(in enerbrain[®]

Our services





We simplify

energy management



of buildings by making them efficient and sustainable

We are certified



A team of experts taking care of your buildings



Our expertise

Energy management & analysis Project management Hardware development IoT and Cloud computing HVAC energy efficiency







Optimize your building with our services

HVAC Optimization

Make plants efficient, save energy and reduce CO₂ emissions with our Algorithm



Energy monitoring

Identify the most energy-consuming machines and processes and consciously reduce waste



Environmental monitoring

View the **comfort conditions** of your buildings in real time with **our sensors**



Turn to us for an Energy Intelligence Consultation



IoT and cloud-based elements of our intelligent system



Features

Accurate and secure data acquisition from the building or electrical panels, machinery, processes, and indoor environment

ex: electrical consumption, gas, water, temperature, etc.

Consumption optimization and setpoint maintenance **Remote control** over the BMS, plant, or individual elements

Displaying and receiving

data also and setting desired comfort setpoints for each area of the building



Why choose the Enerbrain team?

A single stakeholder for stress-free optimization



We take care of every stage



SAVING

Save energy and reduce CO₂ emissions

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5-7% with energy monitoring service

15-30%

with HVAC optimization service



DIGITIZATION

We simplify energy management

Collect data and make strategic decisions to

Cut consumption Decarbonize Obtain certifications ESG reporting



INNOVATION

We increase the intelligence of your buildings

Thanks to the optimization logic developed by our **Cloud Algorithm**

Our services

HVAC Optimization

The complete service to improve indoor comfort, remotely monitor and optimize your system



HVAC optimization

With the intelligence of our Algorithm

Make your buildings' HVAC systems efficient

Our comprehensive service to monitor, reduce energy consumption and improve occupants' indoor comfort

COMPATIBLE

With any HVAC system regardless of make or model

Energy saving up to 30%



Remote control



Improved indoor comfort



Intelligence to the building

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Why choose **HVAC Optimization**?



Your needs

I want to have better tools for facility management of single or multiple buildings

My buildings are very difficult to manage (distributed in different climate zones, with different HVAC systems, with different ages, etc.)

I want to optimize HVAC systems or my BMS

I would like to save energy, reduce CO_2 emissions, and the HVAC share is a major part of my costs

I want to reduce complaints about comfort conditions

Our advantages

Enerbrain Web App: a single platform to visualize the areas of each building (with synoptics and visualization of anomalies)

> Integration of collected data via open APIs with your BMS or into business intelligence

Easy to scale to a portfolio of large buildings

Compatible with most of HVAC systems

Optimize your HVAC system or BMS control thanks to our intelligent algorithm

Set the setpoints (T, RH, CO₂) for each area via the Web App

Benefits



TIME SAVING data collection, visualization and plant control



DIGITIZATION for strategic positioning



LESS COMPLAINTS from the occupants



REDUCTION OF CO₂ EMISSIONS



ENERGY SAVINGS between 15 and 30%









Full service, customized to the plant characteristics in the field, to improve the activity and achieve:

Energy savings

Improved indoor comfort

Reduced CO₂ emissions

Easy to scale to a portfolio of large buildings

Application of intelligence logic to the HVAC plant

HVAC system optimization intelligent logics







Retrofit installation

HVAC system optimization

actuator control





How do we achieve savings? The logic of optimization

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Benefits

Adaptive Regulation	 The algorithm adjusts the system response to the building behavior. The regulation tries not to exceed the set room setpoint, and through integration with environmental monitoring with eSense it will be possible to achieve: more appropriate regulation based on the customer's needs (choosing where to adjust); tighter monitoring of internal parameters and consequently compliance with the setpoint assigned to each room; flexibility of future configuration of sensors 	Decreased OVERHEATING OVERCOOLING Improvement and maintenance of COMFORT conditions
Optimized management of generation and/or distribution systems	The algorithm manages hot/cold generation according to indoor and outdoor thermo hygrometer conditions and the heating and cooling requirements of the building.	Optimization of TIME for plant management =
Dynamic pre-ignition and pre-power-off calculation	The algorithm determines the correct instant of turn-on or turn-off to ensure that comfort is achieved at the desired occupancy times, taking into account building inertia and indoor and outdoor conditions and set setpoint, zeroing out the waste associated with excessively early or late turn-on or turn-off.	SAVINGS on HVAC quota of up to 30%



56%

27,50 °C

26,27 *C 26,63 *C

58% 58%

28,40 °C

56%

25,80 °C

28,00 °C

54%

27,50 °C

55%

Data visualization and control



How does HVAC Optimization work?







Our architectures to integrate with existing HVAC plants



Point-in-time control over individual plant components



The interface with the existing BMS

Enerbrain as a Service

The application of intelligent logic and integration with the present control system





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Intelligence and optimization thanks to IoT devices and our Cloud-based Algorithm

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Control, visualization, and information acquisition

Our services

Energy Monitoring The solution for those who want visibility into energy consumption

Energy Monitoring

Actual data to support you in energy management

Identify and reduce waste where needed with the Enerbrain platform

Simplify **energy data collection and monitoring:** a single tool, with advanced alarming, to take targeted actions and simplify data management

Why choose Energy Monitoring?

Your needs

I don't have data or a dashboard to see the correlation of energy data

My building portfolio is not digitized

I do not understand where energy is being used in my building(s)

I would like to have clear and simple **energy KPIs** for my buildings

I would like to compare similar loads across buildings

Our advantages

Enerbrain Web App: a single platform to view energy carriers (with synoptics)

> Quick and easy installation (a few days of work)

Visibility of energy data with granularity

Historicized data available for maintenance, for ESG reporting, ISO 50001 certification and energy diagnostics

All data can be used **in a future building BMS** via Modbus

Easily expandable in the future with additional meters

Integration of data via open APIs into tools for business intelligence

Benefits

TIME SAVING data collection, visualization and plant control

DIGITIZATION for strategic positioning

DECISIONS driven by data

POTENTIAL ENERGY SAVING find out what to optimize thanks to the data collected

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Energy monitoring pulse counter monitoring

Disaggregation of loads to understand areas of focus

Enerbrain Web app

for visualization and monitoring] of collected data

How does **Energy Monitoring** work?

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Electrical panel/machine or counters

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Electrical

loads

Electrical monitoring installation

Acquiring electrical consumption through **eMeter** with data loggers and current clamps or by obtaining consumption data from **existing multimeters** through ModBus RTU protocol

Monitoring electrical loads

LIND HOAL

Pulse Counter Installation

Reading of pulse signals that interfaces with existing meters equipped with pulse or open-collector type interface, such as gas, thermal energy and water meters.

Our services

Environmental Monitoring

Gain real-time insight into the climatic conditions of your indoor spaces

Environmental monitoring

Never too cold or too hot again

View real-time comfort conditions

Monitoring indoor spaces using **Enerbrain sensors** allows you to **view environmental comfort parameters in real-time**

MONITORED DATA

Why choose Environmental Monitoring?

Your needs

I don't have any data or a dashboard to display environmental data

> I would like to have clear and simple KPIs for the environments in my buildings

I need to create an ESG report and I am missing data related to indoor comfort

> I need additional data to make the BMS work better

I would like a monitoring system easy to use and integrate

Our advantages

Our eSenses are wireless, self-calibrated and non-invasive

Enerbrain Web App: a single platform to visualize areas of each building (with synoptics and visualization of anomalies)

Integration of collected data via open APIs with your BMS or into business intelligence tools

Historicized data available for maintenance and for ESG reporting

All data can be **used in a future building BMS** (LoRa to Modbus)

Long battery life* with low maintenance costs *2-4 years depending on readings and field connection Benefits

TIME SAVING data collection, visualization and plant control

DIGITIZATION for strategic positioning

DECISIONS driven by data

POTENTIAL ENERGY SAVING Use of environmental data for HVAC system regulation

Environmental Data

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O Ext.RH

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for visualization and monitoring] of collected data

How does **Environmental Monitoring** work?

eSense

Environmental monitoring

(in enerbrain)

Ready for an intelligent use of energy?

Discover more

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