



**SIEMENS**



## **WORK BEGINS ON EUROPE'S LARGEST SMART ENERGY NETWORK DEMONSTRATOR AT KEELE UNIVERSITY**

- **Groundbreaking ceremony took place at Keele University to mark the official start of works**
- **Siemens will upgrade existing energy infrastructure and install smart devices**
- **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 marked the official start of work on its landmark Smart Energy Network Demonstrator (SEND), which will be the first project of its kind in Europe.

The project will create a decentralised energy system, providing Keele University with the infrastructure to monitor and manage its energy across the campus – the largest in the UK.

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.

The project will enable smart analysis of energy consumption using smart technologies to understand energy consumption on the campus, and the interplay between contributory factors affecting that consumption. The 'living lab' will give evidence to the energy research and business community and local energy and related sector SMEs who will have access to the University's unique infrastructure to develop and test renewable and smart technologies.

Siemens will digitalise 24 substations, install 1,500 smart meters, and integrate 5MW of renewable energy as part of phase 1 of the project.

The project will focus research in areas of energy efficiency and cost savings, security of supply, and lowering CO2 emissions.

Professor Mark Ormerod, Deputy Vice-Chancellor and Provost of Keele University, commented: "We are committed to investing in our energy and utility network. Being the home to Europe's largest smart energy network demonstrator is a thrilling prospect, both academically and environmentally. Our living lab will help provide the research into decentralised energy systems needed now and into the future to create a more agile power system."

Carl Ennis, Managing Director at Siemens Energy Management said: "This project is an important milestone as we officially begin work. With more than 70% of the world's population expected to live in urban areas by 2050, projects such as this will have a massive impact in how this urbanisation is managed. As the largest demonstrator in Europe it will give us real data on how to be more energy efficient and how innovative technologies can reduce emissions and improve security of supply.

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 commitment to sustainability.

- ENDS -

**For further information, interview requests or photography, please contact Sophie Rawlings at Keele University on 01782 733459 or at [s.rawlings@keele.ac.uk](mailto:s.rawlings@keele.ac.uk)**

#### **Notes to editors:**

##### **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](http://www.keele.ac.uk)

##### **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 Ministry of Housing, 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 (ERDF) 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>.

##### **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 165 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 2016, which ended on September 30, 2016, Siemens generated revenue of €79.6 billion and net income of €5.6 billion. At the end of September 2016, the company had around 351,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).