

UBICO FLEET ELECTRIFICATION

BACKGROUND

Stroud District Council own a substantial number of vehicles, operated by Ubico for the provision of environmental services. Historically all have been supplied with diesel combustion engines.

With the drive to increase the proportion of fleet operated by zero or low carbon technologies as per EC6.3 of the Council Delivery Plan, Ubico and SDC have been assessing vehicles at the time of capital replacement, reviewing the feasibility of electric alternatives. This has included the trial of a 100% electric refuse collection vehicle and street sweeper.

Whilst environmental credentials are clearly important, there are also operational considerations, given the profile of services, visiting every property in the district, every week. Commercial electric vehicles are, relatively speaking, in their infancy, so balanced views are required to mitigate risks. This includes workshop skills, reliability, long term performance and possible battery degradation.

PROGRESS UPDATE

Positive trials have led to a number of EV commitments as a fleet transition commences. Charging capability for multiple vehicles has already been installed at Gossington, with further facilities in progress. Electric vehicles as per the below table have been agreed:

VEHICLE	SERVICE	EST. DELIVERY DATE
Street Sweeper	Street Cleansing	March 2022
Small Van	Building Cleaning	March 2022
3.5t Cage	Street Cleansing	TBC
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COSTS

Currently the price differential between diesel and electric is substantial, with most local authorities monitoring price points. The capital budget presented to Strategy & Resources Committee on 27th Jan 2022 outlines an additional spend dedicated to fleet electrification in 22/23 (reflected above to account for lead times). Further provision for electric vehicle upgrades beyond 22/23 are unbudgeted, but the

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Community Services Manager will continue to liaise with the S151 Officer and members, as appropriate, to review options.

POTENTIAL CARBON SAVING

Using parameters of mileage and usage particular to Stroud District, it is estimated that the street sweeper will generate circa. 42 tonnes of CO₂/carbon savings, per annum. Based on similar metrics, the remaining vehicles will contribute an additional 30 tonnes of CO₂/carbon savings.

COSTS VERSUS CARBON SAVING

The additional investment required to electrify the above fleet stands at £384k. This investment will result in 72 tonnes of CO₂/carbon savings, each year over the expected vehicle lifecycles.

WHAT NEXT

As the technology stands and given the large scale fleet replacement due in 2023/24, it is unlikely that RCV electrification will be recommended at this time. However, SDC will continue to work with Ubico to identify new opportunities to decarbonise fleet.