



*In partnership with*



**KNOWLEDGE  
QUARTER**



## **KNOWLEDGE QUARTER MASTERCLASS**

REDUCING CARBON EMISSIONS FROM YOUR BUILDINGS & ESTATES

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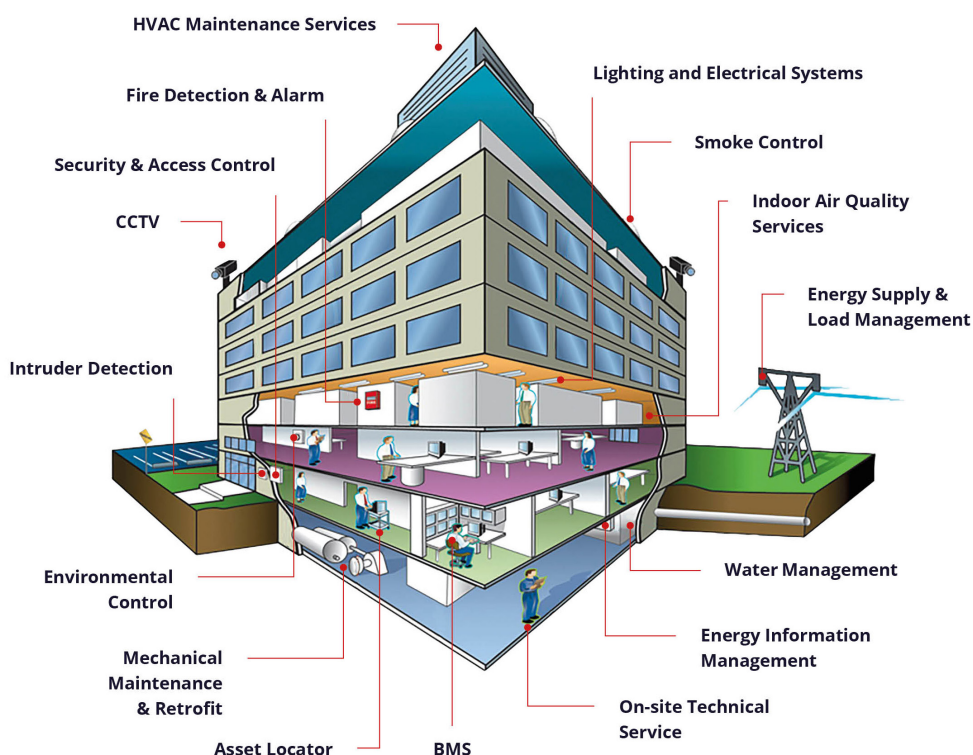
**Founded in 1998, Artic provides Hard Services Facilities Management, Consultancy and a range of allied specialist services that seek to seamlessly connect people to their internal environment.**



We work in partnership with our client's to deliver long-term cost effectiveness with an innovative approach to service provision. We will develop a facilities management plan tailored to your organisation to reduce your environmental impact and deliver reductions in carbon emissions, year on year.

Whilst Artic offers leading innovations to improve energy usage in line with Carbon Net zero targets to our clients, we also focus on improving our own. This includes adhering to strict protocols in association to our ISO standards and embracing all recommendations provided by our partnership with Planet Mark.

We look to deliver a low carbon, energy efficient, and sustainable future. This allows us to constantly evaluate and develop our service provision to match the ever-changing requirements of even the most demanding and challenging environments.





## OUR CARBON NET ZERO STRATEGIES:

- Our core business is performing Planned Preventative Maintenance on Hard FM assets.
- We promote behaviour changes to keep in line with achieving Carbon Net Zero.
- We work with our clients to develop plans to optimise your existing assets including replacement upgrade programs to achieve carbon goals.
- We have a directly employed, vastly experienced and flexible engineering and management team.
- We provide turnkey project solutions.
- We have condition-based maintenance specialists that monitor the real-time condition of your site's assets and respond whenever they see energy saving opportunities.
- We have a close working relationship with all major manufacturers to provide the latest energy efficient plant/solutions.

Our directly employed engineering teams are conveniently located throughout London and the Home Counties which enables a fast and flexible approach for our technical resource to deliver sustainable solutions.

## OUR ACCREDITATIONS



## Supporting you in reducing your carbon footprint.

At Artic Building Services, we specialise in supporting your transition to a greener future. Partnering with you, and our specialist supply team, we will develop a tailor-made plan to your organisation. We have the resources, equipment and experience needed to tackle carbon emissions at sites of all sizes while managing any facilities challenges we face.

Conducting a comprehensive audit of your site, we will review your energy consumption and identify ways to improve your usage and reduce your energy bills. We always benchmark our solutions inline with industry and carbon accredited protocols to ensure we're following best practices to achieve exceptional results.

Our projects team have installed numerous energy efficient heat pumps, electric industrial boilers and

other highly efficient cutting edge asset technologies. These changes will help to reduce your energy costs and comply with new building regulations.

We will also look at the option of fitting LED lighting, installing smart sensors and daylight harvesting which can offset the amount of energy needed in different areas within your buildings. These quick changes can achieve significant energy savings annually.

### Long-term Energy Management

Utilising your BMS system, we will critically assess the performance of your systems and assets and continually monitor and optimise control strategies to reduce energy waste and improve energy efficiency. Our condition-based maintenance specialists will monitor the real-time condition of your site's assets and respond whenever they see energy saving opportunities or signs of decreasing asset efficiency. We will send alerts to our CAFM system to trigger maintenance tasks before a failure occurs or asset performance drops below an optimal level.

We achieve these energy savings through tailored maintenance plans which focus on optimising your HVAC system's performance. As part of this plan, we will utilise techniques such as:

- *Installing smart sensors*
- *Retrofitting energy efficient motors and equipment*
- *Business Critical Maintenance*
- *Monitor building use & occupation density*
- *Flexible adjustment of controls scenarios*

**It's estimated that HVAC systems account for around 40% of worldwide carbon emissions. We have unique expertise in optimising HVAC systems and reducing their energy consumption by up to 30%.**



# Encred.

**Encred are the retained technical authors for the BESA SFG20 and SFG30 maintenance guides. Encred offer a broad spectrum of professional building asset management services throughout the UK. They can help public or private clients to plan, design, construct, operate and maintain their buildings and property portfolios throughout the plant lifecycle.**

Encred specialise in providing the systems and support that keep your buildings operating efficiently, with minimal problems and at the least expense throughout their life.

Encred's services include engineering asset management, feasibility studies, asset and condition surveys, project management, operation and maintenance management, energy audits, energy surveys and accreditation services. Their in-depth technical expertise, innovative professional consulting services and years of industry experience can help ensure the smooth running and compliance of buildings or property portfolios, whether new or existing in the public or private sectors.



## The KQ Masterclass

At the event, Encred will be discussing SFG20 and SFG30 maintenance regimes for empty or part occupied buildings, as a result of the Covid 19 Pandemic. They will also highlight additional requirements when reopening a building to the work force and the impact on energy consumption within these buildings.

They will also highlight the various requirements on air ventilation and options to achieve legislative recommendations.

# Carbon Numbers.

***Your energy is their passion.***

Founded in the UK in 2012, Carbon Numbers is a leader in employing cutting edge technologies with a dedicated fibre network and cloud-based IT system to deliver energy-saving BMS, lighting, energy, and metering services.



As well as installations, they provide consultancy services to support businesses with SECR, ESOS and ISO 50001 accreditations, and create a pathway to net zero carbon. Carbon Number's award-winning reporting suite gives clients access to remotely control lighting, heating and much more, potentially saving on average, hundreds of thousands of pounds in energy.

At Carbon Numbers, they provide a truly independent solution to help businesses and organisations reduce energy consumption, cut costs and lower carbon emissions.

◀ *2021 BCIA Smart Building Award Winner*

## The KQ Masterclass: Reducing carbon emissions from your buildings & estates

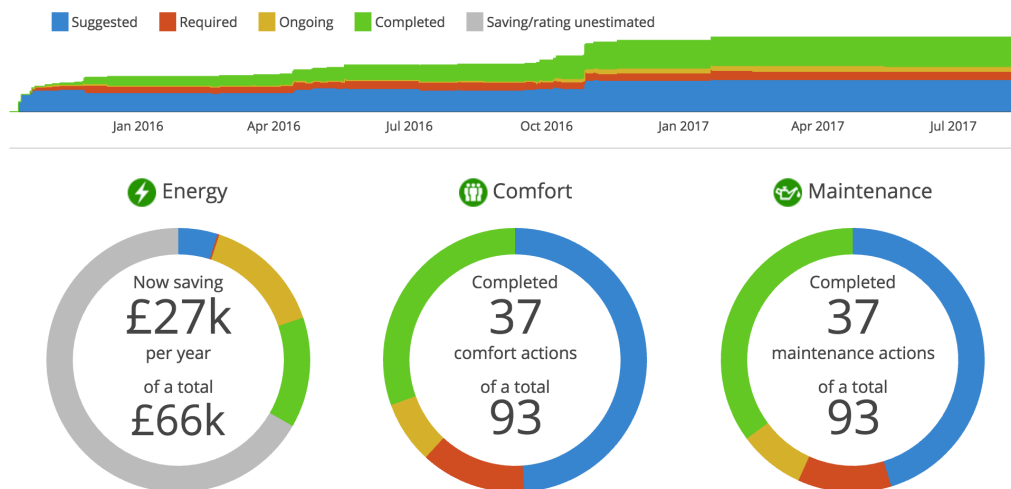
Do you know which areas of your business and buildings consume the most energy? Most homes, businesses and organisations do not operate to their full potential, resulting in efficiency performance gaps. It is important to benchmark your business' energy usage to be able to identify where improvements can be made.

As well as improving the performance of buildings, having visibility of energy consumption will put your organisation in a better place to comply with ever-evolving energy legislation and guidelines. At the event, Carbon Numbers will help businesses navigate complex legislation such as ESOS and SECR and create a clear pathway to helping you achieve Net Zero.



# Demand Logic.

**Demand Logic is a UK-based, CleanTech and PropTech start-up, transforming buildings to become healthier and smash their carbon emissions.**



Commercial buildings consume huge levels of energy, a staggering amount of which is wasted. In the UK a typical building is responsible for nearly 4 times the carbon emissions it was designed for. This is because the Building Services controlling energy consumption are highly complex, and performance is opaque.

Their mission is to use technology to empower property owners, occupiers and facility managers to better understand their buildings and to provide actionable recommendations to improve on their ESG targets. Demand Logic's innovative technology collects and analyses building data to offer digestible and user-friendly recommendations while providing a collaborative tool for on-site teams.

## The KQ Masterclass

Demand Logic are excited to discuss how making the most of existing data sources is the quickest and cheapest way to reducing energy waste, and how breaking the silos between property stakeholders leads to immediate improvements in energy performance, internal environmental quality and maintenance efficiency.

**Demand Logic has won 14 awards in 5 years covering property technology, cleantech, building controls, smart cities, green buildings, energy, innovation and data analysis. They have been specifically mentioned in UK parliament, and are involved in multiple UK government consultations and advisory groups.**

# Boss Controls.

**Boss Controls is a leading independent Building Energy Management Systems (BEMS/BMS) company.**

They specialise in effectively controlling buildings so that heating, ventilation, and air conditioning (HVAC) are running at peak performance. Their services include:

- *Remote support services*
- *24-7 help-desk with call-out facility*
- *Upgrades and minor installation*
- *BMS alarms*

## Planned and Preventative Maintenance services (PPM)

Each building is different and therefore Boss Controls offer tailor-made PPM solutions based on the needs of your business, the building, and its occupants. Boss Controls' expert engineers can reduce your energy consumption by controlling BMS via time, staff presence or conditions.

*"Only systems that are measured can be improved, therefore, the more that it is measured, the greater the savings are that can be achieved."*

Boss Controls' PPM services align with the Carbon Trust's Principles of Good Building Control:

- *Improve comfort for employees and customers*
- *Prolong the expectancy of your HVAC hardware*

## Upgrades

If you are responsible for a legacy BMS which has been superseded by newer technology, it is likely that device failure may present operational risk. Modern technology operates more efficiently with smart strategies to manage your building's energy consumption. Boss Controls will perform a fully specified hardware upgrade including replacing sensors, actuators, frequency inverters and control panel upgrades.

They are experts in market leading BMS products:

The logo for Distech Controls, featuring the word "DISTECH" in a blue, sans-serif font above the word "CONTROLS" in a smaller, blue, sans-serif font, all enclosed within a thin blue rectangular border.The Siemens logo, consisting of the word "SIEMENS" in a bold, teal, sans-serif font.The Trend logo, featuring the word "TREND" in a bold, orange, sans-serif font.The Tridium logo, featuring the word "TRIDIUM" in a blue, sans-serif font with a small red triangle above the letter 'M'.





"Artic have played a dynamic role in identifying innovations in support of the BMA's Carbon Descent ambitions. When Artic took over the hard FM contract at BMA House they undertook a detailed energy audit to show potential innovative measures. Artic highlighted many new protocols and programme of works to benefit the BMA in relation to energy expenditure and consumption.

Some examples of this were lagging the pipework to minimise the loss of heat, updating the lighting to LED and adding PIR- based motion detectors. Artic fine-tuned the BMS to assist in their carbon management plan by operating the plant at peak efficiency.

Since partnering with Artic, we have seen a continued reduction in our carbon footprint and an increase in energy efficiencies at BMA House. Once our future ways of working requirements are identified, I am confident Artic will continue to contribute in this area, as the BMA consider more larger and complex projects that will significantly reduce our carbon footprint further".

**The British Medical Association**



"Encred's expertise working with Artic as their specialist energy partner, was instrumental in keeping our site fully operational through the major changes to the steam plant at our Clare Hall facility."

**University College London Estates**



"I would just like to mention that John Tyler has gone to the top of my Christmas card list. John has thought outside the box and managed to salvage loads of boiler parts from the now defunct On-Call building boilers. John informs me that he can use these parts to keep the 4 Windsor Walk boilers functioning until we eventually have this boiler house refurbished. I have thanked John for his dedication and foresight."

**King's College London**



I am happy to thoroughly endorse the services of Artic Building Services.

Having worked with them over a number of years, we have seen the benefit of their pro-active engagement on their contract and ability to advise and offer practical solutions to the college.

Artic have been working with the college to make instrumental changes to help move towards achieving our planned reduction targets. They are a competent partner and we look forward to developing our important work with them.

**Birkbeck, University of London**

## ENDORSEMENTS

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Partnering with Artic, Encred have carried out various projects to improve the resilience of services to buildings within the UCL estate. An example includes carrying out a TM44 inspection and producing an option study on a project to allow business operations to continue as normal.

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Daiwa Capital Markets Europe Limited, an award-winning investment bank, has a 5 year Energy Performance Contract (EnPC) with Carbon Numbers.

The agreement sees Carbon Numbers support the City of London based Daiwa in reducing carbon emissions by 3426 megawatts and prevent 1546 tonnes of CO2 being produced with up to 18% savings to be made. Services include Bill Validation, Sub Metering, FCU Recommissioning, and Remote Bureau Support and Assistance.

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Demand Logic provides data analysis at two of Arup's key offices. The system has given valuable insight into the efficiency of systems and helped focus maintenance and improve plant operation.

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Under the Artic hard FM contract, Boss Controls check and monitor the BMS system to ensure optimal control of indoor environments is always achieved. Their remote monitoring facility can identify changes to strategic control strategies which can often lead to greater energy efficiency for the BMA.



## COMPANY DETAILS

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### ARTIC BUILDING SERVICES LTD

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#### CONTACT DETAILS

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*Email:* [contactus@articbuildingservices.com](mailto:contactus@articbuildingservices.com)

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#### ADDRESS

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#### SERVICE AND MAINTENANCE OPENING HOURS

*General Office Hours:* Monday – Friday: 08:00 to 17:00

*Out of Hours Helpdesk:* Monday – Friday: 17:00 to 08:00  
Saturday – Sunday: 00:00 to 23:59

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#### WEBSITE

[www.articbuildingservices.com](http://www.articbuildingservices.com)

