

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

F1 | BEST PRACTICES COLLECTION

Best Practice Name:	Renovation and expansion of an existing private building
Code:	IT_RE_CO_13

Best Practice Description:

Type:	<input checked="" type="checkbox"/> Action for improvement in the EE	<input type="checkbox"/> Training experience (*)
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Description:	<p>Renovation and surface expansion of an existing building. The existing part of the building was already built with good material providing high insulation.</p> <p>Interventions provided:</p> <ul style="list-style-type: none"> - Infill made of tile block filled with perlite 30 cm thick, thermal transmittance $U = 0.25 \text{ W/m}^2\text{K}$ - Correction of the thermal bridge pillars lined cork slab and finished with plaster - Insulation of the floors of new construction, both inter-spaces and not heated spaces, with screed heat with cork, clay and dust diathomeic minimum thickness of 5 cm - Windows in softwood with double layered plate and cavity dry air; the window overall transmittance $U_w < 1.9 \text{ W/m}^2\text{K}$ - Cover towards the outside ventilated with laminated wood type XLAM, with double-paneled wood and cork insulating minimum thickness of 10 cm, $U = 0.29 \text{ W / m}^2 \text{ K}$, $Y_{ie} = 0.18 \text{ W / m}^2\text{K}$. Check and reset, if necessary, cork insulation on existing roof. - Complete shaving building with thermal plaster. - Installation of PV system within the shelter of relevance, exposure to South-West, 6 kWp - Installing solar thermal system for DHW integration with flat panels surface 6 sqm, South-West exposure and storage tank from the 300 litres. <p>With regard to the consumption of resources have been provided technological systems such as the use of water-saving faucets and drains, and recovery tank of rainwater.</p>
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Location:	Bastia Umbra (PG)	Country:	Italy
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Type of building:	<input type="checkbox"/> Tertiary	<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Mixed
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Property:	<input type="checkbox"/> Public	<input checked="" type="checkbox"/> Private	<input type="checkbox"/> Mixed
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Management:	<input type="checkbox"/> Public	<input checked="" type="checkbox"/> Private	<input type="checkbox"/> Mixed
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Fields of action:	<input checked="" type="checkbox"/> Construction	<input checked="" type="checkbox"/> Maintenance	<input type="checkbox"/> Use
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	<input type="checkbox"/> Energy generation and distribution	<input type="checkbox"/> Other
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	<input checked="" type="checkbox"/> Replacement or implementation of renewable energies	<i>Which ones?</i>
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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 type="checkbox"/>	<input checked="" type="checkbox"/>
Product and services have been improved	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jobs have been created	<input type="checkbox"/>	<input checked="" 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)	It is obtained a reduction of the indices of overall energy performance of the building by about 40% with a cover from FER estimated at around 55% for both the electric and thermal.
FINANCIAL COVERAGE	The investment was fully supported by the Client. It is expected a payback time of less than 10 years.
EMPLOYABILITY POTENTIAL	
OTHER	Have been used materials produced locally and recyclable. All professionals and laborers are working and living in the territory of Umbria Region.
DIFFICULTIES	The greatest difficulties coped with they have been: <ul style="list-style-type: none"> - to standardize the energy performance of the existing part of the building with the new one - to reconcile different parts of the plant - to adapt of the existing plumbing system with the support of RES.

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 checked="" type="checkbox"/>	Technicians of the private sphere (professional associations ...)
<input checked="" type="checkbox"/>	Builders
<input type="checkbox"/>	Industrial
<input type="checkbox"/>	Facility Managers (property managers, cleaning companies ...)
<input type="checkbox"/>	Energy supply companies
<input type="checkbox"/>	Users/owners (homeowners association, schools ...)
<input type="checkbox"/>	Other: Installer
GAPS	

(*) 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...*

(*)IN CASE OF A TRAINING EXPERIENCE:

Course name:	
Duration:	<i>Training hours/ECTS</i>
Web:	
Director/a:	
Who is it aimed:	<i>Profile of trainees</i>
Objectives:	<i>What enables this training?</i>
Program:	
Methodology:	<i>Format (face-to-face, on-line), structure of sessions, visits, case studies, evaluation systems, dynamic sessions, other aspects ...</i>

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.