

Box 22: Details of External Collaborators appendix

Organisation Name	SSE Renewables Developments (UK) Ltd
Relationship to DNO (if any)	Both part of the SSE plc group.
Type of Organisation	<p>SSE Renewables is the renewable energy development division of SSE (Scottish and Southern Energy plc). For some time SSE Renewables had been working with SHEAP to develop a Wind turbine project on Gremista Hill, Lerwick. This was not originally intended to be grid connected</p> <p>However, it was subsequently identified that within the scope of the LCNF proposal this could be grid connected.</p>
Role in Project	SSE Renewables along with our venture partner SHEAP, upon successful planning consent, will construct, own and operate wind turbines on Gremista Hill for 25 years.
Prior experience brought to Project	SSE Renewables has over 20 onshore wind farms in operation in Scotland, the Republic of Ireland, Northern Ireland and Portugal totalling over 840MW. Windfarms totalling over 790MW are under construction or pre construction and a further 150MW with consent for development.
Funding	SSE Renewables with out venture partner SHEAP will fund and manage the entire wind turbine project at an estimated cost of £11m.
Contractual relationship	<p>Will the DNO have a contract in place which ensures the External Collaborator complies with the LCN Fund Governance Document? Yes/No</p> <p>No direct contract with DNO – contractual arrangements ongoing with SHEAP through project development process</p>
External Collaborator benefits from the Project	SSE Renewables will benefit through a less constrained grid connection for the wind turbine development.

Organisation Name	KEMA Limited
Relationship to DNO (if any)	No relationship with SHEPD
Type of Organisation	KEMA is a global company specializing in strategic & technical energy consulting, operational support, measurements & inspection, and testing & certification. Keeping a close eye on innovation and industry trends, KEMA is actively involved in helping clients address climate change issues through innovative technologies, strategies and solutions.
Role in Project	KEMA will provide the key role of independent technical assurance of the vendor-provided solutions to be utilised in the project. KEMA will also provide technical assistance to the consideration of the deployment of new technologies in clusters and volumes not previously conducted on the network. KEMA will also provide strategic insight and knowledge of technical developments from around the world to inform the project; and utilise their global networks to disseminate the learning from the project.
Prior experience brought to Project	KEMA is actively engaged in smart grid technology development and deployment projects around the world. Recent examples include The Power Matching City project in The Netherlands, The EU ADDRESS project, and smart grid analysis and development for New York Smart Grid Consortium.
Funding	KEMA is providing a discounted service contract to provide a financial commitment to the project.
Contractual relationship	YES. An MOU is in existence which will be formalised in a Professional Services Agreement prior to Project Award.
External Collaborator benefits from the Project	KEMA expects to take learning from the project which KEMA will be able to utilise and promote to other KEMA clients – both in the UK (where we are engaged on national developments) and across Europe and internationally where KEMA is also active.

Organisation Name	University of Reading
Relationship to DNO (if any)	Occasional contractor and collaborator with SSE. Work covers analysis of massive data sets derived from smart meter trials, methods, analytics and consumer focus.
Type of Organisation	University
Role in Project	To work alongside University of Strathclyde to ensure that all relevant learning is achieved from the project. This will take the form of peer review as well as direct academic input.
Prior experience brought to Project	Mathematical analysis of vast data sets for retail sector, consumer goods sector, telecoms sector and online marketing sectors. Mathematical analysis of smart meter data from the EDRP trials. Behaviour based consumer segmentation (unsupervised discrimination). ABM modelling expertise for retail and supply businesses
Funding	University of Reading is investing £250k alongside of the project to provide technology transfer function (outreach), project management and administrative support to the project team. This is an internal investment in real terms.
Contractual relationship	Yes - MOU currently being worked on between SSE and University of Reading.
External Collaborator benefits from the Project	The University wishes to build strong relationships with locally based companies, and will benefit reputationally from the Project. The University of Reading benefits directly from the R&D carried out for the project and the growth of its new CSWA, which will be a world class centre of excellence for large data analysis across consumer facing sectors. The publications and scientific discoveries will contribute to the University's standing. The University of Reading also has a low carbon initiative, and a doctoral training centre (Technology for a Sustainable Built Environment) that will benefit from a halo of activity around the LCNF activities.

Organisation Name	University of Strathclyde
Relationship to DNO (if any)	None.
Type of Organisation	The University of Strathclyde is a charitable body, registered in Scotland, number SC015263. The organisation's main business is education and research and so will provide experimental rigour, analysis of results and assessment of implications of the work being undertaken in the project.
Role in Project	<p>The University of Strathclyde will:</p> <ul style="list-style-type: none"> • provide independent technical support and assessment relating to the technologies being deployed in the project. • undertake activities to identify, model and manage risks in the project. • identify, capture and disseminate learning from across the project activities • undertake activities to augment, understand and package technical, economic, educational learning from the project activities.
Prior experience brought to Project	The University of Strathclyde has an excellent track record in technological based research and the translation/exchange of that learning into addressing the needs of society. The university's expertise in electrical power and energy systems (analysis and innovation), management science and economics related to the energy sector will bring rigour to the deployment, experimentation and analysis of the deployed low carbon solutions. In addition, the university's large portfolio of ongoing research in the area of low carbon energy brings substantial gearing to the project activities as noted below.
Funding	The contribution of academic and research labour to the project is currently estimated at circa £1.3m, however, this is subject to a series of ongoing funding applications.
Contractual relationship	Will the DNO have a contract in place which ensures the External Collaborator complies with the LCN Fund Governance Document? TBC depending upon final project scope
External Collaborator benefits from the Project	One of the university's strategic aims is to maximise the societal value of its knowledge and understanding. Transferring this learning in low carbon energy systems into a significant demonstration in the LCN provides a valuable avenue of knowledge exchange for the university as well as IP license possibilities. The university also has a major portfolio of ongoing research related to low carbon energy systems and this project provides test cases and data that will inform these activities and add significant value to them. The opportunity to strengthen and build strategic partnerships with the collaborating organisations in this project is also of value.