

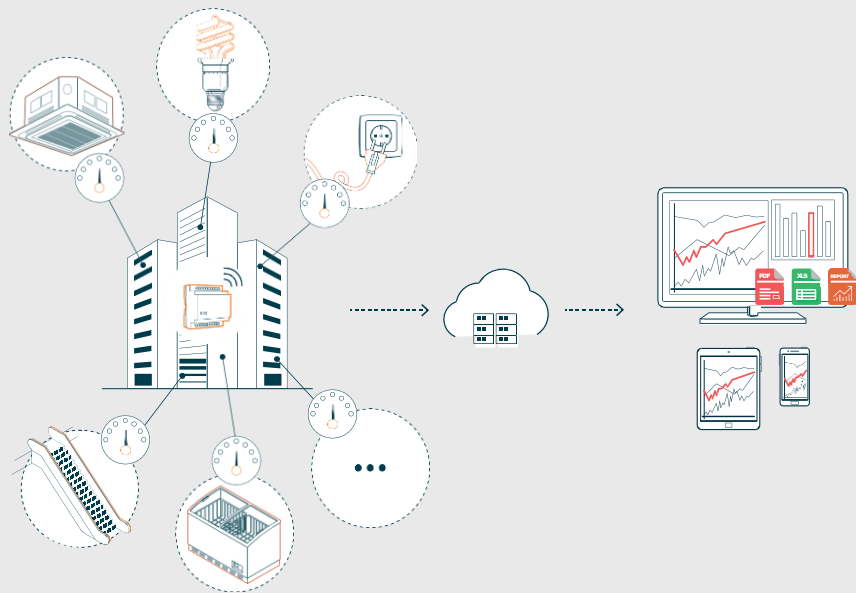


INTERNET OF THINGS

“TAKE THINGS FURTHER” SMART ENERGY CASE STUDY

August 2019

An energysolution



ENERGY INSIGHT

Energy Insight is our first level of energy management for companies that want a deep understanding of the use of energy in any building or location and advice of actions to be taken. The service provides the required tools so building managers can make the right decisions to lower energy consumption and achieve savings.

FUNCTIONALITIES

Detailed knowledge of the energy consumption and cost, by site or by a set of sites; prediction (Big Data) and detection of deviations; alerts system; bill simulation; energy performance analysis; custom reports; creation of Sankey diagrams; monitoring of energy savings; detection of improvement opportunities; archive of historic data; task orders follow-up; centralised management.

TARGET

This service is geared to any customer that has a high-energy consumption, with special interest for three sectors; Industry, utilities and services (e.g. banking, hotels, retail, shopping centers...).

BENEFITS

- Lower the energy consumption and bill, by providing valuable information on critical points of consumption and possible improvements.
- Improve efficiency and obtain operational improvements by managing your energy infrastructure.
- Make better investment decisions based on data (return on investment).
- Centralised access to energy consumption info from all the infrastructures.

WHY TELEFÓNICA?

- End-to-end service from the proposal definition up to the operation service.
- Over seven years of experience with several sectors.
- Solution compatibility with most hardware providers.
- Pay-per-use.
- By using Telefónica's network, the information arrives safely to our high-availability cloud platform.

RELATED PRODUCTS

Services to combine and enhance the product:

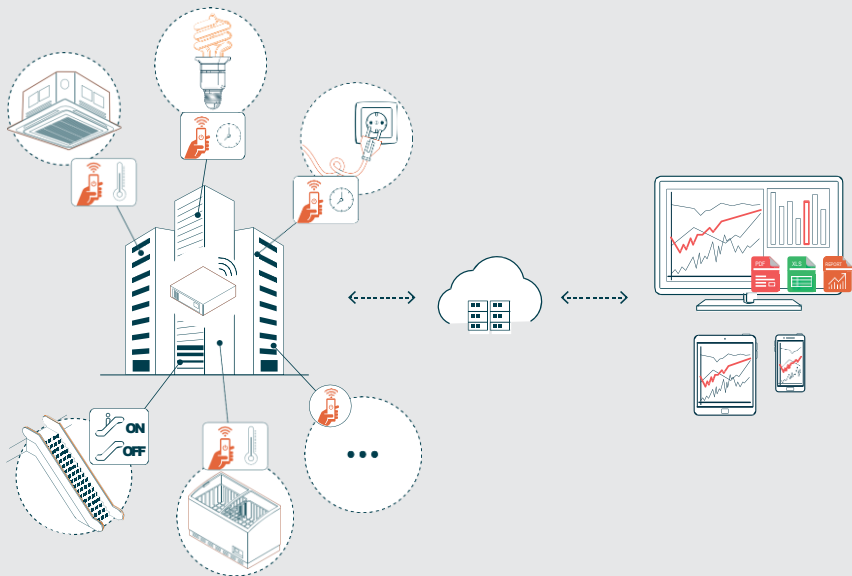
- **Energy Optimise**: our second level of energy management in which certain high-consumption equipment is remotely and automatically controlled to assure energy reduction.

AVAILABILITY IN COUNTRIES

Service mode: Spain and Peru.

Platform as a Service: Spain, Brazil, Peru, Mexico and Ecuador.

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ENERGY OPTIMISE

Energy Optimise enables remote and centralised measurement, control and management of high energy consumption equipment at any facility. This service particularly focuses on points of high consumption such as air conditioning, heating and lighting, giving a holistic control of a building or set of buildings.

FUNCTIONALITIES

Rules for the automation of equipment behaviour in the facilities; alarms of unexpected changes in any equipment; real-time monitoring of the functioning status and operating parameters; all kinds of reports, consumption predictions, branches comparison, alerts, etc.

TARGET

This service is geared towards customers experiencing high energy consumption, with a specific focus on three sectors; Industry, utilities and services (e.g. banking, hotels, retail, shopping centers...).

BENEFITS

- Reduce energy consumption and CO2 emissions.
- Improve energy operations due to a better knowledge of the functioning status of the facilities.
- Adapt the use of energy facilities to business needs by remote management and control of the equipment.
- Optimise the performance of the facilities by automating operations.

WHY TELEFÓNICA?

- End-to-end service from the proposal definition up to the operation service.
- Over seven years of experience with several sectors.
- Solution compatibility with most hardware providers.
- By using Telefónica's network, the information arrives safely to our high availability cloud platform.

RELATED PRODUCTS

Services to combine and enhance the product:

- **Energy Insight:** first level of interaction with energy efficiency through a simple implementation for monitoring and measuring energy consumption.

AVAILABILITY IN COUNTRIES

Service mode: Spain.
Platform as a Service:
Brazil.

INTERNET OF THINGS ■ ■ ▼

ENERGY

WHEN EARTHCALLS,
IOT ANSWERS

OPTIMISED AND CUSTOMISED END-TO-END SOLUTION.

ENERGY CONSUMPTION REMOTE METERING AND MAIN USES
SUBMETERING.

REMOTE CONTROL OF COOL WATER CONDITIONING PLANT
AND LIGHTING SYSTEM FOR COMMON AREAS.

A top level hotel wanted us to propose a solution for measuring and managing lighting and temperature in order to locate energy inefficiency spots in the building. By simply doing that energy costs savings raised up to 12% *. So, why stop there? Why settle for reacting when we could be more active about the environment? And so we did.

Employees now can easily control the whole ambient conditions at the hotel from anywhere, whether on the inside or the outside. They can focus on customer service and make predictions from reports in order to deliver best comfort to passengers. And also to the planet.

ENERGY
CONSUMPTION
REMOTE



REMOTE CONTROL
COOL WATER,
LIGHTING SYSTEM...



REMOTE
TEMPERATURE
CONTROL



COMMITMENT



* "To address the energy inefficiency, we installed connected meters and submeters to get insight into the energy consumption profile. All data generated were sent to our centralised platform and using real information, which allowed us to identify that the cooling and lightening circuits featured as the biggest energy consumption. As a result, we placed automated equipment to control on those circuits. By comparing the energy consumption before and after the Telefónica's Energy Optimise solution, the client found that the energy saving amounted to around 12%."

SMART ENERGY VIDEO

Telefónica IoT | Your #SmartEnergy solution optimizes energy consumption:

Manage the energy consumption of your facilities, save by reducing costs and improve work efficiency with the innovative #SmartEnergy solution from Telefónica IoT.

<https://www.youtube.com/watch?v=p2dq7LrW6SE&t=17s>



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