

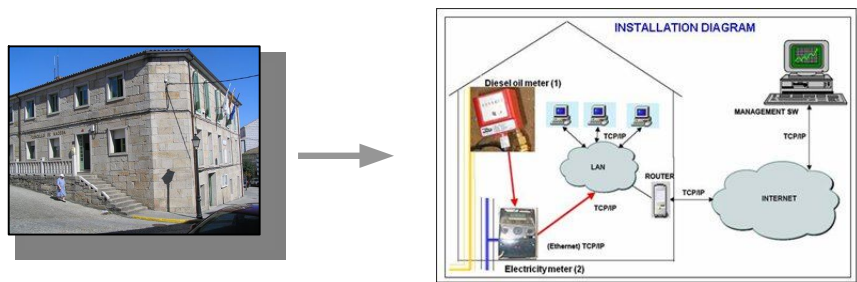
ENERinTOWN Case Study

Energy use in TOWN HALL - Maceda

Client MACEDA MUNICIPALITY

Overall objective Implementing low/zero cost measures to optimize the consumption of energy in this building, after monitoring energy consumption.

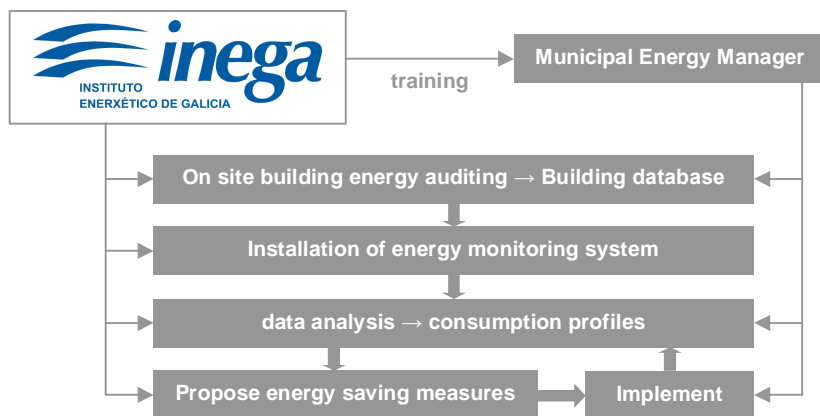
Object data Town hall of approximately 880 square metres of effective area, with electricity and internet connection, and diesel oil tank. The number of users of the building is variable.



Initial Situation This building consumes diesel oil in the central heating system and electricity for lighting, office equipment and other systems.

| Half-Yearly Consumption | |
|-------------------------|-----------|
| ELECTRIC ENERGY | 9918 kWh |
| THERMAL ENERGY | 48948 kWh |

Realisation model

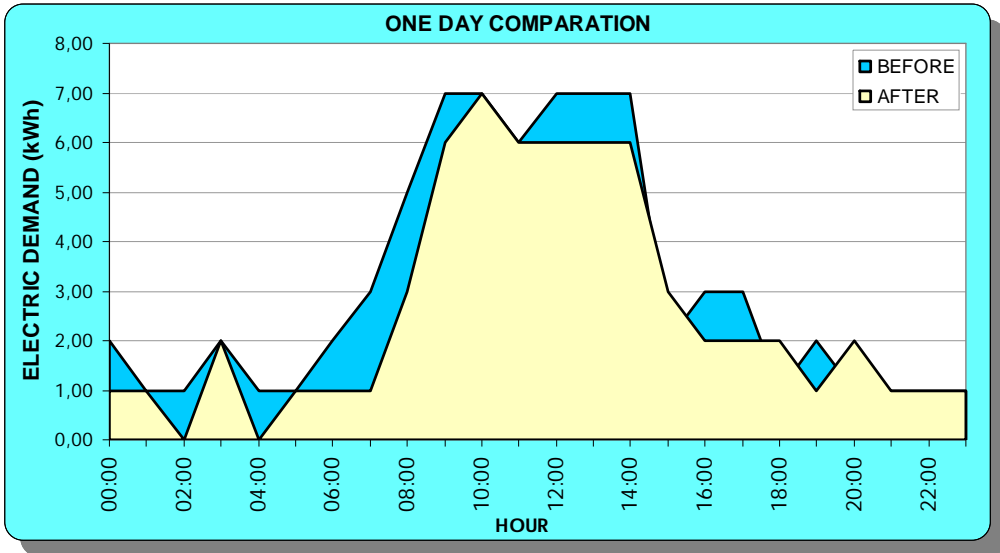


Measures implemented

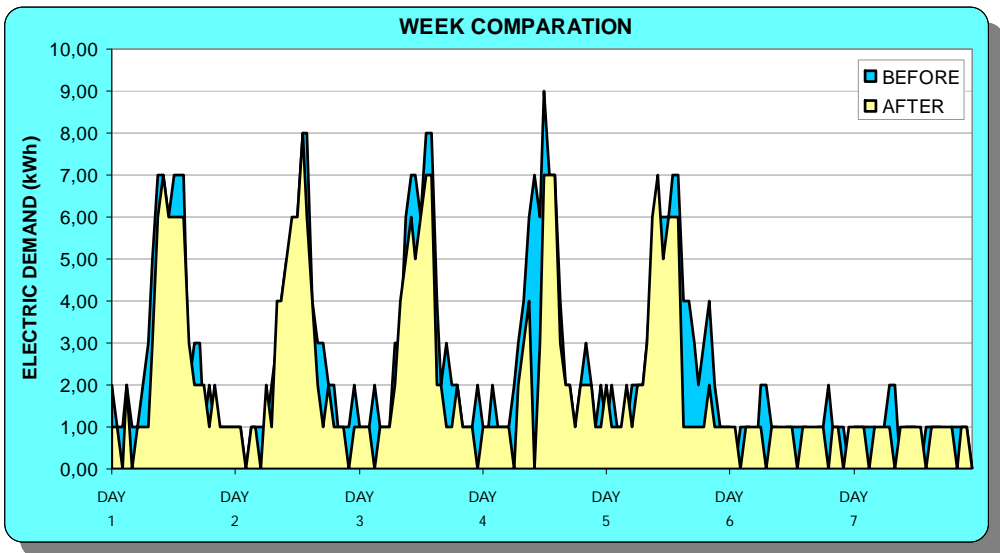
- Energy management via internet realised by a modern energy monitoring system.
- General energy saving behaviour (turn lights off, shut windows, turn thermostats down, etc.).
- Training of the Municipal Energy Manager.
- Room temperatures information of building occupants, rules for room temperatures by the Energy Manager.
- Fine tuning of controls of building energy systems.
- Temperature control to reduce excess heating, lowering of temperature set point.

- Optimization of boiler on/off hours.
- Keep clean the lamps and the luminaries.
- Efficient use of office equipment, turn off when not working.
- Reduction of electric load out of working time.
- Deactivation of lamps situated in places with excess luminance.
- Measures for user motivation, show the data monitored before and after the efficient management of energy.

Results



| | | |
|---|--------|----------------|
| Consumption before implement energy efficiency measures | 74 kWh | SAVING 16,22 % |
| Consumption after implement energy efficiency measures | 62 kWh | |



| | | |
|---|---------|----------------|
| Consumption before implement energy efficiency measures | 410 kWh | SAVING 18,54 % |
| Consumption after implement energy efficiency measures | 334 kWh | |

Benefits for the clients

- The economical aim to save money for resources, which can partly be reinvested in additional energy saving measures.
- Saving on natural resources, emissions reduction and climate protection.
- Implementation of a professional energy management.
- Creation of the new figure of Energy Manager in the municipality.
- Practical lessons on the responsible use of energy and environment for building users.
- New inovative model of energy monitoring system, via Internet.
- Improved public image of the municipality.
- Identification of sources of energy wasting.
- Changes behavior on the use of energy.
- Increase of the awareness on the energy saving.

Assistance provided

- SICA S.A., software MEDCOM and SIGEST ENERinTOWN.
- CONTOIL®, oil meter VZO 4-RE 0.1
- ZIV Medida S.L., electricity meter 5 CTD

Contact

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