

ENGIE expertise helps Yorkshire Water meet its commitment to providing best value for customers





"The success of our partnership with ENGIE has been founded on collaboration. Everyone has pulled together to make this new scheme work for the whole business. The expertise and resources offered by ENGIE have taken the pressure off our busy operational teams. enabling them to focus on their core activities while ENGIE focuses on identifying and implementing measures to significantly reduce our energy consumption and costs. With the size of our energy usage. this will help keep our customer bills as low as possible and ensure we are looking after the water environment for good."

James Gudgeon, Contracts Manager, Energy & Recycling, Yorkshire Water



Requirement:

With a bill of around £53m per annum, energy is one of the biggest costs for Yorkshire Water. When its electricity and gas contracts were due for renewal, the company wanted to find a supplier that could help optimise its energy consumption and achieve greater value from its energy-consuming assets. Yorkshire Water consumes 550GWh of electricity across 4,500 meter points at more than 2,000 sites. These range from small pumping stations to major water treatment works. The company is committed to providing the best value for its customers, and improving energy efficiency plays an important part in achieving that objective.

The Solution:

ENGIE proposed a new energy partnership for Yorkshire Water, combining energy supply and services, with a guarantee that ENGIE would identify savings of £3m over the five-year contract. ENGIE gave Yorkshire Water complete confidence in this pledge by guaranteeing that if it failed to identify the promised £3m in savings, it would make up the difference.





Identifying energysaving opportunities

ENGIE embarked on a programme of audits to identify efficiencies and energy-saving opportunities at Yorkshire Water sites. These site investigations required close collaboration between ENGIE and the operational teams on each site. At the outset, ENGIE visited each site to explain what it hoped to achieve and to engage everyone in the process. The project proved a great success, thanks to the cooperation from Yorkshire Water engineers. By sharing their detailed knowledge of each plant, they enabled realistic and practical solutions to be identified.

To date, ENGIE has audited 17 major sites and identified more than 200 energy-saving opportunities worth around £8m over five years. These opportunities range from low or no-cost process changes through to major capital investments in new plant and equipment.



Investment-grade proposals

Every project requiring capital expenditure is discussed with Yorkshire Water engineers on site to determine which are the most viable. These are then developed into fully costed, investment-grade proposals by ENGIE, setting out the savings that will be achieved.

Yorkshire Water then decides which projects to implement and whether to appoint ENGIE to deliver them. If ENGIE is appointed, it will guarantee the savings set out in its proposal. ENGIE is now implementing the first two projects, which include installing new control optimisation equipment at the sewage treatment works at Blackburn Meadows, saving around $\mathfrak{L}16,000$ per year, and at Calder Vale, which will save around $\mathfrak{L}15,000$ per year.



Maximising DSR earnings

To complement its energy-efficiency programme, Yorkshire Water appointed ENGIE to manage a new style demand-side response (DSR) contract. This involves ENGIE monitoring and deploying Yorkshire Water's assets to maximise the benefits of participation in a range of DSR schemes, including Short Term Operating Reserve (STOR), Frequency Response, the Capacity Market and Triad avoidance. It's an approach that allows ENGIE to use its experience to optimise the earning potential of Yorkshire Water's existing assets.



Renewable energy for electric vehicles

In support of its sustainable objectives, Yorkshire Water is also investing in a fleet of electric vehicles. ENGIE is supplying electricity from 100% renewable sources to power these vehicles, further enhancing the carbon savings achieved. As a result, Yorkshire Water was the first water company to be awarded the 'Go Ultra Low' accreditation, jointly funded by Government and the automotive industry.

