

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

F1 | BEST PRACTICES COLLECTION

Best Practice Name:	Undertaking an energy balance before establishing a refurbishing program
Code:	FR-RE-CO-03

Best Practice Description:

Type:	<input checked="" type="checkbox"/> Action for improvement in the EE	<input type="checkbox"/> Training experience (*)
Description:	<p>The municipality of Mison intended to proceed to the renovation of three apartments it rents out. The mediocre thermal performances of the building forced occupants to either give up heating up their home or to resort to extra heating, which use appeared prejudicial to their health, because of the high quantity of water vapor produced by fuel combustion and the fact it does not evacuate very well. In response to this situation, the City Council decided to realize an energy balance of the building, before defining a rehabilitation program.</p> <p>The energy balance consisted in:</p> <ul style="list-style-type: none"> - Localizing and assessing heat loss in the building - Calculating energy consumptions according to a thermic audit method - Calculating energy and climate labels - Defining several construction scenarios and simulating their impact on heat loss, consumption and labels - Setting up a financial plan for the rehabilitation project trying to maximize return time on investment 	

Location:	Mison	Country:	France
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Contact (team):	Mairie de Mison – Les Armands – 04200 – Tel: 04 92 62 27 90
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Type of building:	<input type="checkbox"/> Tertiary	<input checked="" 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 checked="" type="checkbox"/> Construction	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Use
	<input type="checkbox"/> Energy generation and distribution		<input type="checkbox"/> Other
	<input type="checkbox"/> Replacement or implementation of renewable energies		

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 type="checkbox"/>	<input checked="" type="checkbox"/>
Training actions have been provided	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Product and services have been improved	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Jobs have been created

X	
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Sustainable financial models have been applied

	X
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Agreements or **collaboration models** have been defined between parties

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

ENERGY EFFICIENCY IMPROVEMENT (EE)	<p>The energy balance produced led the City Council to adopt the following refurbishment program:</p> <ul style="list-style-type: none"> - Loft insulation – $R = 7,5M^2.k/W$ - Thermal insulation from the outside of the walls that were found to be wasteful – $R = 4,3 M^2.k/W$ - Installation of a mechanical distribution of ventilation in each apartment - Replacement of electric convectors with a wood pellet boiler. <p>This refurbishment program leads to a significant improvement of the energy efficiency performance of the building: primary energy consumption is divided by three, final energy consumption is reduced by 20% and energy expenses are reduced by half.</p>
FINANCIAL COVERAGE	The achievement of the construction program is on the expenses of the municipality of Mison. However, the town receives financings from other communities, and therefore the return time on investment is estimated at 4 years.
EMPLOYABILITY POTENTIAL	No job creation may be directly attributed to the construction program, however it creates additional revenues for companies appointed to the rehabilitation work (80K€).
OTHER	This building rehabilitation project fits into a broader Energy Management policy undertaken by the municipality of Mison. The project enabled to make the municipality staff more sensitive to the energy efficiency rehabilitation of buildings.
DIFFICULTIES	

Agents involved in this experience:

Legislation agencies	
Public promoters	
Private promoters	
Technical public institutions	
Technicians of the private sphere (professional associations ...)	
Builders	
Industrial	
Facility Managers (property managers, cleaning companies ...)	
Energy supply companies	
Users/owners (homeowners association, schools ...)	
Other:	
GAPS	In order to improve the efficiency of preliminary studies, it would be preferable to train craftsmen in charge of implementing the refurbishing program to energy efficiency renovation techniques, which is not

systematically the case.

(*) **RR_BB_FF_NN**

RR Country: **CY** (Cyprus), **FR** (France), **GR** (Greece), **IT** (Italy), **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...**

(*)IN CASE OF A TRAINING EXPERIENCE:

Course name:	
Duration:	
Web:	
Director/a:	
Who is it aimed:	
Objectives:	
Program:	
Methodology:	

I agree to bring this experience to the database of the MARIE project, which will create a comprehensive training program for improving the energy efficiency of buildings in the area of the Mediterranean.