

# Guidance along the green road

Reliable advice at an early stage is vital if local authorities are to benefit from green commercial vehicle technologies, explains JouleVert Ltd MD Colin Matthews...

In today's climate it is getting ever more difficult for local authorities to plot their way through the plethora of latest 'green' offerings that appear on the market – from the supposedly quick fix add-ons (that never appear to work in reality) to the more costly complete vehicle and fuel options. Add to this the increased pressures to deliver tangible CO<sub>2</sub> savings and (sometimes contradictory) air quality emission improvements, whilst having to deal with reductions in budgets, and one can't help feeling that any local authority official with a transport portfolio or sustainability brief has the equivalent of a poisoned chalice.

How does one go about determining the correct way forward for their authority, one that balances cost effectiveness, real carbon and air quality reductions, budgetary prudence, and long-term progress? How to assess all the offers landing on the table and be sure that one is getting sound, sensible advice in a world where 'they would say that wouldn't they' prevails with every sales pitch received?

What is needed is truly independent advice that can be trusted, based on actual experience.

## How to go about it

When it comes to commercial vehicles (vans, trucks and buses), we need to split the approach into bite-sized chunks to allow for proper analysis and identification of options before bringing it all back together to ensure that the overall approach is holistic in its delivery.

Vehicle choice should be based on an assessment of 'right vehicle, right fuel, right drive cycle'. Each type of power train or fuel option has its own 'sweet spot' of operability. Understanding this is fundamental in sorting the wheat from the chaff. What is key is that authorities recognise the functional drive cycle of each of their vehicles in terms of daily, monthly, annual mileage and hours of operation. That analysis is the tool that allows for the elimination of options that aren't practical or appropriate, leaving a much smaller set of options that can be considered and worked upon in detail.

Secondly, the future options need to be set alongside the vehicle change-out policy of the authority's own fleet, as this will further help in reviewing the tangible opportunities to deliver the required balance of short-term and long-term aims.

Much heartache can arise when what seemed like the right investment is found not to perform or deliver in reality, but this can be spared via good, independent, supportive advice on the assessment phase. An example would be an electric van; in theory they are great for inner cities, but be aware of topography – carrying that weight up a hill with the wipers and the lights on whilst trying to keep up with the flow of traffic knocks six bells out of the batteries, and that is not recovered completely on the descent (perpetual motion does not exist). Yes, driver training helps but then there is reality.

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When considering heavier commercial vehicles such as trucks and buses, the range of economic options narrows significantly. Bio-methane as a fuel provides the lowest carbon footprint for these types of vehicles whilst maintaining their economic functionality. However, this depends on engaging with enough vehicle operators to justify the refuelling station build. Thus, knowledge of all the vehicle options – including dual fuel conversions and their resulting performance – is needed to convince the various parties to join a consortium to develop the refuelling. Natural gas itself saves carbon against diesel and delivers the lowest air quality emissions of any fossil fuel.

This is where the Technology Strategy Board grant programme is scoring highly. It is providing real life examples of multi-operator collaboration for the private sector, which, if developed properly, opens up the option for councils and bus operators to utilise the facilities at a low entry cost.



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