



SIEMENS



SIEMENS AND KEELE UNIVERSITY IN LANDMARK ENERGY PARTNERSHIP

- Keele University appoints Siemens to turn campus into Europe's biggest smart energy network demonstrator
- 24 substations to be digitalised, 1,500 smart meters to be installed and 5 MW of renewable energy to be integrated
- Keele has the largest university campus in the UK with 12,000 students and staff, 350 mixed used buildings – a size similar to a small town

Keele University has appointed engineering giant, Siemens, to turn the West Midlands-based University campus into the largest single, integrated electricity, gas and heat Smart Energy Network Demonstrator (SEND).

It will be the first facility in Europe for at-scale living laboratory research, development and demonstration of new smart energy technologies and services in partnership with business and industry, involving the digitalisation of 24 substations, the installation over 1,500 smart meters, 500 home controllers and a 5 MW renewable integration package.

The Smart Energy Network Demonstrator (SEND) – which is funded by Keele University, the Department for Business, Energy and Industrial Strategy (BEIS), and the European Regional Development Fund (ERDF) as part of the England 2014 to 2020 European Structural and Investment Funds (ESIF) Growth Programme – builds on Keele University's investment in its energy and other utility networks over many years.

Professor Mark Ormerod, Deputy Vice-Chancellor and Provost of Keele University, commented: "The Smart Energy Network Demonstrator (SEND) is a fantastic example of innovation delivering really tangible results for Keele University, businesses and the wider UK economy, as well as major societal benefits. It puts Keele and our campus at the forefront of the new, more sustainable, energy

landscape – the technology being deployed represents a revolution in smart energy technology for UK universities. Keele University is part of the Smart Energy Alliance, along with local partner Stoke-on-Trent City Council, and there is real momentum building in the area for developing intelligent, sustainable and low carbon energy networks as a catalyst for economic growth within the city and beyond.”

Carl Ennis, Managing Director at Siemens Energy Management said: “This landmark project will provide a society-based demonstrator for the research community, the energy industry, and local communities. It will be at the centre of a smart and flexible network of energy supply and storage – which will reduce emissions, improve security of supply to the campus and be open to further innovation from the academic community. We are seeing decentralised energy as a key trend in the UK and are delighted to work with an innovative partner such as Keele University to drive this intelligent energy technology forward.”

The demonstrator will be a representation of “real world” infrastructures in the UK with a mix of technologies from different suppliers used on site. This will enable a smart analysis of energy consumption for the campus, so that demand can be better managed locally according to factors such as the number of students on site at any one time and energy needs of individual buildings.

The project will also allow businesses to access the University’s unique infrastructure in order to develop and test renewables and smart energy technologies.

The Association for Decentralised Energy Director, Dr Tim Rotheray, added: “When the UK mixes the best of engineering and ingenuity, we see innovative solutions developed. Decentralised smart energy systems, designed with user needs at front of mind, can deliver greater efficiencies, lower emissions and cost savings. The UK is building a strong reputation as an innovative market leader in the smart grid energy revolution and projects such as these clearly demonstrate this reputation is well deserved.

- Ends-

Notes to Editors

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About Keele University

- Keele was recently awarded Gold in the Teaching Excellence Framework
- Keele is ranked No.1 in England for Course Satisfaction (Guardian University Guide 2018)
- 97% of the University's research was deemed to be world-leading, or of international importance, in the latest Research Excellence Framework
- www.keele.ac.uk

About Siemens

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active in more than 200 countries, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. The company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2017, which ended on September 30, 2017, Siemens generated revenue of €83.0 billion and net income of €6.2 billion. At the end of September 2017, the company had around 377,000 employees worldwide. Further information is available on the Internet at www.siemens.com.

About ERDF

The SEND project (ref: 32R16P00706) is receiving up to £9m of funding from the England European Regional Development Fund as part of the European Structural and Investment Funds Growth Programme 2014-2020, and £4.5m from the Department for Business, Energy & Industrial Strategy . The Department for Communities and Local Government (and in London the intermediate body Greater London Authority) is the Managing Authority for European Regional Development Fund.

Established by the European Union, the European Regional Development Fund helps local areas stimulate their economic development by investing in projects which will support innovation, businesses, create jobs and local community regenerations. For more information visit <https://www.gov.uk/european-growth-funding>.