

Banking institutions Case study



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PROJECT

Improve the electric energy management of a network of bank offices in Mexico

SECTOR Banking

CLIENT Mexican banking institution

Information of interest Energy savings by bank office

Most significant results

SAVINGS 15-20% of annual consumption

INVESTMENT €126000

PAYBACK PERIOD 6 months

TARGET ACHIEVED:

Identify and correct the energy habits of the different offices



Initial situation

One of the largest banking groups in Mexico wanted to optimise its energy consumption. This is one of the world's leading banks with a presence in over 160 countries. Due to the need for rational electrical energy use, the banking group decided to install an energy measuring and logging system in more than 210 offices in Mexico.

Objectives

The main objective of the project was to achieve a robust and reliable system that could provide an overview of the installations so that timely corrective actions could intuitively be made.

The client needed a centralised system to log electricity consumption in order to compare the different consumption habits of its offices and improve the management of energy efficiency in each office and at the group level.

Results

The results of the energy audit performed using the Electric Energy Management System were to optimise consumption of air conditioning, lighting and rest of the office's energy resources. It also managed to control and compare the usage habits of the different offices.



Reduction 15 - 20% kW-h Energy consumption

by building





Control of the electricity consumption of the offices when idle

Solution

The chosen **CIRWATT B PREMIUM** energy meter was able to log all the necessary electrical parameters and dump them to its monitoring and control system: Scada Power Studio. The system was fully implemented in each bank office through a direct LAN connection, creating an individual management system for each office.

The energy consumption of the offices was grouped by floor area with the system (Scada Power Studio), with each office generating monthly simulations of the electricity bill before the bill was actually sent by the **CFE (Federal Electricity Commission)**. In this simple way it was able to analyse the offices with the highest and lowest consumption to correct energy habits detected and even suggest improvements.

Besides energy logging, the installed units stored data related to the electric supply, such as the voltage supplied by the **CFE** and the power, helping to control occasional excess demand and correct deviations.

Thanks to the **CIRCUTOR** solution, instead of having to wait to receive the electricity bill, the bank offices were able to view the energy or power consumed in each time period. This simple procedure allowed them to control whether the installation was working efficiently or not, and they could check if the contracted power was correct and if the lighting and air conditioning systems were meeting real needs.

The improvement actions taken by the system's energy managers were as follows:

- Light timers and lighting adjustment in many sectors of the bank offices.
- Air conditioning timers and adjustment: Reduction of hours of use of the air conditioning system, adjusting its operation during the offices' hours of activity, control and monitoring of secondary climate elements that consumed a large amount of energy.
- Control of the electricity consumption of the offices when idle.
- · Control and limitation of unjustified excessive consumption.

Specifically, the results of these actions were as follows:

- Reduction of the electrical consumption of each office (kWh) by around 15-20 %
- Six-month payback period for the Energy Management project.

Thanks to **CIRCUTOR's** units and the **PowerStudio SCADA Energy Management Software**, direct savings actions could be taken, raising awareness about more rational energy use among internal staff. They were able to significantly reduce the overall electricity consumption, and the associated economic cost of electricity and CO² emissions.

Partners

CIRCUTOR supplies units and software for energy management and savings in the public administration, tertiary, corporate, industrial and residential sectors.

Through its network of Experts and its distribution channel, installers, integrators and partners, it provides services in more than 100 countries and has received several energy efficiency awards for projects, units and R&D+i. **CIRCUTOR's** management solutions are compatible with other units on the market, so that installations can be updated with minimum investment. **CIR-MEX** was the chosen Partner for this project.

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