

# The need to explore smart charging for Electric Freight Vehicles (EFVs)

- Most UK cities experience an air pollution and CO<sub>2</sub> emission crisis
- In London, freight vehicles cover 16% of vehicle kilometres, but produce a disproportionate amount of 22% of total road CO<sub>2</sub>, and 35-40% of local air pollutants
- EFVs can play an important role in addressing these issues with zero tailpipe emissions and significant CO<sub>2</sub> reduction potential
- Large-scale deployment of EFVs will involve the electrification of larger fleets, such as the UPS one in central London.
- The introduction of large electric fleets is currently hindered by potential constraints in the existing local grid infrastructure.



Turn over to see what the Smart Electric Urban Logistics project has set out to do about this

# The Smart Electric Urban Logistics Project (SEUL)



The global logistics company UPS is committed to greening its delivery fleet. At the start of this project UPS has integrated 52 fully electric trucks and, because of the existing electric infrastructure and lack of EFVs, is being held back introducing more.

For the SEUL project, UPS has partnered with UK Power Networks and Cross River Partnership to:

- Extend the number of electric freight vehicles at their central London depot by 20 EFVs, bringing the number above the maximum that can theoretically be charged at any one time
- Design and implement an innovative smart charging system at this depot together with an energy storage system
- Design and implement a sophisticated network capacity assessment tool developed by UK Power Networks to take into account time of day variation in demand
- Develop a roadmap for how all of UPS's 170 central London vehicles could be electric
- Deliver a scalable set of outputs, which other logistics and freight operators can implement.

SEUL is a two-year project that commenced in April 2017, and is co-funded by the Office for Low Emission Vehicles (OLEV).



Office for Low  
Emission Vehicles

To register your interest in SEUL and be kept informed of news, progress reports, fact sheets, and conference attendance, please visit: [www.crossriverpartnership.org/projects/smart-electric-urban-logistics/](http://www.crossriverpartnership.org/projects/smart-electric-urban-logistics/)