

Unitas



Reasons to Purchase Electric Vehicles?

It is clear that if we are to meet challenging emissions targets set by the government and move towards a sustainable future, Uritas as a medium size fleet operator need to look at introducing ultra-low emission vehicles within our fleet.

Targets set out include all new conventional petrol and diesel cars and vans are set to be banned from sale in 2030.

Clean Air Zone (CAZ)

A Clean Air Zone is an area within which older vehicles that don't meet current emission standards may have to pay a charge to drive within a specific area of a city, this helping to improve air quality.

Following London, Bath has already introduced a CAZ earlier this year and Birmingham's CAZ is set to launch on 01/06/2021.

More cities, including Stoke-on-Trent, are likely to implement Clean Air Zones at a later date.

What this means for City of Stoke-on-Trent and surrounding areas?

In 2018 the Government ordered NO2 levels to be cut at hot spots in both the city and borough. Air pollution has to be brought within acceptable levels by 2023. Since then all three councils have been working on the air quality plan, with the Government due to approve the final plan next summer.

This process is being overseen by the Government's Joint Air Quality Unit (JAQU), which says councils have to achieve the reduction in the shortest possible timescale.

Options Considered

Unitas looked at identifying which current vehicles within the fleet would benefit as having an electric vehicle as a suitable replacement.

A vehicles daily/weekly mileage, the payload it carries and types of journeys it makes were all considered.

This resulted in our Logistics department being chosen as our first area within the business to benefit from electric vehicles. Logistics only make up 8% of the overall fleet, however they do considerable more mileage than the rest of the fleet delivering goods out to operatives all over the city on a daily basis.

Before procuring the new Electric Vehicles, Unitas demonstrated several different Make and Models of electric vehicles to compare range and capability, including Vauxhall Combo-E and Nissan eNV200.

Renault Kangoo Z.E.

- **Range** – the Z.E. battery offers real life estimates of **124 miles** in summer and **75 miles** in winter
- **Internal Load Space Area** – **High Load Capacity** with the versatility for **3 additional seats** in the rear
- **Regenerative braking** - The battery charges itself when you take your foot off the accelerator and also when you use the brake pedal.

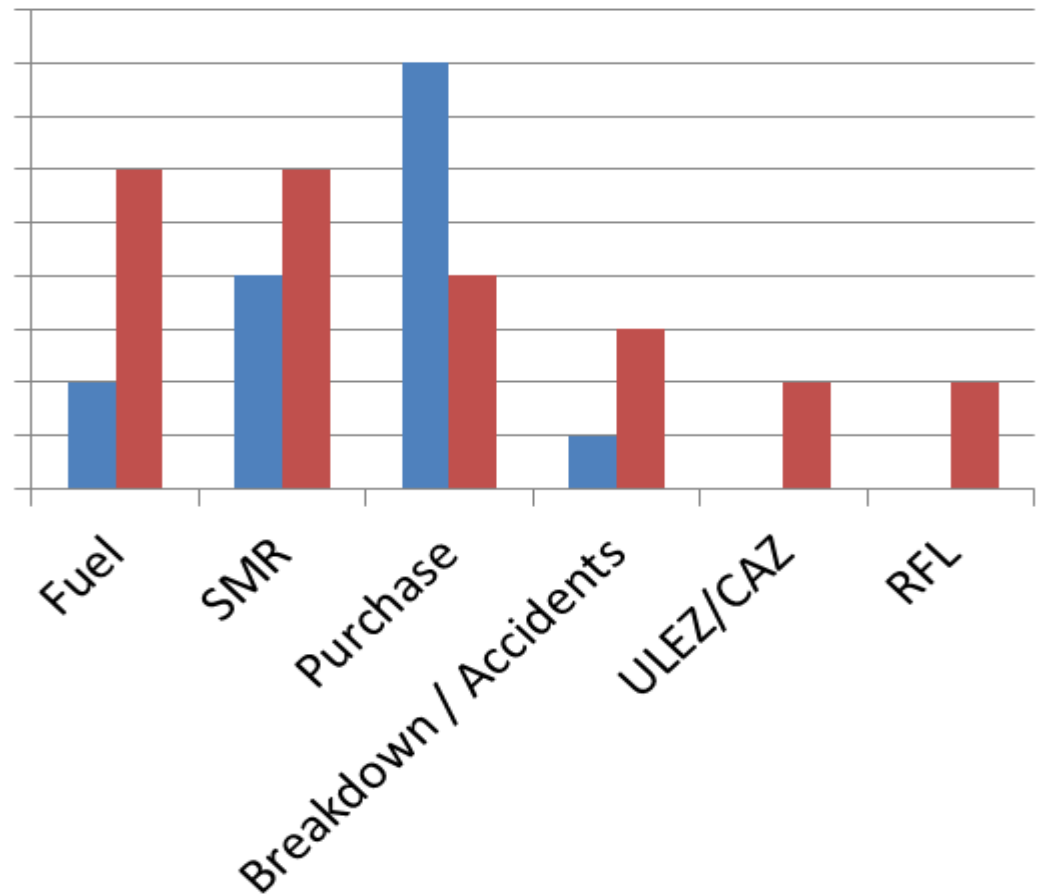
Pro's vs Con's of Electric Vehicles

- Lower running costs
- Cheaper to maintain
- Environmentally Friendly
- Government Incentives
- Image booster
- Future-proofing
- Easy to drive
- Range anxiety
- Charging challenges
- Initial outlay
- Reduced payload
- How green?
- Depreciation

Indicative Costs

When looking at implementing EV Vehicles into the Fleet we need to look at the Total Cost of Ownership, in comparison to that of a Diesel vehicle.

Other than the outright purchase of the vehicle, Electric Vehicles cost less on the majority of all aspects when operating a Fleet.



We also looked at EV vehicles already situated within Stoke-on-Trent City Councils fleet.

This showed electric vehicles introduced into the councils fleet had reduced fuel expenses alone by 34% per van per year.

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Electric Vehicle Branding

Following the successful application to complete the Livery on Uritas vehicles, we worked closely with Stoke-on-Trent based company Graphix to design and implement a full vehicle wrap on our new electric vans.

Uritas wanted the new vans to stand out from the rest, showing the 100% Electric and Zero Emissions vehicle, but also keeping a local twist which is shown with the skyline of Stoke, including its famous bottle kilns.

The wrap installed by Graphix is also made entirely from 100% recyclable material

Charging



Challenges of Charging

With more than 85% of our Operatives taking their vehicles home at the end of their shift, the questions around how operatives can charge are:

- they might not have off-street parking,
- they might not own their property and/or may not be able to get permission from their landlord to install a home charger
- if they do have off-road parking, is their space big enough for a full-size commercial vehicle?
- how do we reimburse operatives for electricity used to recharge vehicles?

Unitas's Future with Electric Vehicles



The Future

Unitas will continue to review and analyse the current fleet, and identify which vehicles could be practically and cost-effectively replaced with fully electric vehicles.

Along side this we will look at the current charging infrastructure available and the potential future requirements.

Whether this is the need to return to base to recharge overnight, or install charging points at employees' homes where vans are taken home overnight.

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