

MARIE TRAINING PROGRAM FOR IMPROVEMENT IN ENERGY EFFICIENCY (EE) OF EXISTING BUILDINGS

F1 | BEST PRACTICES COLLECTION

Best Practice Name:	Consumption monitoring – ISCTE Buildings
Code:	PO_TE_MA_07

Best Practice Description:

Type:	<input checked="" type="checkbox"/> Action for improvement in the EE	<input type="checkbox"/> Training experience (*)
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Description:	Adopted methodology in order to achieve energy efficiency <ul style="list-style-type: none"> a) Systematic coordination between the Technical Center and the General Support Center (responsible for the space management) in order to the Technical Center to be permanently informed of the intended use for the different areas. With this information, the Technical center should be able to take the appropriate measures (lighting and acclimatization). For example, the General Support Center gives priority to those rooms whose temperature control leads to lower consumptions. b) Obtaining weather forecasts in order to adjust the "set points" of the acclimatization equipment in relation to expected changes in air temperature compared to that expected for the season. c) Very close coordination between the Technical Center and the resident maintenance team, responsible for running the facilities, so that they are adequately informed about the actions to be taken for proper completion of their tasks. Monitoring is performed weekly to check the results of the actions of that team. At these monitoring meetings, the operation hours of the different systems are checked and corrected, if needed. d) Regarding the electricity consumption for lighting, we turned off some points considered excessive in the circulation areas and sanitary facilities, and are replacing old lamps with low energy lamps, as soon as they are failing. 	
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Location:	Lisbon	Country:	Portugal
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Type of building:	<input checked="" type="checkbox"/> Tertiary	<input type="checkbox"/> Residential	<input type="checkbox"/> Mixed
Property:	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Private	<input type="checkbox"/> Mixed
Management:	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Private	<input type="checkbox"/> Mixed
Fields of action:	<input type="checkbox"/> Construction	<input checked="" type="checkbox"/> Maintenance	<input checked="" type="checkbox"/> Use
	<input type="checkbox"/> Energy generation and distribution		<input type="checkbox"/> Other
	<input type="checkbox"/> Replacement or implementation of renewable energies		<i>Which ones?</i>

Please, evaluate if the following processes take place in the Best Practice that you are describing in this form:

	Yes	No
The data collection has been complete and rigorous	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Communication and awareness processes have been developed to disseminate this practice	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Training actions have been provided	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Product and services have been improved	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jobs have been created	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sustainable financial models have been applied	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Agreements or collaboration models have been defined between parties	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Positive impact tested in the following fields (add quantitative data if you have):

ENERGY EFFICIENCY IMPROVEMENT (EE)	<p>Consumptions conducted between the months of April 2011 and September 2011</p> <p>Natural Gas</p> <p>Building I</p> <p>The heating network from this building dates from the 70s. Since its installation, the applied improvement with greater importance was the replacement of the original fuel boilers with new natural gas boilers, and the replacement of the electric frame. Since this project started the gas consumption became almost residual compared with the same period from previous years.</p> <p>Building II</p> <p>In Building II (the most recent building) the supply of natural gas is intended almost exclusively to the heating system of the facilities. In this case only a reduced consumption was recorded in April.</p> <p>Electricity</p> <p>Regarding electricity, we recorded the following improvements in comparison with the same period from the previous years:</p> <p><u>Building I</u></p> <p>Consumption Reduced – 34.434 Kw Savings – 8,29%</p> <p><u>Autonomous Hall</u></p> <p>Consumption Reduced – 60.473 Kw Savings – 33,39%</p> <p><u>Building II</u></p> <p>Consumption Reduced – 164.327 Kw Savings – 18,60%</p>
FINANCIAL COVERAGE	<p>None. We only used the maintenance budget from the University</p>
EMPLOYABILITY POTENTIAL	<p>To conduct such an extensive monitoring of the facilities we had to employ a resident maintenance team, as we only had someone part time. So we created two jobs, full-time, for this purpose, included in the maintenance team.</p>
OTHER	

DIFFICULTIES	The major difficulties are related to: - Lack of human resources with appropriate skills; - Difficulty in analyzing the network in order to produce complete and detailed studies for the purpose of obtaining the information necessary for a correct and timely decision regarding the measures to adopt.
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Agents involved in this experience:

<input type="checkbox"/>	Legislation agencies
<input type="checkbox"/>	Public promoters
<input type="checkbox"/>	Private promoters
<input type="checkbox"/>	Technical public institutions
<input type="checkbox"/>	Technicians of the private sphere (professional associations ...)
<input type="checkbox"/>	Builders
<input type="checkbox"/>	Industrial
<input checked="" type="checkbox"/>	Facility Managers (property managers, cleaning companies ...)
<input type="checkbox"/>	Energy supply companies
<input checked="" type="checkbox"/>	Users/owners (homeowners association, schools ...)
<input type="checkbox"/>	Other:

GAPS	
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(*) **RR_BB_FF_NN**

RR Country: **CY** (Cyprus), **FR** (France), **GR** (Greece), **IT** (Italy), **MA** (Macedonia), **MT** (Malta), **PO** (Portugal), **SL** (Slovenia), **SP** (Spain)

BB Type of building: **RE** (residential), **TE** (tertiary), **MX** (mixed)

FF Field of action: **CO** (construction), **MA** (maintenance), **US** (use), **EN** (energy generation and distribution), **OT** (other)
(in case of affecting more than one field of action choose the most relevant)

NN Number of the practice: **01, 02, 03...**