



## Energy Management - getting back to basics

As UK businesses and service providers continue to feel the squeeze of rising wholesale energy prices, GRAHAM's Energy Manager is advising a "back to basics" approach to energy management.

Gary McClune, a Chartered Energy Manager and ESOS Lead Assessor, pointed to the realisation of £1.1m in actual energy cost savings for one of GRAHAM's key public-sector clients as proof of his analysis.

Recorded over a four-year period, the 31% reduction in costs, and 20% reduction in consumption (kWh), was officially confirmed to the client in its Annual Energy Report in June 2018.

GRAHAM began working with this public sector partner in 2014 as part of a ten-year Energy Management Contract.

So just how has this considerable sum been realised in such a short timeframe?

### Platform

"From the outset, we installed sub-metering equipment across the estate, complemented by a new Energy Monitoring and Targeting System, which has provided the platform for identifying energy wastage while also quantifying future savings and validating monthly utility invoices," said Gary.

**"We believe that a 31% reduction in annual energy costs is significantly beyond what could have been realistically expected by this point in the contract and demonstrates the benefit of an integrated approach. Without buy-in from the client's senior management, estates, trades and building occupants these results would not have been achieved."**

"On a broader level, key decision makers are often unaware of hidden wastage in their buildings. They point to the solar panels on their roofs and the LED lights, which have been installed in reception and then believe that their building is efficient. Unfortunately, they are blissfully unaware that, out of sight, their boiler is running 24 hours a day and the chiller in the roof space is on throughout the winter."

### Credentials

The tangible benefits resulting from this particular contract reaffirm GRAHAM's energy management credentials. The core of this success is a focus on the fundamentals, consisting of:

- The development of a bespoke Energy Management Policy
- Ensuring that accurate half hourly data streams are in place to develop a structured Energy Monitoring and Targeting System
- Identification of energy saving opportunities
- Setting realistic targets for improvement
- Implementation of projects and the measurement of the results
- Appointment of an Energy Team with representation from all stakeholders

Having amassed over 15 years of experience within the energy sector, Gary reiterated his belief that the "implementation of best practice" is the key to delivering sustainable, long-term energy savings.

Furthermore, the GRAHAM approach to Energy Management is underpinned by the principles of ISO 50001:2011 – an accreditation that supports organisations 'in all sectors to use energy more efficiently, through the development of an energy management system'.

## Priority

"There's a school of thought that to make buildings more efficient then we need to invest heavily in the latest, highly innovative technology. But I would take exception to that," added Gary.

"At GRAHAM, we believe that while such technology certainly has a part to play, the priority for businesses should be to put in place sustainable, long-term systems and processes that will not just reduce consumption in the short-term but promote the development of a culture, which delivers continuous improvement.

"If you don't monitor it, you can't improve it and therefore I think it's critical that clients get back to basics first and then focus on the add-ons after.

"Collaboration is also key and this means getting the support and buy-in from maintenance teams, client representatives, building occupants and other relevant stakeholders."

## Transition

Gary's expert opinion comes at a time of transition for both producers and consumers of energy throughout the UK.

Within its 'Annual Report and Accounts 2017-18', the Office of Gas and Electricity Markets (Ofgem), indicated that 'the need to reduce carbon emissions, technological advancements and greater digitalisation are changing the way energy is produced, generated, transported, stored and supplied'.

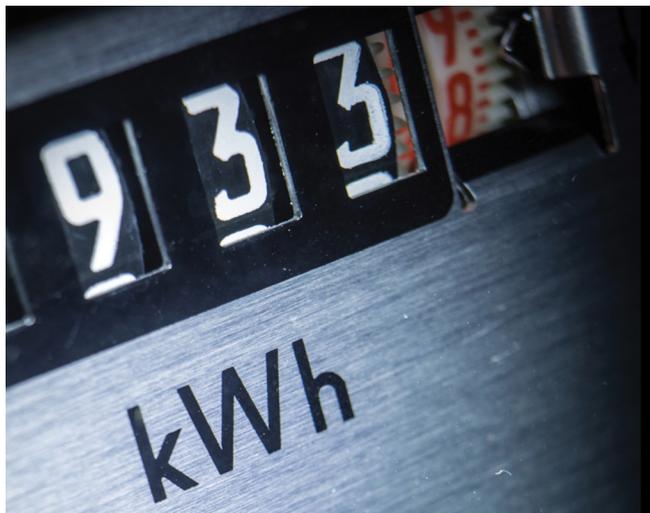
Statistics also reveal subtle shifts in how energy is consumed.

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**In the Department for Business, Energy and Industrial Strategy's 'UK Energy in Brief Report', the total final energy consumption in the UK (excluding non-energy use) was recorded as '0.7% lower in 2017 compared to 2016'.**

**Published on July 26th 2018, the research also revealed that 'it fell by 3.7% in the domestic sector, and by 1.4% in the service sector, but rose by 0.9% in the transport sector, and by 1.6% in the industry sector'.**

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Meanwhile at a strategic level, securing long-term sustainable energy supplies is also paramount and the UK Government remains committed to 'enabling a smarter, more efficient energy system'.

It has therefore pledged 'up to £70 million to smart energy system innovation'.

## Working smart

"In an evolving energy market, we appreciate the need to work smartly, efficiently and innovatively with our clients," continued Gary.

"Within GRAHAM, we are constantly working with manufacturers and suppliers to stay ahead of the competition. This ensures that, as new technologies advance, we are best placed to impartially guide our clients.



"We study what's on offer and outline the advantages and disadvantages of the new technology along with any logistical issues associated with its implementation. We also quantify the associated installation costs, along with projected energy and carbon savings. This then culminates in an estimated financial payback plan.

"At a time of rising wholesale energy costs, we would recommend that clients put in place the appropriate controls to ensure their energy systems are fully optimised.

"They also need to recognise that robust energy management is not simply a one off process or project but it's about maintaining consistency and momentum.

"If clients lose focus, for even a short period of time, it can result in the loss of previous gains. Taking a longer term view is what we promote at GRAHAM and this approach is central to the close, collaborative relationships we enjoy with our clients."

For more information on GRAHAM's Energy Management offering email Gary on [gary.mcclune@graham.co.uk](mailto:gary.mcclune@graham.co.uk) or visit <https://www.graham.co.uk/Expertise/Facilities-Management>