. It was agreed that an 'all-or-nothing' approach to the modelling, whereby E10 introduction was either highly successful or a failure, was most likely, and that the effective overall blend level in the model ought to be increased from E8.3 to E9 for a 'success' scenario (subject to feedback from fuel suppliers).

Action: Stakeholders to submit estimates of likely ethanol blending scenarios

5 Discussion of biofuel cost projections

a). 2nd Generation

DfT presented new projections of the cost of advanced biofuels, based on a levelised cost approach using available data from currently open plants. These were significantly higher than those presented previously.

Despite the higher costs presented, stakeholders suggested that the cost estimates were still too low. Discussion centred on feedstock costs. The lack of sophistication currently present in the market for straw was noted, as were the costs of collection, and competition with anaerobic digestion (AD). Plant operators would need to invest time and resources in establishing the supply chain. It was therefore felt that £40/tonne was too low, and that £60-70/tonne would be a better estimate. It was suggested that it would be useful to get price quotations from companies currently using straw for energy in the UK market. It was additionally felt that operating costs were too low.

b). 1st Generation

DfT presented their analysis of historical biofuel price spreads, and suggested approaches for projecting it into the future.

Some stakeholders suggested that, given the considerable uncertainty around future biofuel prices, a range of cost spread scenarios should be developed, according to the oil price, weather and other factors. It was agreed that current biofuel projections were too low for a central scenario. Some suggested that there was greater room for yield improvements in the feedstocks for crop biodiesel than for crop ethanol, and that crop biodiesel prices might therefore decline. It was suggested that international trade would provide a lower bound on the spread, as at that point it would become more profitable for producers to ship biofuel abroad.

The drivers of waste biodiesel price were noted as different, due to it not being crop based. The main driver here was considered to be government policy, globally speaking especially, which would in turn drive demand and price. Some questioned whether double-counting of waste biodiesel should be only a transitional measure, and eventually withdrawn, to better provide greenhouse gas emissions cuts.

It was noted that several projections already exist, some in the public domain, and that these may be worth investigating.

6 Crop cap scenario presentation

DfT presented 2020 scenarios where the amount of energy from crop-based biofuels was held at RTFO year 6 levels, as called for by environmental NGOs on the taskforce. (This cap was 5.93TWh, or 1.38% of transport energy in 2020).

Several stakeholders believed that the level of waste biodiesel required to meet the RED in these scenarios was unrealistically high, and that suppliers would pay the buyout price. Although the scenarios illustrated that E10, with some advanced biofuel, could be fully met within such a crop cap, some stakeholders were concerned that placing such a low constraint on crops would not provide any further room, for example if dieselisation slowed or reversed by 2020. This would restrict the greenhouse gas savings it could deliver.

Evidence on 2020 UCO availability was requested. It was noted that the combination of the buyout price and double-counting left plenty of room for the price of waste biodiesel to rise significantly and still be supplied. Concerns were raised over the increased scope and incentive for fraud and questionable practices around UCO if the price rose significantly.

Doubts were voiced over whether sufficient advanced fuels would be available to meet the 2020 targets, and whether similar crop caps would be replicated abroad. It was also noted that this would stymie any eventual move to E20.

7 2020 and 2030 trajectories

When presented a range of ambitions for biofuels to 2030, stakeholders broadly believed that somewhere between the low and medium ambitions (6-10% by energy), with some continuing role for crop-based biofuels, was most realistic. The medium and high ambition scenarios (9 to 15%) were considered over-optimistic on the availability of advanced fuel. Possible technical/vehicle constraints on using this much biofuel were raised.

Action: Stakeholders to submit views on likely and possible 2030 scenarios

Action: Stakeholders to submit views on likely and possible supply trajectories to 2020

8 Conclusion

The chair thanked everyone for their time, and noted actions to be taken forward. He requested that stakeholders please submit any further information by Wednesday 11th February, to provide time to draft the final report to the High-Level Group.