

## **Portfolio: District Heating Networks in South Staffordshire**

South Staffordshire Council has reaffirmed its commitment to low carbon energy by targeting schemes that will help it meet 10 percent of energy demand through renewables by 2020. With this in mind, they asked us to explore the potential for district heating networks (DHNs) and community energy schemes in the region. They recognised that DHNs not only offer a more efficient method of transporting heat, but also allow for the easier deployment of renewables.

Our detailed study explored the commercial and technical case for DHNs at three sites south-west of Wolverhampton, as well as the potential for district community energy schemes within certain industrial units.

We modelled the energy use of both existing buildings and planned development areas, and carried out a technical and economic appraisal of decentralised energy generation and supply. This allowed us to formulate an energy masterplan. The plan determined the viability of each of the proposed schemes and calculated the council's return on investment over 10, 25 and 40 year timescales, for each option.

We recommended more detailed feasibility studies into the two most suitable schemes, so that the council can refine their business case and select their preferred choice. We also advised them to extend the network to include a private wire.

These changes will generate local income, reduce carbon emissions, cut fuel bills, and provide energy security for residents and local businesses alike.

The UK's energy network is undergoing a period of huge development. Changes in market regulation are leading to smarter, more flexible networks providing exciting opportunities for innovation. We regularly advise local authorities, energy companies and local enterprise partnerships about these exciting technologies and have undertaken numerous high level heat mapping and project prioritisation exercises. If you are considering implementing a DHN, we can supply you with the technical expertise to identify the best options and ensure your project achieves its goals.

If you would like further information, please contact James Wayman, Distributed Energy Projects Consultant.