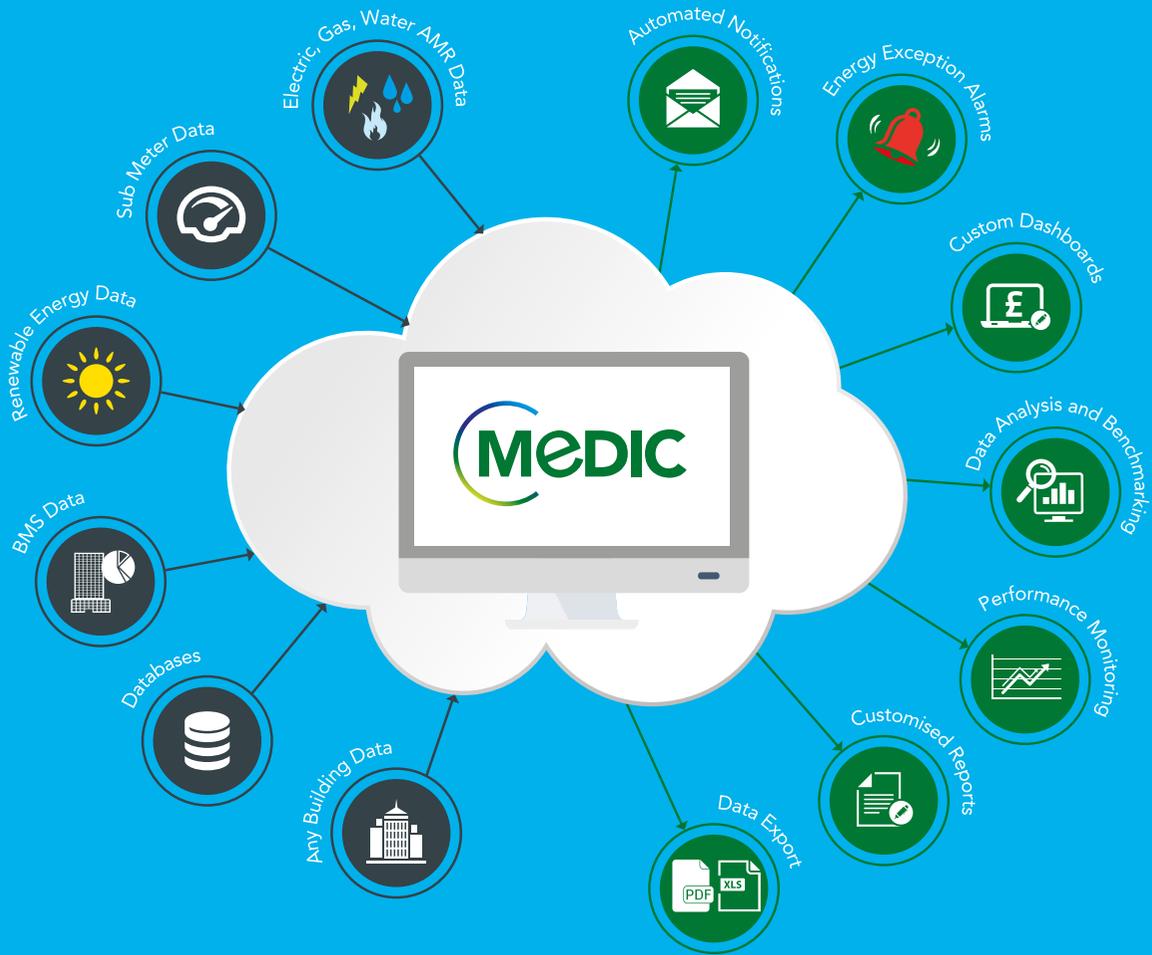


# Re-defining Energy Management



Making Buildings Smarter



## Our Approach

Partnership is the cornerstone of the BMSI approach, to all of our clients. We aim to thoroughly understand specific service needs so we can tailor our offerings accordingly.

Our partnership approach, with its focus on understanding, flexibility and communication, has resulted in long-term relationships with clients across industries and throughout the UK.

## Complete Installations and Service

BMSI provide a full suite of services:

- BEMS Service Support
- Energy Engineering
- aM&T
- Energy Controls Centre
- Sub Metering Services
- Major BEMS Installations



BMSI's innovative MediCentre (BMSI's remote technical centre) enables us to offer an extensive suite of energy and controls services.

The range of MediCentre - BMSI's remote technical centre services are focused on providing a full life cycle service for our customers and creating a holistic view of the efficiency of a customer's estate. Our core services are centred around the acquisition, analysis and presentation of data from a variety of sources, this is achieved by utilising our in house software platform MEDIC.

## MEDIC Re-defining Energy Management

MEDIC is a web based energy management platform that enables users to access real-time and historic environmental, BEMS and energy data.

Using an interactive, browser-based user interface, MEDIC can be used to manage and analyse data, build and schedule reports and configure notifications.

MEDIC has been designed with flexibility and scalability firmly in mind and as such is a suitable solution for a wide range of customers. It is capable of handling multi-site, multi-utility corporate customers as well as standalone, single site installations.

### Core Benefits

- Increased profitability.
- Reduced operational expenditure.
- ROI tracking for energy saving initiatives.
- Early identification of energy wastage and hardware inefficiencies.
- Assistance in achieving ESOS and ISO 50001 compliance.

### Data Acquisition

- Data is extracted from a variety of sources, including metering devices and BEMS.
- Secure transmission into the MEDIC platform.
- Rigorous measurement and validation.
- Automated data estimation.

This ensures early identification of any data acquisition issues and gives our customers 100% confidence in the quality of the data within MEDIC.

### Data Manipulation and Presentation

The key functionality of MEDIC lies in the management and presentation of data. This is achieved using a variety of methods including:

- Customised Dashboards
- Data Analysis and Benchmarking
- Customised Reporting
- Automated Alarm Notifications
- Performance Monitoring

## User Defined Cockpits & Customised Dashboards

Online access to MEDIC removes the requirement to download, store and manage PC-based software or have a dedicated PC to use the package.

MEDIC is totally configurable and can contain a selection of customer charts, widgets and custom images.

### Cockpit –

This aspect of MEDIC provides customisable visual, interactive display of metering, sub-metering, renewable, weather and BEMS information.

### Dashboard –

Displayed on a PC, flat screen, or through a link on a corporate website, the dashboard presents information from multi-utility metering and sub-metering points for a single site or an entire estate.

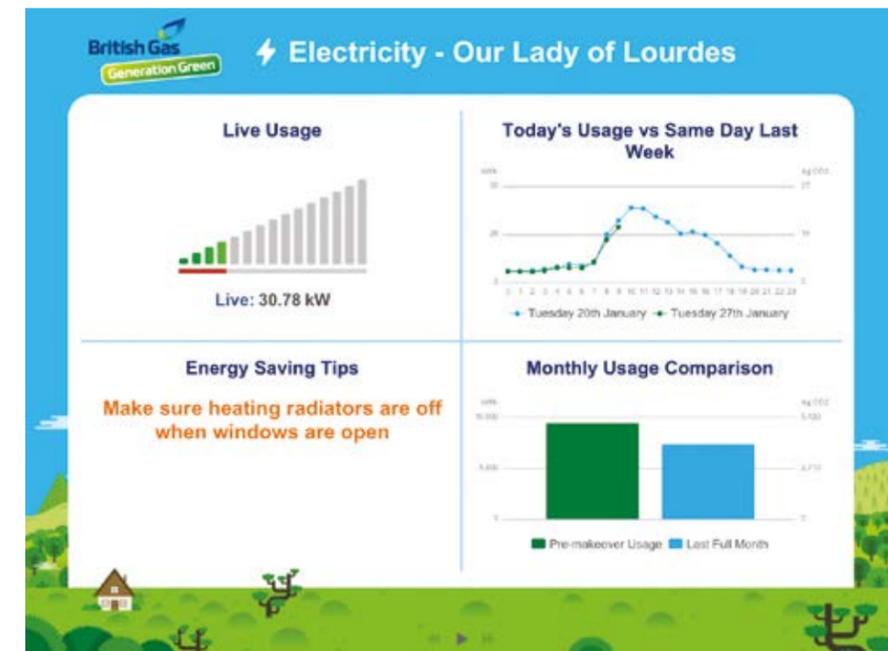
Bringing energy data to life, the dashboard is designed to gain stakeholder buy-in.

## Cockpit

MEDIC Cockpits are interactive allowing users to expand charts and navigate to secondary dashboards.



## Dashboard



# Data Analysis and Benchmarking

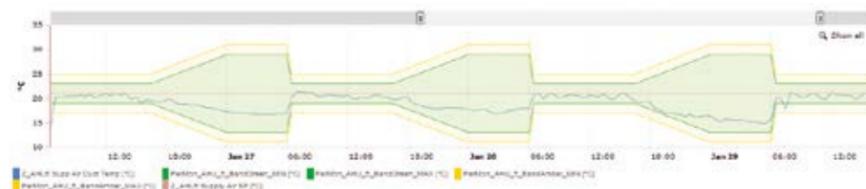
The MEDIC charting tool provides all options associated with a standard aM&T package and additionally includes advanced charting functionality, giving users the ability to fully report, compare and quantify their energy data for each monitoring point, activity area or entire site.

- Business Hours
- Performance Monitor
- League Tables
- Sankey
- Carpet (Heat Maps)
- Comparison Charts
- Monthly Profile Map

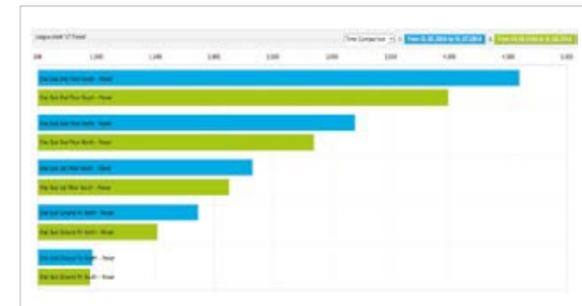
Business hour charts allow the user to identify energy usage across configurable time periods.



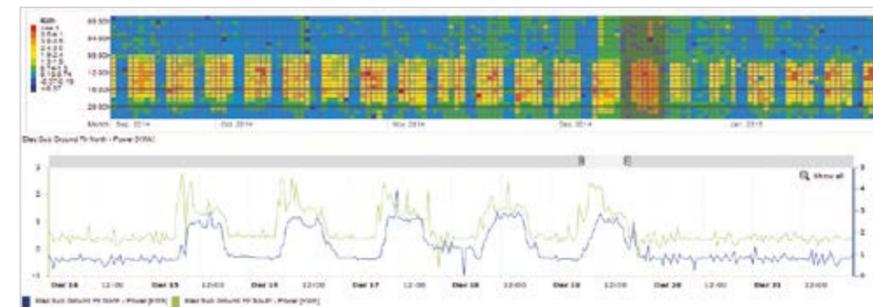
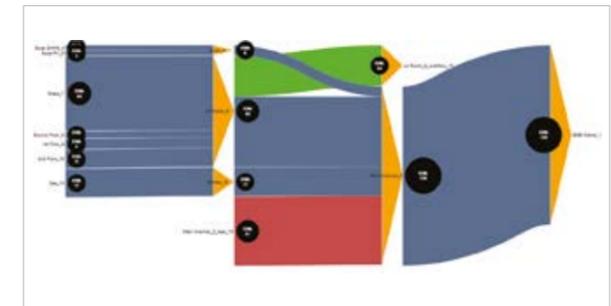
MEDIC's Performance Monitor constantly tracks a variable (for example consumption or temperature) against a predefined range of values. Notifications are generated if deviations occur.



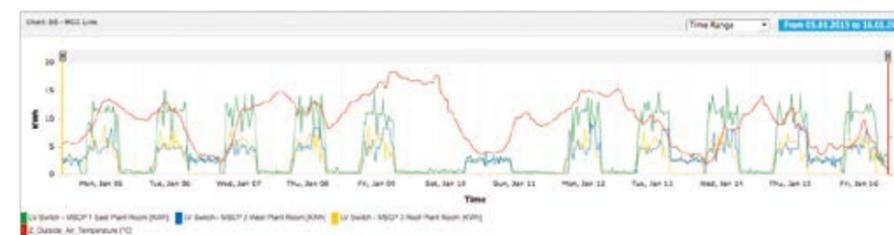
The league table chart enables users to compare similar data feeds against each other and a predefined benchmark.



The Sankey Diagrams allow users to easily visualise the flow of energy distribution.



Carpet charts allow the user to view data in an easy colour coded format.



MEDIC's line charts enable users to view the profile of any configured data point and draw comparisons against multiple static or dynamic targets.



Monthly profile maps show a simple summary of the month's usage allowing easy identification of over usage.

## Customised Reporting

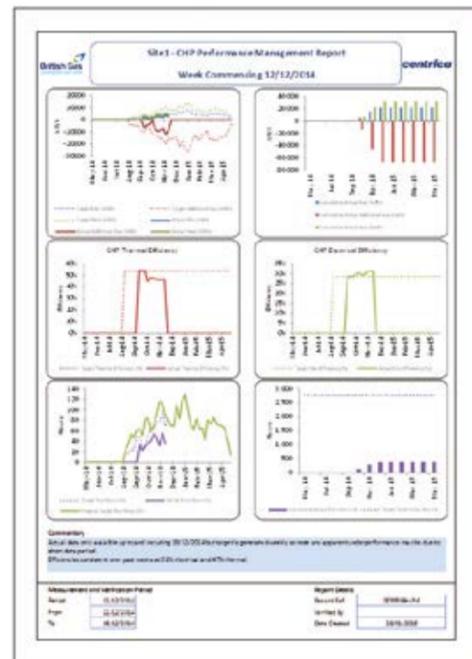
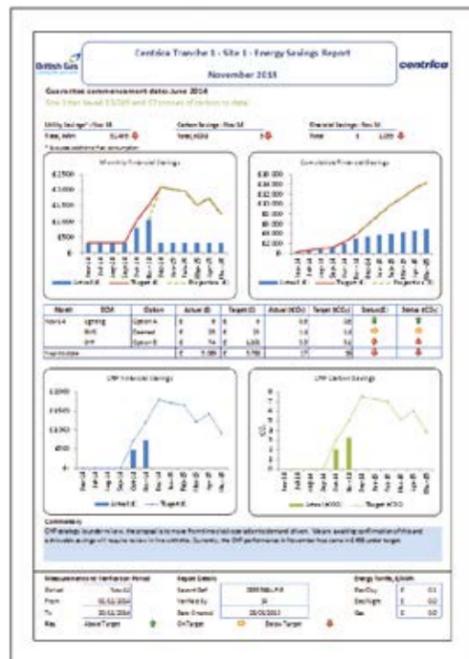
MEDIC's Reporting Functionality is an all-in-one & intuitive tool which enables users to monitor and analyse energy, environmental and BEMS data.

The highly interactive user interface makes compiling reports on a wide spectrum of parameters simple and fast.

**MEDIC making your data more accessible and readable than ever before!**

### Core features include:

- Intuitive, innovative and responsive user interface.
- Completely customisable reports – Reports can be created by compiling predefined charts, widgets and images.
- Existing excel templates can be imported into MEDIC and automatically populated with data at predetermined intervals.
- Export reports as Image, PDF, XLSX or CSV files.
- Report distribution can be scheduled automatically via e-mail.



## Automated Alarm Notifications

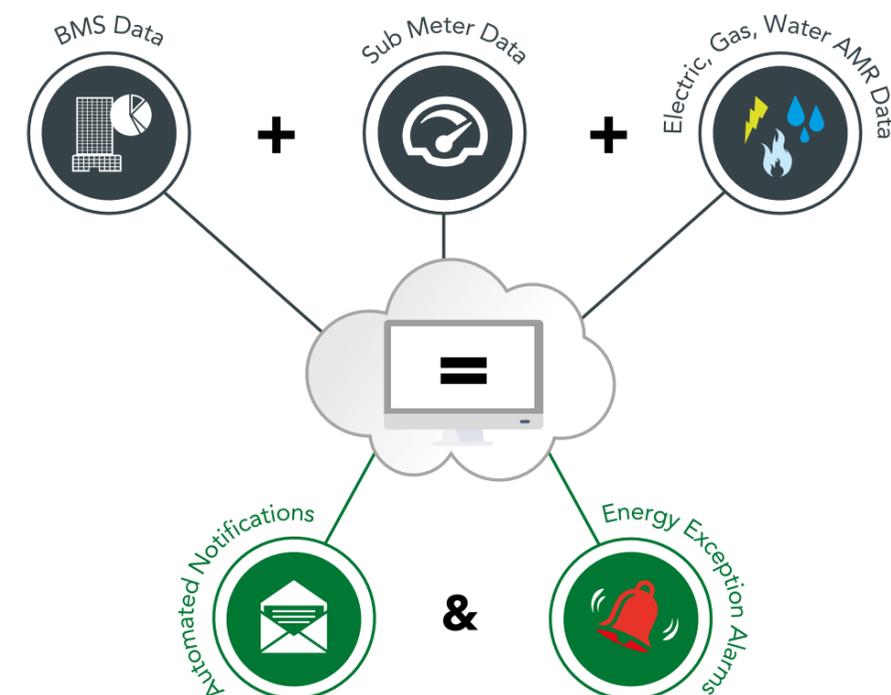
The notification tool monitors energy and BEMS data against user specified conditions and generates alarms via SMS and/or e-mail.

This allows over usage and hardware faults to be identified ASAP and through early identification of these alarms the user can adjust their behaviours to optimise potential savings.

Notification rules can be configured to check and cross reference multiple conditions. For example, you may only wish to receive a notification within operational hours or if the outside air temperature is above or below a certain threshold.

### Core features include:

- Easy creation of multi-conditional rules.
- Automated notification of data value deviations from defined characteristics.
- Alarm management and reporting.
- Automatic forwarding to operational personnel by SMS /e-mail.





MEDIC is one of the tools used by our MediCentre - BMSI's remote technical centre to enable the unification of the energy management and BEMS controls worlds.

By combining energy management services with our BEMS controls services we offer a complete life cycle solution to our customers, maximising plant efficiency and energy savings across the customer's entire estate.

## MediCentre - BMSI's remote technical centre

### ENERGY

A number of services are available from host only, for customers with their own energy management teams, to our full analytical service. Our energy analyser service utilises all the features of the MEDIC system and includes specialist advice on energy saving initiatives and usage optimisation.

### CONTROLS

Our BEMS controls services include options for reactive and proactive support, providing around the clock issue investigation and resolution to ensure minimum impact to building occupants and energy consumption.

Fully automated performance monitoring enables us to continuously monitor BEMS and plant performance and provide advice on building efficiency improvements to ensure optimum operation.



