

iSERVcmb Best Practice

Electricity savings of 16% per square meter per year through monitoring and operation adjustment of UPS, HVAC, lighting.

Leonardo Tower Almaviva –IT

Introduction

This report summarizes the results of Almaviva’s participation to the iSERVcmb project with regard to its HVAC system energy consumption. The report refers to the period from 2009 to 2013.



iSERV Achievements

Energy Savings

Electricity: 50 kWh/m²

[Click here to enter text.](#)

Cost Savings

Emissions Reductions

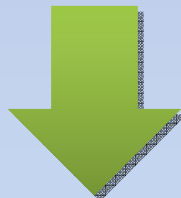
Electricity: 19,9 kgCO₂/m²

Investment to achieve savings

x

16%

Total building electrical consumption reduction since participation



	Key Figures
Location	Rome, Italy
Sector	Office
Construction Date	1985
Project Size	3360 m ²
EPC	B
Sub-metering Level	Fully Metered
Data Frequency	15'
Data Collection Protocol	Stand Alone system
Data Sending Protocol	Automatically extract & send to an email address
Nature of Savings achieved	Improved Operating Schedule Improved HVAC Control
No. HVAC Systems	2
HVAC Components	<input type="checkbox"/> Heat Generators <input checked="" type="checkbox"/> Cold Generators <input type="checkbox"/> All-in-One Systems <input type="checkbox"/> Heat Pumps <input checked="" type="checkbox"/> Air Handling Units <input type="checkbox"/> Humidifiers <input type="checkbox"/> Dehumidifiers <input checked="" type="checkbox"/> Pumps <input type="checkbox"/> Storage Systems <input checked="" type="checkbox"/> Terminal Units <input type="checkbox"/> Heat Recovery <input type="checkbox"/> Heat Rejection



Building Profile

Almaviva Headquarters are composed by 7 building connected. The office block count about 30'000 m² conditioned gross internal area, in Rome, IT. All the building are served by fan coils and AHUs. Cooling system is served by a number of chillers installed on the roofs.

Building Management System installed

The building systems are controlled by a BMS, and the system operates on an optimized stop and start. The BMS is not used for data collection, while a stand alone, self developed system is used for monitoring. The building is occupied 08:00 to 17:00, Monday to Friday, on Saturday just parts of the buildings are used.

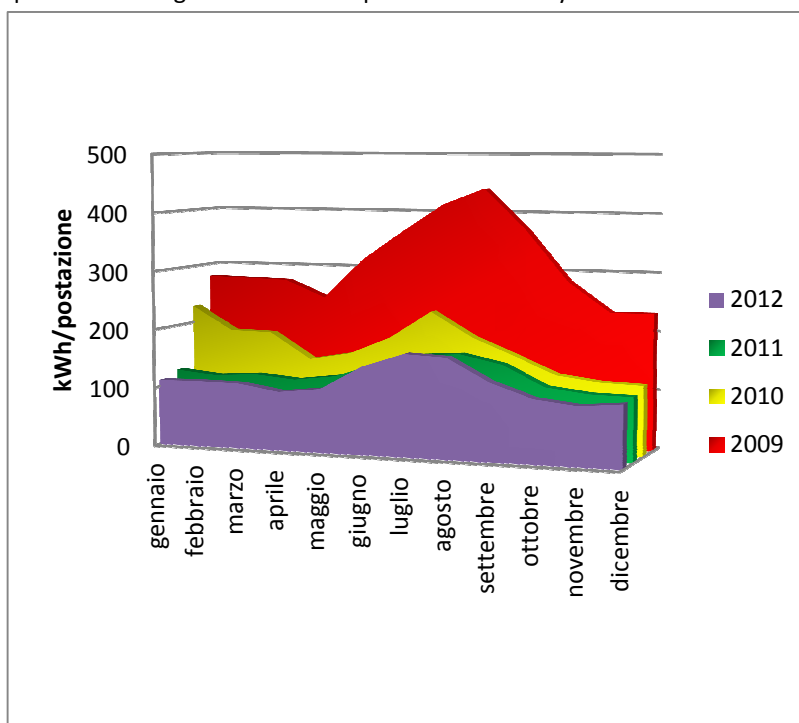
Savings of 45% per capita due to optimized control of PC's, lighting, UPS, HVAC system

The data provided starts at June 2009 and includes energy consumption of electricity. From December 2009 onwards the rolling annual electricity use starts to reduce.

The Company already started monitoring when iSERV project was started. The energy manager was specifically focused on PCs control (centralized turning off), lighting and HVAC control.

The participation help in focusing on further potential savings and correct inspection of HVAC system.

The continued steep reduction after this date to a current consumption of 268 kWh/m²a is due to additional control being exerted on the building's HVAC system. These electricity savings represent a reduction of 45% from the initial electricity per worker use peak.



www.iSERVcmb.info

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how energy efficient are you really?



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