MARIE
INFORMATION
AND TRAINING

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

F1 | BEST PRACTICES COLLECTION

Best Practice Name:	"Mur/Mur Campagne isolation"(wall/wall insulation campaign); Global renovation of co-ownerships via a support scheme personalized from A to Z by the ALE (Local Energy Agency), from inspiring the renovation of an existing building to monitoring the energy consumptions post-renovation that justify the savings made.
Code:	FR-RE-CO-07

Best Practice Description:

Type:	X	Action for improvement in the EE	X	Training experience (*)

Description:

"Mur/mur campagne isolation" is a support scheme for co-ownerships, from A to Z between 1945 and 1975, with an obligation of means, which aim is to reach a thermal performance based on the respect of the "Mur/mur" (wall/wall) frame of reference for renovations, with no preliminary audit (Audit made by the ADEME in 2003/2004 as part of the OPATB scheme - Programmed Operation for Thermal Improvement of Building - which categorizes buildings built between 1945 and 1975 as "non insulated"):

- Meeting syndic/ALE: convergence between the "Mur/Mur" scheme and co-ownership's needs (often a need for refreshing)
- Signature of a commitment charter (expectations and commitments of each-one involved)
- Visit of the building and personalized advising
- Choice of different refurbishment packages:
  - Progressive renovation : thermal insulation from the outside (ITE) + gables
  - Complete renovation : ITE + gables + roofing + low-floor + ventilation option
  - Exemplary renovation : complete renovation + joineries + ventilation
- Consulting prime contracting companies (obligation to take an architect)
- General assembly on the choice of the prime contracting company
- Validation of the choice of refurbishment, consulting enterprises
- General assembly on the choice of refurbishment and enterprises
- Compilation of financial files (subsidies validation)
- Carrying out refurbishment work
- Following up on energy consumptions for 2 years

Location:	Grenoble	Country:	France

Contact (team):

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Type of building:		Tertiary	X	Residential		Mixed

Property:		Public		X	Private		Mixed
Management:		Public		X	Private		Mixed
Fields of action:	X	Construction			Maintenance		Use
		Energy generation and distribution				X	Other
		Replacement or implementation of renewable energies				*Which ones?*	

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	X	
Communication and awareness processes have been developed to disseminate this practice	X	
Training actions have been provided	X	
Product and services have been improved		
Jobs have been created		
Sustainable financial models have been applied	X	
Agreements or **collaboration models** have been defined between parties	X	

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

ENERGY EFFICIENCY IMPROVEMENT (EE)	This scheme relies on an obligation of means which allows obtaining a "BBC" renovation performance level (low energy consumption buildings), representing an energy saving of around 55%. A refurbishment frame of reference as been drafted in the form of technical fact sheets, whose performances are based on reaching the BBC renovation label (96 kW for Grenoble). The return on investment is fast, the buildings built between 1945 and 1975 being non-insulated.
FINANCIAL COVERAGE	A financial simulation is made as soon as ALE meets the syndic. The financing is partly made from subsidies distributed by the METRO (Grenoble metropole area), which, in compensation, gets the CEE or Energy Saving Certificates back. The METRO has signed a partnership with some "beholden" companies (Gaz de France - French gas company -, heating companies and EDF - French electricity company -) for reselling the Energy Saving Certificates. Cumulative financial aids : - Global subsidies for co-owners according to the refurbishment package chosen : 15 to 40% of the cost of the work, excluding taxes - Individual subsidies for the lowest incomes and/or bonus for efficient joineries in "noise zones" - Common law aids : zero interest eco-loan, sustainable development tax credit, lessor's right to raise the rent
EMPLOYABILITY POTENTIAL	This action did not directly create employment but improved prime contractors' and companies' skills thanks to the implementation of a training action which goal is to appropriate and apply the refurbishment frame of reference established as part of the "Mur/Mur campagne isolation" and to ensure the quality of the refurbishments made. This training allows the multidisciplinary teams (architects, thermal

	engineers, economists…) to apprehend these new renovation techniques from different perspectives (energy, architecture, economics, health…) It is now proposed by ADEME at a national level, out of the "Mur/Mur" frame, because it proved to be efficient and reproducible.
OTHER	This measure allows a valorization of the existing heritage et an increased awareness of occupants facing energy-related issues.
DIFFICULTIES	Difficulties are mainly linked to decision making within a co-ownership, including the respect of the General Assembly process for successive validations. Furthermore, even though the more refurbishment work is made, the lower is the cost at the expense of co-ownerships, 50% of them do not vote for the work.

Agents involved in this experience:

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

GAPS	

*(*) **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:	REBBAC: Knowing how to renovate low energy consumption buildings
Duration:	4 days i.e. 32 hours
Web:	www.ademe.fr/formation
Director/a:	jocelyne.rebillard@ademe.fr
Who is it aimed:	• Contracting body (building project manager) • Engineering and prime contractors (architects, design office, economists, companies…) • Companies in charge of refurbishment work, upkeep, maintenance • Heating system operators
Objectives:	• Knowing how to renovate a building in an efficient way, beyond regulations • Understand the need for a transversal and multidisciplinary approach, and improving in consequence one's professional practice • Knowing the steps and the elements of a technical and energy diagnosis of existing buildings: overview of the place, practice and analysis of thermal calculations, technical prescriptions • Being able to give technical solutions for the building's shell ➢ Fitted to a low energy renovation ➢ Respecting or improving the architectural appearance of the building ➢ In a multi-criteria approach (comfort, health…) • Share experience feedbacks in the building utilization
Program:	Day 1: **Low energy consumption buildings' renovation issues, technical and energetic diagnosis** - Stakes, context, strategy, regulations and labels - The process of designing the renovation, practice of technical diagnosis - Energy calculations, economic analysis - "Construction site" vigilance points - Visit of a low energy consumption renovated building Day 2: **Efficient envelopes fitted to building typologies and airtightness** - Airtightness treatment in renovation - Thermo-hygro behavior of materials (theoretical input and study cases) - Technical and architectural solutions fitted to building typologies Day 3: **Technical equipment, use of an aid to renovation software, feedback on measurement campaigns** - Technical equipment: ventilation, heating and domestic hot water systems fitted to low energy consumption renovated buildings - Possibility to integrate renewable energies - Presentation and use of a thermal calculation tool to help the drafting - Operational experience feedback: results of measurement

	campaigns carried out by ADEME Day 4: **Study case on renovation project – multi-criteria and multidisciplinary approach** - Study case: practical exercises in small groups on a renovation project (community housing, individual housing, offices) - Correction and exchanges, in the presence of the designers
Methodology:	Presentations, small groups working on study cases, technical visit. For simulations, use of a thermal calculation tool to help the energy efficiency and environmental design adapted to the energy efficiency renovation.

[X] *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.*