Calor Gas Ltd comments

Page: Policy T7 Freight and servicing

Section: N/A

We welcome the focus on freight transport in the London Plan, and share the view that freight is the next challenge in the decarbonisation of transport.

However we would argue that road freight movements inside the Capital cannot be reduced to zero entirely. Although there are some notable gains to be made from more strategic and efficient management of freight movement we would urge the Mayor of London to aim to outline proposals which manage road freight that will still, inevitably, retain some presence in the city.

Calor Gas is pioneering work with LPG (liquefied petroleum gas) and LNG (liquefied natural gas) as an alternative road vehicle fuel to be used in the UK. LPG and LNG fuels offer an efficient, low-cost and lower-carbon option to conventional diesel and petrol vehicles – and it is available now.

LPG and LNG offer immediately available solutions to reducing the carbon and air quality concerns of road vehicles. In Birmingham, Calor has successfully demonstrated the value of this fuel in its taxi retrofit scheme. Independent testing of a TX4 taxi (a typical Black Cab) repowered to run on LPG revealed that after conversion the taxi emitted 99% less PM, 80% less NOx, and 7% less CO2. The LPG TX2 has already been approved by TfL and the TX4 is currently undergoing road testing, so should follow soon.

For larger freight demands, the development of a pure electric heavy goods vehicle (HGV) is still a long way off. Calor is currently working with Dutch EV vehicle developer Emoss Ltd to provide the UK market with an electric powered truck with an LPG range extender (RE), to meet the needs of heavy goods freight. The first model produced will be a 16 tonne rigid truck, which allows operation in urban areas; we plan for this to operate across London by the end of 2018. The truck has a range of 400 km and can travel for 64 km solely on the battery. It offers savings of 82% carbon emissions annually, and with BioLPG capability carbon emissions are reduced by a further 80% (equating to 94% reduction overall). NOx emissions are reduced by 94% compared to Euro VI standards; and particulate matter is virtually eliminated.

We welcome the Plan's proposal to roll out infrastructure to support alternative fuels, but are concerned that only hydrogen fuel is mentioned, and that the benefits of LPG/bioLPG and LNG/bioLNG should be included in the Plan. We believe that insufficient infrastructure is a key barrier to the wide-scale uptake of alternative-fuel vehicles. In the instance of LNG, Calor Gas is actively rolling out refuelling networks across UK highways, and as demand for the fuel increases Calor will build the infrastructure to accommodate this, at no cost to local authorities or government. Calor already has a strong presence in the UK's LNG infrastructure along the road network, operating a total of 7 publicly available refuelling hubs. For LPG, there are currently over 1,200 forecourts supplying LPG to drivers in the UK, 50 of which are located inside the M25.

The Plan's aim of carbon-free travel by 2050 is also an encouraging one. We are committed to the decarbonisation of our fuels, and we are leading the drive to incorporate BioLPG into our products. BioLPG offers a potential well-to-wheel greenhouse gas savings of up to 95% compared to fossil LPG. Calor is in the process of supplying over 20,000 tonnes of BioLPG into the UK, with the first shipment expected to arrive in spring 2018. For heavier vehicles, Volvo, Iveco and Scania all offer LNG for long distance haulage, which demonstrates the demand in this sector to move to LNG. These provide an immediate 20% reduction in carbon emissions from conventional diesel, offering the same load capacity and performance. There is also a 39% reduction in NOx emissions, and particulate matter is slashed by 68%.

Calor's first delivery of BioLPG is produced as a by-product of biodiesel and Calor is actively researching other methods, such using gasification of household waste to create propane. This has the potential to enhance whole-system thinking and the Mayor of London's existing thinking on the Circular Economy and sustainable treatment of the city's waste.