

Project ID	DIP027		
Long Title	Electric Boulevard		
Short Title			
Keywords	Small-scale; Town; Non-domestic; Electricity; Transport; Electric & Hybrid Vehicles; Smart Transport Networks; Transport System Enablers; Data Acquisition		
Location (Town, Region, Country)	Milton Keynes	Northumberland	England
Latitude and Longitude	52.04N	0.76W	
OSGB code	SP 84 39		
Status	Complete		
Start Date	2013		
End Date	2016		
Description	<p>Arup and Mitsui led a joint venture to determine the technical and commercial feasibility of decarbonising an existing public transport route around Milton Keynes with the introduction of a number of pure electric buses.</p> <p>The conventional diesel powered buses servicing this route were entirely replaced by an electric bus fleet developed by Wright Bus and operated by Arriva. This is the first scheme in the UK to replace an existing fleet with electric multi-passenger vehicles. It is also the first scheme in the UK to use opportunistic wireless charging at a number of bus stops around the route to supply power to the vehicles.</p> <p>This project has facilitated decarbonisation of the transport system by developing a standard connection policy for Inductive Power Transfer (IPT) chargers. Through monitoring of the HV and LV network before and after installation, the level of disturbance was assessed and quantified against existing limits. Furthermore, by trialling a number of connection arrangements and comparing traditional reinforcement methods with innovative techniques, the most appropriate scheme could be developed.</p>		
Sectors	Transport		
Funding Sources	Low Carbon Network Fund		
Budget £	£492,000		
Partners	Western Power Distribution, Arriva, Arup, Cambridge University, Chargemaster, Conductix-Wampfler, Milton Keynes Council, Mitsui, SSE, TRL, Wright Bus		
Energy vectors	Electricity, Transport		
Scale (lab/site/small /community/region/national)	Small		
Technologies demonstrated	EV charging, wireless charging, network data acquisition		

Economic models demonstrated	
Other concepts demonstrated	Grid constraint mitigation
Industry engagement	
Consumer engagement	
Project Reports (incl. links)	https://www.westernpower.co.uk/docs/Innovation/Closed-projects/Electric-Boulevards/Electric-Boulevards-Closedown-Report-FINAL-v2.aspx
Datasets (incl. links)	
Website/social media	https://www.westernpower.co.uk/Innovation/Projects/Closed-Projects/Electric-Boulevards.aspx
Information sources	http://www.smarternetworks.org/project/nia_wpd_001