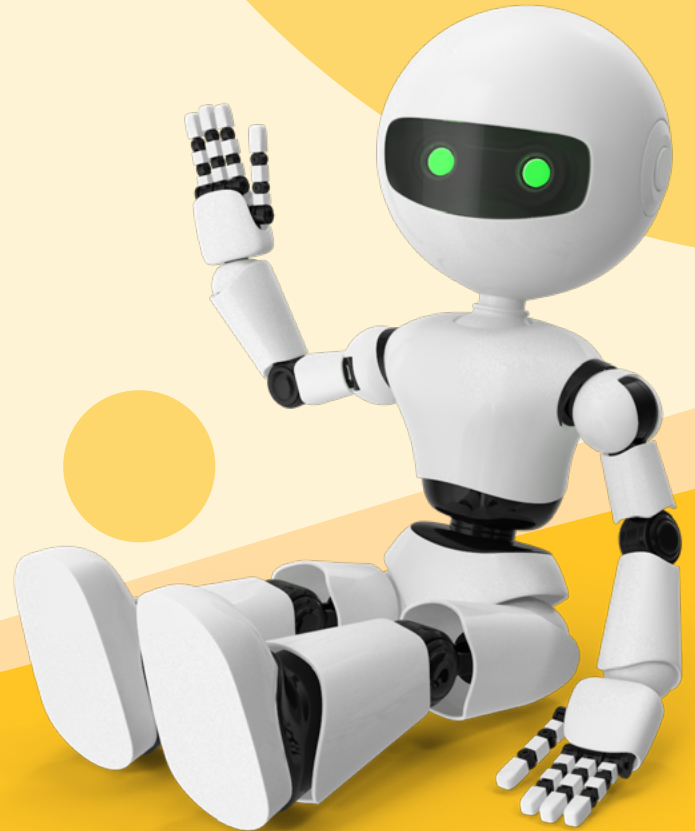# emma AI

Introducing EMMA AI

Save money & reduce your carbon footprint with zero capex, nothing to install and no additional staff
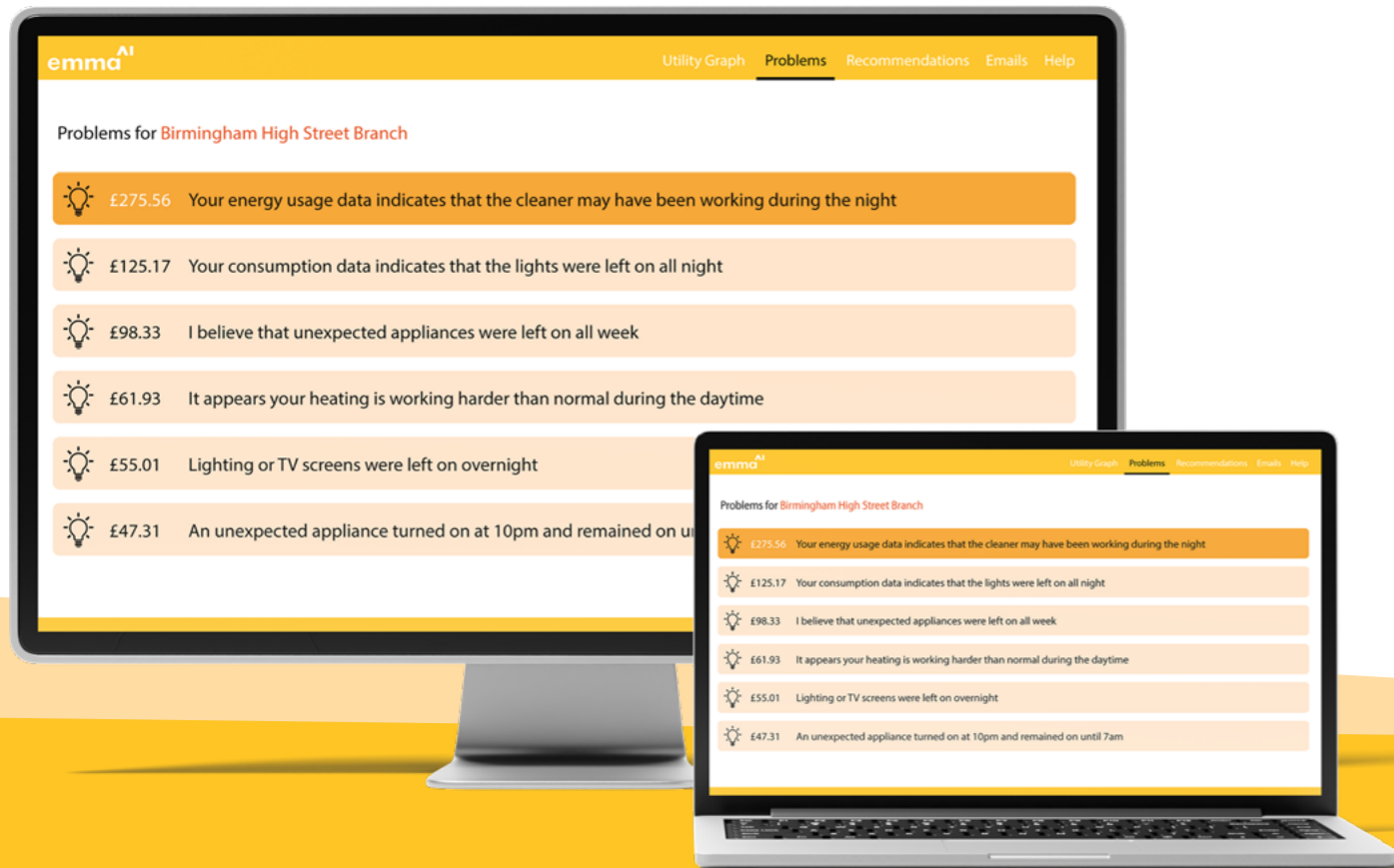
What is **EMMA AI**?

EMMA AI is a cloud-based Artificial Intelligence (AI) platform that measures energy consumption across your individual sites, pinpointing exactly where energy is being wasted and taking proactive measures to reduce the waste – all without having to install a single piece of equipment!

The platform uses our proprietary advanced pattern and machine learning technology to analyse the half-hourly meter data that you already have in your business and learn how each site is operating to spot energy wastage. Once EMMA AI identifies an issue, the platform advises your on-site management teams of the problem directly and offers advice on how to fix it. It effectively creates an army of energy managers across your business.

The platform requires no upfront capital investment and delivers savings from day one – so it's good for your business and the planet!

emma AI

Utility Graph Problems Recommendations Emails Help

Problems for Birmingham High Street Branch

💡	£275.56	Your energy usage data indicates that the cleaner may have been working during the night
💡	£125.17	Your consumption data indicates that the lights were left on all night
💡	£98.33	I believe that unexpected appliances were left on all week
💡	£61.93	It appears your heating is working harder than normal during the daytime
💡	£55.01	Lighting or TV screens were left on overnight
💡	£47.31	An unexpected appliance turned on at 10pm and remained on u...

Absolutely no investment required

UK businesses spend around £24 billion a year on energy. With most wasting between 20-40%, the UK could be saving up to £960 million every single year!

No Capex required

EMMA AI operates in the cloud and therefore has no upfront capital investment. Instead, we charge a monthly, per-site fee to access the platform.

Nothing to install

EMMA AI processes your existing meter data and so doesn't require any additional hardware – although you can connect additional IoT devices if desired.

No increase in headcount

EMMA AI educates your site managers on how to reduce their spend directly, creating an army of Energy Managers across your entire business with no increase in people.
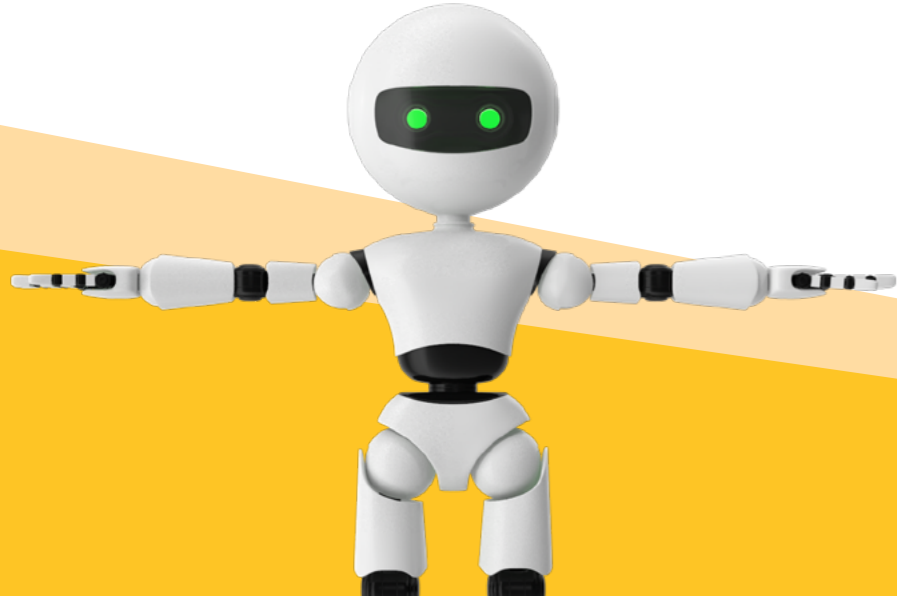
Significantly reduce your emissions

EMMA AI saves you money from day one by reducing your energy consumption and spend, which means what is good for your pocket is also good for the environment. Every single EMMA AI customer is seeing dramatic savings from day one – for example, Betfred have reduced electricity spend equivalent to over 130 tonnes of CO2e per year!

How does **EMMA AI** work?

EMMA AI becomes your digital Energy Manager, sitting in the background, constantly monitoring so it can email your staff as soon as it sees anomalous use of energy, advising how to fix it so that you're constantly saving money and reducing your CO2 emissions. Setup is extremely simple, and requires nothing more than the half-hourly meter data that you will already be receiving from your current energy supplier. Once EMMA AI has this information, it uses a range of intelligent algorithms and machine learning to process your all your site data in real-time, allowing it to spot issues as they happen.

Importantly, you don't have to rely on logging into the platform! Instead, EMMA AI lets each of your locations know of problems (and how to fix them) directly via a simple, human-readable email. Once your site managers receive this information, they can act on it and then simply reply to the email to let EMMA AI know what the outcome is.

Connect the meter data for your individual sites

EMMA AI takes a digital data feed directly from your existing energy supplier and extracts half-hourly readings to understand at a granular level how each of your sites is using its energy. Once connected, there is nothing more for you to do!

Leave Emma AI to process your data in real-time

Energy usage by site is ingested from your supplier and combined with other data using our proprietary AI engine to form a unique view of every location and immediately spot issues relating to where on-site energy is being wasted.

Get actionable notifications sent direct to your managers

Energy issues identified by EMMA AI are sent via email directly to your site managers, with recommendations in clear, concise English of what they need to do to fix the problem and prevent a repeat.

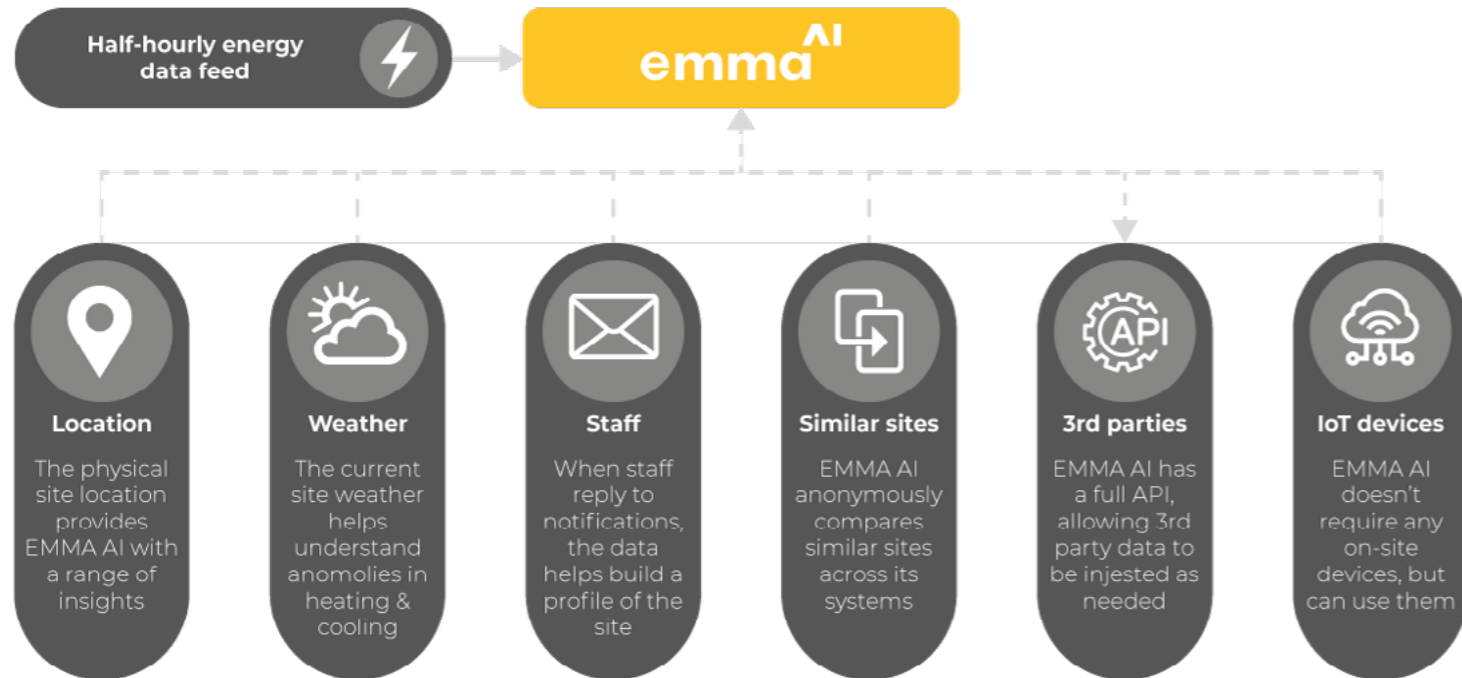## Staff can take immediate action and save money

On-site staff can use the clear advice and instructions sent to them to take immediate action and prevent future energy wastage without any need for input from head office or senior management.

EMMA AI is constantly learning

Half-hourly energy data feed → emma^AI

Location
The physical site location provides EMMA AI with a range of insights

Weather
The current site weather helps understand anomolies in heating & cooling

Staff
When staff reply to notifications, the data helps build a profile of the site

Similar sites
EMMA AI anonymously compares similar sites across its systems

3rd parties
EMMA AI has a full API, allowing 3rd party data to be injested as needed

IoT devices
EMMA AI doesn't require any on-site devices, but can use them

EMMA AI is a genuine Artificial Intelligence platform that is constantly learning from a range of inputs and applying that learning to its algorithms to improve its knowledge and recommendations.

The only essential data that EMMA AI requires is your existing half-hourly energy data feed, which we get from your energy supplier. On top of this, EMMA AI will use data based on site locations, current weather, time of day, site profiles and even anonymous data from similar sites to build a complete picture of what 'normal' energy usage should look like for each and every site location.

In addition, EMMA AI has the capability to accept data feeds from 3rd-party systems via our industry-standard API and can additionally accept data from a range of Internet of Things (IoT) devices if you have them installed across your site locations – although these are not required!
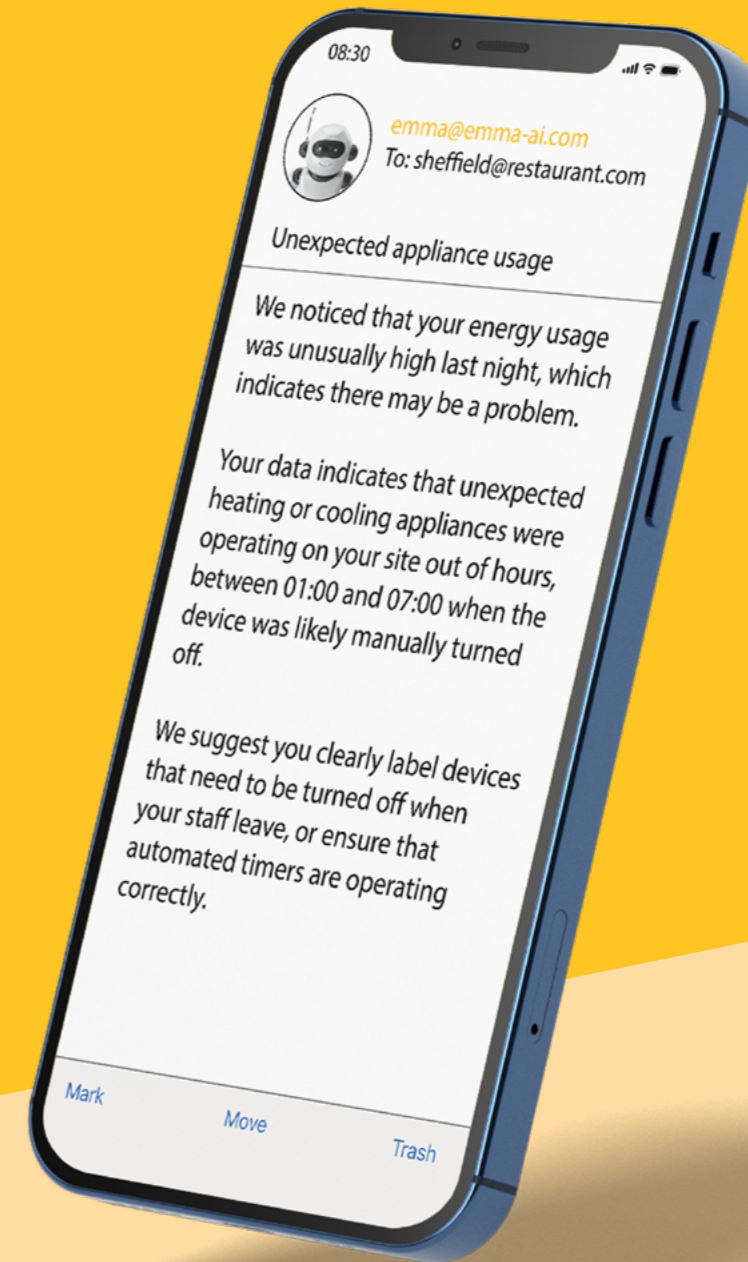
Actionable notifications

EMMA AI doesn't just spot where energy is being wasted, it acts on the information immediately by sending email notifications directly to your managers on-site.
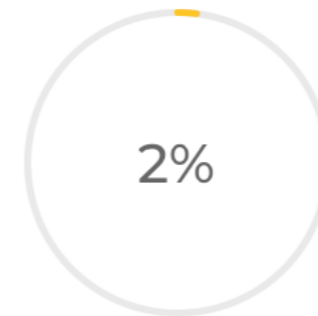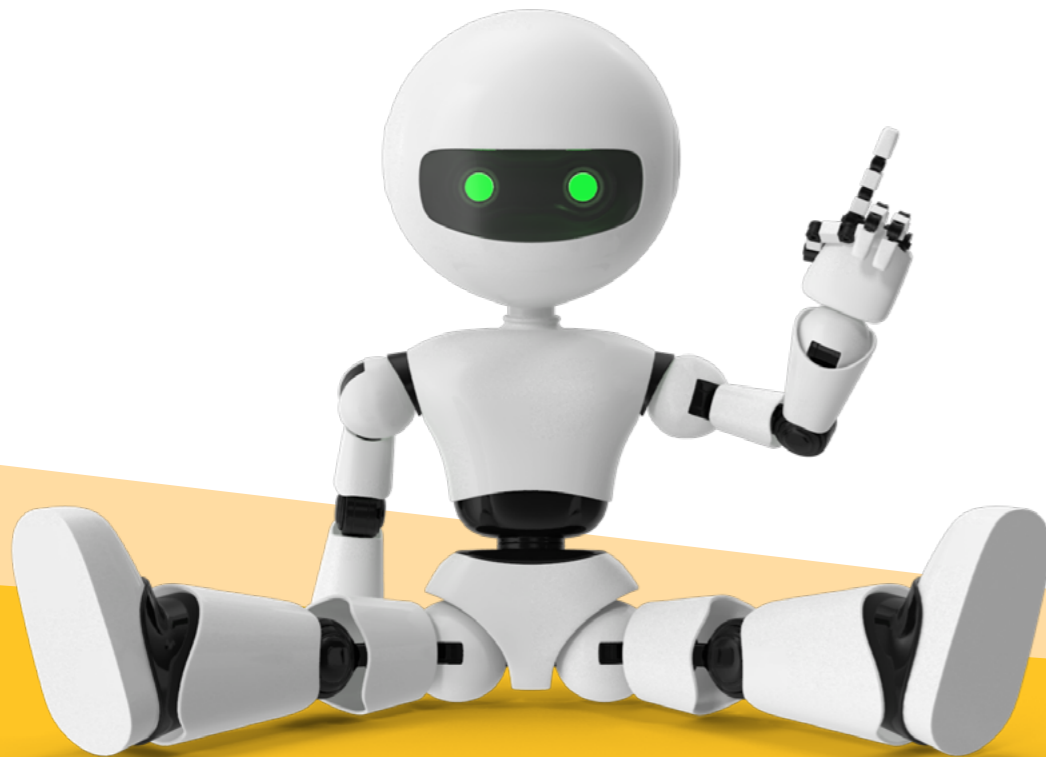
Using sensible, human language, EMMA AI will let your people know what happened and present ideas on how they can prevent it happening again without them needing to login to any systems. Once they've rectified the problem, they simply reply to the email with the actions they took and EMMA AI extracts the information and closes down any tickets that were raised.

With EMMA AI you effectively create an army of energy managers across your business!

08:30

emma@emma-ai.com
To: sheffield@restaurant.com

Unexpected appliance usage

We noticed that your energy usage was unusually high last night, which indicates there may be a problem.

Your data indicates that unexpected heating or cooling appliances were operating on your site out of hours, between 01:00 and 07:00 when the device was likely manually turned off.

We suggest you clearly label devices that need to be turned off when your staff leave, or ensure that automated timers are operating correctly.

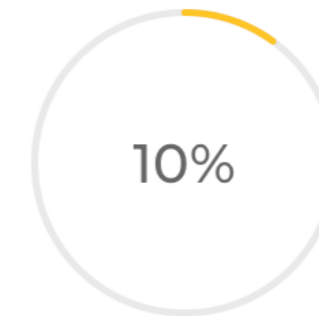Mark   Move   Trash
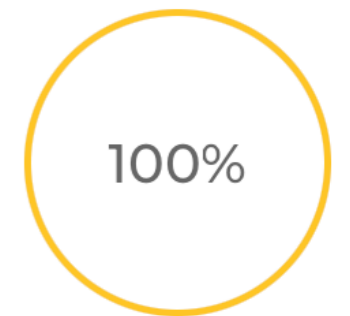
Why do you need **EMMA AI**?

EMMA AI requires no upfront investment or capital expenditure, meaning that the energy savings you start to make from day one are just that ... savings. Our customers typically find the cost of EMMA AI is equivalent to less than 2% of their energy spend, with total savings in year one often exceeding 10% of their energy spend on a site-by-site basis. A figure that only grows from year two onwards.

2%

The cost is generally less than 2% of energy spend

10%

Typical year-one savings on your energy bill

100%

Percentage of customers that renew after year one

Make your meter data work for you

Most meters send data to your energy provider on a half-hourly basis. If your sites have both electricity and gas, then this is equivalent to over **35,000 individual readings every single year**! With this amount of data, it's simply impossible for manual analysis to discover where your problems lie, which is where a platform like EMMA AI really comes into its own.

Betfred win big by investing in **EMMA AI**

The challenge

Betfred are one of the country's largest and most successful betting shop groups. They maintain a large retail estate (1400+) of high street betting shops., each with relatively low individual consumption, but collectively a large and increasing cost. The challenge was how to optimise consumption and at the same time empower and demonstrate how Betfred were actively pursuing their Net Zero carbon strategy.

The solution

Betfred used Optimal Monitoring's EMMA AI® platform to capture, curate and analyse their existing data to identify abnormal and anomalous use of energy. Using its AI knowledge base EMMA provided immediate and actionable advice, as work tickets on a day +1 basis, that were delivered directly to the individual shop teams creating an army of energy managers who were able to effect positive and immediate change at no incremental cost and with very low effort.

The results

Initially all regions were informed of the need to better manage utility consumption but only the East region was provided instructions from EMMA AI allowing us to prove the additional impact of EMMA AI. Unsurprisingly it was found that store management reacted positively to the instructions from EMMA and took swift action to improve their shops consumption.
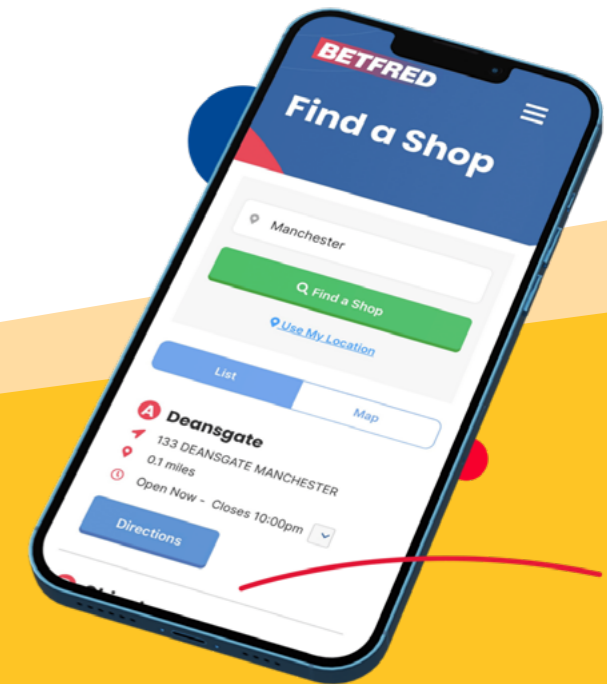
The continuous and quantifiable nature of EMMA AI's instructions was able to maintain the savings and improvements made, even as staff and roles changed, an issue that has plagued energy management over a long period. Focusing on overnight consumption and comparing Q1 of 2020 with Q1 2022 the savings are clear, showing an **annualized reduction of 6.3% or £234,000pa in electricity spend, equal to 131 tonnes of CO2e.**

Read the full case study online at www.emma-ai.com/fred

> When I heard about EMMA AI, I honestly thought it was another gimmick, but the team at Optimal Monitoring have proved to be honest and easy to work with, delivering on their promise to make us great savings. You have got to love a product that does that.

Fred Done
Owner and Founder, Betfred

Ready to see how much you could save?

EMMA AI requires no upfront capital outlay, meaning you start to save from day one. To see how big your savings could be, we've put together a simple online Return On Investment (ROI) calculator.

Take it for a spin @ **www.emma.com/roi**

emma^AI

www.emma-ai.com