



Briefing Note 2: Developing Local Energy Markets

June 2017

Cambridgeshire County Council has been invited to participate in an interesting project called the **East Anglian Energy Market Innovation Project**, sponsored by UK Power Networks and Pixie Energy.

The project has three key deliverables including:

1. **To develop a web based regional knowledge hub** which maps low carbon assets across Cambridgeshire, Norfolk and Suffolk including the commercial arrangements associated with these assets. The mapping will also identify grid and other market and commercial barriers to future delivery.
2. **Set up local Innovation Hubs in Cambridgeshire**, Norfolk and Suffolk to develop coherent local plans for joining up assets across Cambridgeshire and more broadly. This will provide the basis for a platform of energy generation and storage that will allow local energy market innovations to be tested.
3. **Demonstration projects** to test local energy market innovations and proof of concept involving suppliers that can contribute/fund local schemes to gain knowledge and trial, non-traditional models and solutions to influence policy. As part of this, the objective is also to seek third party funding, e.g. through platforms such as the European Research & Development Fund (ERDF), to provide further financial support for the demonstration projects.

Who is involved?

Pixie Energy is leading the project. Pixie is an independent company (established 2015 by Cornwall Insights) with a long history of supporting energy market reform, working with established and newer market participants alike.

Pixie Energy was established to help drive forward ideas and actions on local energy markets, with the aim of exploring positive outcomes for a range of stakeholders, communities, local authorities and generators. They have a reputation for helping new players in the energy market, for example, Bristol Energy Company, Greater Manchester Combined Authority and supported the GLA on licence lite.

The project is sponsored by Pixie Energy and UKPN and the project partnership includes Norfolk, Suffolk and Cambridgeshire authorities as well as a number of private sector companies. BEIS and OFGEM are observers to the project and the GCGP and New Anglia LEPs are connected into the project to ensure that outputs are coordinated and supportive of the Local Energy Investment Strategy being developed by the LEPs for BEIS.

Local Energy Market challenges

The rationale for the project is to better understand how to manage supply and demand of electricity over the local distribution system, and opportunities for connecting significant low

carbon assets across the three Counties to help balance supply and demand, whilst also making money as part of a local energy market. But there are challenges with local energy and the market rules that govern them, including:

- Network Charges
- Meeting contracted outputs to balance the network
- The perception that 1MW generated at a local level is worth less than the equivalent reinforcement costs
- The withdrawal of the Levy exemption certificates in 2015 impacted the financial business case for clean energy

This project will, among other areas, look to establish new commercial models and solutions and whether regulation and policy change is required to deliver the transformational change and grid management to meet electric vehicle demand and other low carbon measures.

On a positive note

Network Operators (DNOs) now have incentives around how well they are working with Local Authorities and communities to address network challenges. This is bringing more effective collaboration at the local level. For example, UKPN is thinking about (i) creating governance structures that allow them to have a more stakeholder governance led investment strategy (ii) looking to free up capacity where it is being hoarded on the network (iii) getting greater visibility of its network through a £30million investment project to manage the energy flow on its low voltage network.

Why is this project beneficial for Cambridgeshire?

Cambridgeshire will have access to the knowledge hub and our low carbon assets will be mapped and commercial models tested for trading energy locally.

Innovative projects can be tested on our assets such as the Smart Energy Grid in St. Ives Park and ride, and new project ideas will be supported by the network operator and energy suppliers through grant applications or direct funding. Dialogue with government, OFGEM and the energy industry on regulation, policy and market development will also be key.

What are our commitments?

Cambridgeshire County Council will need to identify potential project sites to test new innovations and collaborate on grant funding applications. Lessons learned on projects to date will be shared with counties of Norfolk and Suffolk (and potentially beyond) to help inform new commercial models to test projects. Some effort will also be required to provide details on all our energy assets that could be included in a local trading platform.

If you have any questions on this project please contact:

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