Transport Energy Task Force – 19 January 2015

Agenda

1. Welcome Chair
2. Minutes and matters arising Chair
3. Automotive Council Fuels Roadmap Neville Jackson,Ricardo
4. Task Force Work Programme updates Sub-working group chairs
5. Final Report Chair
6. Next steps Chair

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WG1 – Evidence and Modelling Progress Report

Ausilio Bauer / Thomas Robertson

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WG1 – Evidence and Modelling

- Last meeting held Friday December 12th
- 16 attendees
- Issues addressed
  - Terms of reference
  - Presentation of 2030 transport fuel demand scenarios
  - Update on 2020 modelling
  - Presentation and discussion of initial 2030 biofuels options

1. Terms of reference

The following terms of reference were presented and approved:

1. What are the key UK and EU road transport decarbonisation modelling exercises? What do they tell us?
2. What are the outcomes of the DfT modelling and key assumptions? How do they compare to other modelling exercises?
3. How can the UK modelling be improved? What will it mean?
4. What are the options for decarbonising road transport in the UK? What relative role can they play?
5. What do we need to believe in? What are the uncertainties?
6. What are possible decarbonisation trajectories 2020, 2030 and beyond? What do they imply?
7. What do the options / trajectories considered mean in terms of sustainability? What are the potential benefits to the UK?
8. What needs to happen for the options / trajectories to be realised?

2. 2030 transport fuel scenarios

- DfT presented projections of transport fuel demand and EV uptake
- Some concerns raised on costs of infrastructure for Evs
- Widespread agreement that liquid fuels would still be dominant to 2030, even with high assumptions of EV uptake
  - Biofuels thus will still have role to play

3. 2020 modelling update

- DfT presented latest outputs of their 2020 modelling
- Price projections questioned, attendees invited to submit alternate sources
- Foreign competition for advanced and UCO raised as a concern
- Feasibility of high-blend biodiesel levels questioned
  - Suggested suppliers might just choose to pay buyout price
  - High blend (>10%) ethanol considered as alternative, but likely unfeasible to 2020
- Possible public backlash against high levels of crop-biodiesel
  - Lower crop cap could help, but also removes flexibility for suppliers
- Queried whether 6.8% actual assumption for B7 too high

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

Action: Stakeholders to submit further information on biodiesel blending constraints

4. 2030 biofuels options

- DfT presented initial modelling
- Advanced biofuel price projections queried; attendees invited to submit alternate sources
- Queried whether RTFO sufficient to encourage investment in new, risky technologies
- Suggested alternative scenarios possible; attendees invite to submit suggestions

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

Next steps

- DfT has distributed the 2020 scenarios model
- Stakeholder submissions on:
  - Price/cost projections
  - Biodiesel blending constraints
  - Alternative 2030 scenarios
- Agenda items for next WG1 meeting:
  - Price/cost projections
  - Comments on model
  - Biofuel supply trajectories to 2020
  - Evidence submitted and likelihood of scenarios and trajectories
  - Focus in on most likely/effective scenarios

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WG2 – Sustainability and Objectives Progress Report

Chris Mottershead / Aaron Berry
DfT

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Working Group 2 – Sustainability and Objectives

- The key task for WG2 is to set out the objectives for transport fuel policy to 2020 and 2030, examining possibilities for a definition of and common agreement on sustainability.

- Second meeting held on Thursday 18 December
  - 12 members of group attended

- Agenda covered
  - Discussion on Definitions of Sustainability
  - Discussion on Definitions of Advanced
  - 2020 / 2030 Scenarios

Definitions of Sustainability

A majority of stakeholders agree that “sustainable” biofuels are those:

- Whose production meets RED/FQD criteria;
- Pose low impacts on soil, air, water and biodiversity;
- Deliver genuine GHG savings (though with different views as to whether ILUC should be taken into account).

Some stakeholders considered that sustainable fuels must not compete with other uses, including food production.

NGOs submitted a statement opposing any increases in the consumption of food based biofuels to 2020. The statement calls for a cap on crop use at current levels and to progressively phase out any related support.

Definitions of Advanced Biofuels – Areas of Agreement

The majority of respondents considered the term “advanced” to refer to biofuels that:

- Are made from non-food crop biomass.
- Deliver substantive GHG savings even when ILUC was included.
- Have a conversion technology component.

Definitions of Advanced Biofuels – Areas for Further Discussion

Discussions on the detail of an appropriate definition of “advanced biofuels” were not conclusive. Differing views remained on:

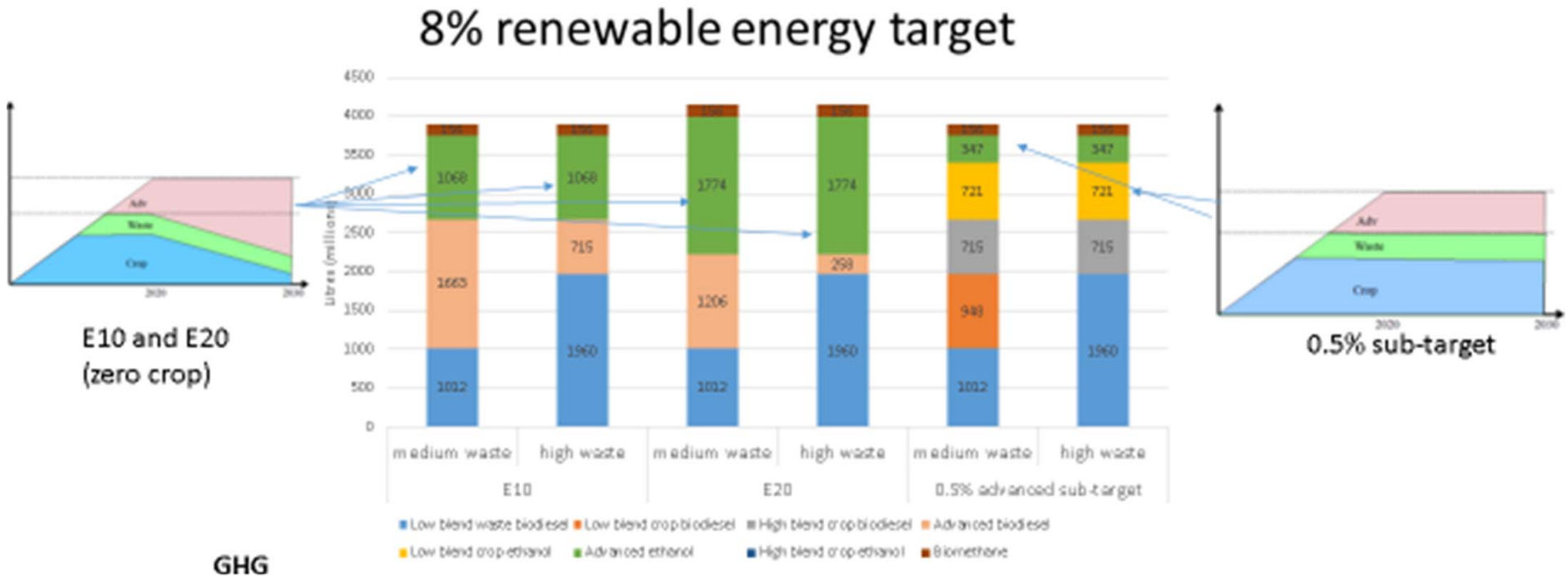
- The role for energy crops.
- Whether it be limited to technologies at a particular stage of development and if so how to describe it.
- Whether there was a fuel quality component.

Some stakeholders suggested that fuels made from feedstocks listed in Annex IX of the draft ILUC Directive were ‘advanced’ fuels, although it was acknowledged that many of these feedstocks could be converted using conventional processes.

WG2 Issues that still required clarification or consideration that were presented at the Higher Level Group on 1 December

- To set out trajectories to 2020, scenarios to 2030 are required (WG1)
- Projections for different scenarios should all be available with E10 (WG1)
- A scenario setting out the least cost for consumers meeting the RED target should be considered (WG1)
- Electric vehicle storage capacity likely to increase markedly – further work required to establish role of electricity to 2030 (WG1)
- Aviation industry / biodiesel producers should be represented in (WG2)
- Cost of advanced biofuel need to be examined (seem low) WG1
- No consensus on E10 – is crop ethanol preferable to crop biodiesel?

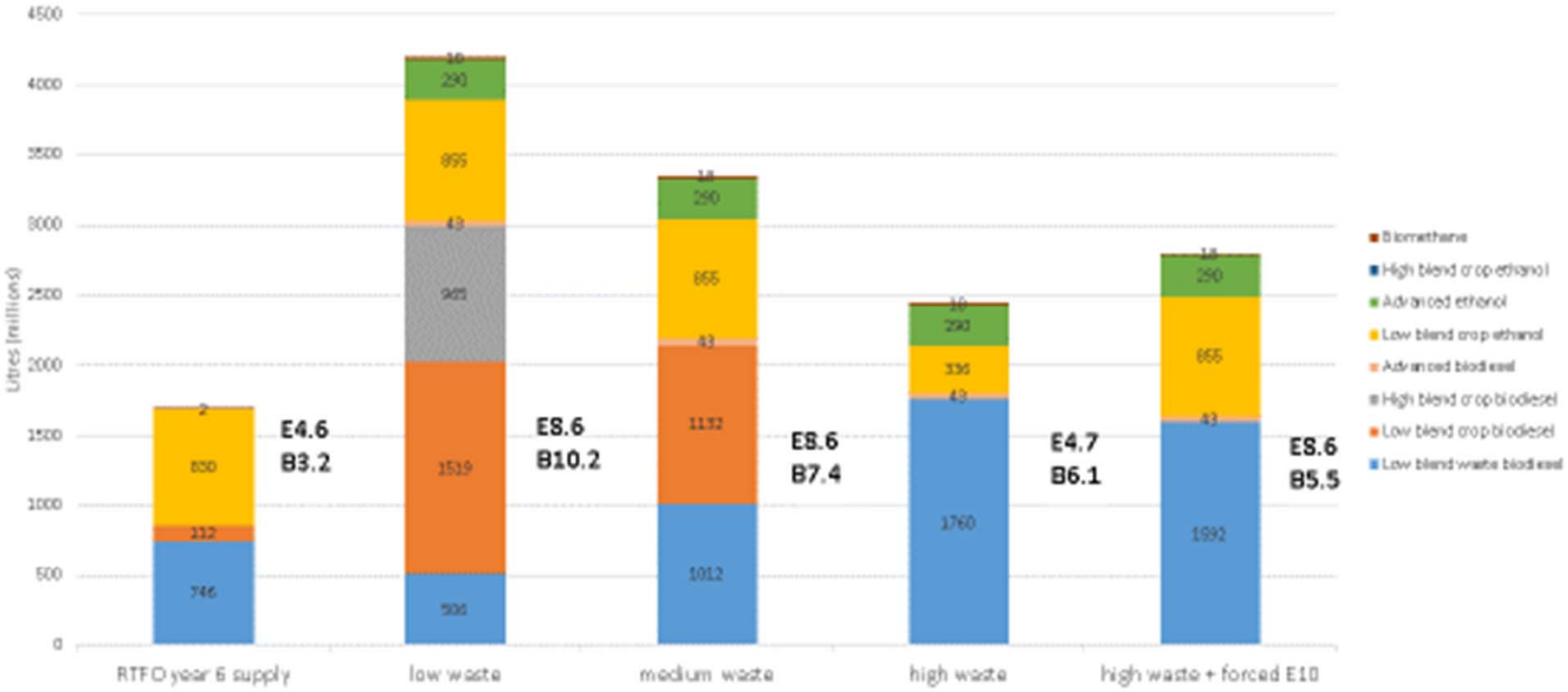
- **To set out trajectories to 2020, scenarios to 2030 are required**



GHG Savings (MTCO2/yr)	8.5	7.9	8.3	7.7	3.2	5.4
Costs (£m/yr)	-504	-186	-518	248	143	292
Advanced %	5.2%	2.1%	6.2%	3.1%	0.5%	0.5%
Crop %	0%	0%	0%	0%	4.7%	2.6%

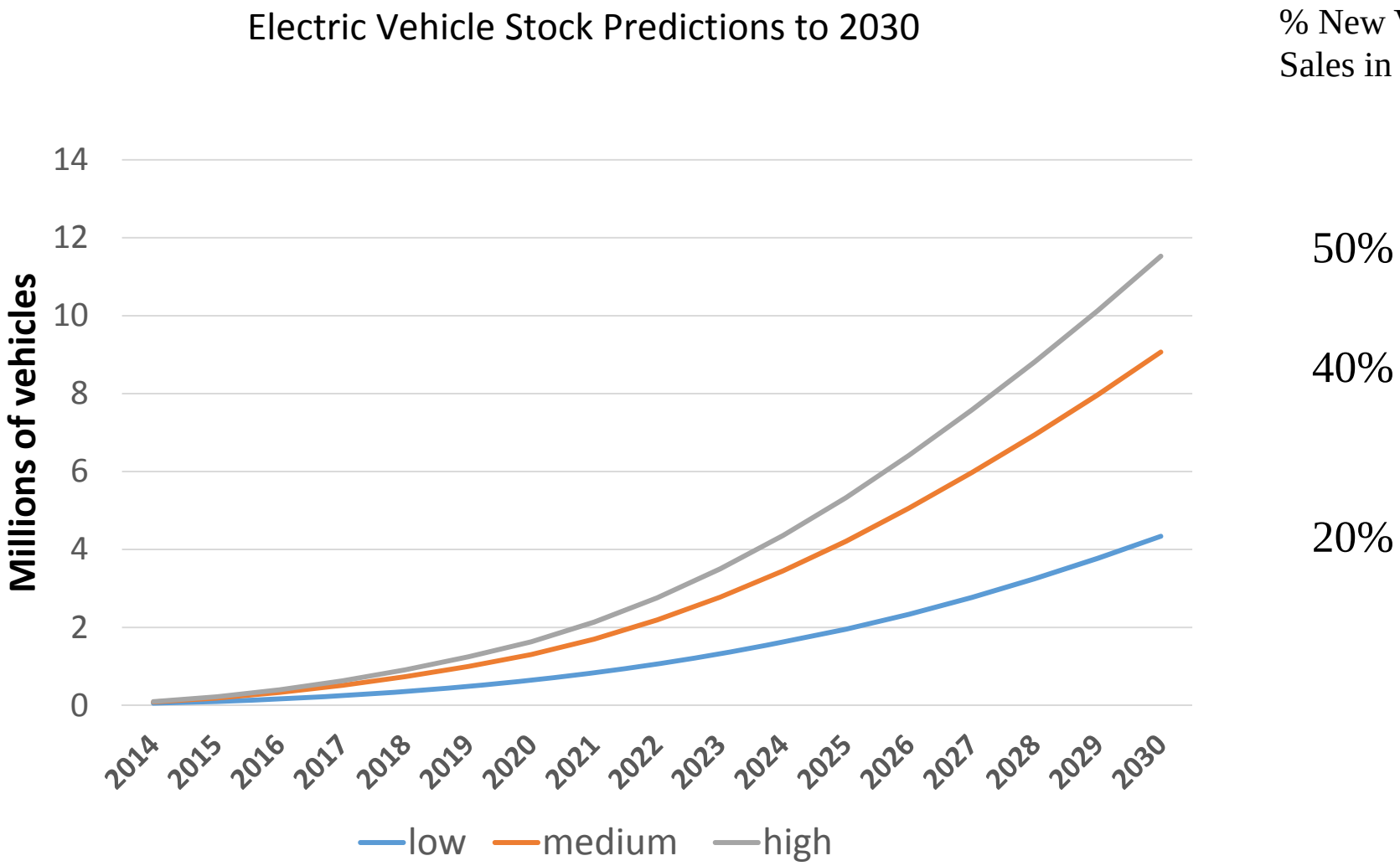
- **Projections for different sub-targets should all be available with E10**

2020 Scenarios 10% RED Target with 0.5% advanced biofuel sub-target



GHG Savings (MTCO2/yr)	**2.2 MT**	**1.8 MT**	**3.1 MT**	**4.6 MT**	**4.7 MT**
Costs (£m/yr)	**£264m/year**	**£376m/year**	**£283m/year**	**£284m/year**	**£267m/year**
Crop %	**1.33%**	**5.74%**	**3.59%**	**0.46%**	**1.18%**

- **To set out trajectories to 2020, scenarios to 2030 are required**



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- **Aviation industry / biodiesel producers should be represented in WG2**

  Invitation extended to the wider aviation industry

- **Cost of advanced biofuel need to be examined (seem low)**

  WG1 / DfT Analysts currently working on this

- **No consensus on E10 – is crop ethanol preferable to crop biodiesel?**

  Still no consensus reached

- **A scenario setting out the least cost for consumers meeting the RED target should be considered (WG1)**

  WG1 confirmed that the scenarios all assume the market will deliver at least cost within policy constraints. Are there other policy scenarios to be considered?

WG2 meeting on 18 December: Action points to be taken forward

- A request was made to model total GHG savings for different biofuel mixes under each scenario without including ILUC GHG emissions.(WG1)

- NGOs agreed to circulate a re-articulated statement focused on the outcome that needs to be avoided.

There was also interest in understanding progress made in the area of low-ILUC biofuel certification

WG3 – Policy & Investment Certainty Progress Report

David Baldock

IEEP

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Working Group 3 – Policy and Investment Certainty

- This working group considers the different possible measures that could be required to meet the Renewable Energy Directive transport fuels target for 2020 and wider 2030 objectives how to provide confidence to investors and the wider stakeholder community.

- Meeting 1 – Friday 21 November
  - Focused on the objectives and scope of the working group
  - Agreed TofR, reviewed questions & WG membership

- Meeting 2 – Thursday 15 January
  - Focused on the policy options available on different timescales and the constraints in delivering the targets.
  - What UK legislative activity is required to comply with proposed RED and FQD amendments?
  - What policy measures could be implemented to deliver 2020 targets, and post 2020?
  - How to build investor confidence over the whole period.

❑ Dates for future meetings to be agreed

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Progress to date – Identifying potential legislative requirements & options

Required by 2020	Options possible before or after 2020	Options not possible until after 2020
• Change the obligation level in current RTFO - Meet RED & FQD targets • Non biological low carbon fuels - Maximising GHG savings - Limit ILUC impacts - Deploy advanced biofuels • Sub targets for advanced - Deploy advanced biofuels • Crop cap - Limit ILUC impacts • GHG scheme - joint reporting by suppliers - Required under FQD • Implementing reporting aspects of the FQD7a - Required under FQD • Upstream emissions reductions (FQD GHG reduction scheme, not RED energy scheme) - Meeting FQD target - Required under FQD	• Alternative obligations – eg. Energy/GHG • Fiscal support for supply – eg. CFD/Duty • Expand coverage of scheme(s) to aviation • Production/development support – eg. R&D, demo funding • Regulatory robustness/certainty – eg. Preapproval of sites • Voluntary agreements – eg. Limiting crops	• ILUC factors into accounting • Incorporate transport into multi-sector scheme • CO2 taxation for fuels

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Progress to date – mapping issues for greater investment certainty

Very difficult environment for investors

Current investors

- Oil price is placing pressure on markets
- Market has not developed as expected
- Policy uncertainty in recent years
- 220 time horizon is very short.

Future investors looking for

- Long term certainty / limits to downside risks
- Return on investment

In an ideal world investors are looking for policy stability, but we are in a situation where;

- Future fuel policy objectives are not clear.
- Policy changes will need to be made for 2020 targets and longer term ambitions.

Moving forwards and outstanding issues

Proposed to segment the work into the following topics for discussion and drafting.

1. Principles of a 2030 framework for biofuels.
2. Recommended measures to deliver 2020 RED target.
3. Measures to support the introduction of alternative and advanced fuels.

Views of stakeholders on policy measure options are being collected to focus in on priority options.

Key issues

- Require prioritisation of scenarios from WG1.
- Require clarity on 2030 objective from WG2.
- Input from other WGs regarding what WG3 should consider in particular from WG4 & WG5.
- Sequence of work crucial for addressing issues in WG3.

WG4 – Customer Acceptability
Progress Report

Rob Wakely DfT

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Working Group 4: Customer Acceptability

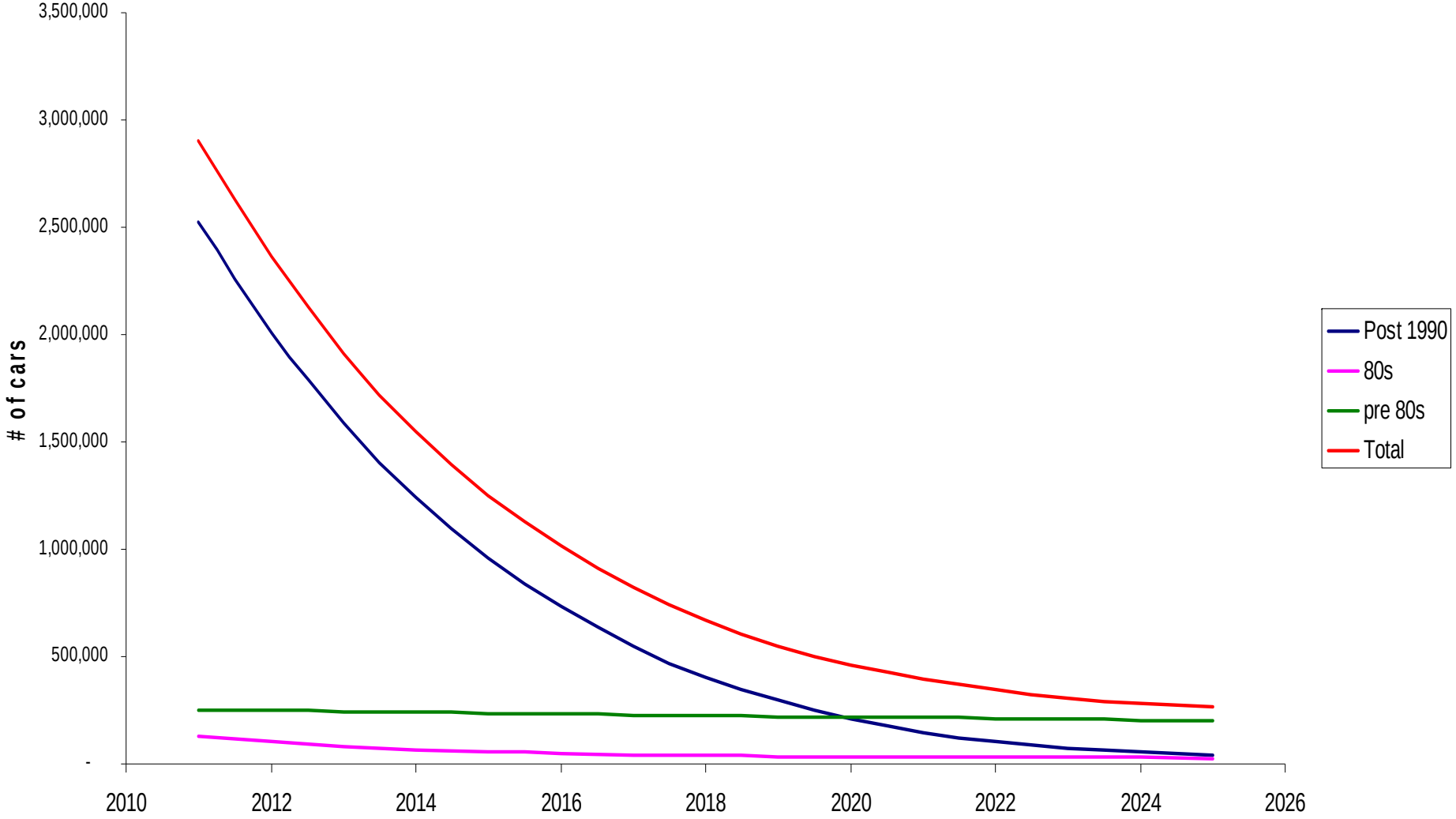
The purpose of Working Group 4 is to provide guidance on identifying issues and proposing ways to address customer acceptability issues related to the fuels mix to 2020 and 2030.

Progress to date

- E10 roll-out/market preparation – questions considered
  - Is previous LowCVP work 2012-13 still fit for purpose
  - What's changed/any evidence gaps
  - Fuel economy, vehicle compatibility, overcoming likely customer resistance
  - Lessons from E10 roll-out in France, Germany and Finland
  - Lead-in time
  - Actions needed by Government and industry
  - Options, recommendations and next steps

Progress to date

Industry estimated that in 2012 there were approximately 2.5 million vehicles (or 12% of petrol cars) that were incompatible with E10. The forecast rate of decline of non-E10 compatible cars is:



What is needed from other working groups?

- WG5 to keep WG4 updated about discussions on novel/ alternative fuels.

- Engagement from HMT would be welcome on the UK roll-out of E10 – perhaps this could be done via their participation in other working groups.

Moving forwards & outstanding issues

- E10 options paper in development.
- Good engagement from WG4 ahead of the meetings, with stakeholders providing suggestions for areas of discussion.
- Meeting 3 (2 Feb) will likely be the last meeting – careful consideration needed to ensure the agenda sufficiently encompasses the key remaining issues.

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WG5 – Alternative Fuels Progress Report

Clare Wenner / Jon Hood
DfT

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Working Group 5 – Alternative Fuels

The key tasks for WG5 are:

- To identify “alternative” fuels which can realistically contribute to the RED and those that can play a material role beyond that
- To identify key barriers to bring these fuels to market so that required actions within other groups (specifically Working Groups 2 & 3) can be identified
- To gain focus and consensus around what priority “alternative” fuel activity needs to be
- To set out realistic and pragmatic aims for each fuel to help deliver RED and GHG savings subsequently

Progress to date

- The group met on 17th December. Agenda covered:
  - Biomethane
  - Biopropane
  - Advanced fuels (briefly)
  - Aviation (briefly)
- Consensus around the need to consider policy mechanisms to consider the different incentives of the RHI and RTFO (WG3) to address the issue of availability of UK biomethane for transport
- Agreement that targeted support for biomethane should focus on vehicles before infrastructure
- Agreement that more work is needed to quantify biomethane lifecycle emissions
- Acknowledged the need to consider recommendations for pre- and post-2020, and ensure coordination with other WGs

Next workshops

- Second workshop scheduled for Friday 23rd January

- Will include:
  - Presentation from R-AEA on UK biomethane supply potential
  - Presentation from Ecofys / E4Tech on novel and low-carbon fuels
  - Key questions to identify how much biofuel can be supplied from alternatives and by when, the key barriers and policy recommendations

- Will aim also to discuss the content of the final report, to be drafted before final workshop

- Third workshop scheduled for Friday 6th February – to discuss draft report and finalise recommendations

Questions for High-Level Group

- What is the magnitude of the ask for alternative fuels post-2020?
    1. Biomethane
    2. Other alternative fuels
- How big a priority is the decarbonisation of aviation?