

Case Study: Working Towards a Low Carbon Future at Leeds University

Our universities have always been outstanding pioneers of environmental change and are renowned for the forward-thinking nature of their projects. Encraft were employed by the University of Leeds to review one such programme, which involved an interesting set of challenges and an opportunity to walk along what was once the longest corridor in Europe.

Leeds has set itself an ambitious target of a 35% reduction in carbon emissions by 2020. This comes at a time of large scale expansion for the university estate, whilst the existing stock comprises of a large number of older structures, including the EC Stoner building of 'corridor fame', making retrofit a difficult task. The university had already completed a number of their carbon reduction projects by the time Encraft arrived, and the projects left were not enough to meet their strict 35% target.

We began rectifying this by calculating the absolute reductions in carbon emissions required, as opposed to the relative, percentage figure. We also completed building surveys in order to identify which of the remaining projects were capable of meeting the university's targets. This allowed us to formulate an overall strategy for delivering the necessary carbon reductions.

This detailed plan showed the potential for reductions in both academic buildings and student accommodation, through the identification of deep retrofit projects and the replacement of the combined heat and power (CHP) generator's gas turbines. It also provided a costed shopping list of the materials required, and recommended structural changes to the university's sustainability and energy teams. The strategy mitigated the estate expansion's impact on the carbon reduction programme, giving Leeds clear guidance on how to meet their ambitious target.

Clear, meaningful targets will always be essential when reducing carbon emissions, but many universities' funding models and programmes for carbon reduction are now out of date. Encraft have a wealth of experience reviewing the costing and resourcing of these models and can offer realistic, pragmatic solutions to keep your objectives achievable.

For further information please contact Kate Ashworth, Practice Head of Distributed Energy Projects.

