Bath and West Community Energy (BWCE)

Open **LV** Your local electricity data

Bear Flat, Bath

BWCE aims to engage local residents in testing a local, sustainable community energy ownership model.

The project will use a web app which provides different ways of visualising substation data. BWCE will display this data in a public place such as at the local pub in order to raise awareness of electricity consumption patterns.

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COMMUNITY CASE STUDY

Marshfield Energy Group

Open **LV** Your local electricity data

Marshfield Village, South Gloucestershire

All four substations in Marshfield village will be monitored by the OpenLV project.

The data will provide a very clear picture of electricity consumption for nearly all of the village of 850 households. Work is underway to also measure the local generation from PV and the wind turbine, for the same time intervals, to attribute this to relevant substations and feeder routes, to give a complete, detailed picture of electricity patterns for the village.

Find out more at www.openlv.net/community

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Owen Square Community Energy Initiative

OpenLV
Your local electricity data

Easton, Bristol

Owen Square Community Energy in Bristol will use substation data to promote take up of low carbon technologies by local households and match up storage, solar PV and heat pump installations in a way that optimises the output of the local low voltage network.

The solution being trialled is a 'community microgrid' approach. The project takes as its geography and customer base the 358 homes and nine businesses connected to a single substation located in Owen Square park in Bristol, located beside a busy community centre.

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COMMUNITY CASE STUDY

Rooftop Housing Group

Open LV — Your local electricity data

Bishops Cleve, North of Cheltenham

Rooftop Housing Group in Gloucestershire will test an app that will give residents in the trial area access to their community's real-time electricity demand and carbon emissions, with the intention of raising awareness and changing behaviour around energy use.

Residents will be sent email alerts that will provide data about the demand on the local feeder, for example highlighting times of the day when energy use is low. The trial hopes to find out if this information assists residents to understand their electricity consumption and helps them manage their energy consumption better.

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Tamar Energy Community

Open LV Your local electricity data

Tavistock, Devon

A web app is being developed to allow people to see how much energy is going through the local substation in the Tamar Valley (using data provided by the OpenLV project), alongside information about grid carbon intensity, electricity costs and local solar PV generation data.

The plan is to use this information to raise awareness about local energy use and the higher carbon emissions associated with electricity generation at times of peak demand. Information from the web app will be displayed on a screen in the local primary school for the children to see – and possibly also on a screen in the local Post Office.

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WHG Housing Association

Open **LV** Your local electricity data

Walsall, North of Birmingham

The tower block in Walsall taking part in the project is currently undergoing a refurbishment programme including an electric heating retrofit project, coinciding with the installation of a smart heating solution.

The OpenLV project is monitoring the substation that feeds this tower block. The app will use the data provided by the project to help the residents make the most of an Economy 10-type tariff by alerting customers when peak and off-peak tariffs are in operation, as well as demonstrating patterns of energy use to help people alter their behaviour.

Find out more at www.openlv.net/community

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Exeter Community Energy

Exeter Community Energy is developing a smartphone app that will be trialled in part of Topsham. The app enables people to see how their energy use has an effect on the local grid, the utilisation of locally-generated renewable electricity, the cost of energy and carbon emissions.

Data from the local substation will be provided by the OpenLV project to be displayed in this app. App users can collect points for changing their consumption and will be able to compete with other users.

Find out more at www.openlv.net/community

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Egnida Group – SGIP (Smart Grid Interface Project)

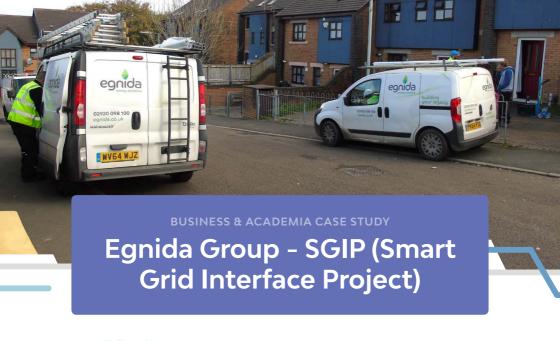Open **LV** Your local electricity data

Swansea, South Wales

This project will seek to build a software application that uses substation data from the OpenLV platform to control the batteries and smart heating in social housing to reduce peak load on the local substation.

The project will explore how smart energy technologies could be used in homes to support the roll out of low carbon technologies (LCTs) without the need for costly reinforcement. In addition to enabling more local generation, the project also has the potential to help alleviate fuel poverty in social housing.

Find out more at www.openlv.net/businessandacademia

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Haysys – FeederNet System

OpenLV
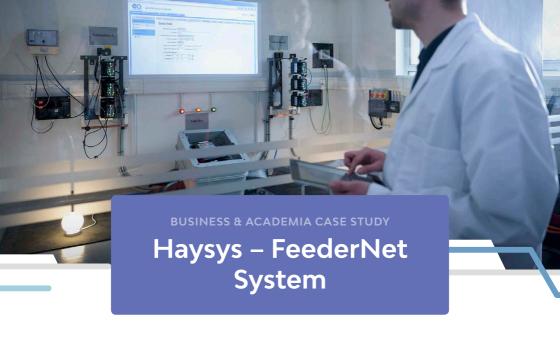Your local electricity data

Cardiff, South Wales

Haysys will connect its FeederNet technology to OpenLV's LV-CAP™ to prove this platform can be utilised by other technology providers. Data from the monitored substation will then be used to confirm that Haysys FeederNet integrated with LV-CAP™ can accurately monitor an LV substation.

The Haysys FeederNet technology will benefit customers and electricity companies by providing an alternative LV-CAP™ measurement device.

Find out more at www.openlv.net/businessandacademia

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London Business School – Electric Mobility as a Service (EMaaS) Operations Impact on Community Networks

Open LV — Your local electricity data

Melton Mowbray, Leicestershire

This project will visualise the impact of EMaaS on LV networks, using two meshed substations and a standalone one with a higher penetration of EVs. The project aims to be able to propose a dynamic pricing model based on cooperative optimisation.

Data from the project will be provided to aid project modelling to visualise real time demand on the grid and the impact EMaaS might have on substations. This output will help inform future policies.

Find out more at www.openlv.net/businessandacademia

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Orxa Grid – Predicting Voltage Limit Violations

Near Bath, Somerset

Orxa Grid is developing an application to run on the OpenLV platform which will forecast future voltage profiles and generate voltage alerts based on those predictions.

The generated predictions and alerts will provide DNOs with a deeper visibility of their low voltage network performance, without them having to manually drill down into low level data from individual sensors, and will automate the categorisation of substation risk.

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