Project ID	DIP026		
Long Title	E-FLEX: Real-world Energy Flexibility through Electric Vehicle Energy Trading		
Short Title	E-FLEX		
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;		
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 promise of flexible mobile energy storage & supply through V2G is no less than to turn each vehicle into a net carbon reducer. The challenge is to create a market mechanism that allows these benefits to be realised with business cases for EV operators and grid/energy users. E-FLEX will create a scale demonstration of a functioning V2G market. It will combine a number of fleets with variable duty cycles, a mixed hardware ecology, and diverse energy users (grid plus facilities) with a market design that captures as much value as possible as private benefit. E-FLEX will involve a mix of urban (London) fleets (parcel delivery, car sharing, police and heath service vehicles), totalling 200 EVs. The first phase will be oriented at fixed scheduling against known end user demand. The second phase will demonstrate a dynamic (near-real time) market operation. Vehicle use and V2G cycles will be fully monitored for analysis of market operation, including adoption, use, cost of operation, value captured, and battery and vehicle performance.		
Sectors	Transport		
Funding Sources	InnovateUK		
Budget £	£5.3 million		
Partners	Cisco, CENEX, E-CAR CLUB, GLA, Imperial College, NUVVE, TfL		
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	Consumer impact analysis
Industry engagement	
Consumer engagement	
Project Reports (incl. links)	
Datasets (incl. links)	
Website/social media	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