



Electric Vehicles (EV)

The Charge Project is preparing for its first major milestone by releasing an interactive map to the public in March 2021. This map covers the entire SP Manweb Licence Area and will identify where EV charge points are needed and can be best accommodated by the electricity network.

“The innovative combination of transport and network modelling is an industry first.”

The innovative combination of transport and network modelling is an industry first. It will inform customers where, when and what type of charging required at each land parcel in SPM as well as the presently available network capacity.

The focus of the project team is preparing for this launch, with a final run of the transport model being undertaken in January. The model built by our partner PTV on their Visum platform identifies the charging requirements for EVs for a range of uptake scenarios between 2025 and 2050. EA Technology are working on finalising the load flow assessment tool that will identify the available network headroom.

The tool will be available free of charge and available on the Charge website following its release in March and users will be able to identify prime locations with high public charging demand and available network capacity.

In addition to the release of the map, the project will be conducting a case study with a local authority and undertaking a ‘test drive’ of the tool prior to its release that will be used to educate stakeholders on how to utilise the tool. The Charge project will also be conducting workshops on how to use the tool post release.

This major milestone for the CHARGE project comes at a time when electric vehicles are becoming more mainstream and it both follows and supports the government’s commitment to ban petrol and diesel cars by 2030.

You can find out more about the Charge project here: www.chargeproject.co.uk



CHARGE

Heat

An innovative battery storage project has helped to reduce energy costs for over 100 homes across Dumfries and Galloway. Warmworks Scotland partnered with Dumfries and Galloway Housing Partnership for this project, and SP Energy Networks supported with a £1.25million funding injection from our Green Economy Fund.

An innovative battery storage project has helped to reduce energy costs for over 100 homes across Dumfries and Galloway. Warmworks Scotland partnered with Dumfries and Galloway Housing Partnership for this project, and SP Energy Networks supported with a £1.25million funding injection from our Green Economy Fund.

Warmworks Scotland is creating a 'virtual power plant' by installing battery storage technology in around 150 off-gas homes in the Stewartry area of Dumfries and Galloway. This project is helping families in social housing save up to 70% off the cost of their energy bills each month since the project launched in 2019, which will have a significant impact on the residents' quality of life. This project also helps make homes more resilient in the event of a power outage.

Following the launch, each eligible customer had a free Tesla Powerwall battery installed in their home and received independent advice on tariff switching to make sure they are on the right tariff to save money.

In a short time one customer who was eligible for the project is already seeing the benefits.

You can learn more about the Green Economy fund and our other projects here: www.spenergynetworks.co.uk/pages/green_economy_fund.aspx



Joseph Harkin, 83, from Dumfries and Galloway, said:

"Since it's been installed, I've noticed a big difference in my monthly bills. Every household is different but, having spoken to my neighbours, I know we're all benefitting from this project and with the winter now fully upon us it's great to have a lovely warm home every night without racking up the bills.

"I'm very grateful to the workers at Warmworks Scotland and SP Energy Networks for all of their help, it's one of those things you don't quite realise how much you can benefit from until it happens."

Ross Armstrong, Warmworks' Managing Director said:

"We know and understand that battery storage and renewable energy are going to play critical roles in Scotland's future energy use, which is why it's been so encouraging to see this project come to life and hear how it's benefitted people across Dumfries and Galloway. We feel strongly that people who are struggling with high energy costs should never have to miss out on innovative new technology and I'm delighted we've been able – thanks to the help from SP Energy Networks – to bring this project to life."

Jillian Violaris, Green Economy Fund Project Manager, SP Energy Networks, said:

"The Green Economy Fund is investing directly in projects that promote low-carbon heating, low-carbon transport, or the education of Scotland's workforce for a greener future. We share the Scottish Government's vision of making a cleaner, greener Scotland by accelerating our green economy in order to deliver a better future, quicker for our communities."

Innovation Projects

As part of the Government's £170 million Industrial Decarbonisation Challenge, £8 million will be invested into developing the comprehensive Net Zero North West (NZNW) Cluster plan to prepare the North West and North East Wales for a net zero future

This funding is to support industrially intensive areas to establish low carbon and net zero industrial clusters, and it will enable the NZNW Cluster plan to remove over 40 million tonnes of carbon from the atmosphere every year and potentially create at least 33,000 new jobs.

SP Energy Networks are proud to be members of the consortium of the NZNW Cluster plan alongside Net Zero North West, Peel L&P Environmental, the North West Business Leadership Team, Cadent, Progressive Energy, Uniper and ENGIE. It is also supported by the Growth Platform (Co-ordinating input from North West Local Enterprise Partnerships), Cheshire and Warrington LEP and the University of Chester.

Phase 1 of the NZNW Cluster plan began in June 2020, and after presenting outputs to the government the consortium received UK Research and Innovation (UKRI) funding for the **Phase 2**, which will start in early 2021 and last 2 years.

It is estimated that the NZNW Cluster plan projects could unlock £4 billion in investment, advance the regions low carbon recovery post-COVID-19 and help the UK meet its legally binding net zero carbon emission targets.



Carl Ennis, Chairman, Net Zero North West said:

"Across renewables, hydrogen, CCUS, nuclear and smart grids, our region is in a truly unique position to become a world-leader in clean growth. Our cluster is already delivering on the ground and paving the way towards a net zero future, which will protect the manufacturing jobs that have made this region thrive and create a sustainable pipeline of new high value green jobs for our region.

With the Prime Minister recently laying out his ten-point plan for a green industrial revolution, this new roadmap funding is a timely vote of confidence in our ability to deliver industrial decarbonisation in the North West and make a significant and rapid contribution to the UK's net zero emission targets."



40 million **£4** billion

tonnes of carbon will be removed from the atmosphere every year using the NZNW Cluster plan

of investment could be unlocked using NZNW Cluster plan projects

"SP Energy Networks are proud to be members of the consortium of the NZNW Cluster plan alongside Net Zero North West, Peel L&P Environmental, the North West Business Leadership Team, Cadent, Progressive Energy, Uniper and ENGIE."

Community Projects

Due to the surge in demand for renewable energy, the Energy Skills Partnership (ESP) has revealed plans to establish nine Renewable & Energy Efficiency Training Centres in colleges across central and southern Scotland following a £500,000 funding boost from SP Energy Networks' Green Economy Fund.

ESP is a collaboration of Scotland's colleges and industry partners established to increase Scotland's capability and capacity to deliver the right skills for the energy, engineering and construction sectors to meet industry demand. The development of this community project is to position colleges at the forefront of training for the future renewables and energy efficiency workforce in Scotland.

The project has supported significant capital investment in renewable and energy efficiency training equipment, staff training and continuing professional development in current and emerging technologies, as well as supporting overall curriculum development.

ESP will enhance and establish the training centres in nine colleges including: Ayrshire, Borders, Edinburgh, Fife, Forth Valley, Glasgow Kelvin, South Lanarkshire, West Lothian and West College Scotland who have been working together as members of the Energy Efficiency Training Network.

John Renwick, Sector Manager at ESP was joined by Forth Valley College Care, Sport and Construction Curriculum Managers Jeanette McCulloch and Steven Adams at the college's new Falkirk Campus to welcome an exciting delivery of solar, thermal and photovoltaic equipment, as well as air and ground source heat pumps. This specialist kit of renewable equipment will enable Forth Valley College to set up an innovative renewables workshop to deliver energy efficiency training to plumbing and construction modern apprentices.

Our Green Economy Fund supports projects that help the Scottish Government in reaching its green targets, which aim to boost local economic growth, improve air quality and deliver a better future, quicker for local communities.

Find out more about the Green Economy Fund and the projects it supports here: www.spenergynetworks.co.uk/pages/green_economy_fund.aspx

Frank Mitchell, Chief Executive of SP Energy Networks, said:

"Scotland has ambitious goals to become Net Zero by 2045. Flagship education projects, such as Energy Skills Partnership's Energy Efficiency Training Network, supports this ambition and helps to power the next generation of green energy experts and develop the workforce of tomorrow.

It's incredible to see so many colleges coming together to help provide opportunities for skills developments within the energy, engineering, and construction sectors. The Green Economy Fund was created to help communities build their green economy and establish low carbon infrastructure. We're delighted to contribute to the success of these nine Renewable & Energy Efficiency Training Centres as they help us all unlock Net Zero."

Sarah Higgins, Director of Curriculum for Forth Valley College's Department of Care, Sport and Construction, said:

"We are all so excited to take delivery of our new renewable energy equipment, which will allow us to train the next generation of construction professionals in the essential skills of installing and maintaining energy saving systems.

We thank SP Energy Networks' Green Economy Fund and ESP for the opportunity to offer this equipment to our students and we can't wait to get it installed and our bespoke renewable training workshop up and running at our new Falkirk Campus."



"Our Green Economy Fund supports projects that help the Scottish Government in reaching its green targets"