Energy Local Storage Advanced System	Project ID	DIP031	DIP031			
Site; Non-domestic; Electricity; Solar PV; Direct Electric Storage; Smart Grids; Demand Response; Smart Devices;	Long Title	Energy Local Storage	Energy Local Storage Advanced System			
Smart Grids; Demand Response; Smart Devices;  Location (Town, Region, Country)  Sunderland  Tyne and Wear  England  S4.92N  S4.92N  S4.92N  S5.92N  S5	Short Title	ELSA				
Latitude and Longitude  S4.92N  OSGB code  NZ 340 588  Status  Complete  Start Date  End Date  Description  At the SASMI site, an ELSA battery energy storage system consisting of three 2nd life Nissan Leaf batteries with a total capacity of 48 kWh has been deployed. Additionally, a 50 kWp photovoltaic system has been installed on SASMI's rooftop—consisting in total of 191 solar panels covering an area of 320 m.2. The existing BMS was upgraded to include a number of new meters, sensors and weather instruments that are also incorporated within the ELSA Building Energy Management System (EBEMS) enabling more efficient control of the building services with SASMI.  The complete list of services that will be trialled at the pilot site at the SASMI is:  Increasing self-consumption  Maximise usage from a fluctuating PV system  Demonstrate the 'plug and play' capability of the design of the battery storage system  Cost minimisation  Flexibility  Peak shaving (simulation)  Sectors  Non-domestic  Funding Sources  Horizon2020  Budget £  £680,000  Partners  Gateshead College  Energy vectors  Electricity  Ste  Scale (lab/site/ small/community/region/national)  Technologies demonstrated  Smart controls, demand response devices, solar PV, battery storage  Economic models demonstrated	Keywords	•				
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Economic models demonstrated storage	•	Site				
	Technologies demonstrated					
Other concepts demonstrated Demand response, low carbon retrofit, generation-demand	Economic models demonstrated					
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	matching	
Industry engagement		
Consumer engagement		
Project Reports (incl. links)	http://www.elsa-h2020.eu/Library.html	
	Paper:	
	https://ieeexplore.ieee.org/abstract/document/7856178/	
	Paper: https://arxiv.org/abs/1704.01308	
Datasets (incl. links)		
Website/social media	http://www.elsa-h2020.eu/Gateshead College.html	
Information sources	https://cordis.europa.eu/project/rcn/194415_en.html	