



FCC Real Estate
**Radcott
Green**

Case Study

The Project

FCC have established a Real Estate business seeking to maximise value from their vast land ownership across the UK. FCC has a pipeline of sites that are at various stages within the planning process for development of residential and mixed-use, and seeking to explore the benefits and opportunities that exist to establish an ESCo to retail heat, hot water and potentially power on an exclusive basis for each of their proposed developments. Based on our industry knowledge, expertise and track record within this sector, FCC appointed Ener-Vate to produce an initial business case of the viability of the installation of a District Heating network for the Radcot Green development.

The Radcot Green development will be a new, contemporary and sustainable new settlement providing c. 2,378 new homes on brownfield land. The community will benefit by a village centre providing the potential for healthcare, education, local shops, over 55 apartments, a public house, microbrewery community facilities & a two-form entry primary school.

The project will be split into three phases, with approximately 1,300 homes in phase 1, 719 homes in phase 2 and 358 homes in phase 3.



Our Role

The main tasks undertaken in this project were to:

- Consider the pros and cons of a potential DHN, addressing the principles of district heating.
- Report on the district energy asset value and whether the ESCo entity has a sound commercial basis.
- Provide a concise overview of the potential structural options that can be used to assess the suitability of investment and possible direction to install district heating to the site.
- Highlight the risks and considerations for the ESCo entity which could affect the model returns such as build delay, additional energy loads, private wire etc. and how they can be mitigated structurally, financially and/or technically.

- Provide a “live” model which gives concise access to the model effects of scenarios such as higher/lower capital cost, higher/lower operational cost and fast/slower build rates.
- Consider the structural scenarios which best suit the ESCo returns
- Investigate and consider the availability of suitable finance or grants
- Assess the possible impact on the wider utility provision should district heating be installed such as any opportunity to reduce both the on-site utility infrastructure costs and any offsite reinforcement costs.

End Result

Ener-Vate issued a full report summarising the main outputs from the above tasks, which recommended that a DHN solution for Radcot Green is commercially viable, under a set of commercial assumptions.

These include the type of commercial structure, concession term and level of connection fee.