

## MEDIA RELEASE

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# LowCVP publishes Roadmap to low carbon transport energy Partnership welcomes greater clarity in EU biofuels policy

The LowCVP, which has been at the forefront of policy formation for fuels in the UK, has today published twin reports which set out how the UK could meet the targets for 2020, defined in the EU's Renewable Energy Directive, and proceed on a pathway to decarbonise road transport fuel in the period to 2030 and beyond.

The publication of the reports follows closely on the move to provide greater clarity in policy direction for biofuels, a move which the LowCVP welcomes. This is the result of a decision by EU Energy Ministers on Friday 13 June, to re-structure the nature of the targets in the EU Renewable Energy Directive following the European Commission's proposals on indirect land use change. This decision should end many years of debilitating uncertainty for the UK biofuels industry and enable the fuels sector to re-engage in the vital effort to decarbonise road transport.

The UK's long term climate strategy implies a virtual decarbonisation of road transport by 2050. Cutting emissions through the full life cycle of fuels and energy supplied for transport is an important part of the challenge and requires clear long term policies from the UK to build on the most recent announcements from the EU.

The LowCVP – the stakeholder body which brings government, industry and other stakeholders together to focus on the challenges of decarbonising road transport - commissioned Element Energy to analyse the UK's options for meeting the Renewable Energy Directive's (RED) 2020 transport target which states that at least 10% of the final energy consumption in transport must come from renewable sources. This and the parallel Fuels Roadmap report benefitted from wide industry consultation and explicitly set out to align with existing powertrain roadmaps (including those published by the Automotive Council and the LowCVP).

In the first report – RED Scenarios<sup>1</sup> the researchers looked at four of the most promising scenarios to assess the best way for the UK to comply with the 2020 target. It found that adopting a majority combination of 10% ethanol in petrol (E10) and 7% biodiesel in diesel (B7) was the most pragmatic way of achieving the target with the vehicles and infrastructure available over the next five years. To achieve this objective, however, would require full uptake by consumers and operators of E10 and B7 and that a significant volume of double counting blendable RED compliant material were available to the market.

Speaking today at Platts Biofuels Conference in Prague, LowCVP Policy and Operations Director Jonathan Murray welcomed the recent decision coming from the EU energy ministers to clarify the RED: *"These reports bring into focus the challenging area for policy straddling the fuels and auto industries. Our work provides a clear basis of evidence to show how the UK can meet its RED obligations to 2020 and contribute to carbon reductions from transport fuels in the longer term through working closely together on the details of the challenge."*

The Element Energy lead author Celine Cluzel noted: *“Meeting the UK’s carbon reduction targets calls for a transformation of the powertrains and fuels used in the vehicle fleet. While industry players have divergent views on technology choices and policy instruments, it was very encouraging to see that all the stakeholders we consulted during the project support and want to play a role in that transformation. The Fuels Roadmap, by identifying the key milestones, is a positive step towards delivering the change that will be required.”*

## **NOTES TO EDITORS**

The study proposes maximising the use of fuels which count double towards the target –primarily, currently, used cooking oil (UCO), and fuels from other waste material, which will be needed as a feedstock for B7 biodiesel in order to both achieve the target and reduce the risk of unintended consequences such as indirect land-use change (ILUC). However, this approach is not without its challenges; maximising the use of UCO and waste sources requires close scrutiny to ensure fuel quality and vehicle operability are maintained under all conditions.

The analysis shows that vehicles powered by renewable electricity are unlikely to make sufficient inroads in the time available to meet the 2020 target even with proposed multiple counting of the EV contribution. However, it says that encouraging the deployment of electric and biomethane vehicles, together with the increasing range of niche options available is key to helping alleviate the risks of reliance on E10 and B7 to meet the target.

The report also says that encouragement of the development and deployment of so called advanced and drop-in fuels as early as possible will also help alleviate short term reliance on E10 and B7 made from food crops. Advanced fuels include hydro treated vegetable oil (HVO), biomass to liquid (BTL) and ethanol made from waste or ligno-cellulosic material (E2G).

The second of the twin studies – the Fuels Roadmap<sup>2</sup> – says that the decade from 2020 is when electrification of vehicles (including plug-in hybrids, battery electric vehicles and/or fuel cell vehicles) is likely to become a mainstream offer, providing there are advances in electricity storage technology and assuming adequate grid capacity. This growth must also be matched with reductions in the carbon intensity of the grid if transport, which currently accounts for about 25 % of the UK’s carbon emissions, is to make a contribution to long term renewable energy and carbon reduction goals.

Between 2020 and 2030, the authors say that powertrain and fuels roadmaps have the potential to deliver around a 20% reduction in well-to-wheel (WTW) emissions.

Beyond 2020, the European Commission’s transport goals are also expected to begin driving the volume introduction of Zero Emission Vehicles (ZEVs). The report envisages, for example, CO<sub>2</sub>-free urban logistics by 2030 and the phasing out of conventionally fuelled cars in cities before 2050.

In terms of commercial vehicles, the report says that efficiency gains will be an essential component of advances in the 2020-2030 timeframe with an increasing use of hybridised and some full electric (battery electric and fuel cell) powertrains for specific applications.

Otherwise, the report finds that there is sufficient sustainable ethanol to enable vehicles to move to a higher blend than E10 gasoline. This also brings potential for further efficiency gains if vehicle engines are manufactured to take advantage of potential, higher octane levels from higher ethanol content but this would require evaluation on a well-to-wheel basis to ensure the optimum approach across fuel production and use. This would need to be agreed as part of a new fuel specification for petrol and is unlikely to be introduced until near 2030.

It also suggests that methane and biomethane will have a key role to play in road transport in the time horizon to 2030. This will require a robust strategy to ensure that the potential well-to-wheel emissions benefits are realised. The report also sees a role for LPG and the intriguing potential for bio-LPG.

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### **About Element Energy**

Element Energy is a strategic energy consultancy specialising in the analysis of low-carbon energy in the transport, buildings and power sectors. The company provides a range of services to private and public sector clients, from techno-economic analysis and policy advice to managing the demonstration and deployment of low carbon technologies. Element Energy has 25 staff with offices in London and Cambridge.

### **About the LowCVP**

The LowCVP is a public-private, not-for-profit partnership that exists to accelerate a sustainable shift to lower carbon vehicles and fuels and create opportunities for UK businesses. The LowCVP has been - and continues to be - mainly funded by the Department for Transport but with increasing contributions via membership fees and sponsorship/project income. Approaching 200 organisations are members, from diverse backgrounds including automotive and fuel supply chains, vehicle users, academics and environment/not-for-profit bodies.

The LowCVP Conference (15 July, Central London) will include a section focusing on the introduction of lower carbon road transport fuels. The event will also announce the results of a new study which is looking at the impact of low carbon-focused policy on investment, jobs and growth in the UK automotive sector. For more information, [click here](#).

Visit [www.lowcvp.org.uk/projects](http://www.lowcvp.org.uk/projects) for full details about the LowCVP's 2014-15 work programme.

For more information visit: [www.lowcvp.org.uk](http://www.lowcvp.org.uk)

- [1.](#) Options and recommendations to meet the RED transport target. Element Energy, 2014. ([MAIN REPORT DOWNLOAD LINK](#); [APPENDIX DOWNLOAD LINK](#))
- [2.](#) Road Transport Fuels Roadmap for the UK. Element Energy, 2014 ([DOWNLOAD LINK HERE](#))