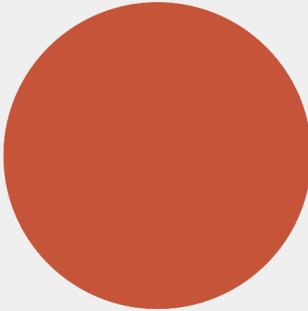
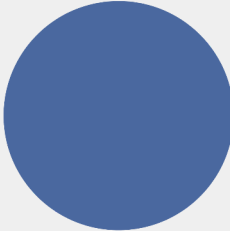

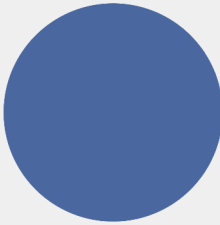


### Diesel vs Electric Vans: A Comparison of Cost & Emissions

Due to recent developments in electric vehicle (EVs) technology, the use of electric last mile delivery vans can offer substantial cost savings, as well as drastically reducing CO<sub>2</sub>e emissions associated with the transportation of goods.

In order to accelerate the art sector’s transition to these vehicles; **target three of the Sustainable Shipping Campaign requests that all local deliveries<sup>1</sup> be low or zero emissions by 2025<sup>2</sup>.**

Provided here is a comparison of both the emissions and cost implications of diesel road freight vs. electric equivalent:

	Diesel Van <sup>a</sup>	Electric Van <sup>a</sup>
<b>Cost<sup>b</sup></b> Over 5 years	 <b>£75,580</b>	 <b>£44,250</b>
<b>Emissions<sup>c</sup></b> Including manufacture over 5 years of use	 <b>43 tCO<sub>2</sub>e</b>	 <b>22 tCO<sub>2</sub>e</b>

## Data Explanation

**a.** The above graphic outlines a comparison of the CO<sub>2</sub>e produced by UK Vauxhall Vivaro diesel vans (1.9L) versus electric Nissan Voltia Acenta vans (8cbm volume EV) driving 15,000 miles per year (24135 km).

**b.** Costs include the van purchase price (as of 2022) and average running costs over 5 years. The cost benefit works out even better for the electric vehicle if the vans are used for longer than 5 years.

**c.** Emissions include a generalised estimate of the carbon footprint created by the manufacturing of both vehicles. The emissions associated with the manufacture of the electric van are higher, as lithium batteries are very energy-intensive to make. However, the lower emissions from running the vehicle more than make up for this over five years. As electricity grids become more carbon-efficient over time the CO<sub>2</sub>e produced in the manufacturing and use of electric vehicles will decrease and these figures will improve further. The emission comparison works out even better for the electric vehicle if the vans are used for longer than 5 years.

The figures in this document are accurate estimates as of May 2022. This document has been produced in collaboration with [Zhero](#) as a part of the [GCC's Sustainable Shipping Campaign](#).

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<sup>1</sup> Defined as transportation between destinations within the same city, so called 'last mile' deliveries and - wherever possible - trips to airports or sea ports.

<sup>2</sup> Where dimensions allow, i.e. as would be for a typical 'last mile' transit vehicle but not expected for shipments that would naturally be moved in HGVs. GCC acknowledges that not every city has appropriate zero emissions fine art delivery options and this target only applies to regions where it can be implemented. The technology and use of low emissions vehicles is rapidly growing and GCC is optimistic about this target being achievable for the majority of members as long as supply can match the growing demand for EVs. If supply cannot match the demand and as a result the target becomes unachievable it will be reviewed. GCC recommends members to have conversations with their local delivery agents and general suppliers and share this information to encourage them to consider decarbonising their fleet.