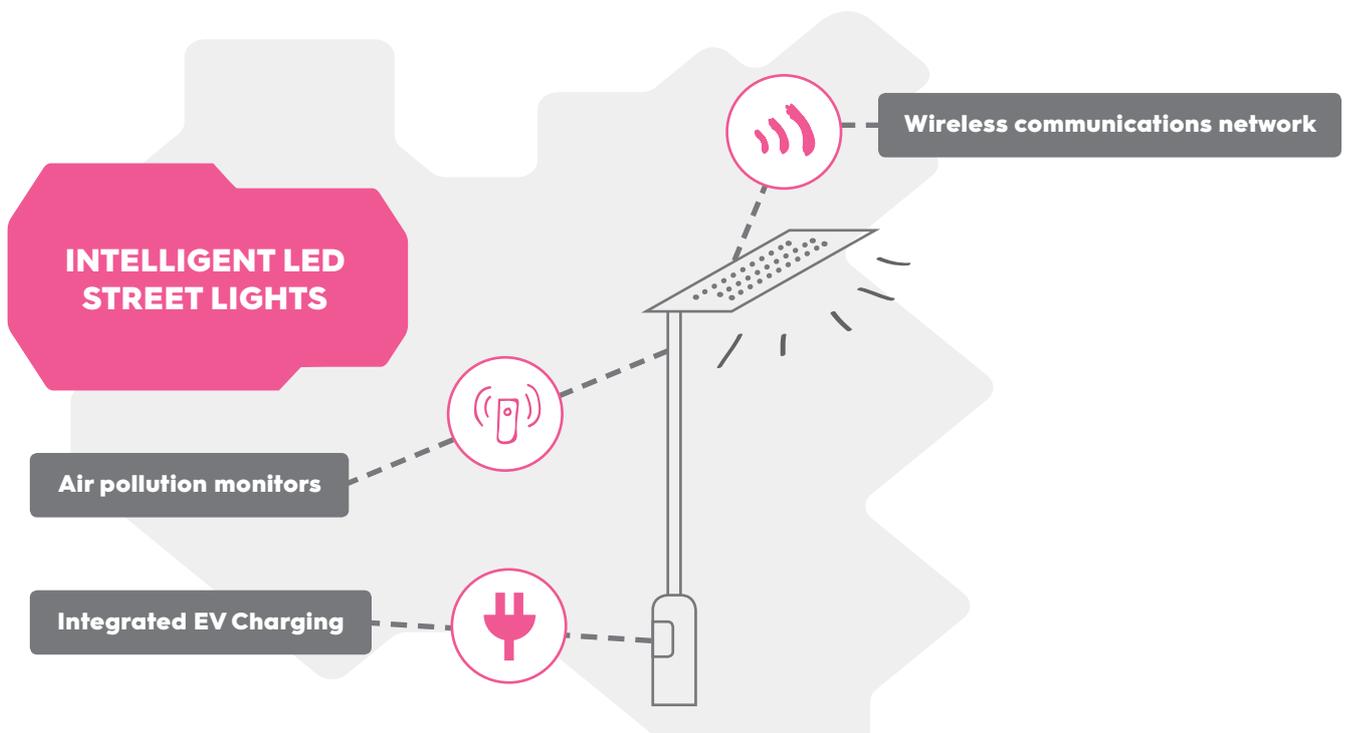


Intelligent LED street lights

Glasgow

Smart electricity grid & e-mobility



The objective of this solution is to seize the opportunity to add value to a programme of LED (light-emitting diode) street light installations in the city of Glasgow, by identifying those columns that are being deployed in the project district and integrating innovative electric vehicle (EV) charging infrastructure into the street lighting column - thus minimising the amount of street furniture on Glasgow's streets whilst improving access to EV charging and improving civic space in the city.

In addition, the wireless communications network that is being installed as part of the LED lighting project will be used to transmit data from the EV chargers, as well as the LED lights, to explore their use as demand response measures.

Main partners involved:



FACTSHEET G6

Intelligent LED street lights



How does it work?

This is both a technical challenge and business case-related.

From a technical side, electric vehicle (EV) chargers will be integrated into street lighting columns and a wireless communications layer will be used to transmit and receive data; to send control signals, and to feed data to the Data-Based Decision Platform.

The integration of EV charging into the street lighting column will be funded by Transport Scotland and the street lighting will be funded through the European Regional Development Fund. The Horizon 2020 (H2020) programme funding will be used to develop the intelligence that allows the communication of data generated to be used to examine the demand-side management potential of connected EV assets and the street lights themselves. The business case challenge will be to understand how the owners of connected EV assets will be remunerated in the event of power being drawn from their battery upon the occurrence of a demand-side event.

Estimated impacts

The solution should increase the number of available EV chargers in the city without adding any additional street furniture.

It will also facilitate further uptake of EV as well as providing more access to charging for citizens of Glasgow that do not have private charging opportunities.

Replication potential

Glasgow intends to explore the replacement of street lights within its estate with intelligent LED street lighting columns with integration into the Central Management System.

Areas where the street lights are correctly positioned in relation to the road will be considered to include integrated EV charging.

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www.ruggedised.eu

