

Royal Mail Trials Hydrogen-Powered Van For Parcel And Letter Deliveries

30-11-2020

The trial forms part of Royal Mail's ongoing commitment to reduce emissions associated with its operations. This week marks the first time in ten years that a hydrogen-powered vehicle has been introduced into Royal Mail's fleet. This is an example of the Company's ongoing commitment to reduce emissions associated with its operations.

The van is a dual fuel vehicle, with up to 60% of its power generated by Green Hydrogen[1]. As part of the trial, the remainder of its power comes from diesel fuel. This is a preliminary trial to determine if hydrogen is operationally suitable within Royal Mail's fleet. If workable, the results will be considered in future strategy developments for the Company.

The van will accommodate letters, cards and parcels of all sizes, and is designed for use on roads and highways. Deliveries during the trial will operate as normal, on suitable routes. The 3.5 tonne vehicle is durable, and can travel up to 120 miles in dual fuel mode. Refuelled close to the delivery office, it is designed to help postmen and women deliver letters and parcels securely, whilst reducing associated emissions. The van will be trialled on delivery rounds in Altens, Aberdeen, for a twelve-month period. It has been provided to the Company by Aberdeen City Council, as part of the EU-funded Civitas Portis project*. This project marks a significant drive from the city to improve air quality, and to explore more sustainable transport options.

Hydrogen-powered vehicles were originally tested by Royal Mail in 2010[2]. As technology has significantly evolved in this space over the past decade, the Company is keen to understand how hydrogen can operate within its fleet; particularly for larger vehicles and longer routes, where electricity

may not be a viable alternative fuel.

This initiative forms part of Royal Mail's program of alternative fuel vehicle trials. They are an example of the Company's ongoing commitment to reduce emissions associated with its operations.

How is hydrogen used to fuel vehicles?

Electrolysis is used to produce hydrogen, by using an electrical current to split water into hydrogen and oxygen. If energy from renewable sources is used to power this process, hydrogen can be produced with zero carbon emissions. When made with renewable energy, and used in a fuel cell as a source of power for vehicles, hydrogen can provide a zero-emission fuel, which produces water vapour instead of CO2e, and other emissions.

Hydrogen-powered vehicles generally have a similar refuelling time to petrol and diesel vehicles, and can travel considerable distances.

A responsible Company

With the UK's largest "Feet on the Street" network of 90,000 postmen and women, Royal Mail already has the lowest reported CO2e emissions per parcel amongst major UK delivery companies. The low emission vehicle



trials, including the dual fuel Transit van, are designed to help the Company inform its long-term environmental strategy, and to meet its goals of delivering a cleaner future.

James Baker, Chief Engineer and Fleet
Director at Royal Mail said: "As a Company,
we are committed to making changes to our
operations that reduce our environmental
impact. Hydrogen is viewed by many as a vital
source of future sustainable energy; so, as
such, is a perfect addition to our program of
initiatives that enable us to assess ways of
achieving this, while allowing us to continue
to deliver letters and parcels safely, efficiently
and responsibly."

Councillor Philip Bell, Aberdeen City Council's

hydrogen spokesman, said: "We are absolutely delighted to support green transport technology in our city by providing Royal Mail with a hydrogen-powered van to operate from its Altens Mail Centre in Aberdeen for an initial 12-month trial period. Aberdeen is already a global leader in pioneering transport technologies and we at Aberdeen City Council have demonstrated our commitment to innovation by helping fund in partnership, the world's first hydrogenpowered double decker buses. We are determined to meet our environmental obligations by tackling air pollution while also establishing the city as 'Centre for Excellence' for hydrogen."

Source: Royal Mail