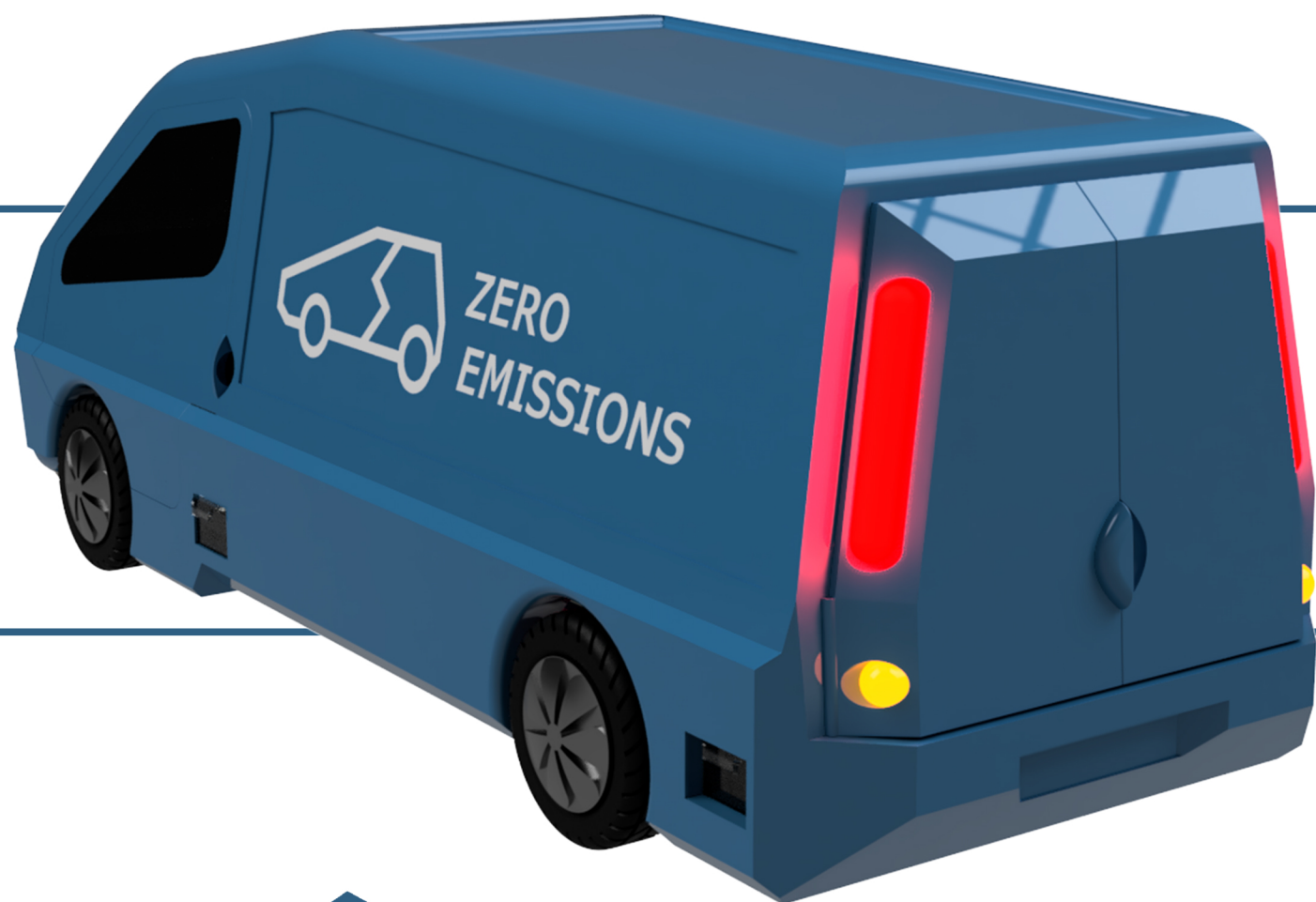


The Bigger Picture

There are a number of issues with the way EVs are produced today. One example is the environmental consequences of mining rare materials for use in lithium-ion car batteries, primarily lithium. There are no quick solutions to this problem, but research into more efficient extraction of these materials will lessen the impact of mining on the planet. Battery technology is always evolving, so I am hopeful that new forms of batteries will exist in the near future that can be made from more sustainable materials. My vehicle has been designed specifically to adapt to change and the modular chassis system makes upgrading components easy.

Another issue is the source of the electricity that powers electric vehicles. Currently 20% of the UK's energy comes from renewable sources. If my design solution was put into production, I would invest heavily in renewable sources to ensure that the energy powering production and individual vehicles is clean.



Viability

I believe that my design is viable in the real world because there is a genuine need for my product. I consider the majority of vans currently in UK cities are obsolete and have no place in the modern world. Commercial vehicles are allowed to emit far more pollution than passenger cars so there is little incentive to change for companies only concerned with profit. My design will change this by offering businesses more range, more carrying capacity and far lower running bills from their vehicles all while contributing to a cleaner, safer environment.

The most substantial barrier to this concept is financing. A new production facility would come at massive cost, so the project would need to attract significant investors to be a reality. Research indicates that a completely new facility could cost upwards of one billion GBP to set up, so efforts should be made to retool an existing facility.

Specifications (Cargo Van Model)

Payload: 1500KG
 Combined Power: 160PS
 Combined Torque: 350NM
 Estimated Range: 400KM
 Empty Weight: 2800KG
 Battery Capacity: 80kWh
 Motor Power (Each): 30kW
 RRP (Base Model, GBP): 39,995

