

Case Study: Sustainable Community Energy Networks (SCENe) project

The University of Nottingham purchased a MiniMet Automatic Weather Station as part of their Sustainable Community Energy Networks (SCENe) project. The weather station monitors rainfall, wind speed, wind direction, relative humidity and outdoor temperature. A Razon+ solar monitor was also supplied, which provides solar irradiance and sunshine duration.

Project SCENe aims to accelerate the adoption of community energy systems, which generate, store and supply energy locally to homes and commercial buildings, through research and development of the necessary technological platforms and business models.

Renewable energy is fundamental to the project and an accurate record of weather conditions can help to assess whether the output of this technology falls within an expected range.

Anomalies can help identify opportunities for optimising how the technology is deployed or maintenance issues for example. Weather conditions are also an important predictor of energy demand and data from the weather station can therefore help predict demand for the community, which helps optimise how local energy is used, stored and exported.

Success of a community energy scheme depends on resident engagement and Project SCENe uses a range of techniques to help with this including 3D models of the community, smartphone apps and smart speaker voice assistants that provide information on the status of residents' homes and community. Data from the MiniMet Weather station is an integral part of this feedback.



Acknowledgements and Contacts

We would like to thank Rob Shipman at Nottingham University for supplying us with a case study. For more information please contact Rob Shipman via email: <u>Rob.Shipman@nottingham.ac.uk</u>

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