

Freight Electric Vehicles in Urban Europe

www.urbact.eu/freight-tails

@freight_tails

September 2017

FREVUE provides evidence on how the current generation of electric freight vehicles are viable alternatives to conventional diesel ones.

London faces increasing logistics demand with restricted road layout and highly polluting diesel delivery vehicles continuing to pollute the air that we breathe.



EU project
with 32 partners
across 8
European cities

€4

Million budget,
of which €.9
million funding
4.5 years
of vehicle
demonstration,
research
and analysis

80

Electric vans and
trucks deployed

Finalised in
September 2017

Introduction

The current generation of fully electric vans and trucks can be alternatives to diesel ones for many freight operators, but a large-scale market uptake has not yet taken place.

The FREVUE project demonstrates the suitability of these vehicles for a wide range of urban logistics operations, with the aim to ultimately increase their uptake.

Scope of works

Cross River Partnership (CRP) is managing the overall project as well as leading on its London component.

Across the eight European cities that are FREVUE partners, more than 80 electric vans and trucks are being successfully deployed and their data is collected and analysed.

In London, project partner UPS has deployed 16 fully electric 7.5 tonne freight vehicles. They are well integrated into UPS's daily operations and their deployment has gone from 'trial' mode to the 'new normal'. This shift in attitude is reflected in the numbers, with the UPS London fleet of fully electric trucks having grown to 52 by the end of 2016, out of a total fleet size of 170.

Outcomes

Preliminary results from the FREVUE project show that not only is the deployment of electric freight vehicles feasible in most cases, but they offer 100 % reduction in local air pollutants NOx and PMs. A significant reduction in CO₂ emissions of on average 45% has also been observed.

The environmental benefits translate into significant cost savings too. As an example: If, in London alone, we could electrify 10% of the freight fleet by 2021, we could save over € 1billion in reduced health impacts and abatement costs. This savings potential should be taken into account in future policy decisions.

Lessons learnt

The project shows that fully electric vehicles are highly suitable for urban freight operations. Nevertheless, for a widespread uptake of electric vehicles, policy makers, fleet operators, vehicle suppliers and energy network operators will need to work together to overcome the remaining barriers, such as limited vehicle availability, high prices and, at times, grid infrastructure limitations.

Future of the project

Coming to an end in September 2017, the FREVUE project has achieved long-lasting results. Most operators that trialled electric vans and trucks as part of the project have already expanded their electric fleet based on the positive experience. FREVUE is providing the practical as well analytical evidence base for industry and policy makers to support the future uptake of electric freight vehicles.

The current generation of electric vans and trucks are well suited for urban logistics

The available vehicle range is sufficient for most operations

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Zero tailpipe emissions mean no NOx or PMs, two of the most concerning local air pollutants

CO₂

Average CO₂ reduction of 45%



<http://frevue.eu/>

https://twitter.com/FREVUE_project

<http://crossriverpartnership.org/projects/freight-electric-vehicles-in-urban-europe/>