

# Prescribing an energy efficient system

We created an energy saving solution to cut costs and improve patient comfort in a regional hospital.



## A need for change was diagnosed

A hospital relies on a staggering amount of energy 24/7. With round the clock patient care and emergency procedures to consider, the energy supply needs to be constant and reliable. Older, less energy-efficient systems and equipment, like those in this hospital, need upgraded to deal with demand.

With the NHS Carbon Reduction Strategy for England (CRS) calling for reductions of 60% by 2050, new solutions must also cut as much CO<sub>2</sub> as possible.

## Creating solutions that offer healthy returns

To help the hospital meet the tough new NHS energy targets, we looked at a number of different ways to help them become more energy-efficient.

Our energy management system allowed us to pinpoint consumption on numerous pieces of equipment, including the air conditioning units, lighting and even the cafeteria machinery. What soon became apparent was that the outdated gas turbine-powered unit which supplied the hospital's hot water, simply wasn't performing to meet demand.

## Boosting the power, but reducing the waste

We fitted an ultra-efficient new ENER-G CHP system. This captures the heat created in the generation process to provide low-cost heating and hot water for the building – making it an intelligent, win-win solution.

The natural gas powered 1.55MW MTU unit creates an additional 500kWe output compared to the previous gas turbine engine, significantly increasing the amount of energy saved.

Its on-board computer allows live system monitoring so any issues can be addressed instantly. It also provides full historic data retrieval if required.

## The small things add up to big savings

As well as the larger changes we made to the hospital, we also suggested numerous small cost-effective ways to cut energy consumption.

We continue to work with the hospital and are determined to help them reach their energy targets and increase the amount they're already saving – which is currently over £200,000 a year.

## Why choose ENER-G CHP?

- Offers financial savings over conventional energy supply
- Avoids Climate Change Levy
- Primary energy savings deliver lower energy bills
- Higher efficiency offers reduced greenhouse gas emissions, offsetting the impact of the Carbon Reduction Commitment
- Greater security of supply and plentiful hot water
- Flexible procurement options
- Zero CAPEX required
- VAT savings
- Incorporate Enhanced Capital Allowances otherwise denied by the public sector
- Possible grant funding