

CONSULTATION PAPER

“Financial support for Energy Efficiency in Buildings”

Answers from MARIE and ELIH-Med projects

1. Projects and initiatives presentation

Territorial and Cross-Border cooperation programmes funded by the European Union such as the MED and ENPI have financed several projects focused on Energy Efficiency in Buildings (EEB). Particularly, the MED programme opened in 2010 a call for strategic projects related to EEB.

MARIE (Mediterranean Building Rethinking for Energy Efficiency Improvement) and ELIH-Med (Energy Efficiency of Low Income Housing in the Mediterranean) were selected as Strategic projects in February 2011 by the MED Evaluation Committee with a budget over EUR 15 million. They gather more than 40 partners (and among them, 12 regions, 5 municipalities, national energy agencies, etc.). The MED Evaluation Committee, which is formed by 9 EU Member States, has recommended both projects to create synergies and work together towards capitalization.

2. Policy paper in preparation

MARIE and ELIH-Med are leading a working group including representatives of several MED & ENPI projects related to EEB to develop jointly a comprehensive policy paper that will be a crucial input in the preparation of next programming period operational programme on EEB in MED space.

The contents of the EEB Policy Paper are structured in four main chapters. The introductory chapter focuses on scope, objectives of the policy paper and methodology of work. The diagnostic chapter will offer a detailed analysis of EEB in MED space, including data, projects summary, capitalization activities and SWOT analysis.

The proposals chapter focuses on the barriers hindering EEB, as well as the strategic lines and investment needs to revert and boost the trend to reach the objective of saving 20% of the energy consumption in MED space buildings.

The recommendations chapter for next EU funds programming related to EEB in MED Space has been organized in four main types of recommendations.

- Coordination between EU programs, projects and entities for EEB in MED space,
- Proposal of axis structure in next programming period,
- MED and other EU programs related to EEB,
- More specific recommendations.

In the framework of the MARIE and ELIH-Med Conferences, taking place respectively in Malaga in September 2012 and in Brussels on the 22nd of November 2012, a first draft of the Policy Paper will be presented to all the EEB stakeholders and related DG of the EC.

In this regard the answers to this consultation paper are to be considered as a working document, to prepare the policy paper. In the forthcoming months and until November both projects shall jointly work to produce a comprehensive policy paper.

3. Added value of MARIE and ELIH-Med for the consultation paper

This consultation paper is based on the first analysis and results of MARIE and ELIH-Med projects and on partners' experiences and feedbacks.

Both projects aim at identifying and experimenting solutions to improve energy efficiency in buildings in the Med space. Nevertheless, the two projects have different scopes and objectives.

The MARIE project focuses on regional strategies aiming at boosting energy refurbishment of buildings with the objective of finding local solutions and stimulating local enterprises as solutions providers to the identified obstacles.

The ELIH-Med project focuses on identifying and demonstrating, through large scale pilot actions, the feasibility of cost efficient innovative solutions and financial mechanisms backed with ERDF which could then be extended to all Mediterranean territories.

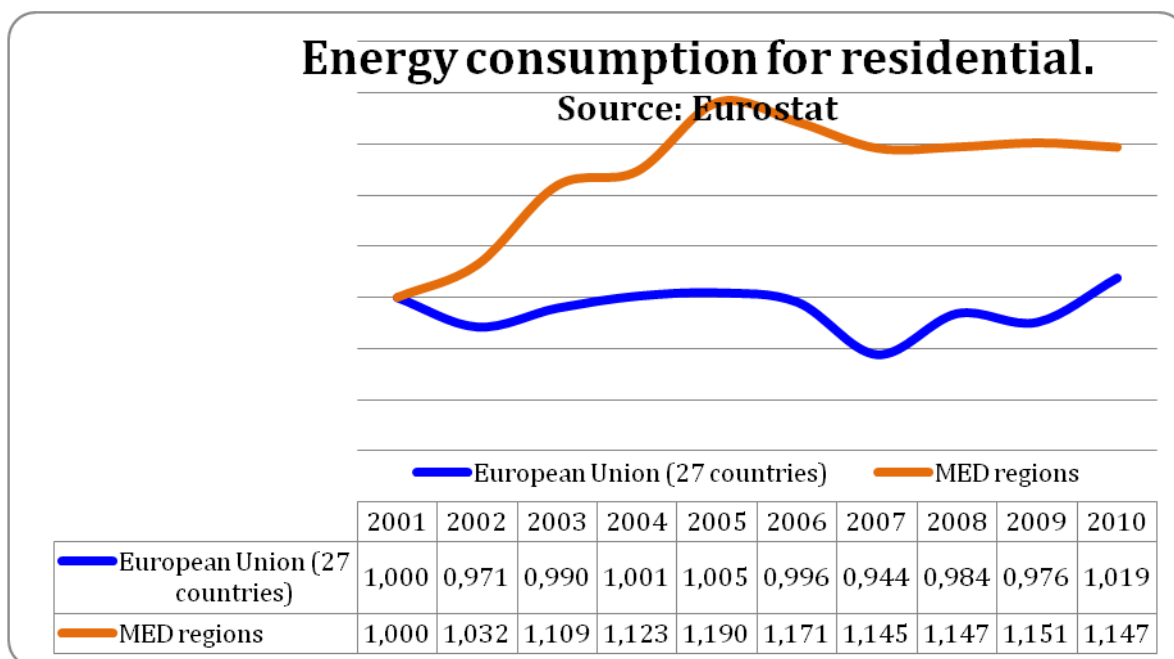
The cooperation dimension of these projects offers an original point of view on energy efficiency issues and an accurate contribution due to:

- a wide range of partners with complementary experiences at different levels
- a transnational approach, over passing national contexts, and close to the Commission transnational objectives
- an experimentation approach, to test the proposed solutions
- a network of associated partners, encompassing energy efficiency experts, and including the private sector
- a geographical focus on the Med space, which is one of the European space where energy savings are more difficult to realize because of climatic specificities and a relatively higher poverty.

In this paper, for each question of the consultation, MARIE and ELIH-Med propose some orientations that could be detailed and discussed with the European Commission, if needed.

General propositions:

Both project partners are convinced that the achievement of EU2020 objectives in terms of energy savings will depend on the strategic investments in Med space of European funds and among them, ERDF at regional level. In this sense, as the next table shows it, the energy consumption trend in the residential sector of MED regions is higher than the EU average, and against the EU2020 targets.



The coordination between the different funding programmes, their strategic orientations towards investment (mainly for regional ERDF), and solutions to overcome EE barriers (mainly through transnational cooperation, research programmes and specific energy programmes) are the baseline for our recommendations.

This improved strategic coordination will increase the leverage effect of European funds on private funds, which is determinant to finance sufficient investment and achieve significant energy saving. The combination between renewable energies and energy savings is one of the means to obtain this leverage effect and mobilize the private sector.

Specific innovative policies and approaches are necessary to be able to reach all the segments of population living in the buildings and all the different categories of buildings (residences, hotel, public facilities, industrial and commercial buildings...) in order to overcome the identified barriers.

4. Market failures

(a1) Are the barriers identified in this document the most important ones?

MARIE and ELIH-Med agree with the identified barriers, mainly concerning energy market prices, which do not reflect all environmental and social costs, but that have a negative incentive effect, mainly by prolonging the pay-back period of any energy saving investment.

Both projects have realized studies to clearly identify barriers which affecting a successful exploitation of market opportunities set up by energy efficiency regulations programs and incentive schemes launched by Regional, National and EU authorities. During the preparation of the Regional Benchmark Analysis¹ and in the Integrated Regional Benchmark Analysis (which shall be public on the 24th May 2012 in Torino), the barriers identified by MARIE partners have been classified in structural, technical, financial, knowledge and behavioural. These barriers are similar to the barriers proposed in the Consultation Paper. However, MARIE proposed barriers are more (33 barriers: 11 structural, 5 technical, 6 financial, 6 knowledge and 5 behavioural). These barriers are associated to 10 MARIE strategic lines and also connected with 7 pilot activities to be developed during 2012 and 2013. One of the main tasks of MARIE pilot activities will be analyse in detail which measures are more effective to overcome the

¹ See executive summary at www.marie-medstrategic.eu, under Documents section

barriers. ELIH-MED partners have analysed the policy commitments and current trends in energy consumption at national level, as well as existing financial mechanisms. These studies permitted to elaborate a trend-setting scenario and the corresponding strategy paving the way for the achievement of the EU2020 objective.

(a2) If not which barriers are missing and why they are important?

Governance:

- Lack of transversal approach of energy efficiency issues and lack of coordination between the funds.

Regulation

- Delay on the implementation of the EPBD directive by each country through the transposition in regulatory laws and implementation of supporting tools (software tools, etc.)
- Delay in implementing energy efficiency audit and certifications by the relevant authorities or bodies in each country, as EPBD foresees.
- Lack of interest, resilience and reluctance from end-users to contribute to the EPBD implementation due to a considerable cost of the energy efficiency certificate and the lack of information and awareness about energy savings benefits.

Structural:

- No flexibility of budgets to allow large investments in EE (yearly running whereas EE benefits pay back in long term)
- Unclear, unstable and short-term oriented operational legislative framework for both offer and demand
- Poor integration of European, national, regional and local policies on EE and renewable energy supply, and of the related administrative bodies
- Gap between political objectives (3*20 especially) and operational regulations: level, delays, control
- Complexity of (1) regulations, (2) implementation and (3) enforcement and verification of compliance
- Complex decision making for multi-owner buildings
- Energy renovation projects are usually conceived as renovation of individual buildings, while better solutions may arise at "neighbourhood" scale.
- No win-win situation because the reduction of energy consumption is not interesting for energy providers that first look for a fixed charges curve. In consequence, low efforts in terms of energy saving incentive by energy providers and lack of transparency on the real end users' consumption.

Technical

- Increased market competition for EE products produced outside MED regions due to better value for money
- Complexity and uniqueness of most EE refurbishment projects (each case is unique, due to many causes, different possible renovation approaches, e.g. Heritage/cultural value of façades, etc.)
- Lack of structuration of the European industry to be competitive in the renewable energy, buildings material and technologies sectors.

Financial

- Incapacity of conventional financial instruments to make EE renovations feasible and lack of new/alternative financial models.
- Lack of opportunities to implement innovative financial mechanisms like Third Party Financing with the intervention of ESCOs, Voluntary Agreements, soft loans etc. These mechanisms might prove an interesting alternative, and must be considered in the revised energy policy of each Med Country.
- Lack of available and accessible funding mechanisms designed for end-users and especially for low-income households. In most cases, the financing synergies between public and private funds are not sufficient for low-income households, who do not have access to most tax incentives.

Knowledge

- Difficult access and analysis capacity by users to real-time, detailed information on their energy use
- Unsuitability of smart metering systems conceived in priority to give information to energy providers and not to end-users
- Lack of awareness among users on the benefits of EE investments in the long run
- Lack of accurate knowledge within politicians, administrative and civil servants. The bodies competent to encourage energy retrofitting are sometimes totally uninformed and unaware of the legal mechanism that could encourage such actions.
- Misconception of the main climate and comfort challenges that the MED area buildings face

Behavioural

- Lack of motivation for energy efficiency improvement in users. The issues of aesthetics, bigger space, fashion and updating, well-being, reducing noise are the most important motivations for refurbishment. As a consequence, there is a distortion between public policies (EE focus only) and consumer behaviour
- Reluctance of users to accept refurbishment works as they are perceived as intrusive, complex and annoying

- Distortion between behaviour requirements for use of refurbished building and MED usual way of life (open windows, mobile sun protections, use of control technologies...)
- Lack of value of non-material and knowledge-based assets and services such as architecture, engineering, and consulting
- Reluctance for collaborative work. New technical and perceived hierarchy between works and professions leading to high reluctance to change practices (but also new opportunities for new professions)
- Lack of support to auto-refurbishment and weakness of training facilities
- Lack of low-cost solutions in diagnosis and refurbishment such as the ones existing in the social economy sector

(b1) Which market failures would be most urgent to address?

The main market failures are **economic** related to availability of money (credit and loans) for buildings owners and ESCO and to the mix of financings funds to affront the energy renovation at current level of energy prices.

A second level of market failures are connected with **organizational and structural** aspects depending specially from the interconnection and synergies creation between public and private entities.

The third level of failures is related to **information, knowledge and behavioural** barriers. Those are failures that are very relevant but difficult to overcome on the short term.

(b2) At what level would these failures be best addressed?

Energy efficiency issues need to be addressed in a multilevel perspective.

At EU level, it is very important to create a strategic framework that goes beyond EE Directives.

At transnational level, we promote a macro-regional approach based on the articulation of cooperation programmes and mutualisation of European funds dedicated to energy efficiency projects. Baltic Sea Energy Efficiency Network (BEEN) is an interesting example at this level. The policy paper in preparation and the Mediterranean Building Energy Efficiency Strategy (MEDBEES) are transnational

strategies that could give birth to effective instruments to address these barriers and failures.

At national level, support to territorial strategies is important. At regional level, the definition of investment plans integrating public and private partnerships should ensure a leverage effect to the ERDF funds available for energy efficiency. At local level, the definition of local policies (urbanism, innovation, etc) in line with the EU2020 objectives and the launch of Building Energy Renovation Plans well coordinated with regional scale investment plans could be the most concrete way to achieve significant results in energy savings.

The coordination between 5 priority levels (EU, Transnational, national, regional and local) would be essential for addressing both market failures and barriers. The management of ERDF funds could be the best way to coordinate these levels.

(c1) How could these failures be best addressed?

We promote an integrated and convergent approach, which relies on the following points:

- Involvement of all the levels of intervention (EU, Transnational, National, Regional and Local)
- Better coordination between EU objectives, policies and financing programs (Research, Cohesion, IEE, ERDF, EEE Facility, climate change and others related)
- Definition of strategic lines of investment at regional level with an increased percentage of ERDF funds directly allocated to energy efficiency.
- Clear allocation of “dedicated” funds (Territorial cooperation funds, IEE, FP7, etc.) to address barriers and market failures (awareness and marketing; urgent training needs; policy commitments at all levels; private involvement and branch approach of EE; urban planning, legislation and regulation; financing; competitiveness; innovation and smart green growth; integrated services; Intelligent Energy Management; quality of life and thermal comfort; EE in specific territories: islands and remote rural areas).
- Monitoring systems at all levels and for all lines through Inspire Directive implementation for buildings (Integrated Spatial Data Infrastructure).
- Communication efforts (linking webs, messages for different target groups, ICT, social networks), notably to modify the expenditure priorities throughout local awareness campaigns.

- Enforce the obligation of the technical inspections and implement the certification of refurbishment works.
- Use of the ERDF by public actors as a leverage and incentive to attract private funds and stakeholders.
- Create a system of concrete incentives to encourage people in reducing strongly their energy consumption, for example with property tax incentive.

(c2) How could the behavioural change needed for quicker uptake of EE measures by society be triggered at the national level?

The analysis of behavioural barriers mentioned above is a good indicator to propose an in-depth cultural change, taking into consideration the fact that at the moment, there is no real economic incentive able to push and encourage a behavioural change (The energy prices do not integrate all the costs needed to produce energy).

Moreover most Europeans know that they will soon have to adopt efficient behaviours but energy renovation measures are less popular than smart mobiles and other technologies. Changes in population preferences are slow but it is clearly evidenced that unconnected and dispersed messages are not effective to reach the desired changes in perception and behaviour.

Today, smart metering and monitoring of energy consumption are not broadly developed, but it could become a strong energy demand side management tool. The ELIH-Med project will test the installation of smart meters or smart monitoring appliances in order to evaluate their impact on behaviours and the functionalities it would be necessary to develop and adapt in order to help end-users reducing their daily consumption.

Continuous and targeted awareness campaigns at different levels are necessary to engage an in-depth mutation in our energy consumption habits. For example, big health campaigns such as HIV prevention, smoking or traffic control have demonstrated that awareness rising may have a significant impact on people behaviour, even though they are not sufficient and have to be associated with other incentives.

Our propositions:

- Make the behavioural change easy, affordable and neighbouring.

- Experience smart monitoring and metering, with an interactive approach in order to identify possible enhancements of the devices and reach significant energy savings linked to behavioural changes.
- Launch awareness campaigns with clear messages of promotion of everyone's responsibility in saving energy.
- Compel energy providers to commit themselves to using dedicated marketing techniques to encourage end-users in reducing their consumption (tariffs and billings). For instance, they could propose an easy system of monitoring based on energy bills: red and green lights, warning in case of high consumption, etc.

(c3) How could the development of an energy services market for households be further stimulated?

In ELIH-Med and MARIE projects, we are working hard on the energy services market through pilot activities focused specially in two main demonstration lines. The first one is the symbiosis between residential buildings energy demand and tertiary ones. The second one is the definition of the households' critical mass necessary to reduce behavioural uncertainty and facilitate the interest of ESCO to invest in refurbishing projects with concrete objectives of energy savings.

However this question is essential and requires further effort. Urban planning could be a key tool to stimulate energy services market for households, but also to promote energy renovation of buildings and organize the renovation process.

The development model of ESCOs is not the same in all the European countries because the structuration of national energy markets influences a lot the level of structuration of the energy services market.

Our propositions:

- Develop the facilities to encourage the combination and joint development of renewable energy projects with energy savings objectives, all the more so as ESCOs in Mediterranean countries are less interested in EE refurbishment because of longer pay-back periods due to the warm climate.
- Improve the structuring effect of European and public funds through public procurements and refurbishing of the public buildings.
- Design tax incentive policies that renewable energies and passive buildings, which will have a positive impact on the development of ESCOs.

- Promote the creation of cooperatives amongst building residents to facilitate the access to funds to carry out EE measures in building.
- Concrete implementation of the smart city concept. Public authorities will have to develop their competences in this domain and they will need to work in close cooperation with ESCOs to do so.

(c4) What could be done to increase awareness raising and promotion of energy efficiency in buildings?

The processes and tools to involve target groups should be very well studied and developed. MARIE and ELIH-Med projects are realizing an important effort in this line, especially in producing an adapted publicity plan for each target and sub-target group.

For MARIE project, the first step has been the preparation of a first draft communication strategy (see www.marie-medstrategic.eu). The second step is analysing the state of the art in terms of marketing experiences and evaluations for 9 MED countries (in preparation). The third step will be the production of a first scheme of publicity plan to be tested in several pilot awareness and promotion campaigns. The forth step will be the development of pilot awareness campaigns. The final step will be the production of a comprehensive Publicity Plan.

In ELIH-Med, a particular attention is given to the real involvement of inhabitants which dwellings are refurbished, because we consider that their adhesion, participation and awareness of the utility of the project are key factors for the success of the rehabilitation. To this end, groups involving residents' representatives, but also social workers, civil servants, local groups and associations, and social landlords are created in each site of experimentation. These groups will participate to the definition of the awareness campaigns, which will target inhabitants of dwellings refurbished, but also of the neighbourhood area, as we think that the interest and awareness produced by EE refurbishment can exceed the strict area of the workings.

Smart metering in another way to involve directly inhabitants. Nevertheless, they should be conceived not only according to energy suppliers needs, as it is mostly the case now, but as a tool of information and adaptation of energy consumption addressed to inhabitants.

Within the project, a series of guidelines will be elaborated to target different audiences: low income housing owners, professionals of the building sector, bank and financial institutions managers, policy makers at different levels.

Our propositions

- Direct involvement of residents in the refurbishment process, accompaniment of the community, awareness raising in schools, associations, etc at the district level.
- Test of smart monitoring and metering with the objective of giving to people the necessary information to moderate their energy consumption.
- Dissemination of information about funding opportunities and energy savings potential to targeted public.
- Training, information and eventual remuneration of Housing Managers to give them the means of raising awareness among residents in their daily relationships.

(c5) How could the business community be better supported in delivering energy efficiency in buildings?

Several propositions are to be implemented within our projects. There are also other propositions, not directly linked to our projects, that need to be tested.

MARIE project is developing two initiatives very useful and interesting to involve the business community. The first one is the Network of Clusters for energy efficiency in buildings. The constitution of the network will be achieved in Torino on the 25th May 2012 with the participation of EEB clusters from the Regions of PACA (Fr), Catalonia (Es), Piedmont (It), Friuli, Venetia Giulia (It) and Greece. This network will facilitate the involvement of the business community in the construction of the MEDBEE Strategy by 2014.

Another tool created by MARIE is the MARIE Associated Partners Platform (see www.marieapp.eu) the tool is conceived essentially to involve business, NGO and public administration communities in the preparation of the MEDBEE Strategy

ELIH-MED has established a Territorial Management Group (TMG) for each experimenting territory with the active involvement of local stakeholders among other public and private actors. Thanks to this innovative group, the local business market could be enriched towards a more “green” direction.

Our propositions:

- Creation of a database of market solutions, at national level, including not only the technical performance achieved, but also the price of the unit executed in order to promote the most cost-effective solutions and businesses providing them.
- Establishment of some sort of filter to ensure the professionalism of the workers applying the new technologies could also help to improve the results obtained.

- Encourage new business models such as the ones proposed by the social economy sector. They are of special interest for two reasons: first, these enterprises can be very competitive in this sector (role in terms of employment and insertion and consequences on the work force costs, small enterprises that could offer flexibility to proceed to the refurbishment) and secondly, they give a positive signal in terms of social and environmental responsibility.
- Integrate business actors in the policy-making process. Their active involvement could lead to voluntary agreements with local authorities and facilitate experimentation of new products and business models.

(c6) How could the split incentive problem be best tackled?

The relationship between decision maker and user is considered as an important barrier (especially important in private residential buildings and also in private owners' communities) in ELIH-Med and MARIE projects. The key question is how community owners could be well involved in EEB improvements.

Our propositions

- Raising awareness and training in EEB of building administrators, owners' cooperatives, rental agencies and property managers in order to increase their assessment capacity to the owners.
- Identifying through precise statistical data and GIS system on energy performances of buildings the areas with the highest energy savings potential in order to concentrate the efforts on these areas. Development of a territorial approach such as the one often implemented concerning the fight against insalubrity.
- Modulation of housing rent in function of the energy charges; repercussion of the energy class on the price of the dwelling for sale: a trigger mechanism of the market could be to give greater presence to the energy rating of buildings in the negotiations of sale or rental.
- Maintaining special subsidies are today dedicated to social housing. The involvement of social landlords, supported by public authorities and private investors, is necessary to enhance the refurbishment of the social housing building stock and make it energy efficient.

5. Improving access to Financing

(a1) Are the current EU-level financial tools for energy efficiency in building effective ?

Until now, the total amount of the regional ERDF dedicated to energy efficiency was 4%. In October 2011, the European Commission proposed that 20% of the ERDF could be allocated to energy efficiency and renewable energies¹.

Nevertheless, the existing EU-level financing tools would be much more effective if there were not so many difficulties to obtain them, with long and complex administrative procedures and strict rules concerning the aid regimes, preventing the possibility of mixing funds from diverse origins. The lack of information on EU funds of some local authorities hampers also the process: if municipalities are uninformed, citizens do not receive the needed information. The consequence is that no public investment and private investment is done in this field.

Not all the segments of inhabitants in buildings have the same opportunities to get financial support. It is easy for social housing operators to access financing but private owners, in particular with low income, are difficult to reach. Existing tax incentives or specific loans only target a limited part of the population.

The improvement of the access to financing requires a clear understanding of the diversity of the building stocks, in terms of ownerships, physical characteristics of the buildings, environment (climate, geographic location, etc.), use (residential, commercial, tourism, tertiary sector, public equipments, etc.) and inhabitants' socio-economic characteristics.

EU-level financial tools specifically address public actors, who can also use other public funds, whereas private owners can roughly access these funds due to strict public procurement related rules and have little access to other funds.

Our propositions:

- Definitive approval by the European Commission of the increase of ERDF funds dedicated to energy efficiency and renewable energies
- Change in ERDF regulations to allow the mix of several kinds of financings and modification of the ERDF grant status in order to target private sector and create synergies with private funds
- Simplification of the administrative process to access the funds

(a2) How could the uptake of EU-level funding for energy efficiency be improved ?

¹ Proposal for an ERDF 2014-2020 Regulation presented by the European Commission on the 6th of October 2011

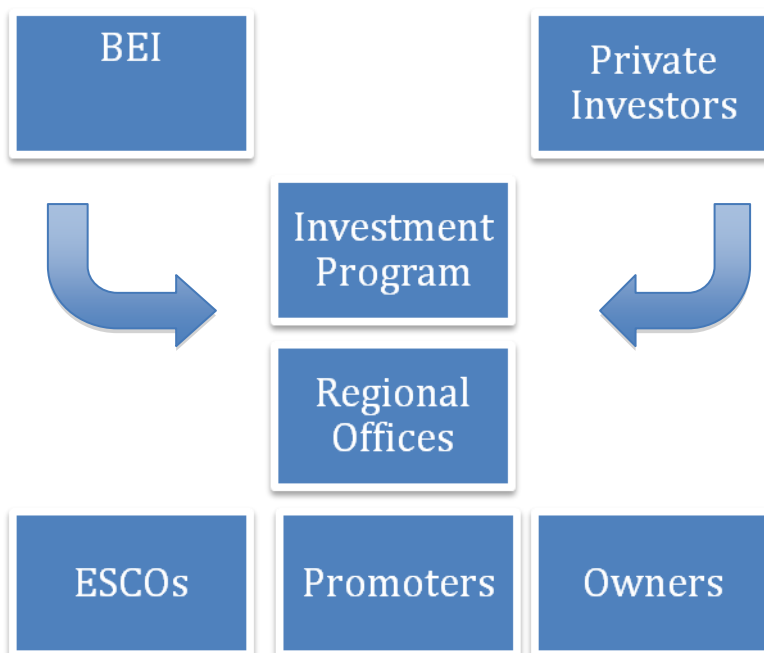
Our propositions

- Better coordination of all the public funds dedicated to energy efficiency in building through the creation of a single counter service at regional level able to centralize the funds linked to energy efficiency programmes, to simplify and harmonize demand procedures to obtain funds and strengthen the visibility of energy efficiency actions.
- Flexibility: It would be necessary to modify the legal framework of European funds in order to make possible their use in a more flexible way, as tools of financial engineering, meaning as complement and/or guarantee of private funds, loans, microcredit, etc. This would contribute to multiply their leverage effect on private funds.
- Possibility for private individuals to benefit from EU funds for EE refurbishment, which proves actually very difficult at the moment. Offer attractive conditions for the final users taking into account their different financing capacities.

(a3)As a complement to tailor-made national or regional financial instruments, what could be the future role of centrally-managed financial instruments at EU level in this context?

Our propositions

- Creation of a European fund dedicated to the 2020 objectives achievement in partnership with the European Investment Bank.



(b1) How could more private financing for energy efficiency projects be mobilised?

Private investors will look for profitability in their investment. The creation of the conditions for profitability and shorter payback periods will facilitate the mobilisation of private funds.

Our propositions:

- Better coordination of all the public funds dedicated to energy efficiency in building through the creation of a single counter service at regional level for simplifying procedures and visibility
- Microcredit has a significant potential, knowing that in a lot of European countries, most people own their housing. They could become the most interested investors, with a significant interest in the comfort and decrease of energy charges, and with less expectative in terms of direct profitability, even if the actual crisis context makes it more difficult.
- There must be a change in the market model : in Mediterranean regions with a warm climate, like in some Spanish regions, the economic savings achieved by performing an energy retrofiting are relatively low, with long repayment periods, and that is why the ESCO are not interested in intervene. Therefore, the ESCO is a good choice for cold climates, where the retrofiting generates enough energy savings for short investment returns periods. So, for Mediterranean climate, where the returns period are too long, the investment in energy efficiency should be linked to the other needed interventions of an existing building: when the owner of a building would have to repair the roof, he should put energy insulation. In this way the investment to make is much smaller and therefore more viable for owners.
- Access to loans for low-income households : there are some experiences where builders (or some other agent involved) assume part of the bank loans that banks deny to low-income homeowners.

(b2) What would be the role of public funding in this context?

Our propositions:

- Public funds as a compensation to ensure a positive profitability of energy efficiency investment.

- Public funds could be used at startup to create financial engineering tools able to multiply leverage effect and the availability of private funds (interest rate subsidies, guarantee funds, revolving investment funds, etc.).
- Public funds could target segments of population which have more difficult access to the traditional sources financing (low income households).

(b3) Is access to technical assistance an issue and how could it be provided most efficiently at the national, regional and local level?

Today, there are some difficulties to access financing because of a lack of skills in terms of complex administratives and financial schemes elaboration. The high degree of complexity to obtain financing is one of the obstacles to their wider and more efficient use.

Our propositions:

- Need for technical assistance mainly for the ERDF managers in regional authorities. They need to develop specific programmes to target population segments of the building stock that are not targeted today by ERDF funds, mainly the private owners.
- Efforts to combine ERDF with private funds is a necessity. A technical assistance and legal aid would be necessary.
- Raising awareness in the bank system about opportunities of financing energy efficiency investments. Training bank staff to advice people on energy efficiency investments and financing tools opportunities.
- Technical assistance required to access JESSICA and JEREMIE fundings because of their complexity.
- Technical assistance and dissemination of good practices in order to support decision makers during the evaluation process and attribution of subsidies.
- Creation of national statistics databases establishing the profitability rates between the investments and the energy saving effectively gained. Analysis of the risk levels in function of the kind and total amount of the investments.

(b4) How could both national and EU financing schemes be improved to best cover all segments of the markets?

Our propositions:

- Framework with an identification of each segment of the building stock and its characteristics. For each segment, identification of its energy saving potential and attribution of a budget percentage to be transposed at different levels (local, regional, national)
- Obligation to adapt the rules and financing schemes to achieve the objectives per segment.
- Control on the certificates (CEE) emissions to ensure a collective benefit through their coordinated collection at regional level. Redistribution of the funds for new energy efficiency projects.

(c1) Is there a need of guarantee systems related to building efficiency investments?

There is a strong need of guarantee system, mainly because the pay back period is long and estimations in terms of energy savings and profitability are difficult. This lack of visibility and high risks associated to energy efficiency loans explain the fact that banks but also private investors and administrations are reluctant to invest. The reduction of this financial risk implies the creation of a guarantee system.

Our propositions:

- Make available guarantee funds in order to support ambitious and innovative energy retrofitting programs and cover the risks associated with more disadvantaged groups, thus permitting the inclusion of these groups in the modernisation of the residential sector and progress in EE.
- Control of the guarantee system in a subsidiary way through regional agencies.
- Create a guarantee system that could support consortiums composed by ESCOs, energy providers and financial institutions in order to encourage their collaboration.

(c2) If so, what guarantee systems for efficiency investments would be necessary and how should they be designed?

Two kind of guarantee systems would be necessary. The first one has to valorize the environmental benefit created by the decrease of energy and CO2 emissions and the

second one is based on the profitability of the investments (savings in energy consumption and possibly, renewable energy sales), taking into account the payback of the measures implemented. Regional Agencies should develop these roles.

(c3) Is there a need for other enabling mechanisms?

N/A

(d1) How could the capacity, knowledge and risk perception regarding energy efficiency investments be improved, both at financial institutions as well as with private investors and administrations at all levels?

Our propositions:

- Encouraging pilot experiences that would serve as examples of new building models.
- Developing comprehensive and accurate information on economic and environmental savings that can be achieved with energy refurbishment projects.
- At several levels, creation of round tables with representative of financial institutions, private investors and public administrations to explore opportunities of joint funding programmes.
- Study on potential benefits of a single counter service at regional level, which could centralize all the funds (if possible, private and public) and harmonize procedures to facilitate the access to energy efficiency financings.
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(e1) Are there examples of good practices at national or regional level?

N/A

6. Strengthening the regulatory framework

(a) Is there any need for further EU-level regulation to stimulate EE investments in buildings beyond the Commission proposal for a new Energy Efficiency Directive? If so, what should these measures entail?

ELIH-MED and MARIE share the same analysis concerning EU regulations. There is first a need of monitoring the concrete implementation of EU directives before elaborating new ones. This monitoring could lead to the necessity of adjusting or amending some regulations.

The role of EC as supervisor of the directive transposition has to be reinforced in order to include the implementation.

Another very important question to be considered is the internal relationships in EC. How EU funding programs (ERDF, VII Framework Program, IEE, ICT, Territorial cooperation, ENPI...) could optimize their contribution to the same goals? How capitalization of EU projects related to EEB can be increased in order to avoid duplicities and funds dispersion? The MED programme experience in capitalization shows the important synergies that are possible. In this sense EC should develop an important effort of coordination and capitalization of projects with EU funds related to EEB.

The regulation framework could be improved to facilitate the mix of several programmes' funds (IEE, FP VI and VII, ICT PSP, etc) and their coordination at regional and local level.

Third point, the redefinition of ERDF regulations for each objective of the cohesion policy is the main and most ambitious challenge for the EC. The objective is to increase a lot the leverage effect of ERDF funds, giving to ERDF beneficiaries the possibility to mix it with other funds, private or public, to multiply energy efficiency projects all over Europe, but with a high level of transparency in its spending and avoiding speculation.

The EC could also elaborate recommendations and guidelines on how to build integrated transnational, national, regional and local strategies using examples as MEDBEE or BEEN (transnational), Grenelle bâtiment (at national) MARIE Regional Strategies (at regional) or developing Covenant of Mayors strategies (at local).

These recommendations at EU level should facilitate the creation and development of the EU framework for integration (see answer 3 (c.1).

MARIE and ELIH-Med projects are eager to commit their efforts in order to help EC in producing these Recommendations at EU level.

The single way to overcome the barriers and failures defined is pushing all the communities in the same direction. An EU level framework should be defined through the Recommendations outlining the direction in order to clarify how each community (business, public administrations and NGO) can optimize their own contributions to reach the 2020 goals. The last EU Council's views on the Energy Efficiency Directive, which has moved backward on the number of public buildings to be retrofitted, is a bad signal sent to all actors on the necessity and will at policy level to increase energy efficiency, starting by setting a good example with public buildings, even in a context of economic crisis.

(b) What could be specific measures to be taken at national level to implement and complement most effectively the EU-level regulatory framework for energy efficiency?

Unfortunately we do not have enough time to prepare, agree and implement regulations. Regarding the Spanish case, nowadays we still do not have the EPBD Directive transposed to National Regulations Framework. It will be better to develop in each Member State the EU EEB framework and facilitate the development of Strategies at Transnational level.

On the other hand MS could facilitate a lot the connection between Transnational Strategies with regional and local participation. It is of special importance to achieve progress in the preparation of Regional Investment Plans (MARIE project has prepared a model and a test to experiment in several participating regions). Regional Investment Plans will be the guarantee of effective intervention during next financing period in order to reach energy savings targets of 20% in 2020. In this sense MS could facilitate the preparation in all their regions the Investment Plans for Energy Renovation in buildings.

At local level, SM and regions can also help cities and towns to link Regional Investment Plans with more detailed Plans at different urban scales (MARIE project has been preparing a model of Building Energy Renovation Plan at detailed scale: urban islands with 30 – 40 buildings). The Covenant of Mayors Plans will be very useful but must be developed considering the energy renovation needs of all buildings and not only the public one's.

In Spain, it would be helpful for the reduction of the country general rates to incorporate more effective legislation requiring buildings to undertake periodic

inspections that include an assessment of the conservation status of the buildings and an energy assessment, forcing those buildings that have a high consumption to reduce it.

(c) What are specific needs for policy guidance and awareness raising among different stakeholders groups?

Specific efforts in terms of policy guidance and awareness raising have to be done to target banks' staff, ERDF managers in regional and local authorities and energy providers.

Stakeholders on line platforms and social networks and other IC Technologies are tools very interesting to create and develop a running current of opinion and awareness raising through their participation and contribution in the preparation of Territorial Strategies.

As mentioned before, MARIE project has created a platform for Mediterranean countries (www.marieapp.eu) and this experience in platform management during next two years could be very useful to be implemented in other territories (considered in Territorial Cooperation). One of the important elements of the platform creation will be to think in how the platform could be maintained beyond MARIE project with self financed projection. In this sense the MARIE Associated Partners Platform has been created and managed considering that the stakeholders' guidance and awareness rising depends of their level of responsibility, commitment and involvement in one idea, policy or strategy.

7. Our conclusions

Main points:

- 1) Coordination of all the European funds and their strategic orientation towards investment and solutions to overcome EE barriers.
- 2) Coordination between all the decision makers' levels: local, regional, national and European. This is the only way to overcome the detected barriers and to move the market to the EU requirements.
- 3) Innovative financial, technical and awareness raising approaches based on a strong knowledge of energy savings potentials and on the development of the social economy models
- 4) Reliability of the implementation model at regional level.
- 5) Investment programme at regional level: look for new models

- a. Public-private partnership: creation of regional public agencies to manage EU funds, incorporate private sector through energy efficiency clusters, financial entities,...
- b. Change action level to make investment feasible