

Project Snapshot

Company: Self Energy
Business: Negotiate long-term Energy Performance Contracts with building owners to install, operate and maintain decentralised energy systems
Project: Reducing the investment risk of long-term energy performance contracts

Energy and Environment

Helping you help the environment

Reducing the investment risk of long-term energy performance contracts

Self Energy 's innovative business model is dependent on efficient and accurate long term modeling of energy services in the built environment. The company negotiates long-term Energy Performance Contracts with building owners to install, operate and maintain decentralised energy systems. Self Energy is focused on allowing the owners and operators of publicly and privately owned buildings to reduce energy costs, reduce carbon emissions and increase security of energy supply.

Modern buildings are extremely complex systems and many diverse factors influence the variation in heating, cooling and electrical power requirements. It is the complex interplay between these loads that determines the suitability of decentralised power generation systems. Normally, a feasibility study would attempt to model the variation in loads and system performance over a typical year ? a complex and time consuming exercise. A KTP project with London South Bank University will seek to develop metrics that may be used at an early stage to decide if a project is technically feasible and financially viable. "My project is to reduce the investment risk for the company, through the development of decision support tools and to further improve cost savings and forecasts for Self Energy's clients," reports Daniel Matson, KTP Associate.

It is envisaged that the project will Provide Self Energy with a bespoke interactive piece of software that will enable project leaders to quickly determine the potential of future projects. Through streamlining the consultancy process, overheads can be reduced leading to an increased work stream and greater revenue. In addition to this, an accurate, proven model will increase confidence and ensure further Energy Performance Contracts are struck between the international Self Energy Group and its customers.

Associate Daniel, is just beginning his project with Self Energy but is already looking forward to the challenge and rewards a project like this can offer. "It is a very exciting time to be involved in the emerging energy efficiency and sustainability sectors and a great responsibility to be to producing a tool that could give us a significant competitive edge."

Partnering with LSBU academics Professor Tony Day and Dr Alan Dunn means getting the necessary expertise plugged into this project. "Between Alan and myself we have years of experience of how energy profiles apply in the UK, how energy characteristics in buildings vary over time, and knowledge of the design and operation of absorption refrigeration systems used in tri-generation applications," reports Tony. Working in partnership with LSBU's experts will help to address all the required areas for the improvement of the business.

Centre for Knowledge Transfer

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