Intelligent Energy Europe Project Number: IEE-10-272

Acronym: iSERV



iSERVcmb Best Practice

Electricity savings of 12% per square meter through monitoring and operation adjustment of PCs, lighting and HVAC system.

Galileo C 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 2011 to 2013.

iSERV Achievements	
Energy Savings Electricity: 14 kWh/m² Click here to enter text.	12% Total building electrical
Cost Savings	consumption reduction since participation
Emissions Reductions Electricity: 5,6 kgCO2/m ²	
Investment to achieve sa	avings



	Key Figures
Location	Rome, Italy
Sector	Office
Construction Date	1985
Project Size	3583 m²
EPC	N/A
Sub-metering Level	Fully Metered
Data Frequency	15'
Data Collection	Stand Alone system
Protocol	Ataa.atiaallatuaat 0
Data Sending Protocol	Automatically extract & send to an email address
Nature of Savings	Improved Operating
achieved	Schedule
	Improved HVAC Control
	improved more control
No. HVAC Systems	1
IIVAC Commonante	□ II+ C+
HVAC Components	☐ Heat Generators
HVAC Components	☐ Heat Generators ☐ Cold Generators
HVAC Components	_ ricat Generators
HVAC Components	
HVAC Components	
HVAC Components	☐ Cold Generators☐ All-in-One Systems☐ Heat Pumps
HVAC Components	 ☐ Cold Generators ☐ All-in-One Systems ☐ Heat Pumps ☒ Air Handling Units
HVAC Components	 ☐ Cold Generators ☐ All-in-One Systems ☐ Heat Pumps ☐ Air Handling Units ☐ Humidifiers
HVAC Components	
HVAC Components	
HVAC Components	

Inspection of HVAC Systems through continuous monitoring and benchmarking

Intelligent Energy Europe Project Number: IEE-10-272

Acronym: iSERV



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.

Galileo C building has a GIA of about 3583 square meters.

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.

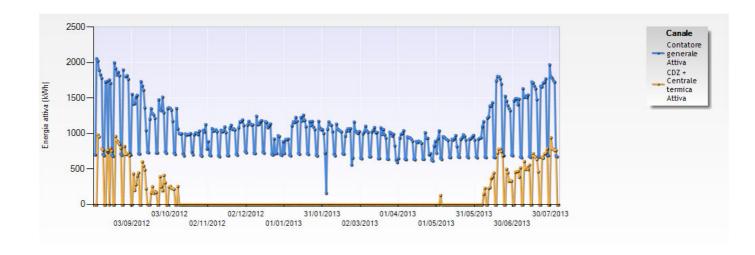
Savings of 45% per capita due to optimized control of PC's, ligtingh, UPS, HVAC system

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 actual consumption, for the Galileo C building, is of 102.5 kWh/m²a due to additional control being exerted on the building's HVAC system and lighting.



www.iSERVcmb.info

Contact

Marco Masoero
Politecnico di Torino
DENERG
Italy

it





ERGY