Workshop on “Policies to improve the energy performance of buildings”

D6.8 "Minutes to the mid-term dissemination workshops"

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ENTRANZE Project

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Project consortium:

EEG	Energy Economics Group Institute of Power Systems and Energy Economics Vienna University of Technology
NCRC	National Consumer Research Centre
Fraunhofer	Fraunhofer Society for the advancement of applied research
CENER	National Renewable Energy Centre
eERG	end use Efficiency Research Group, Politecnico di Milano
Oeko	Öko-Institut
SOFENA	Sofia Energy Agency
BPIE	Buildings Performance Institute Europe
Enerdata	Enerdata
SEVEn	SEVEn, The Energy Efficiency Center

The ENTRANZE project

The objective of the ENTRANZE project is to actively support policy making by providing the required data, analysis and guidelines to achieve a fast and strong penetration of nZEB and RES-H/C within the existing national building stocks. The project intends to connect building experts from European research and academia to national decision makers and key stakeholders with a view to build ambitious, but reality proof, policies and roadmaps.

The core part of the project is the dialogue with policy makers and experts and will focus on nine countries, covering >60% of the EU-27 building stock. Data, scenarios and recommendations will also be provided for EU-27 (+ Croatia and Serbia).

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Content

Workshop on “Policies to improve the energy performance of buildings” (2013)

Organised by BPIE as part of the ENTRANZE project and as part of its initiative in Romania

I. Setting the stage

European legislation on buildings (EPBD) and energy efficiency (EED) requires Member States to develop strategies on how to progressively transform their national building stocks into an energy performing and climate neutral built environment. Very low or 'nearly Zero-Energy Buildings' (nZEB) will become mandatory for all new constructions from 2020 onwards. At the same time Member States will have to draft strategies outlining the renovation of buildings in order to assure low levels of energy consumption. The harmonisation with EU policies and requirements will facilitate the access to EU funds for improving the energy performance of buildings.

In the framework of the IEE ENTRANZE project, BPIE organised the Romanian mid-term workshop in Bucharest on 17th April 2013.

The overall aim of the workshop was to debate potential pathways, strategies and policies to upscale nZEB/deep renovation of the existing building stock and to support the transition towards nZEB in Romania. A particular focus was put on facilitating the public debate for the development of a funding scheme for energy efficiency in Romanian public buildings. In order to stimulate the debate, examples of good practices from the Czech Republic and Poland were presented.

The workshop brought together key stakeholders in Romania (from local authorities, associations from the construction sector, energy auditors, and experts from the Czech Republic, Poland and Romania) and included high level representatives from the European Commission and the Romanian Ministry for Regional Development and Public Administration. These local and international stakeholders came together to discuss potential solutions to achieve a fast and strong penetration of nZEB and RES-H/C within the existing national building stocks in Romania by adapting external experiences to local market conditions.

II. The policy framework in Romania: status and further development

The first panel of the workshop focused on existing policies enhancing the energy performance of the Romanian building stock and future policy perspectives. The discussion led to the following observations:

- There are positive developments in Romania as building renovation is on the top of the policy agenda. Several programs and financing schemes addressing building renovation and renewable energy integration are currently in place: the *National Thermo-renovation Program* of block of flats (GEO no. 18/2009), the loan scheme for thermo-renovation of residential buildings (GEO no. 69/2010) and the *Casa Verde Program* for promoting renewable energy in buildings. Moreover, in 2012, the *National Thermo-renovation Program* of blocks of flats has been amended to allow for the absorption of EU funds (Government Emergency Ordinance-GEO- no. 63/2012).
- However, at the moment there are no clear longer-term strategies for improving the energy performance of Romanian buildings, neither clear targets nor goals. Budget and lifetime of the existing support programmes are decided on annual basis and therefore do not allow for long-term planning, nor vision.
- This absence of a long-term framework does not offer a predictable and stable investment environment for private businesses and buildings owners. It represents also an issue for attracting additional EU and international funding.
- The current programmes may finance the deep renovation of a small share of blocks of flats between 1950 and1990, but do not address larger building stocks.
- Given the low purchase power of most of the building owners, the *National Thermo-renovation Program* of block of flats (GEO no. 18/2009) offers now a very generous grant that cannot be continued in the future. Therefore, it is necessary to start planning for a gradual transition towards a lower level of grants and other more commercial based support schemes able to address the entire building stock renovation by 2050.

The *National Thermo-renovation Program* of block of flats is meant to support investments in energy efficiency of condominiums. The programme aims to increase the energy performance of apartment blocks massively constructed during communist times, to create and maintain jobs in the construction sector and to promote social cohesion. The National Program has been amended in November 2012 and temporarily transformed into a pilot program using European Regional Development Funds (ERDF). The expected result of these projects is a reduction of at least 40% of heating consumption and reaching minimum energy consumption for heating depending on climate areas. This programme targets condominiums constructed between 1950 and 1990 inhabited by vulnerable social categories that have a reduced income (i.e. with more than 50% households with income <500 Euro). Total budget of this pilot program is 304 million Euro, where 150 million Euro are from the ERDF and 154 million Euro from national resources. The pilot program has to allocate the full budget in 2013. 60% of the co-financing comes from the ERDF and State budget and 40% from local public authorities (LPA) and home owner associations (HOA): The financial support is divided as follows:

- 30% (LPA)+ 10% Home Owner Association (HOA) if net income of more than 50% of families < 150 Euro
- 20% (LPA)+ 20% Home Owner Association (HOA) if net income of more than 50% of families < 350 Euro
- 10% (LPA)+ 30% Home Owner Association (HOA) if net income of more than 50% of families < 500 Euro

An important aspect of this programme is that budget allocation is limited in order to avoid the concentration of funds in a region or in a certain municipality/district. For the moment there have been a reduced number of applications for funds, but the Ministry for Regional Development and Public Administration is expecting to receive more in the following period. Critical voices mentioned that there should have been more available information on this scheme and that the Ministry could have launched a more effective awareness campaign.

This pilot programme will end this year and preparations for the next programming period are underway. The Cohesion Policy package for 2014-2020 is currently negotiated between Member States. One of the thematic objectives refers to supporting the transition to a low carbon economy in all sectors. Among the European Commission's thematic priorities for Romania we can identify "using and protecting natural resources" as a focus point. As mentioned, the programming package for the next financing period is currently being debated at national level in the context of consultative committees. Within the regional development committee there is a special working group which has the goal to draft a social-economic analysis and to outline the next programme financing energy efficiency investments in buildings. Thus, the working group, composed of regional development agencies and private organisations, sets out to produce an analysis of energy efficiency in the Romanian building stock, to develop a SWOT analysis and discuss investment priorities. There were stakeholders participating to our workshop who were not aware about the call to become member of this committee. There are other preparations being made for the next framework such as laying out a strategy on how to use structural funds to finance investments in energy efficiency measures targeting the public and residential sectors from Romania – this is being prepared by the Ministry in collaboration with EBRD.

It is the appropriate time to discuss programming because meeting the "20-20-20 targets by 2020" is a matter of urgency especially in the context in which estimations show that there is a deficit of 10% between current trends and energy efficiency targets. The next Multi-Annual Financial Framework (MFF 2014-2020) promises a considerable increase of funds for energy efficiency programmes: 17 billion Euro to be allocated through cohesion funding and around 7 billion Euro through Horizon 2020. Horizon 2020 includes schemes like *EE PPP* and *Smart Cities and Communities* that have no Romanian stakeholders so far. Therefore, there are numerous opportunities for Romania to receive EU funds but at the same time it has to attract funds from the private sector, from banks and energy companies.

III. Good practices in financing the renovation of public and residential buildings
- The Czech and Polish Cases –

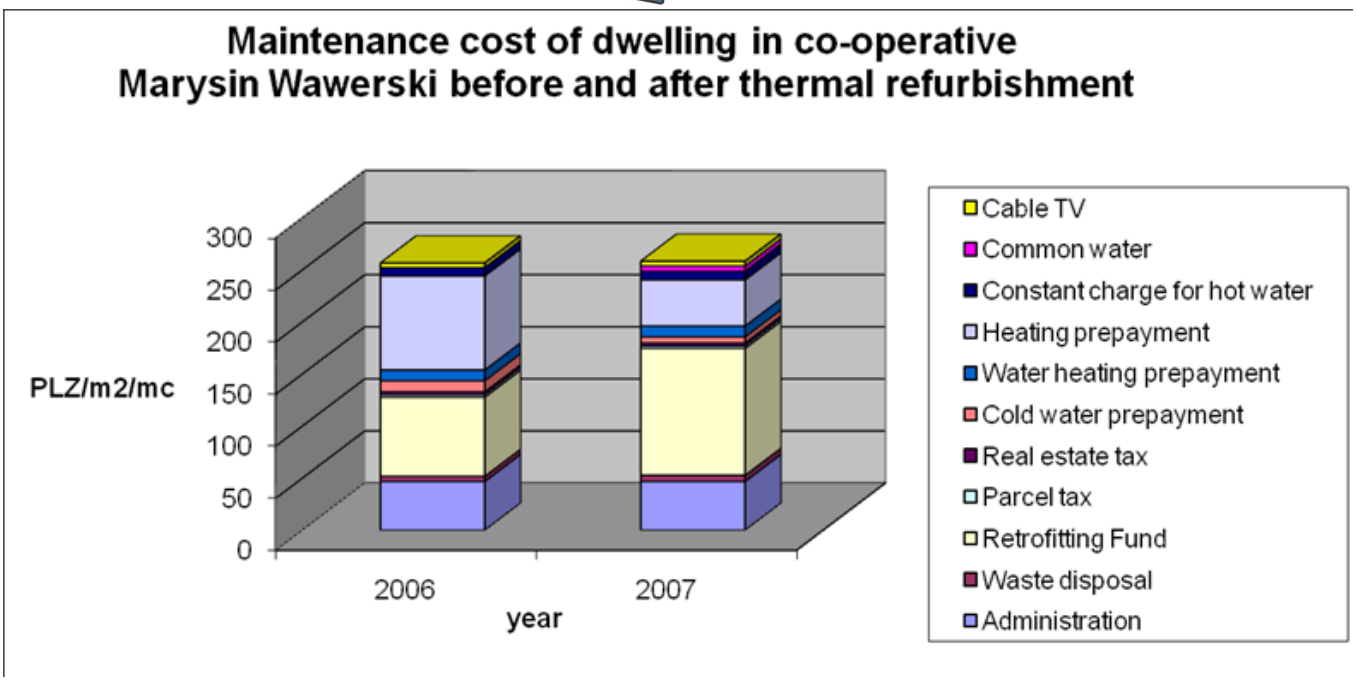
The Czech case brought to the table a series of examples of successful subsidy schemes with a special focus on ESCOs. Since 2009 financial resources of municipalities have been constantly decreasing and taking up loans has become increasingly difficult. The Czech Republic has a set of programmes that aim to overcome these setbacks.

There are three important subsidy schemes: *Operational Programme Environment, the Green Savings Programme and the Panel Programme*. The *Operational Programme* is financed from several sources: the Cohesion Fund, the European Regional Development Fund, and the National Environment Fund and from the State budget. This scheme targets municipalities and has eight priority areas among which we find thermal renovation of public buildings. Next, the *Green Savings Programme* is financed by the profit made by selling emission credits and focuses on residential buildings. The main subsidy measures focus on the insulation of houses, installation of renewable sources and constructing new buildings that comply with passive energy standards. Last, but not least, the *Panel Programme* focuses on the renovation of residential buildings and - compared to the other schemes mentioned above - it doesn't offer investment sources, but only advantageous interest rates. Usually, this programme is combined with the *Green Savings Programme*.

The Czech case provides a good example of EPC framework implementation fully taking advantage of the financial saving measures it implies. This example is very useful for Romania that is planning to introduce EPCs. Energy performance contracts could effectively address existing market barriers. But in order for EPCs to become a reality in Romania, they need both private and public support in order to develop.

The Polish case study focuses on a sole scheme, namely the *Thermo-Renovation Fund*, which entails a comprehensive modernisation in order to reduce annual energy demand. This particular scheme couldn't be implemented without firstly modernising the whole heat supply system of a building. It also aims to modernise district heating networks and encourage conversion of conventional energy sources into renewable ones and to install co-generation systems. Over the years (programme dates from 1998) there has been a high number of applications, and this was due to campaigns aimed at raising awareness among beneficiaries. Moreover, this scheme offers incentives to invest and creates jobs. One of the most important aspects of the Polish framework is the well-established status of Home Owners Associations (HOA) which are highly organised, democratically managed and are creditworthy. Another factor that makes this scheme relevant is its independence from the government, meaning that the banks are managing the fund and determining the worthiness of the applications.

Caption: The Polish case study shows that it's possible to finance refurbishment without increasing maintenance costs of the dwellings by their owners.



Graph 1: Polish Case - Method of collecting own resources for thermal refurbishment

Credits: Andrzej Rajkiewicz (NAPE)

IV. The implementation challenge in Romania

There has to be a clear vision and long-term strategy focusing on the deep renovation of the existing building stock by 2050. It should be in line with other strategies at EU level to be eligible to attract EU funds. The deep renovation of buildings will generate multiple benefits: economic (stimulating the job market, increasing the value of properties, increasing industrial competitiveness, reducing energy imports…), social (increased living standards, healthier environment in buildings, increased productivity, low rates of living expenses), environmental (reducing CO_2 emissions and pollution) and relate to energy security (reducing fossil fuel and imports dependency, avoiding creating new capacities).

A renovation strategy must have interim milestones and should be based on a continuous and effective monitoring process.

A long-term renovation plan has to be elaborated in conjunction with other long-term energy, environmental, economic and societal strategies in order to exploit synergies, to minimize costs and to maximize benefits. For a successful implementation of a long-term renovation plan it is vital to involve and engage all relevant stakeholders, from its elaboration to its periodical revision, including experts, industry and investment communities.

The implementation of the renovation plan has to be based on policies and measures able to scale up renovation rates and depth. Indeed, in order to reach the ultimate objective of transforming the existing building sector into a sustainable one by 2050, renovation rates need to ramp up from the prevailing rate of around 1% of the total floor area renovated

annually, to around 3% p.a. from 2020 onwards (BPIE, 2013). Efforts to increase the rate and depth of renovation will stimulate at the same time the market uptake of highly efficient and renewable technologies and construction techniques that can deliver the expected increase of the actual energy performance of buildings. Therefore, it is important to consider the technological dimension as well as training activities for the necessary upgrade of skills and qualification of all white and blue collars involved in delivering low-energy buildings (e.g. architects, construction workers, certifiers and auditors etc.).

Last but not least, a successful and realistic long-term renovation plan has to consider all societal, environmental and macro-economic benefits (e.g. job creation and additional tax income to public budgets, development of supply chain industry, avoidance of new power plants etc.) and to consequently define the right level of public support for private owners renovating their buildings. The ultimate goal of a long-term renovation plan has to be a complete market transformation by 2050 and a gradual reduction of public support leading to renovation activities on commercial basis. Therefore, only by creating a longer-term, predictable business framework private banks and institutional investors will find building renovation a low risk investment and create the necessary flow of private capital to upscale the renovation activities.The workshop touched upon some important aspects relating to EU opportunities which will help design a strategy for buildings in Romania. The EU vision is long-term so there is an emphasis put on energy, low-carbon and resource efficiency roadmaps. Taking into account the requirements of the EU Directives (EED and EBPD), it is imperative to improve synergies with these policies in order to facilitate the access to EU funds for a sustainable development of buildings, for the construction and supply sectors.

The interim results of IEE project ENTRANZE show that Romania has a significant potential for improving the energy performance of existing buildings. Nevertheless, to reach this potential as well as to increase the use of EU Funds it is necessary to strengthen building policies and to integrate them in long-term strategies aiming to deeply renovate the existing building stock as well as to move towards nearly zero-energy buildings.

The Romanian programmes which are currently in place have neither long term vision nor specific objectives, thus there is an issue to get financial support through EU structural funds. Lastly, the market is not ready to support energy efficiency projects and the banks don’t have the capacity to finance long-term programmes in spite of existing financing schemes supporting thermal rehabilitation projects (supported by CEC Bank in cooperation with the Ministry for Regional Development and Public Administration). In addition, there’s also a need to push for a change in behaviour regarding energy efficiency measures targeting both consumers as well as other stakeholder groups.

The further development of policies and measures stimulating nZEB renovation of Romanian buildings

During the workshop, several topics for a further improvement of policies, and the regulatory and investment framework have been addressed, concretely the need for:

- A long-term renovation plan, targeting the transformation of the existing building stock into a very energy performing one by 2050. This is a specific requirement of the

Energy Efficiency Directive. By strengthening the alignment between national and EU policies better conditions will be created for attracting EU funds for the deep renovation.

- A specific renovation program for public buildings as requested by the Energy Efficiency Directive.
- A reinforcement of the existing energy regulations for buildings and the need to move towards dynamic energy performance requirements, able to secure the transition towards nZEB and beyond.
- the elimination of existing market barriers and the creation of better conditions for stimulating the deep renovation of buildings.
- A more vigorous involvement of private capital.
- Predictability of actual policies and programmes addressing building renovation by securing a clearer multi-annual budgetary framework.
- Significantly increased information of buildings owners and relevant stakeholders on existing policies, on deep renovation benefits and on available financing schemes. In this way, the public perception on deep renovation will be improved as well as their knowledge regarding social and economic benefits.
- Increasing the synergies between building policies and other national, local and urban policies. For instance there is a need to reinforce the links between the renovation of blocks of flats and district heating strategies.
- Better monitoring of the results of policy and programme implementation as well as a better integration of macro-economic benefits.
- A gradual and predictable reduction of grant levels within the National Thermo-renovation Programme for block of flats.
- Up-scaling and mainstreaming the actual credit line with subsidized interests for building renovation. An additional preferential credit line for securing co-financing within the National Thermo-renovation Program for block of flats will be necessary and even more in the light of reducing the grant levels.
- Vigorous educational, training and qualification schemes for white and blue collars involved in buildings renovation. The IEE Build-Up Skills project ROBUST, already defined the status and need for increasing the skills of construction workers in order to be able to cope with nZEB challenges.
- demonstration programs and stimulus of related research for nZEB, new and renovation; stimulating local know-how will be key for maximising macro-economic benefits of building renovation and impacting the supply chain industry.
- Last but not least, the stimulation of a public debate involving all relevant stakeholders and ministries. The objective should be to shape and periodically adjust building policies. A policy is strong and effective only if it is supported by large categories of citizens and companies.