LowCVP's technology challenge

During its annual conference in July, the Low Carbon Vehicle Partnership (LowCVP) launched a challenge to find new carbon technologies specifically for HGVs.

Greg Archer, LowCVP managing director, says: "Efficient road freight distribution is a foundation of successful economies. There is a range of emerging technologies which achieve this, benefiting both the economy and the environment. Our challenge is designed to accelerate development and integration of technologies for lower carbon trucks by connecting the most promising UK technology companies with leading vehicle manufacturers and operators."

The Technology Challenge is sponsored by CENEX, the UK's Centre for Excellence for Low Carbon and Fuel Cell Technologies; and the FTA (Freight Transport Association).

Archer explains that the LowCVP Technology Challenge is open to "products or systems that have the ability to improve fuel efficiency, reduce losses or cut energy consumption" – all of which ultimately result in lower CO_2 emissions from HGVs.

Winners, he says, will be selected by a panel of expert assessors, reviewing the solution's technical merit, commercial viability, environmental benefits and potential for commercialisation within three years.

Winning organisations will have the opportunity to work with senior executives of vehicle manufacturers, component suppliers and major fleet operators. They will also present their technologies at another LowCVP event later this year.

Pollution solutions

The Low Carbon Vehicle Partnership (LowCVP) aims to help businesses reduce carbon footprint. Deputy director Jonathan Murray talks to John Challen about which technologies will play the biggest parts

When the Low Carbon Vehicle Partnership (LowCVP) was called on by the DfT (Department for Transport) to investigate how to cut carbon emissions from buses, it was able to suggest ways to cut fleet emissions by up to 30%. Following this success, the partnership was brought to the attention of the government's Green Transport committee in the summer of 2009, and asked to evaluate a similar scenario for HGVs and LCVs.

The LowCVP's reports are now due this autumn, to coincide with the new government's spending review – and the partnership's deputy director, Jonathan Murray, assures us that cleaner trucks and vans are the priority. "[Transport Secretary] Norman Baker explained that, while the spending review is important, reducing carbon gases is still an important area across government. And they are also looking at measures to reduce the legislation and cost of such measures for business."

"We tried to be as technology-neutral as possible, but we eventually came up with three groups that could make a difference"

Encouraging signs, then, but what is the report likely to include? According to Murray, a range of options, for a range of vehicles: "We tried to be as technology-neutral as possible, but we eventually came up with three main groups that could make a difference." The first of the suggested trio were technologies that could be applied, or even retrofitted, to a vehicle – such as aerodynamic aids and low rolling resistance tyres. Then the partnership considered the growing number of options for powertrains, whether that be hybrid, electric or more efficient diesel engines. The final focus was on fuels: "We know there is a growing market for biofuels, as well as a market for gas-powered vehicles, so it is our job to consider which of these offers the biggest benefits to operators and the commercial vehicle market," explains Murray.

LowCVP has been helped in its task by a cross-section of vehicle operators, roughly 60% SME and the remaining 40% being major players in the transport and logistics world. The names and numbers that are involved in the sample – generated with a lot of help from the RHA (Road Haulage Association) and FTA (Freight Transport Association) – are under wraps, but Murray happily confirms that the level of knowledge about the possible forms of technology was encouraging.

"There was an element of confusion surrounding the regulation of emissions and CO_2, as well as the effect of forthcoming Euro 6 standards, but many were aware of aero improvements and the positive effect that low rolling resistance tyres could have on their fleets," he reveals.

When asked about which technologies members of the sample panel would invest in and how willing they would be to commit to it, Murray says two factors were clear. "There was a deep scepticism of claims made by manufacturers of trucks and trailers, in particular from the smaller operators," he explains. "There was a clear desire for someone to put an authoritative stamp on the technologies and to say it does what it says."

The second big issue, Murray says, was financial. "There were a range of responses, but clearly a need for return on investment to be quick. The average was under two years, but some people said a couple of months." Such thinking would realistically rule out an industry-wide roll-out of incentives for hybrid powertrains, then!

Murray, like many operators, is hedging his bets as to the make-up of dominant technologies for CO_2 emissions reduction. "I think a conservative approach is well placed and healthy," he states. "What's needed is a certification scheme that is robust and doesn't bear much cost, in terms of testing by vehicle manufacturers, but can provide certainty to vehicle operators about technologies that help the UK achieve climate change targets and deliver reductions in fuel consumption."

Time will tell whether such a certification scheme remains a priority or whether the recommendations that LowCVP puts forward to the coalition government have any impact. However, having experienced success in the bus market, Murray has some cause to be confident.