Power Forward Challenge: funding for UK / Canada joint challenge on smart energy systems innovation

Summary SME Support Details

- SME support for feasibility studies;
- 11 projects;
- Total value of grants awarded: £478,422

<table>
<thead>
<tr>
<th>Lead Company</th>
<th>Project Title</th>
<th>Brief Project Description</th>
<th>Grant Award</th>
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<tbody>
<tr>
<td>UNIT9 Ltd</td>
<td>Energy Open Piazza</td>
<td>Energy Open Piazza is a platform that enables electricity data democratisation through interoperability.</td>
<td>£60,000</td>
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<tr>
<td>Moixa Technology Ltd</td>
<td>The Future of Smart Storage</td>
<td>In the face of millions of smart devices, renewables, energy storage and electric vehicles (EVs) entering the Canadian market and participating in a future green grid, Moixa will deliver a smart charging, Energy Storage System (ESS) and grid flexibility project that maximizes value for the Canadian homeowner and provides grid support from behind the meter.</td>
<td>£60,000</td>
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<td>Integrated Environmental Solutions Ltd</td>
<td>Enabling positive energy communities embedded within a local energy system (PECs)</td>
<td>This innovative collaboration between the University of Glasgow, IES, Doosan Babcock and Smart Mpower provides a unique opportunity to deliver a positive energy campus/community leveraging the University’s smart campus development alongside some of its diverse existing building portfolio, as an energy research test bed embedded within the Glasgow Innovation District.</td>
<td>£41,756</td>
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<td>PassivSystems Limited</td>
<td>The Maple Project</td>
<td>PassivSystems is a provider of smart technology systems for domestic energy use and energy asset efficiency management. The Maple project will allow PassivSystems to assess the feasibility of exporting smart demand balancing controls systems domestic hybrid heat pumps to Canada.</td>
<td>£41,307.23</td>
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<td>Chaddenwych Services Limited (T/A Electron)</td>
<td>Project Pegasus</td>
<td>The project is an advanced pilot for a commercial flexibility trading platform in Ontario. It will expand on and leverage the existing technical platform and design work already undertaken by Electron in the UK. The aim is to develop a trading product, with</td>
<td>£52,744</td>
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local partners on Electron’s flexibility marketplace, that incentivises demand side flexibility capacity, maximises the value of existing assets and informs investment decisions for flexibility providers and grid operators.

### Scene Connect Ltd
- **Cloud ZuoS**
  - This project will design and implement the Cloud Zonal Use of System (Cloud ZUoS) platform. The aim of Cloud ZUoS is to provide optimal grid and electricity costs within a local energy market (LEM) context, by integrating grid and load control across generation, storage, and demand side response.
  - **£41,560.40**

### Green Cat Renewables Ltd
- **Smart Energy Network**
  - The project will design a prototype model that can simulate the proposed Smart Energy Network for an industrial user. The objectives are to reduce the facility energy costs and carbon emissions by maximising the usage of renewable energy generation, reducing its dependence on the grid and utilising potential sources of income through grid services.
  - **£40,000**

### The Society for the Reduction of Carbon Ltd (Carbon Coop)
- **OpenFlex**
  - The project will bring proven smart grid and smart home technology from Canada to the UK and take advantage of the new UK smart metering infrastructure to deliver an open standards-based, low cost, and interoperable system for flexibility services which will enable aggregators and DNOs to unlock the long tail of flexibility in domestic and small commercial premises.
  - **£14,630**

### Clear Blue Energy Limited
- **Heat-Enabled Virtual Power Plant Feasibility Study**
  - The project will produce a tool that can optimise the composition and management of a Virtual Power Plant (VPP) where the controllable loads provide heat and hot water (Heat-Enabled VPP or HE-VPP).
  - **£49,270**

### Qbots Energy Ltd
- **ENERGY-IQ**
  - Utilising the smart metering communication framework and an IOT gateway as the consumer access device (CAD), ENERGY-IQ project will develop and demonstrate an innovative, energy management automation tool for small, non-domestic users to increase the efficiency of their buildings, reduce energy bills by demand shifting and respond to the energy markets, while contributing to the reduction of UK’s carbon emissions.
  - **£22,449**
| **Smarter Microgrid Ltd** | Babel Grid - Smart microgrid controller for diverse networks of generators, consumers, storage and grid | The background of this project is that Smarter Microgrid Ltd intends to develop a smart microgrid controller to enable microgrids to bring electricity to over 1.2 billion people across the world who do not have access to reliable power generation. These communities are predominantly in rural and semi-urban areas of large land masses and on islands dispersed across the world’s oceans. | £54,705 |