Project ID	DIP008		
Long Title	Bus2Grid		
Short Title	Bus2Grid		
Keywords	Small-scale; Multi-sector/Grid; Electricity; Transport; Virtual Power Plant; Vehicle-to-Grid; Electric & Hybrid Vehicles; Smart Transport Networks; Transport System Enablers; Energy Strategy Development; Environmental Impact;		
Location (Town, Region, Country)	London		England
Latitude and Longitude	51.51N	0.13W	
OSGB code	TQ 30 80		
Status	Ongoing		
Start Date	2018		
End Date	2020		
Description	The project is a first of a kind large scale, multi-megawatt, demonstration of Vehicle to Grid (V2G) technology in electric bus depots in London. Over 30 e-buses will be enabled to provide bi-directional charging connected to an aggregation platform that enables the e-bus batteries to interact with the energy system. The project will explore the commercial value and social benefits to the energy and passenger transportation systems developing services to National Grid, local DNOs, bus operators and transport authorities accompanied by the consumer engagement approaches necessary for its implementation. Overall, the project will provide confidence to encourage the growth of the V2G market through the creation of business models and their enabling frameworks, and a clear V2G mass roll-out strategy in the e-bus market space. The project will be delivered by a consortium led by SSE, the UKs second largest electricity generator, bringing knowledge of wholesale electricity markets and delivering an aggregation capability as well as leading on design advice and installation of charging infrastructure and comprises BYD. A global leader in e-bus manufacturing providing V2G enabled electric buses, charging infrastructure and charging management systems; UKPN, providing DNO use cases and local network modelling intelligence; and Leeds University, leading on business model design and barriers to market analysis.		
Sectors	Transport		
Funding Sources	InnovateUK		
Budget £	£2.43 million		
Partners	SSE, BYD, UK Power Networks, University of Leeds		
Energy vectors	Electricity, Transport		
Scale (lab/site /small/community/region/national)	Small		

Technologies demonstrated	EV charging, vehicle-to-grid
Economic models demonstrated	Virtual power plant/market aggregation, grid services, new commercial models
Other concepts demonstrated	
Industry engagement	Industry led
Consumer engagement	
Project Reports (incl. links)	
Datasets (incl. links)	
Website/social media	http://sse.com/newsandviews/allarticles/2018/02/sse-enterprise-led-consortium-wins-funding-to-power-the-smart-electric-buses-of-the-future/ http://www.v2g.co.uk/
Information sources	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/681321/Innovation_in_Vehicle-To-Grid__V2G__Systems_-_Real-World_Demonstrators_-_Competition_Results.pdf