ENERGY MANAGEMENT. IMPROVE EFFICIENCY. REDUCE CARBON.

harnessing energy in retail and hospitality
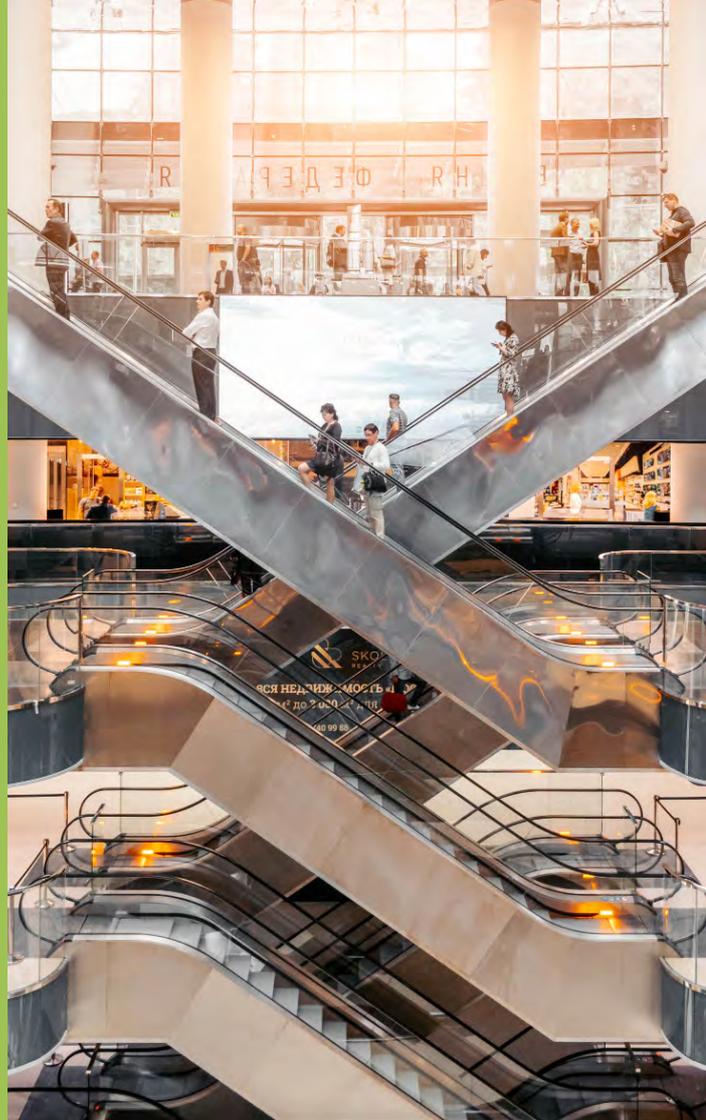
t-mac
technologies

retail and hospitality

The pandemic has caused plenty of problems for companies around the world. Not least the retail and hospitality sectors. Social distancing restrictions and lockdowns have made it essential for these businesses to adapt quickly and cut out any possible overheads.

Now, as governments around the world start to implement recovery strategies, it is imperative that these sectors find innovative and sustainable ways to manage their largest costs.

Energy is a significant overhead for retail and hospitality businesses, and much of it can be avoided. Leaving appliances on, forgetting to switch off lights and continued HVAC use, even outside of opening hours, are all major culprits of energy waste often overlooked by management.

Fortunately, worldwide lockdowns and restrictions have also propelled the use of technology and digitalisation within these sectors. It is estimated that by implementing smart energy management systems, the UK hospitality sector could make savings of almost £310 million annually.

t-mac devices can identify areas of high energy usage, such as lighting, heating and air conditioning. Once spotted, these areas can be controlled and reduced to only what is necessary.

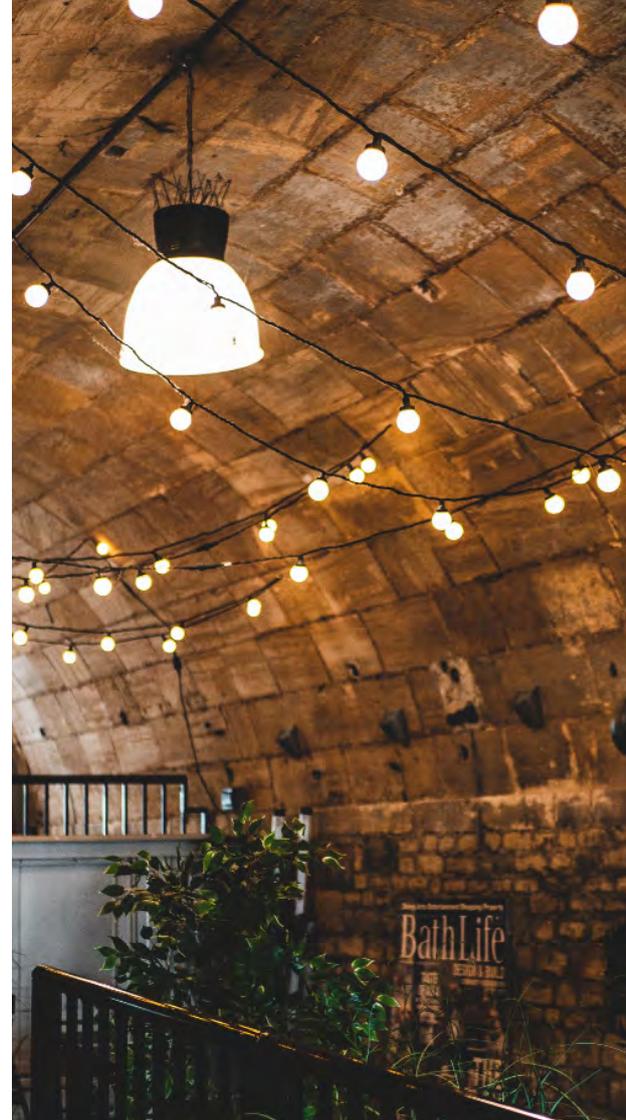# A 20% reduction in your energy costs is equal to a 5% sales increase.

system
controls

energy management

IMPROVE ENERGY EFFICIENCY, CUT WASTE, REDUCE COSTS.

Taking control of energy management is crucial for retail and hospitality businesses as they navigate a sustainable road to recovery. Once you understand where you are using the most energy, you can identify areas of inefficiency and waste. Eliminating waste and reducing consumption can lead to lower energy costs and compliance with green legislation.

This is why, now more than ever, it is important that restaurants, shops, pubs and cafes have the right tools to identify and tackle unusual trends and inefficiencies. Our IoT-enabled technology provides a real-time window into your consumption, granting visibility and control across all systems including heating, lighting and ventilation.

sub-metering

AIR-CONDITIONING, LIGHTING, HEATING, ENERGY ACTIVITY

Every business can benefit from cutting out waste. Understanding your energy consumption is the first step towards doing just that. By identifying areas of inefficiency, you can turn your attention to the 'why' and go about finding sustainable solutions. This is where submetering comes in.

Sub-metering allows you to dive deeper into the reasons behind these high consumption areas. More specifically their peaks, troughs and base-loads. For retail and hospitality businesses with multiple sites in different locations, understanding these usage trends is vital for a profitable and sustainable future.

This allows businesses to focus on the reasons behind their energy use and where exactly it is being used. Including areas such as:

• Lighting
• Heating
• Air conditioning
• Refrigeration

heating   lighting   A/C   refrigeration

hospitality case study

Nando's
PERi-PERi CHICKEN

Originating in South Africa, Nando's is an international hospitality brand. Nando's currently operates 1,200 outlets in 35 different countries. With sites based across the country and the world, Nando's must understand exactly where energy is being spent on each site, and how to control it.

t-mac's Mini BMS has helped Nando's save 15% on its energy consumption at their Nottingham restaurant. This equates to £3,600 for the year, and an ROI in 18 months.

We worked with Nando's to identify areas which could become more efficient, such as lighting and HVAC systems. After installing t-mac systems, Nando's sites were able to gain basic control over both systems and plan for them to switch on and off around opening times.
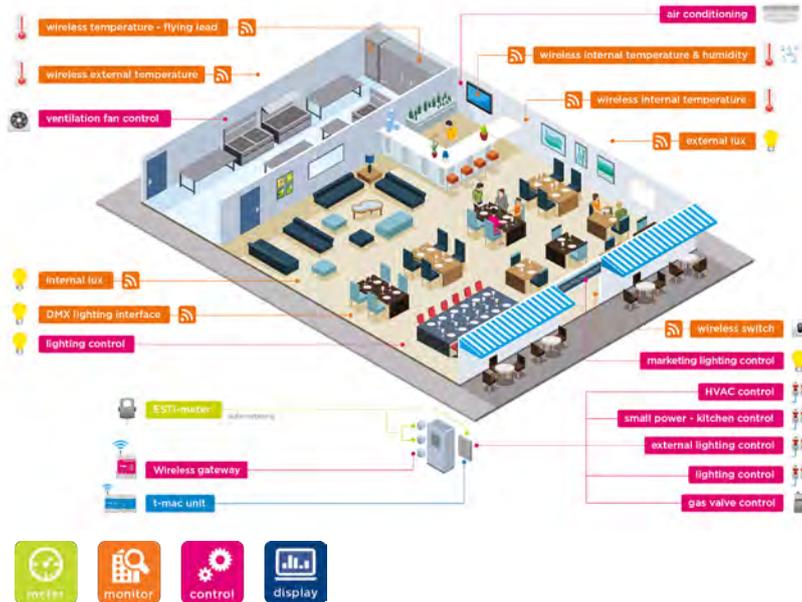
18
Month ROI

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Bespoke BMS
ENABLED CONTROLS
SOLUTION IMPLEMENTED

....

Basic Control
SYSTEMS IMPLEMENTED OVER LIGHTING,
HEATING AND AIR CONDITIONING

hospitality installation

wireless temperature - flying lead
wireless external temperature
ventilation fan control

air conditioning
wireless internal temperature & humidity
wireless internal temperature
external lux

internal lux
DMX lighting interface
lighting control

wireless switch
marketing lighting control
HVAC control
small power - kitchen control
external lighting control
lighting control
gas valve control

ESTI-meter
Wireless gateway
t-mac unit

meter monitor control display

t-mac in hospitality

Customer service: Reduced staff and increased workloads have forced hospitality businesses to find innovative ways of reducing costs while maintaining excellent customer service.

Rather than adding to a growing pile of responsibilities, installations such as t-mac save the hospitality sector a considerable amount of money and time. At the touch of a button, businesses can understand where their energy is going. Allowing them the chance to redistribute this money to enhance their customer experience, whether that be online or in person.

Energy management: As the government continues to announce new legislations, it is essential that businesses reduce their impact on the planet. 'Going green' not only future-proofs companies, but encourages environmentally conscious consumers to choose their services. Understanding your energy consumption allows for changes to be made to your business model. Not only does this save your company money, it also gives you the chance to become more sustainable in an ever-greening world.

Data analysis: Being able to have quick access to performative evaluations allows businesses to revaluate their work dynamics and look for ways to improve.

t-mac's Smart.Dash quickly and efficiently quantifies and visualises a building or multiple sites energy consumption and performance. Making consumption easier to understand and, finding the best energy saving solution, stress free.

retail case study

Iceland

As the UK's leader in frozen food, Iceland is a fast-growing and innovative retailer. And with multiple sites based around the country, it is imperative that each site knows where they are using energy and how to control it. This made them an ideal candidate for t-mac's energy saving solutions.

t-mac provides innovative software to enable users to track energy usage in real-time, 24 hours a day, 365 days a year. Plus, our smart building solutions offer clients the ability to connect energy intensive devices across multiple sites.

Working closely with Iceland we were able to provide an optimised lighting system to 850 of their sites. This bespoke controls system provides the retailers with automated store lighting. Meaning they can optimise energy usage based on occupancy and trading times. This resulted in a 17% decrease in energy usage across 1600 sites. To further reduce electricity usage and deliver 10% savings, our team are implementing load shedding and shifting activities during peak DUoS and TNUoS times. The ROI for these lighting solutions was 18 months.

15%
SAVINGS ACHIEVED THE IN FIRST YEAR

Bespoke BMS
ENABLED CONTROLS SOLUTION IMPLEMENTED

10%
ADDITIONAL SAVINGS PROJECTED THROUGH LOAD SHIFTING AND SHEDDING

retail
installation

energy showcasing dashboard	air conditioning
security alarm	Presence Detection
	Internal Lux
	lighting control
	external Lux
CO₂ sensor	
internal temperature	overdoor heater
HVAC control	footfall counter
electricity meter	marketing lighting control
gas meter	energy showcasing dashboard
water meter	
t-mac unit	Wireless Gateway

meter · monitor · control · display

t-mac
in retail

Customer satisfaction: To keep up with rapidly developing e-commerce competitors, retailers must find a way to reduce overheads while increasing profit. IoT technology is being used to enhance the customer experience and reduce costs.
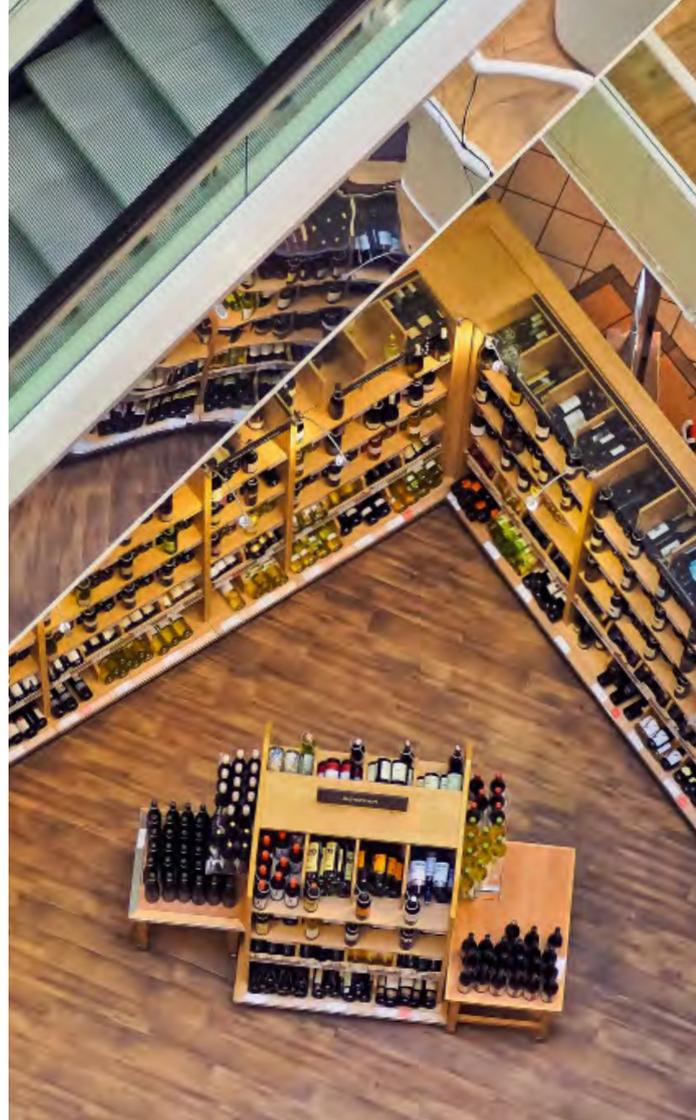
At t-mac, our IoT-enabled energy management services allow retailers an opportunity to be transparent with their customers about their sustainability accomplishments. 'Buying green' is more attractive than ever to consumers, so understanding consumption and reducing it is vital in upkeeping customer satisfaction.

Energy efficiency: It's quickly becoming clear that smart technology is becoming the most effective way for the retail sector to minimise costs and maximise profits and efficiency. Taking control of your building and equipment can

be a daunting task for hospitality and retail staff who are already faced with a mountain of other responsibilities. But it can be simple and stress free with the right Building Management Systems (BMS).

Our Mini BMS solution allows fast access to your business's energy details across several sites. Having control through a convenient easy-to-use platform allows energy and site managers the chance to implement, amend and manage their energy in real time. This basically means maximising site performance while minimising the effort behind it.

Shop management: T-mac services provide you with visibility of all your systems in any of your buildings, including heating, lighting and ventilation. Allowing you to identify inefficiencies and reduce overheads at the touch of a button.

bespoke solutions

At t-mac, we understand the importance of recovering from Covid-19 successfully and sustainably. By analysing your business's energy trends we can supply you with a bespoke service tailored to you and your sustainable needs. After understanding your specific needs, we create a metering and controls solution. Finding solutions that work specifically for your business is exactly what you need to kickstart your journey towards sustainability.

PRODUCT DEVELOPMENT
t-mac engineers focus on achieving product development in all aspects of the service. From hardware and software to product certification and conformity testing.

MANUFACTURING
t-mac ensure that our clients receive the highest quality technology to ensure they get the most helpful solutions. Our UK manufacturing partners utilise the latest processes to achieve the shortest possible lead times.

VARIETY OF APPLICATIONS
t-mac can help deliver Machine 2 Machine (M2M) solutions in areas including HVAC equipment, industrial controls and fuel stock management. Our sister company, EIC, is also on hand to assist companies with their comprehensive list of energy services. These include smart procurement and trusted compliance.

To find out more about our energy saving solutions
call us today on **0330 303 3302** or email **hello@t-mac.co.uk**
visit our website **www.t-mac.co.uk**

t-mac
technologies