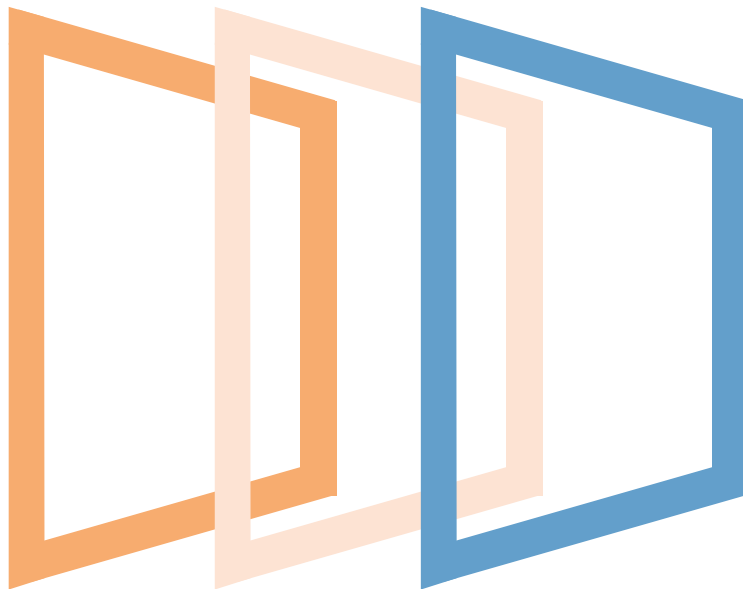




Success Case

SENA - Colombia

minsoit



An Indra company

Índice






- 01. Project characteristics
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Project Characteristics

01

01. Project Characteristics



-  **Project period:** 3 years. Beginning in December 2015.
-  **Nº de sites** where the solution has been deployed: 28 sites (100 additional sites planned for next phase)
-  **Monitoring and Control of Electricity, Gas and Water circuits** (243 monitored points)
-  **Implantation of IoT Technology**
-  **Installation of the equipment and the Software Platform** of Monitoring, control and actuation

Implementation of:

- ✓ Energy Management Software Platform
- ✓ Cloud Services and Communications
- ✓ Energy Management System ISO50001

Energy-Productive Characterization and Diagnosis

- Request for preliminary documentation and description of physical plants.
- Designation of SENA officers for coordination and facilitation of activities.

Implantation of IoT Technology

- Support in the implementation of the action plan to close gaps against ISO 50001.

Implantación de Tecnología IoT

- Instalación de Equipos
- Instalación Plataforma Software de Monitorización, Control y Actuación

Auditoría Interna y Acompañamiento Certificación ISO 50001

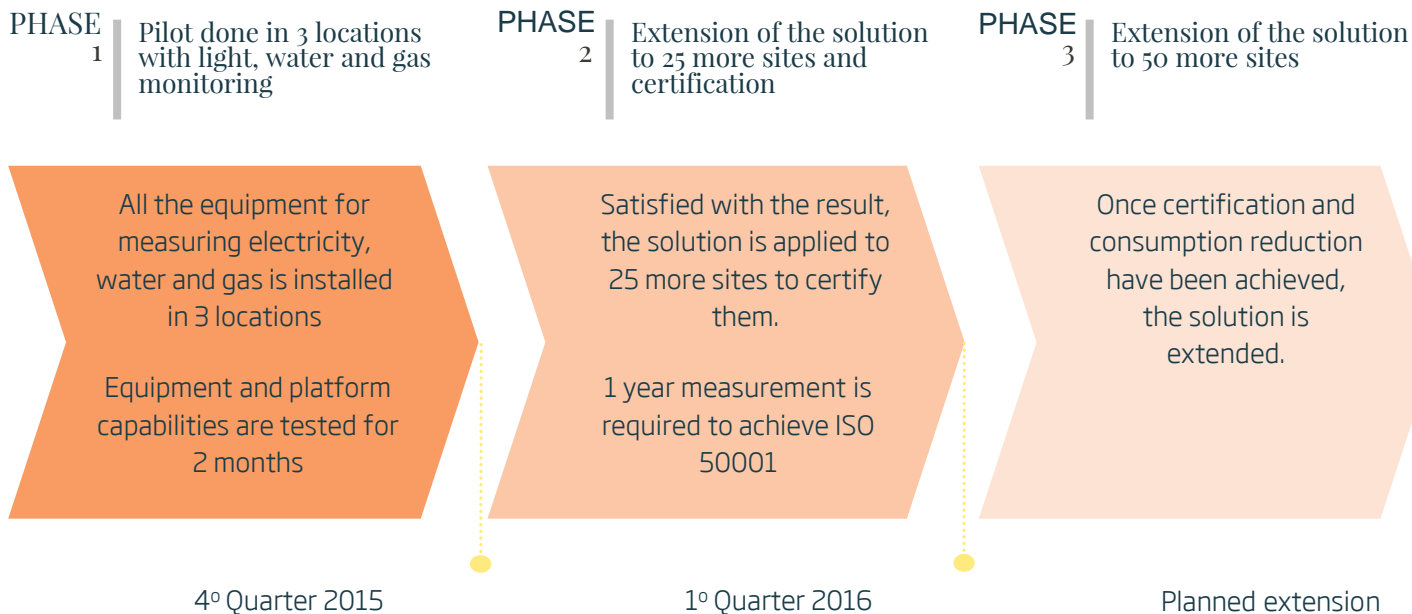
Activities

02



02. Activities

ISO 50001 certification is sought for SENA public buildings. To achieve this, they need a management platform that monitors all energy consumption and applies savings measures to reduce them. This is done in 3 distinct phases.



Benefits obtained

03

03. Benefits obtained



Savings in energy consumption 21%.



Improved control of operations



Many of the measures can be implemented in the short term



Reduced maintenance costs resulting from better operation of equipment and machinery



Reduced employee downtime



Support for the implementation of awareness campaigns for guests and users

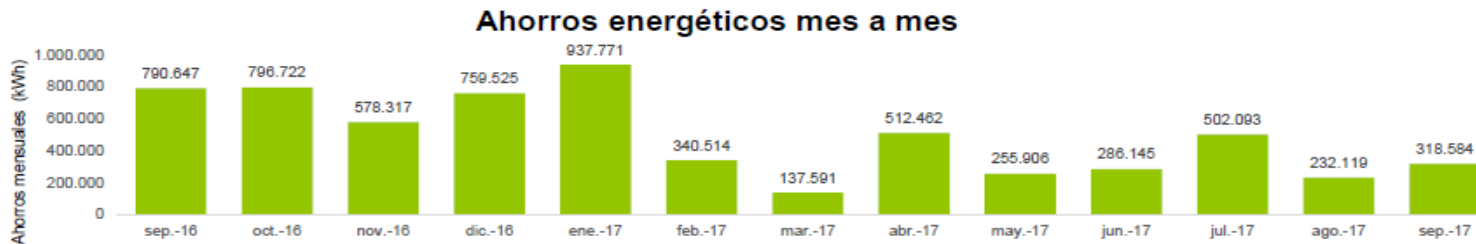


Optimization of the use of equipment and installed powers



Increase of the reputation of the company

Saving
21%
Energy

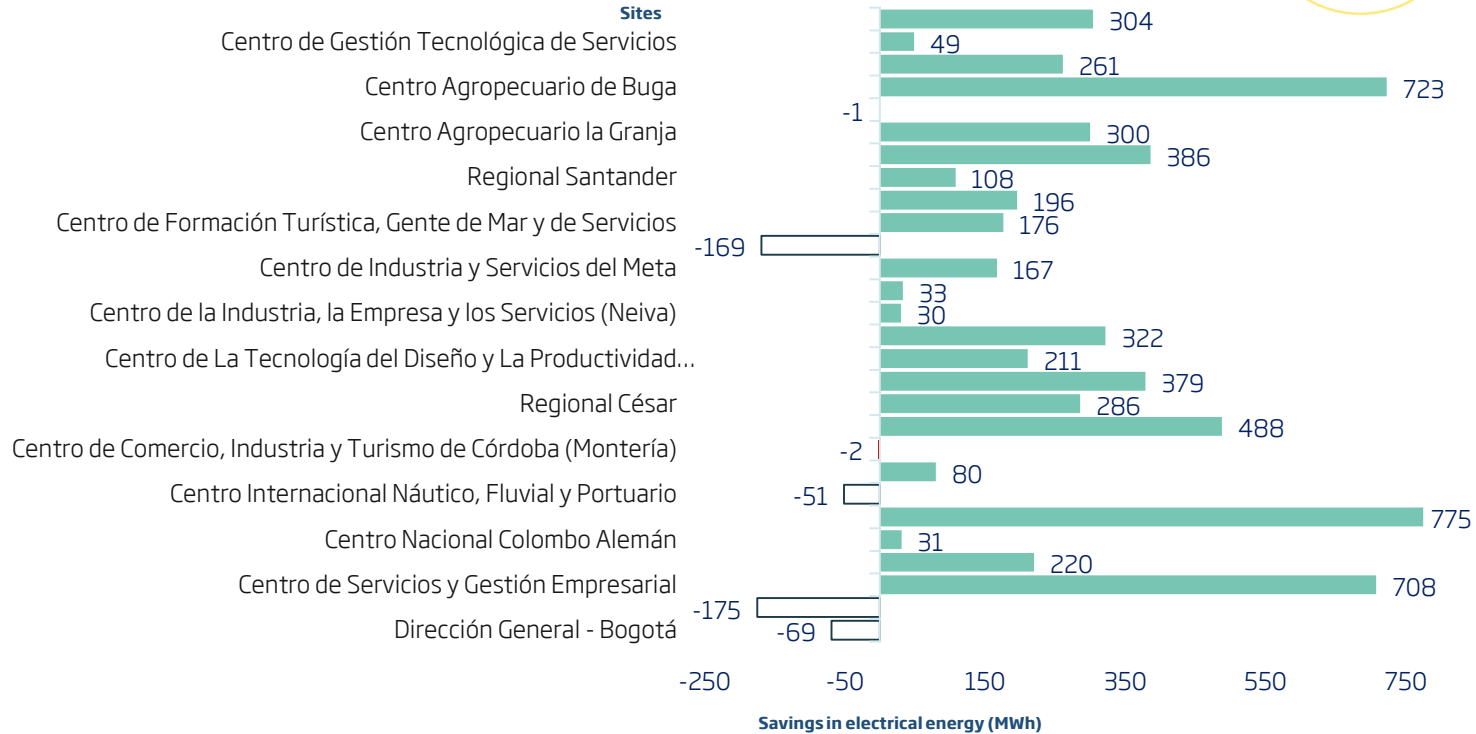


03. Benefits obtained



Savings achieved in the last year exceed 5700 MWh

Saving
21%
Energy



Reconocimientos

04

04. Awards



1

Energy Efficiency Award in the category of Public Entities in Colombia

- The energy efficiency project developed by Colombia's National Learning Service (SENA) in collaboration with Indra has been awarded with the **Energy Efficiency** Prize in the category of Public Entities in Colombia, granted by the National Association of Public Services and Communications Companies (**Andesco**), the Ministry of Mines and Energy, Findeter and the Mining Energy Planning Unit (UPME).
- The award recognizes the commitment and good practices in the implementation and dissemination of projects that promote energy saving and sustainability.

2

enerTIC Awards in the category SMART International Projects



- The energy efficiency project developed by Colombia's National Learning Service (SENA), in collaboration with Indra, has won the 2017 **energyTIC award** in the Smart International Projects category, according to the consulting and technology company in a statement.
- The enerTIC Award, which has been organized for six years by the enerTIC group, aim to recognize organizations and managers who promote, through **innovation and technology**, **energy efficiency** in the digital age.

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Mark Making the way forward

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