

energy efficiency at your fingertips







We simplify

energy management

and (digitization)

of buildings

by making them efficient and sustainable

We are certified





# A team of experts taking care of your buildings







700+

Buildings

10

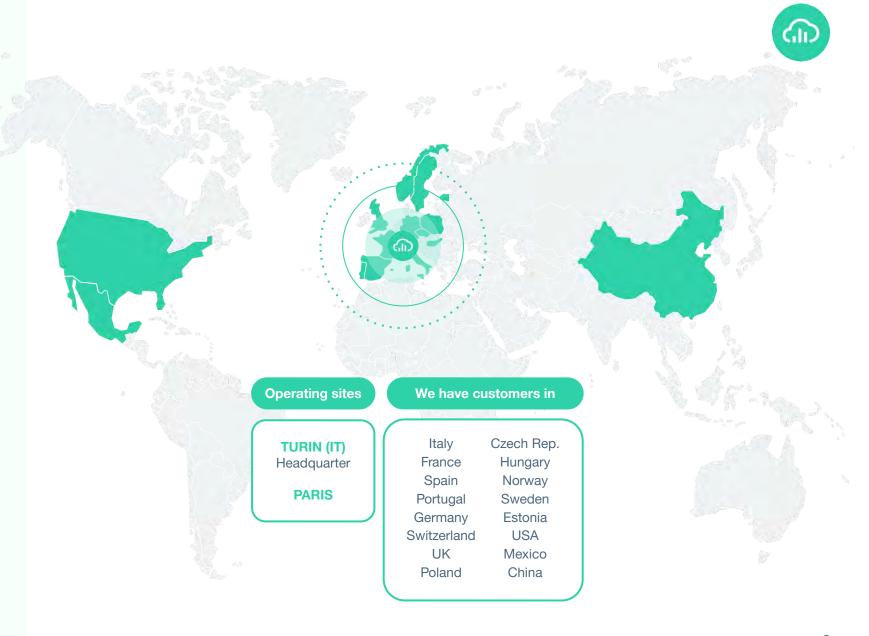
12

Markets

Patents\*

#### Our expertise

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





We improve

the activity of

Energy manager

### When intelligence meets sustainability

#### We digitize your building stock:

- Optimizing consumption through the logic of our Cloud Algorithm
- Data collection (for analysis and reporting)
- Advanced energy monitoring even for complex buildings
- Energy management tools for making strategic decisions



#### **Type of buildings**

















Facility manager

CEO and ESG Managers of Buildings

industry

hospital

retail

public buildings





Optimize
your building
with our
services

# HVAC Optimization

Make plants efficient, save energy and reduce  $CO_2$  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

#### **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 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

#### **MONITORED DATA**









electrical loads

gas consumption water consumption

Thermal energy



#### 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**







temperature

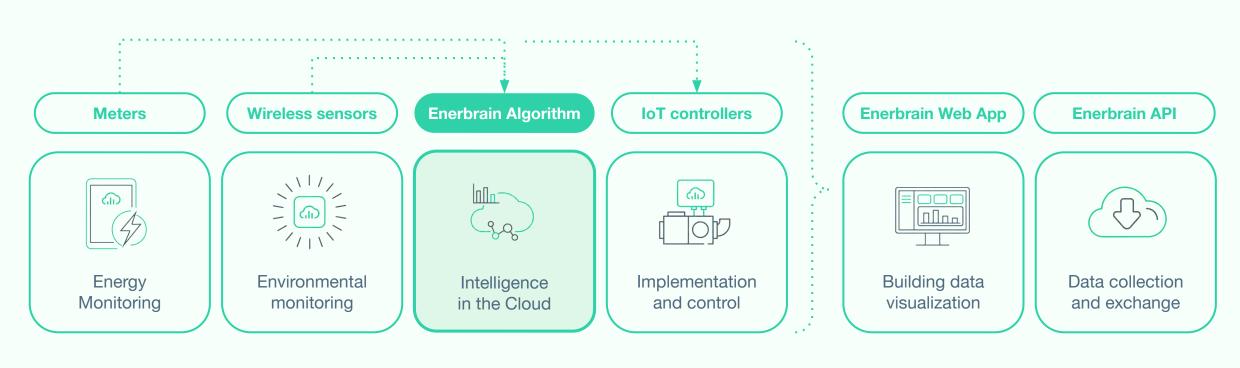
CO<sub>2</sub>

relative humidity





# 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



#### Interior comfort and intelligent regulation?

#### **Enerbrain algorithm takes care of it**



#### **Benefits**



#### **ENERGY** Savings

up to 30% on the HVAC rate

Quick configuration via Enerbrain Web App

Versatile application on buildings belonging to different sectors

Compatibility with all plant types and BMSs

#### **Features**

**Adaptive Regulation** 

in each room

**Optimized management of generation** and/or distribution systems

Once the **set points** are set,

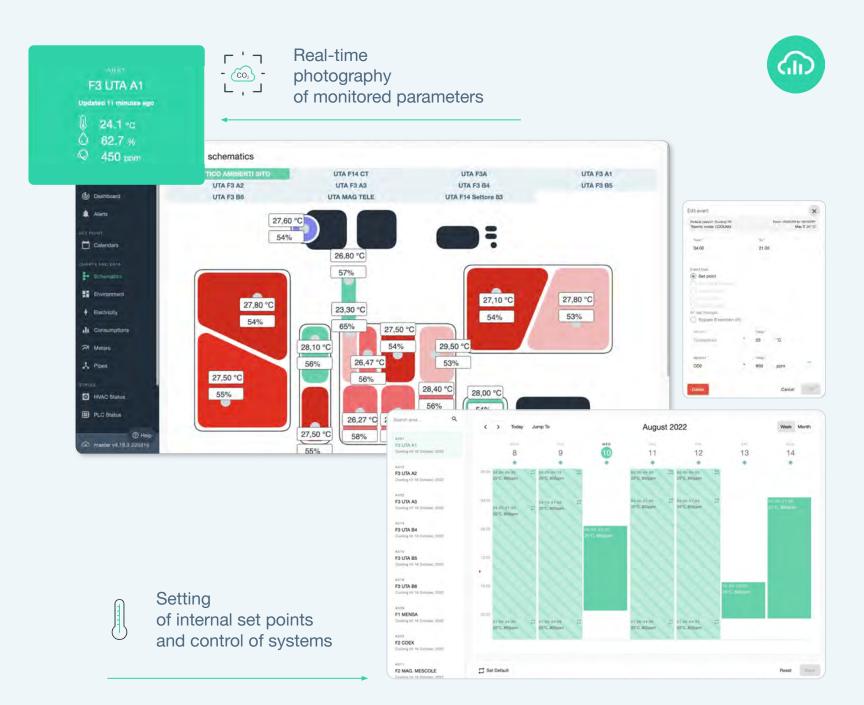
**Dynamic pre-ignition** and pre-power-off calculation

#### **Digitize your buildings**

Awareness
is the first step toward
change

## Enerbrain Web App, a single digital platform to:

- **visualize** your building stock
- configure Enerbrain Architecture in the cloud
- set up calendars and setpoints
- make data-driven decisions



#### At your side, for every need







Integration with existing facilities? Customized monitoring?

Data collection for reporting?

Whatever your need, we will support you along your sustainability journey

support after-sales

#### **Benefits and advantages**



# Why choose the Enerbrain team?

A single stakeholder for stress-free optimization

Complete turnkey service

We take care of every stage



#### **SAVING**

Save energy and reduce CO<sub>2</sub> emissions

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









Explore our impact through some success stories



International automotive industry



Banco BPM



#### City of Turin

#### Customer need:

- Improve energy efficiency of several buildings
- Monitor environmental comfort
- Solution to be applied to a cluster of 89 buildings

#### Partnership with



How did we help the client?

#### Integration of HVAC optimization service

We improved plant operation by reducing energy consumption, improving occupant comfort, and decreasing pollutant emissions.

#### Results

SUSTAINABILITY

1.400 t of CO<sub>2</sub>

saved each year

SUPERVISION 24h/24

Remote control

EFFICIENCY 6.700 MWh

Annual energy savings

RETURN
OF INVESTMENT
< 1.5 years





Control and optimization solution for HVAC systems

gas boilers radiator circuits fan-coils

without implementing a BMS



89 Buildings, a Project: we take care of our city



Remote control

44 schools

21 OFFICES

24 ENTERTAINMENT

**Optimization + Monitoring** 



#### International automotive industry

#### Customer need:

- Integrate a comprehensive energy monitoring and savings solution without invasive changes
- Monitor, disaggregate consumption and gain detailed knowledge of energy use (measuring at least 80% of electricity + gas consumption)
- HVAC efficiency with a minimum of 10% savings

How did we help the client?

#### Energy monitoring and HVAC optimization

We have installed a **single energy monitoring solution in 49 factories in 13 countries,** including the US, Mexico and China. In addition, for European industries, we added the **HVAC monitoring and optimization solution,** significantly reducing consumption.

#### Results

EFFICIENCY 15%

Annual energy savings obtained on the HVAC portion

SUPERVISION 24h/24

Remote control

**MONITORING** 

> 4.100

electrical loads monitored in 13 different countries

RETURN
OF INVESTMENT
1/2 years





Informed choices based on reliable and accurate data through data acquisition and definition of KPIs





#### Banco BPM



#### Results

**EFFICIENCY** 

10%

Energy saving

BUILDINGS

1.436

Branches analyzed

**MONITORING** 

+100

Branches with monitoring internal

#### Customer need:

- Analyze the energy efficiency and environmental sustainability of a building stock
- Use data to estimate optimization and opportunity for intervention

How did we help the client?

#### Energy Intelligence Platform

Energy data collection, definition of KPIs and creation of dashboards for visualizing and monitoring of branch energy consumption.





# A single energy intelligence platform developed to:

- perform scenario analysis
- highlight critical issues
- obtain a focus on consumption
- analyze indoor comfort









Servizi - Chi Siamo - Casi studio Contatti

@ enerbrain

Web App Enerbr

brain

I nostri casi studio

#### Chi ci ha scelto come partner di sostenibilità

WAR THE RESERVE OF STREET

Sono sempre di più le aziende che grazie alle loro scelte virtuose si fanno portavoce della voglia e del desiderio di sfruttare l'innovazione per un fine più alto, quello della sostenibilità..

#### Discover more

About Clients who have chosen us as their sustainability partner



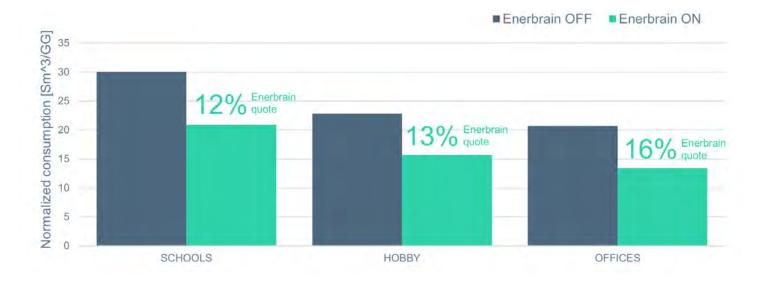


# City of Turin Project developed with IREN

89 buildings optimized in 20 days

# (ii)

#### Thermal energy savings achieved in the first two months of system activation



#### Results

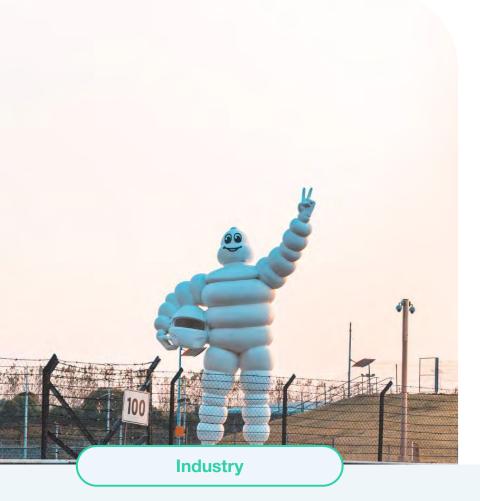
**6.700**MWh

Annual energy saving

1.400t

CO<sub>2</sub> not emitted in one year

95%



sep

oct



# Baseline Enerbrain ON 180.000 140.000 120.000 90.000 100.0000

dec

jan

nov

#### Michelin

Monitoring on 500.000 m<sup>2</sup>
Regulation on 35.000 m<sup>2</sup>

HVAC consumption: 600.000€

Plant: all air conditioning and heating

#### Results

40%

Annual energy saving

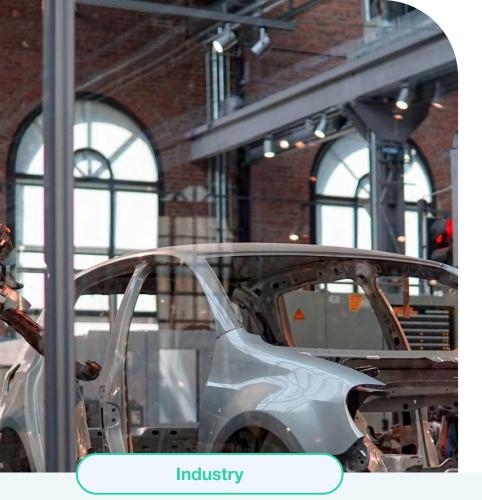
1.030t

CO<sub>2</sub> not emitted in one year

85%

mar

feb





#### Control over:

10

Flow diverters

**17** 

switchboards subtending 134 destratifiers

21 AHU



#### Automotive company

70.000 m<sup>2</sup>

HVAC consumption: 800.000€

Plant: all-air heating only

#### Results

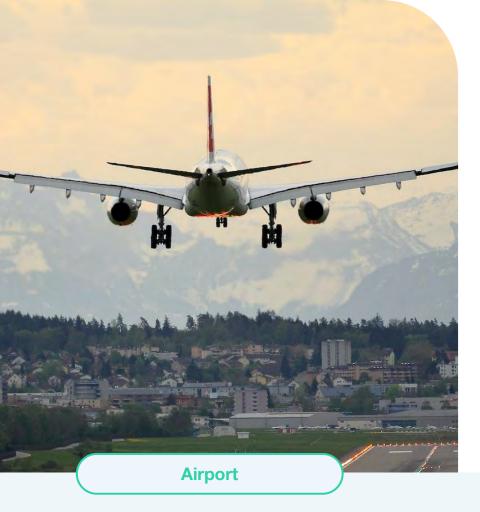
6%

Thermal energy saving

36%

Electricity energy saving

(limited as existing steam generators do not allow direct control)



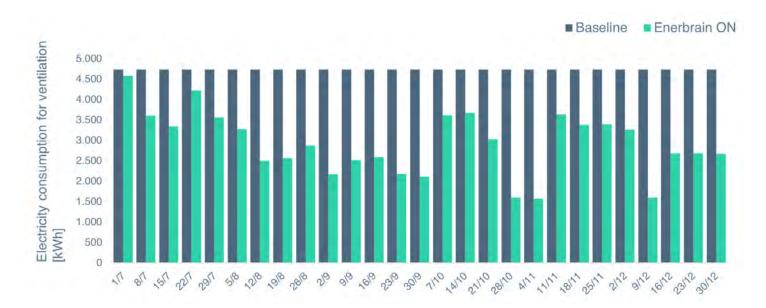
#### Turin Airport . Sagat

4.000 m2

HVAC consumption: 460 MWh/year Plant: all air, boilers and chiller units

#### Energy consumption management, without and with Enerbrain control





Results

30%

Annual electricity saving

14t

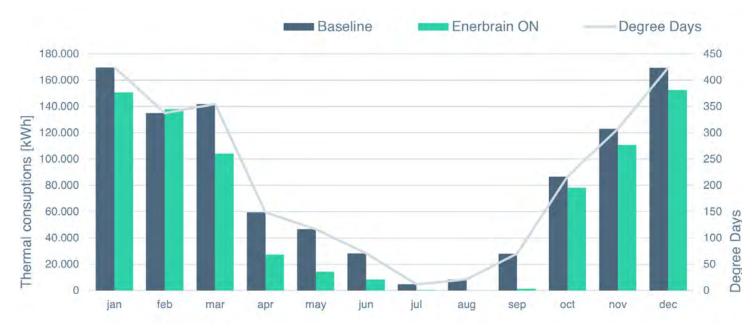
CO<sub>2</sub> not emitted in one year

93%



#### Enerbrain's performance in one year





#### **GHU Paris**

23 buildings - installations in progress 170 structures - places of care Total area: 190.000 m<sup>2</sup> Results

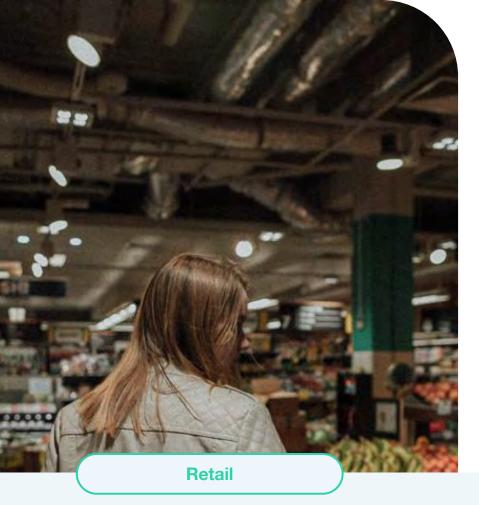
25%

Annual energy saving

412t

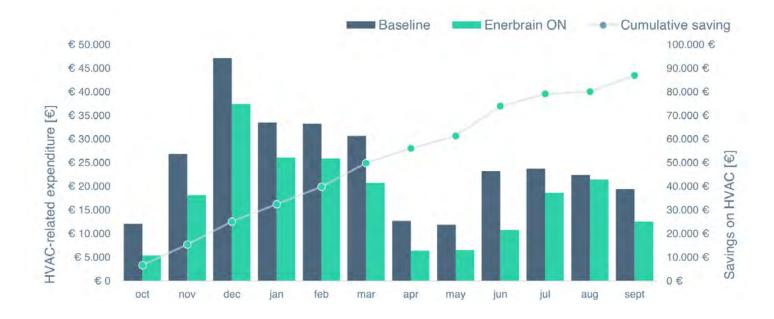
CO<sub>2</sub> not emitted in one year

99%



### ट्या

#### Focus on natural gas consumption, monthly consumption and total money savings



#### Carrefour

15.000 m<sup>2</sup>

HVAC consumption: 285.000€

Plant: all air, boilers and chiller units

Results

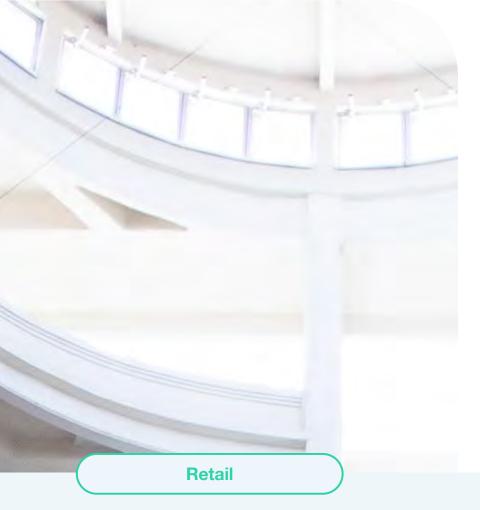
29%

Annual energy saving

340t

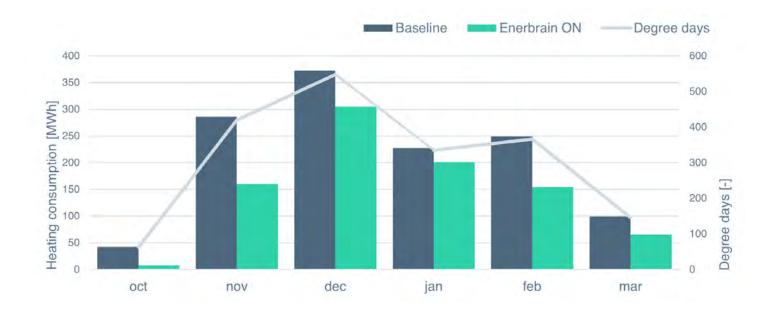
CO<sub>2</sub> not emitted in one year

90%



## (II)

#### Focus on natural gas consumption, monthly consumption and total money savings



#### Lingotto

10.000 m<sup>2</sup>

HVAC consumption: 350.000€

Plant: all air, boilers and chiller units

Results

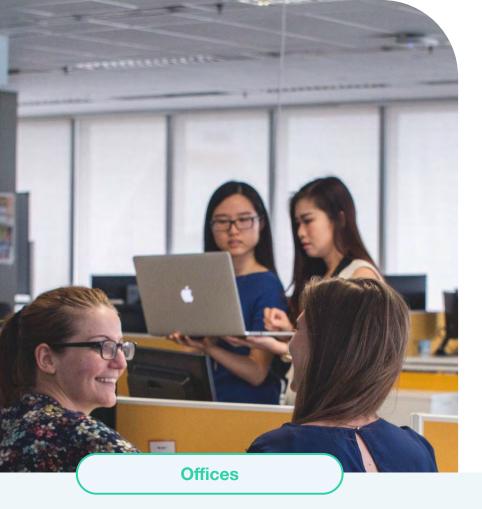
35%

Annual energy saving

218t

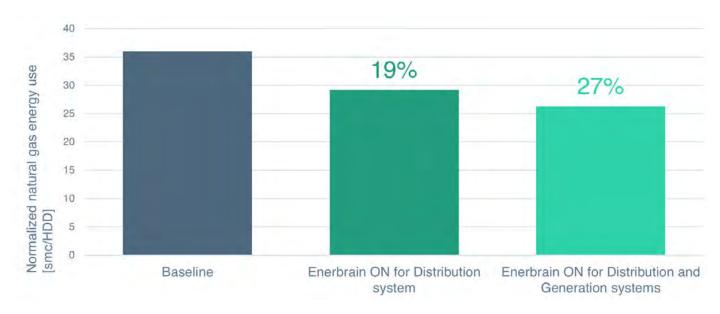
CO<sub>2</sub> not emitted in one year

90%









#### Public offices

12.000 m<sup>2</sup>

HVAC consumption: 65,000€

Plant: condensing boiler and radiators

Results

15%

Annual energy saving

38t

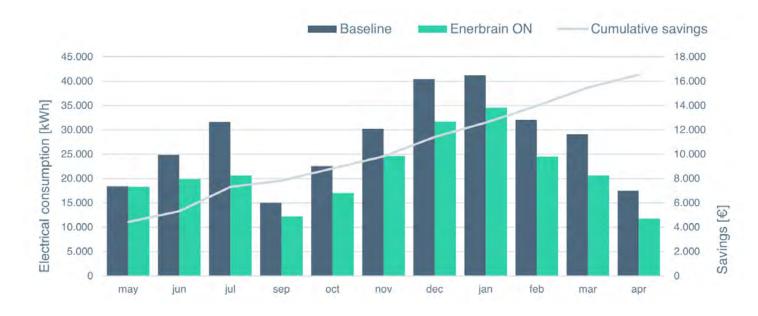
CO<sub>2</sub> not emitted in one year

90%









#### Carignano Theater

3.800 m<sup>2</sup>

HVAC consumption: 54.000€ System: all-air, radiant floor,

condensing heat pump and water

Results

23%

Annual energy saving

32t

CO<sub>2</sub> not emitted in one year

82%



# Ready for an intelligent use of energy?

Discover more

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**Enerbrain** 

