



Electric Vehicles (EV)

Less than 18 months since its launch, innovation project PACE has transformed electric vehicle charging across Lanarkshire and has reached the milestone of completing 10,000 charges.

10,000

times the charging hubs have been used to charge electric vehicles in North and South Lanarkshire Councils. Project PACE is being delivered through a strategic partnership between SP Energy Networks and the Scottish Government and will create over 40 electric vehicle charging hubs by the end of spring 2021. The project will significantly increase the number of EV chargers across Lanarkshire, particularly the number of fast (22kW) and rapid (50kW) chargers, allowing more drivers to charge quickly.

Facilitated by North and South Lanarkshire Councils, in collaboration with Transport Scotland, the charging hubs have now been used over 10,000 times to charge electric vehicles across the regions, with PACE serving as a blueprint for how similar projects could be rolled out across the country.





Electric Vehicles (EV)

The popular charging hubs have already provided 183MWh of energy to electric vehicles and enabled around 640,450 miles to be driven using clean, green transport, removing up to 111 tonnes of CO2 which would have been emitted to the atmosphere had this mileage been done by petrol or diesel cars.

As well as benefits for the environment, the project offers substantial savings for customers, with each PACE charging hub expected to save between £30,000 and £60,000 on electricity grid connection costs per new location. This equates to a total of between £1.3 million to £2.6 million of taxpayer money saved across all the planned sites.

It total, 21 of the strategically placed PACE charging hub sites are now live with a further 23 expected by springtime, across North and South Lanarkshire. One of the newest sites that has gone live at Chatelherault Country Park has enough chargers for 14 cars at any one time, making it the largest charging hub in South Lanarkshire. Locations that will see new hubs open soon include Lanark Lifestyles and Getting Better Together Shotts.

PACE represents just one of the projects SP Energy Networks is delivering to help the transition to renewable energy sources in 2021, as Glasgow prepares to host the COP26 climate change conference later this year. PACE also aims to help achieve ambitious plans by the Scottish Government to phase out the need for new petrol and diesel vehicles by 2030.

For more information about project PACE, visit: www.spenergynetworks.co.uk/pages/pace.aspx

Scott Mathieson, Director of Network Planning and Regulation at SP Energy Networks, said:

"The benefits of Project PACE are clear to see and as we pass the 10,000th electric charge milestone, we're seeing the scale of uptake across Lanarkshire.

The popularity of the charging hubs we've been able to help quickly build across the county underline the importance of rolling out similar projects across the rest of the country.

Our collaborative approach to working in Lanarkshire is as a good example of how we can quickly develop electric vehicle charging infrastructure by maximising our existing network as we help lead the way towards Net Zero emissions targets."

Cabinet Secretary for Transport, Infrastructure and Connectivity Michael Matheson said:

"I'm pleased to see the continued development of Project PACE and it's very welcome to see people charging their vehicles on 10,000 occasions since this work began. I know the new charging infrastructure will be a welcome benefit across Lanarkshire.

The delivery of electric vehicle infrastructure is an important part of our green recovery. It provides work and economic stimulus across Scotland as we move to a net-zero economy. To maximise the economic benefits as we make that transition – we need to ensure we're delivering EV charging infrastructure as effectively and efficiently as possible."

Leader of South Lanarkshire Council, Councillor John Ross, said:

"This is a hugely significant milestone and demonstrates there is a real need and demand for Electric Vehicle Charging points. We expect this demand to increase in the coming years which is one of the main reasons why we believe it's so important to be involved in Project PACE to help get our region"

Nicole Paterson, Head of Environmental Assets at North Lanarkshire Council, said:

"This level of usage of the electric charging points shows clearly the increasing popularity of electric vehicles and the demand for charging points in Lanarkshire.

"By proving more charging points in locations that people use regularly, Project PACE is allowing more people to consider choosing an electric vehicle, which will help cut emissions, improve air quality and reduce our carbon footprint."



Heat

The Scottish Government has published its Heat in Buildings Strategy Consultation which outlines how the decarbonisation of heat in homes and businesses will be a key enabler of reaching net zero by 2045.

SP Energy Networks welcomes these plans, which include ambitious targets to invest £1.6bn over the duration of the next parliament, install zero emission electric heating in every new build property consented by 2024 and for one million of Scotland's homes to have zero emission electric heating by 2030.

For more information about our Heat-Up project, visit: www.spenergynetworks.co.uk/pages/heatup.aspx



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

"This is a welcome and timely consultation which clearly sets out the enormous challenge we face to decarbonise heating in Scotland. We welcome the scale of the ambition shown by the Scottish Government, particularly in relation to the short and medium-term targets, such as all new builds to have electrified heat by 2024.

The Heat in Buildings Strategy recognises that network operators form the backbone of the energy infrastructure that will facilitate the transition to decarbonised heat in Scotland's homes and buildings. Through our Heat-Up project, which is gathering evidence on the potential impact of heat pump installations on our distribution networks based on a range of uptake scenarios, we are increasing our understanding and visibility of this fundamental change in the way we heat our homes. The learnings from Heat-Up will enable us to ensure that any investment needed for network reinforcement will be targeted where it is needed most.

What we do know is that the scale and pace of electric heat pump installation needed to deliver Net Zero will lead to a huge increase in demand for energy. We have been investing significantly in our network over the RIIO-ED1 period but investment in RIIO-ED2 will also be vital to ensure we stay on track.

The decarbonisation of heat in our buildings and the journey to Net Zero will affect us all so it is important that individuals and organisations in Scotland take this opportunity to have their say on the Government's plans and influence the direction of travel. The consultation is open until 30th April and you can respond by visiting Heat in Buildings Strategy - Scottish Government - Citizen Space

As a network operator we look forward to playing a key role in changing the way we heat our homes and buildings in Scotland. The creation of a strategic Heat Electrification Partnership will enable us to work closely with both the Scottish Government and Scottish and Southern Electricity Networks (SSEN) to help plan and deliver an electricity network to support the scale of the Government's ambitions in this consultation, as we work towards delivering Net Zero in the years to come."

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Innovation Projects

Supporting Project CAELUS

We are delighted to have been involved in Project CAELUS as a supporting stakeholder.

AGS Airports, which owns and manages Aberdeen, Glasgow and Southampton airports, is leading the project to develop and trial the UK's first national distribution network to use drones to transport essential medicines, blood, organs and other medical supplies throughout Scotland.

CAELUS (Care & Equity - Healthcare Logistics UAS Scotland) started in December and involves live drone flight trials. In addition to developing the ground infrastructure needed to recharge the drones and the systems to control them while flying, pathways to ensure the drones can safely share airspace with civil aviation also need to be designed.

The project will ensure critical aspects such as public safety, security and noise levels are considered. A digital blueprint of the drone delivery network will then be created with the potential to connect hospitals, pathology laboratories, distribution centres and GP surgeries across Scotland. The project is scheduled to run until Spring 2022.

For more information on Project CAELUS, visit their website: www.projectcaelus.co.uk, www.agsairports.co.uk/drones

Community Projects

SP Energy Networks to supercharge energy projects with share of £300M Green Economic Recovery funding.

SP Energy Networks has launched a call for energy projects to apply for financial support from a revolutionary new green recovery fund.

The electricity network operator has joined forces with fellow energy companies across the UK to unlock up to £300million of funding to support green energy projects over the next two years.

Working closely with Ofgem, Energy Networks Association (ENA) members have jointly created plans to unlock early investment in the grid to help support green energy infrastructure projects that will help accelerate uptake of the technologies of tomorrow, such as electric heating and electric vehicles.

As outlined in the UK, Scottish and Welsh Governments' plans for economic recovery the green industrial revolution will play a major role in the country's recovery from COVID-19. The green recovery fund will help create new jobs in the supply chain in each local area where the funding is invested

Craig Arthur, SP Distribution Director for Central & Southern Scotland at SP Energy Networks, said:

"We're proud to be leading the way when it comes to green economic recovery. We're working on a number of exciting projects across the country to futureproof our network and help progress towards the country's ambitious net zero targets.

"We're already planning for additional capacity to support electric bus charging in key locations like Glasgow or Edinburgh. And in Alloa we are working with the local council to help ensure the town is ready for their electric vehicle roll out. Our priority is working with local communities to ensure the network is capable of supporting their local ambitions."

Liam O'Sullivan, SP Manweb Director at SP Energy Networks, said:

"It's essential that we progress green energy projects now to support our economic recovery and the clean energy solutions of tomography

A great example is our work in Formby to upgrade properties with a looped electrical service connection. When the technology was installed it was normal to use the same service cable for multiple properties but now everyone is moving towards low carbon technologies, we've had to complete upgrade works to enable future connections to be added.

We're also working with Transport for Wales to introduce electric vehicle chargers in carparks at train stations and bus depots. These are just two example of the many projects we're supporting as we push forward towards Net Zero emissions targets."

Jonathan Brearley, Chief Executive of Ofgem, said:

"With the clock ticking on the UK's race to hit net zero carbon emissions, we cannot afford to delay in building a clean energy infrastructure that will help power our transport and heat our homes emissions-free.

We're urging electricity network companies to come forward with fresh new sites for green investment, starting work quickly, to help kick start the green recovery."

The call for evidence can be found at <u>energynetworks.org/greenrecovery (opens in a new window)</u> and will be open from Monday 8 February for six weeks until 19 March at 5pm.

Sites approved for investment will be announced in early May with the planning and construction phase beginning shortly thereafter."



DSO/Flexibility

SP Energy Networks have awarded Opus One Solutions a contract to develop a Distribution System Operator (DSO) platform to test the Universal Smart Energy Framework (USEF) flexibility market model as part of a £5.7million investment to trial innovative ways to operate the electricity distribution network.

This is an integral part of Project FUSION – part of SP Energy Networks' vision to deliver a better future, quicker for its customers – and could, in the future, allow participating customers to generate additional income by agreeing to be flexible with their energy usage.

The project will see external companies acting on behalf of customers to trade their electricity demand and supply 'flexibility' in a new digital marketplace, as SP Energy Networks continues to pioneer creative methods of managing the electricity grid.

Opus One Solutions has been awarded the contract to test and develop the flexibility trading platform for Project FUSION, supporting SP Energy Networks as it continues to manage its networks in a more intelligent way.

In practice, Project FUSION will allow people to secure additional income from being flexible with their energy usage or generation.

For more information about Project Fusion, click here.



Michael Green, Senior Innovation Engineer at SP Energy Networks, said:

"Project FUSION will trial a world-leading, online platform, which will make better use of existing electricity infrastructure by ensuring its capacity is used to maximum efficiency.

Working with Opus One Solutions is an exciting milestone in Project FUSION as we trial innovative flexibility solutions that could add great value to our customers by accelerating connections and deferring costly reinforcements.

Ultimately, the smarter use of our networks allows us to respond efficiently to the growing challenges placed upon them, which is critical as we move towards an electric future for transport and heat to help achieve the UK's ambitious net zero goals. We're pleased to be working with Opus One Solutions to help make this happen."

Hari Suthan, Chief of Strategic Growth and Sales for Opus One Solutions, said:

"Opus One is honoured to partner with SP Energy Networks to develop and test a marketplace that democratises the energy system with a model of flexibility market that has the potential to be a standard for Europe."

The Project FUSION trials will take place in St Andrews and Leuchars in Fife until December 2023.

The test will enable SP Energy Networks to ensure the system is simple so that there is opportunity for everyone to take advantage of the new technology."

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has been invested to trial innovative ways to operate the electricity distribution network. "The project will see external companies acting on behalf of customers to trade their electricity demand and supply 'flexibility' in a new digital marketplace, as SP Energy Networks continues to pioneer creative methods of managing the electricity grid."