The Low Carbon Vehicle Partnership is flying the flag to reduce the UK's carbon impact of road transport

Reducing greenhouse gas emissions in the UK

Relative vehicle infrastructures in Europe vary from country to country. In the UK, electric vehicles are expected to play a key role in reducing greenhouse gas emissions, alongside Ultra-Low Emission Buses and low carbon trucks, as well as other innovative technologies allied with behaviour changes.

The Low Carbon Vehicle Partnership (LowCVP) is one of the initiatives fighting towards the UK becoming carbon neutral. Managing Director Andy Eastlake talks to *Government Europa Quarterly* about how this can be achieved, and how electric vehicles and other low emission technologies can play a key part in reducing greenhouse gas emissions by 2050.

Can you start by telling us a bit about the work and role of the Low Carbon Vehicle Partnership (LowCVP)?

In the UK, the legally binding Climate Change Act (2008) determined that the UK must reduce its greenhouse gas emissions by 80% in 2050 compared with a 1990 baseline. A new 'Net Zero' law, passed earlier this year, has increased the UK's level of ambition such that it should be effectively 'carbon neutral' by the middle of this century.

The Committee on Climate Change is the independent body that has been set up to hold the UK Government to account in terms of its progress towards Net Zero. The Committee has set a series of 'carbon budgets' (effectively defining the necessary trajectory towards 2050) and monitors whether the Government is on course to meet each budget. Recently, the Committee has been critical about the UK Government's progress saying that the actions required are not matching the rhetoric. The

Committee has pointed to transport and heat as being key areas of concern.

Since 2003, the LowCVP has been working to help the UK reduce the carbon impact of road transport and meet its climate change targets. Road transport is one of the largest contributors to greenhouse gas emissions and also one of the most challenging sectors to tackle. In the UK, road transport is responsible for over a quarter of the country's CO_2 emissions and the contribution of transport overall has remained almost unchanged in the last 30 years, with road transport emissions actually increasing recently.

The LowCVP was set up in 2003 by the UK Government to work with the widest community of experts and provide evidence-based guidance to inform policy and other initiatives to cut carbon emissions from road transport. It's a unique organisation in having over 200 stakeholder members representing the widest range of

perspectives. Members come from the energy and motor industries as well as road transport operators, central and local government, academic bodies, financial organisations and environmental NGOs. The LowCVP works closely with representatives of the Government, particularly departments representing transport, business and environmental interests as well as finance, local government and international trade.

LowCVP's mission is "To accelerate a sustainable shift to low carbon vehicles and fuels in the UK and thereby stimulate opportunities for UK businesses". What is the importance of this, and how will you go about achieving this?

Each year the Partnership's secretariat group involves stakeholders in a process to identify the







key barriers and opportunities in terms of the low carbon road transport transition. LowCVP breaks down its activities into a series of working groups representing, for example, passenger cars, fuels, commercial vehicles and buses.

A growing area of activity has been around energy infrastructure; with the arrival of electric vehicles and significant growth expected, LowCVP is working with partners to ensure that the benefits of the EV transition in terms of the energy supply sector are maximised and potential challenges addressed.

Other key areas of activity include: **Buses**

The LowCVP has worked with stakeholders to define what is an Ultra-Low Emission Bus (ULEB) and has helped Government to create incentive schemes based on these definitions. A series of Green Bus Funds and other activities have made the UK feature amongst the world's leaders in terms of the adoption of low emission buses.

Commercial Vehicles

The truck sector is one of the most challenging in road transport due to long distance journeys and heavy payloads. The wide variety of truck configurations also means that it is difficult to create effective incentive schemes to encourage the best, low emission technology. The LowCVP has helped to develop definitions for low carbon trucks against which incentive schemes can be introduced. The Partnership has also developed a retrofit technology accreditation scheme (CVRAS) which enables existing freight operators to adopt relatively low cost retrofit technologies to clean up locally polluting emissions.

Passenger Cars

In addition to the EV Energy Taskforce (mentioned above) LowCVP is working on a range of initiatives to improve consumer understanding and awareness about low emission car choices. LowCVP was responsible for the introduction of the colour-coded fuel economy label in the UK, familiar to consumers as something similar appears on fridges, freezers etc. The Partnership has recently been working to raise awareness of the total cost of ownership benefits of electric cars through stakeholders (such as the finance and leasing community) who are in a powerful position to communicate how lower energy and other operating costs can benefit car buyers.

Vans and taxis

LowCVP has created a range of guides and other resources to inform operators of the available technologies and has run series of workshops and other events to disseminate them to key actors.

Fuels

The partnership is active in the fuels area helping to ensure greater consumer awareness and understanding through consumer labelling as well



Hydrogen van

as performing detailed technical work to help inform policymakers about the life cycle impacts of different low carbon and renewable fuels. LowCVP has been central to discussions around the introduction of higher ethanol blends (E10) to petrol sold in the UK.

In terms of UK businesses, what opportunities are you referring too, and what is the importance of these?

Contrary to earlier expectations, the UK's motor sector has generally thrived since the UK Government began to focus on cutting vehicle emission and other environmental aspects of vehicle performance. While the uncertainty around Brexit has unsettled the industry in recent years, it appears to be in a stronger position than it was in the 1980s and 1990s, prior to the focus on environmental and emissions performance. The LowCVP published a report called 'Investing in the Low Carbon Journey' in 2014, which looked at the industrial benefits to UK Plc arising from this focus.

The Government has introduced a wide range of incentives to encourage R&D and innovation in the automotive sector and there is a growing realisation, particularly as the EV transition gathers pace, that the countries best placed to dominate the markets of the future will be those that have gained a lead in the technical aspects of new mobility. Through this there is the potential to develop a competitive advantage which can be

bolstered by the development of advanced production capabilities.

In the UK, what would you say is currently being done in order of a sustainable shift to be achieved, and what do you think could/can be done better to enable this shift to be accelerated further?

Over many years the Government, with the LowCVP's help, has developed a range of support incentives through taxation, grants, softer local incentives and public information, to encourage both the purchase of lower emitting vehicles and for more efficient use. These have



GATEway Autonomous Pod

helped the UK become a leader in several areas (EV manufacturing, low emission buses, ULEV uptake and low carbon fuels). The UK Government has just announced that it will be publishing a plan for the full decarbonisation of the transport sector by 2050. This is to bring transport and other sector-specific plans into line with the new Net Zero regulation. The new plan will supersede the 'Road to Zero' strategy which was published in 2018.

The pace of change will clearly have to be raised and new technology introduction accelerated. The UK transport secretary has recently introduced the possibility, for example, that the target for ending sales of conventional ICE cars may be brought forward from 2040 to 2035.

There will also need to be a wider focus on tackling the problem; for example, looking more closely at the interface between energy and transport (how transport can also be more embedded in the energy cycle and support the green energy transition) and at the behavioural aspects of transport choice (car sharing and moves towards mobility as a service).

Where do you hope to see the UK in terms of carbon emissions in five years' time? Would you say we are on track of achieving this?

The latest progress report from the Committee on Climate Change showed that the UK is not on track to meet the 80% reduction target by 2050 and that we will have to significantly raise the scale of our ambition again in order to meet the new Net Zero target. Particularly worrying was that the Committee's latest report showed that most of the policy actions actually introduced to meet the current carbon budget have not yet been effectively implemented. For the last 10 years UK has made good progress, but there is no doubt that we face a significant challenge in continuing on the trajectory needed.

Therefore, we will clearly have to make a step change in our level of near-term ambition, and this will not be comfortable for policymakers, manufacturers, operators, mobility consumers or anyone else involved in the transport/mobility supply chain. Similar challenges will be faced and felt, of course, in other sectors of the economy. Solutions will have to accelerate green, clean technology introduction but also embrace significant behaviour changes. There will very likely have to be some sacrifices in terms of how far and how often we travel (and how many others we travel with). However, these changes may bring benefits that are currently unforeseen too. For us, it is clear that working in partnership across all sectors and stakeholders will be vital to galvanise the activities needed to make rapid progress.

The climate emergency is dictating that we must do all we can together, to make these changes in the shortest time we can. The UK is facing up to the challenge as all responsible countries must do and LowCVP and its members stand ready to support this shared endeavour in every way we can.

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