

ENVIRONMENT AND SUSTAINABILITY FORUM

New technologies feature at low-carbon road transport event

New technology, including alternative fuels, is an increasingly topical subject, with Road Minister Jesse Norman recently releasing a competition to compete for up to £15 million of funding to develop technology to reduce harmful emissions from freight. The joint Forum and Intelligent Transport Systems event: *Low-carbon road transport: the new normal*, saw nine speakers from a variety of backgrounds speak at the Liverpool John Moores University, followed by the chance to see a brand new Arriva gas bus.

Geoff Clark, Forum Chairman and Regional Director, AECOM, chaired the well-attended event. Several large organisations repeated that the three ways to reduce transport emissions are to reduce the number of miles driven, reduce the fuel burned by vehicles and to use alternative fuels.

Catherine Weetman, Forum Vice-Chair, introduced the theme for the day, with a reminder of the importance of reaching zero net emissions by 2050 in order to reach the targets set by the Paris agreement. One new technology highlighted was the Mole solution pipeline in Northampton. This has the potential to bulk goods in customised capsules travelling in a dedicated subsurface pipeline under full automatic control.

Steve Tainton, Wincanton, spoke on the challenges of scaling up and making the business case. Wincanton has had some difficulties implementing alternative fuels and he said that there are three pillars to reducing emissions: network design and operation; vehicle and driver fuel efficiency; and renewable and alternative fuels.

Justin Laney, John Lewis Partnership, spoke about using gas-powered trucks



Arrival recently started a trial with Royal Mail with three versions of its vehicle that have a battery life of 100 miles

Gas

Justin Laney, John Lewis Partnership, commented that the challenges of using gas-powered trucks are reducing rapidly. A 500-mile range truck has recently been released on to the market, meaning that John Lewis can effectively replace any journey required in its supply chain. Although John Lewis had 12 gas-powered (compressed biomethane) trucks, the fast improvements in technology have led it to increase its biogas fleet by 40.

Phil Cummins, Arriva, repeated the idea that new gas vehicles are a contender for new vehicle replacements, such as a Scania gas double-decker bus.

Electric

Catherine Weetman stood in for Jim York and spoke on the new electric delivery vehicle from Arrival, saying that electric is the prime solution for urban logistics. Arrival recently started a trial with Royal Mail with three versions of its vehicle (3.6t, 6t and 7.5t) that have a battery life of 100 miles.

The interesting point of allowing electric vehicles to deliver goods at night was raised by Steve Tainton, Wincanton. When asked what he thought local authorities



Waitrose's parent organisation, the John Lewis Partnership, has recently released a 500-mile range biomethane truck on to the market

could improve on, he said that due to the quieter nature of the vehicles, deliveries should be decided on a case-by-case basis, rather than the blanket night ban that exists currently in London.


Alternative fuels

Matthew O'Neil, Lead Air Quality Officer, Transport for Greater Manchester, said that there needs to be cost savings for businesses if they are to adopt alternative fuels, and that taxi drivers are not aware of the cost savings there could be. He highlighted a need to increase education and awareness of the recent advances.

Professor Andy Shaw, John Moores University, went on to speak about how fats and water can be used as fuel. The process used by Argent Fuel uses waste goods and therefore answers a criticism that is voiced by many of biofuels. The fuel produced marks a big reduction of greenhouse gases and it is almost waste free.

A lively question-and-answer session looked at a range of topics, including how tyre braking is causing significant pollution. Several of the speakers noted that this is an important issue, but there is need for more research to highlight the effect.

The audience members were then invited to see a new Arriva gas bus, which is based in Merseyside. Arriva has introduced nine new biogas buses to its fleet in Runcorn following a £2 million investment. The new 43-seater carbon-neutral models are powered by renewable gas from waste products, such as household food or animal waste, and comply with the latest Euro 6 emission standards, reducing the level of harmful exhaust emissions.

CILT thanks Professor Zaili Yang, John Moores University, for his hospitality. 

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