



OPTIEM ENERGY CORPORATION

THE

# ENISCOPE®

**ECOSYSTEM** 



**INTELLIGENT ENERGY MANAGEMENT AT** YOUR FINGERTIPS





OPTIEM . ENERGY CORPORATION



#### **KEY**



**Global Command Centres** FLORIDA/UK/MALAYSIA/KENYA



**Best.Energy**Official Partner Coverage



Areas Under Negotiation

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**FOOD PRODUCTION** 

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#### INTRODUCING

# ENISCOPE®

Energy costs are higher than ever, and our impact on the planet is a global concern.

But what if there's a simple solution to identify when and where you're wasting energy, so you can cut your energy usage and eliminate costs immediately?

#### Energy efficiency is the answer. And ENISCOPE is the key!

This guide includes everything you need to know about our flagship product - the Eniscope - with case studies from around the world illustrating the incredible impact it can have.



"I've never seen a system like it. It's been very easy, the platform is very intuitive."

Head of Construction and Real Estate, Reitan Convenience (7-Eleven), Denmark

7-ELEVEN®

#### **OUR FLAGSHIP PRODUCT**

With over 10 years of research, development, and experience in energy efficiency, our specialist tech team has refined the Eniscope hub, which sits at the heart of our business.

Edge computer, IoT hub, data aggregator, and internet gateway - this smart technology is the most

Trusted by tens of thousands of sites globally (including big names like 7-Eleven, KFC & IBM), it delivers outstanding energy-saving results.

#### WHAT IS ENISCOPE?

The Eniscope hub is the intelligent hardware at the core of our all-encompassing energy monitoring ecosystem. But it doesn't just work alone.

Combining unmatched hardware technology, with cutting-edge software and innovative Virtual Energy Management (VEM) capabilities - Eniscope is an IoT hub that works seamlessly with an entire suite of wireless smart 'Air' sensors, enabling minute-by-minute energy monitoring and targeting, blending the power of Al with human expertise.



"30% of energy being used in buildings is done so inefficiently or unnecessarily."

UNITED STATES DEPARTMENT

"79% of businesses view reducing electricity costs as essential to creating and maintaining competitive advantage"

#### **ENISCOPE CAN:**

- Be easily installed without disrupting day-to-day activity
- Make energy usage visible instantly
- Provide real-time energy data
- Monitor energy use at asset level
- Reduce your carbon footprint
- Use AI to detect and eliminate hours of waste
- **Expose energy-draining equipment**
- Reduce your energy bill and deliver savings
- Change user behaviour
- Identify maintenance issues before they happen
- Accurately calculate tenant billing
- **Se infinitely scaled across large sites**

#### **ENISCOPE IS ACTIVELY DELIVERING AMAZING RESULTS FOR:**



**MANUFACTURING** 



**EDUCATION** 



FOOD PRODUCTION



**OFFICES** 



**RESTAURANTS** 



**CINEMAS** 



**QUICK SERVICE RESTAURANTS** 



UTILITY **BROKERS** 



**FOOD RETAIL** 



FACILITIES MANAGERS



HOTELS AND



**AND MORE** 

complete energy monitoring solution in the world.

DELOITTE



THE

# ENISCOPE®

**AIR SUITE** 

Our wireless suite of Eniscope Air sensors enables additional smart functionality and enhanced energy–saving capabilities, giving the Eniscope hub even greater Cloud control over your energy usage.

Combining Eniscope with this intelligent range of IoT-connected control solutions creates an innovative energy management ecosystem that can:

- Monitor and manage your energy consumption remotely
- Place energy data in context, making it far more powerful than ever before
- Offer three-phase control and single-phase control
- Enable environmental monitoring (temperature, humidity, light, and room occupancy)

"The average small and medium-sized business could reduce energy bills by 18-25% by installing energy efficiency measures."

ENERGY SAVING TRUST



"Big businesses waste at least £1.6bn every year on energy they could easily save."

THE CARBON TRUST

Robert Easson, Easson Energy, Thailand



"In a heartbeat, I would recommend it. It's cutting-edge, it really is!"

"With a myriad of

efficiency space,

solutions in the energy

the Eniscope and its

head and shoulders

It runs rings around

who do much less

for much more

investment."

the big-name brands

analytics suite stands

above its competitors.

Gretchen Saunders, Chief Business Officer – Hillsborough County Schools District, USA



#### • AN ENERGY MANAGEMENT ECOSYSTEM:

#### **HARDWARE**

Eniscope 8 Hybrid is our latest compact energy–monitoring hub. It's easy to install, robust, and designed to be up and running fast to avoid disrupting clients' daily activities.

#### **EACH ENISCOPE:**

- Monitors up to eight 3-phase channels, 24 single-phase channels, or a combination of the two
- Offers accurate building-level and asset-level energy monitoring
- (v) Is an IoT hub connected using the reliable LoRa network
- Connects seamlessly with a suite of wireless Air sensors that transfer data from across a facility
- Can connect to up to 100 Air devices



recommend Eniscope to anyone as it will save you money."

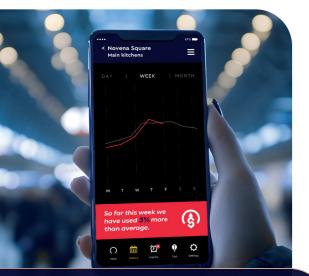
lan Rumble, Engineering Manager,

Tex Plastics, UK



This all-in-one solution captures data from across your site, instantly sending granular energy data to your dashboard. It makes the invisible, visible, from any device, at any time, and from anywhere in the world.

- Intuitive cloud-based platform
- Automated report delivery
- Mobile app with reporting at your fingertips
- Customisable dashboards view granular real-time data in a variety of displays
- Remote control functionality turn off energy-draining equipment at the touch of a button or set an automated schedule
- New automated intelligence features create a series of logic-based rules to control energy usage remotely
- Customised public displays influence behaviour change and demonstrate actions being taken towards net zero targets



"It enabled us to dig deeper into the analysis... it saved us many thousands of pounds. The savings that we've managed to achieve have certainly more than justified the investment."

Justin Davies, Tex Plastics, UK

# VIRTUAL ENERGY MANAGEMENT (VEM)

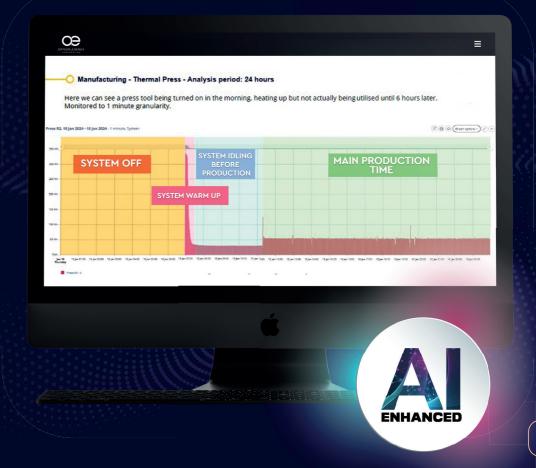
You can now combine the power of AI with the expertise of a specialist team of Virtual Energy Managers around the world, making Eniscope a hugely powerful end-to-end energy management solution.

Al finds energy-saving opportunities at breakneck speed, analysing millions of bits of data every second. Then humans curate the findings and advise you and your team on how to unlock savings. Fast.

Our robots find and highlight the issues and our energy experts stretched across three continents curate the Al findings, laser in on the best value, advise you on what to do next, and provide 24/7 support. So you can focus your efforts on maximum returns.

- Automatic detection of waste-saving opportunities
- A variety of waste types included
- Curated by energy experts who advise on actions
- Alerts for equipment failures before they happen
- Massive time saver: process millions of data bits in seconds





# ENISCOPEINACTION



TEX PLASTICS, UK

26.7%

Annual energy savings

p12-13

HILLSBOROUGH COUNTY PUBLIC SCHOOL, USA

\$8m

Annual energy savings p14-15



LACTHOSA, HONDURAS

\$15-20,000

projected energy savings per month

p20-21



MENY/SPAR, DENMARK

600

Tonnes of CO<sub>2</sub> saved annually

p18-19



MÖVENPICK HOTEL, KENYA

around

\$4,000

Monthly energy savings

p14-15





#### MANUFACTURING CASE STUDY

# TEX PLASTICS, UK

The UK manufacturing sector is feeling the heat of mounting energy costs. Electricity bills have tripled in some cases, as the price per kWh spiked from 21p up to 97p in 2022. So, injection moulding company, Tex Plastics, sought a solution to transform their energy use and cut costs fast.

#### THE RESULTS IN A NUTSHELL



26.7%

**Annual energy savings** 



No CapEx deal



Total visibility of energy consumption

**©** 



Net cash flow gain within 3 months



£237,000

**Annual savings** 

"The Eniscope system enabled us to not only measure the actual machine consumption in realtime, but also critically assess associated individual ancillary equipment used in the process such as heaters, ovens, and compressors.

If you're a business that is serious about reducing energy consumption to cut costs, I would recommend a conversation with Best.Energy to

fully understand what they can do to save money for your business".

Justin Davies, MD at Tex Plastics





# MAKING A DIFFERENCE WITH ENISCOPE

Within just a few weeks of installing three Eniscopes to measure and manage energy consumption, the VEM team identified substantial wastage. It pinpointed efficiency opportunities within the air conditioning and ventilation systems, and highlighted power-hungry machinery that was burning energy during start-up.

By integrating the Al-driven analysis tools with real-time Eniscope data, the machinery idle times could be analysed, providing insights into energy wastage. Tex Plastics now uses this data to inform their decision-making with remarkable results.

Within the first three months of using Eniscope energy monitoring and analysis in just one area of the business, Tex plastics achieved a massive 59.13% reduction in energy consumption, taking their daily energy usage from 41.5 kWh right down to 16.96 kWh.





#### O HOTELS CASE STUDY

# MÖVENPICK HOTEL, KENYA

Tourism is a huge contributor to the economy in countries like Kenya, so energy-hungry hotels are a prime energy efficiency target for our Global Partners. For these clients, low occupancy rates can make the impact of high energy bills even more difficult to stomach, but the savings potentials are massive. The Movenpick Hotel is just one example of a client that has achieved successful energy efficiency savings since installing Eniscope in their Nairobi hotel.

#### THE RESULTS IN A NUTSHELL



**AROUND** 

\$4,000

Monthly energy savings



No CapEx deal

The client was net cash positive from day 1!

0

With energy prices expected to rise again next year, the value of these savings will only increase.



10-13%

Reduction in overall energy bill

"The team has installed online energy monitors that give real-time energy consumption data. In just three months of operation, we have identified faulty pump controls that kept pumps running unnecessarily and wasting electricity.

We have also found faulty cold room doors that led to high energy usage and identified idle consumption in vacant guest rooms from equipment left on standby mode."

Thomas Mjomba, Chief Engineer at Mövenpick Hotels Nairobi

## MÖVENPICK

# ECO-FRIENDLY TOURISM WITH ENISCOPE

Alcove Ltd, supported the Mövenpick Hotel in Nairobi to gain control of their energy usage. The hotel stretches across 230 rooms, with kitchens, cold rooms, laundry facilities, and extensive air conditioning all contributing to high energy costs.

But you can't manage what you don't measure, so introducing real-time energy monitoring across the site was crucial. Alcove Ltd installed four Eniscopes on-site to provide instant visibility of energy consumption in the Cloud, right down to asset level.

Thanks to Eniscope, areas for energy–saving interventions were highlighted, including:

- Introducing small but powerful CUES devices into refrigerated units in the kitchens, allowing a cold unit to operate by food temperature rather than air temperature and reducing compressor cycles to drive down energy consumption, and increasing lifespan
- 2. Switching off equipment that's not in use, like mini bars in unoccupied rooms
- Optimising energy-intensive processes, like laundry washing, which was being run for much smaller loads than usual.





#### EDUCATION CASE STUDY

## HILLSBOROUGH COUNTY PUBLIC SCHOOL, USA

In the single biggest energy project secured by a Best.Energy partner to date – a \$500m project at Hillsborough County School District – Eniscope has led to savings of a staggering \$8m+ on energy costs! It is a remarkable achievement and one that has Eniscope at its heart.

With over 240 school sites and square footage as large as Rhode Island, Hillsborough County School District was spending over \$37 million a year just on their electric bill! However, they were keen to make savings in order to put money back into the classroom for an improved learning experience.

#### THE RESULTS IN A NUTSHELL



\$8m

**Annual energy savings** 



1,000+

**Eniscopes installed** 



\$500m

**Gross project value** 



15-20%

Energy savings achieved (so far!)

Naturally, more school districts in the USA are acutely interested in this model and negotiations are underway to roll this out deeper into the country.



# LEARNING OPPORTUNITIES WITH ENISCOPE

Eniscope's first role is at the start of the project, before anything else has been installed. Using accurate, itemised, real-time data from the Eniscope platform, a reliable energy consumption benchmark was set.

Once the project got underway, the Eniscope devices remained in place – providing a constant flow of real-time data on energy consumption.

This helps the School District identify and verify new ways to save energy and even helps with preventative maintenance. The Eniscope's alarms

are used to identify faulty equipment remotely and guide engineer visits, saving money on potentially costly breakdowns.

The project has involved several phases of LED lighting installations, providing substantial energy bill gains – as well as much improved quality of light for the students inside. This stretches to 290,000 new lights across the School District, with many more in the pipeline.



Watch the case study video here

"Our operating costs are huge in a large school district. Those optimal learning conditions that families want and that kids and teachers need, come at a cost. We have to look at these operating costs so we can drive more dollars into our classroom for great learning."

Jeff Eakins, Superintendent – Hillsborough County Schools District

"It looks like our savings projections are very similar, if not exceeding what we had said. We're looking at 15–20% savings! I can literally pull up a site on the Internet of Things and look at what the chilled water temperature is, or look at what the AC is doing in each of the rooms."

Chris Farkas, Deputy Superintendent – Hillsborough County Schools District







#### SUPERMARKETS CASE STUDY

# MENY/SPAR, DENMARK

Scandinavian partner, IQ Energy Nordic, has been working with KFI – a commercial foundation that owns around 50% of the rights to MENY and SPAR supermarkets across Denmark – to deliver proactive energy management in 101 stores.

Stretching over 60 million kWh a year and with typical annual bills of \$50,000 – \$150,000 for each store, Eniscope has saved an enormous amount for this supermarket chain.

#### THE RESULTS IN A NUTSHELL



OVER

3,000,000kwh

**Annual energy savings** 



93

Store locations in this project



200

Eniscope devices active



600

Tonnes of CO2 saved annually

"The Eniscope system in combination with the energy management services from IQ Energy Nordic, has given us an effective tool that delivers business insights and savings we have never had before."

Peter Bank Madsen, Head of Construction at KFI





# CREATING SMARTER STORES WITH ENISCOPE

Over 250 Eniscopes have been installed across MENY and SPAR supermarkets in Denmark, arming KFI with granular, real-time energy consumption data and monitoring around 1,200 circuits. This rich supply of data has enabled the IQ Energy Nordic team to immediately identify energy wastage and work closely with KFI to eradicate it through a proactive energy management service.

The extent of asset-level monitoring provided by Eniscope, and analysed by IQ Energy Nordic, offers additional benefits like critical asset failure. This means that they can flag asset issues as they happen, so the technical team can maintain equipment more effectively and minimise store disruption.

The power of Eniscope, combined with the expertise of IQ Energy Nordic, has achieved KFI's four key goals:

- 1. Overview and control of energy across their estate
- 2. Monthly and quarterly reporting and benchmarking
- 3. Verification of new technologies





#### FOOD PRODUCTION CASE STUDY

## LACTHOSA, HONDURAS

With the soaring electricity rates that have long burdened Central America, Honduras-based dairy factory, Lacthosa, teamed up with global partner Lumen Energy Solutions to investigate ways to reduce their energy consumption and cut costs.

With a presence across South America, Lacthosa operates in five factories, and the Honduras facility is the oldest and strongest local company in Honduras. Lumen Energy recognised the client's unique needs and challenges, seeking to tackle issues with energy distribution and fluctuations and establish a guideline of what their energy expenditure should look like.

#### THE RESULTS IN A NUTSHELL



Projected energy savings of

\$15-20,000

per month

Started with a

### FREE TRIAL

No upfront costs or bills



Total energy visibility across the site, all achieved remotely consumption

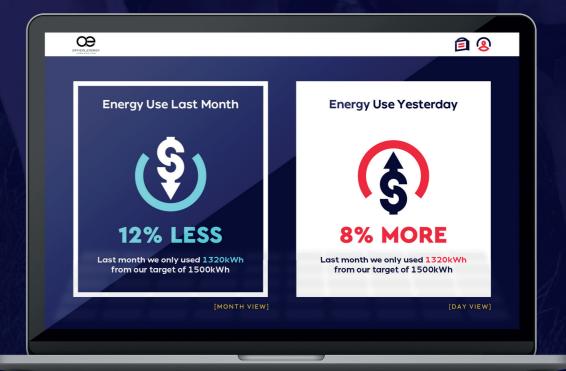


# ENISCOPE IN ACTION IN A DAIRY FACTORY

Five Eniscopes were installed in a bid to make Lacthosa's energy usage visible. This has helped to identify and deliver quality solutions to lower energy consumption and reduce their energy bill.

Following installation, Eniscope monitored the machinery and the HVAC system, specifically analysing the efficiency of the refrigeration compressors. Thanks to the minute-by-minute data flowing from Eniscope, the Lumen Energy team made beneficial recommendations and delivered long-term value for their client.

Even in the project's relative infancy, Eniscope has allowed the client to see where opportunities for energy efficiency exist thanks to real-time energy monitoring and analytics. The Eniscope solution has delivered great results and demonstrates the true power of energy efficiency.







# OPTIEM ENERGY

CORPORATION

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