

Dear Mr/Ms,

As a non-governmental organization representing the construction and real estate related industries, Romania Green Building Council's (RoGBC) mission is to actively participate and contribute to the creation of legislative conditions that encourage the development of low energy buildings with a significantly reduced impact on the environment.

The European Commission is asking all Member States to prepare and submit by 31st of June 2011 the revised National Energy Efficiency Action Plans (according the Energy Service Directive) and a list with measures, including those of financial nature, that ensure the implementation of the EPBD 2 objectives. We took the initiative of gathering feedback from our members and collaborators on financial and fiscal measures that support energy efficiency in buildings.

The RoGBC organized on the 12th of May 2011 a half day workshop to discuss existing financial measures for supporting sustainability in construction (with a focus on energy efficiency in buildings, from the private sector perspective). The discussions were also organized around new financial mechanisms that could be considered. Participants at the event included representatives from the banking sector, investors and real estate developers, academia, public authorities and providers of materials and solutions for buildings. The discussions were organized in two working group: A). Existing financial measures and B) New mechanisms that could be considered

The results of this feedback are structured in the following report as follows:

- Financial Mechanisms for encouraging energy efficiency in buildings in Romania – includes the conclusions of the workshop RoGBC organized on the 12th of May
- Annex 1 with more information on the Green Mortgage financial mechanism proposed and developed by RoGBC
- Annex 2 includes a review of the existing financial instruments implemented in different countries in Europe. The material was created by the World GBC Europe Network based on the information gathered from the Green Building Councils active in Europe including Romania.

We hope you will find this information useful for your current initiatives and we express our willingness and availability of discussing them with you and/or assist you with further support for implementation.

On behalf of the member companies of the Romania Green Building Council and on the additional stakeholders present in our discussions to date, I submit the following report.

Thank you for your attention,

Steven Borncamp, President

Romania Green Building Council

Financial mechanisms for encouraging Energy Efficiency in Buildings in Romania

Introduction – Why the building sector is important when establishing measures for reducing energy consumption?

In Europe, the building sector is responsible for 40% final energy consumption and 36% CO₂ emissions¹. For reaching the targets under the Climate and Energy Package (20% reduction in final energy consumption and CO₂ emissions by 2020) Member States must evaluate and address the sectors with higher impacts . Adopting and implementing policies and measures meant to support a high level of energy performance in existing and new buildings is not only effective for reaching the targets but also efficient from the cost perspective.

The direct benefits of supporting energy efficiency in buildings are much more attractive - job creation and economic stimulus for the national/local level. In addition, the costs associated with implementing energy efficiency measures in buildings are minimal as they are not cash expenditures but rather investments paid back by future, continuous energy savings.

In Romania the social impact should be decisive when prioritizing policies and measures meant to encourage energy efficiency. In the household segment, the potential for energy efficiency might vary – based on the types and intensity of the policies applied – between 5.8% and 33.5% by 2020². In the context of thermal energy subsidy removal (that was announced for the winter of 2011), 1,6 Million households will have to pay an increased energy bill of up to 60%. This equates to more than 20% of monthly income for 34,4% of the families living in households currently connected to the grid³.

Therefore, ensuring efficiency of the existing programs and finding new solutions for maximizing the level of investment that could be attracted from the private sector for financing refurbishments is essential.

Legal context: Article 10 from Directive 2010/31/EU on the energy performance of buildings require that all Member States should submit to the European Commission a list with proposed measures and instruments including those of a financial nature, which promote the objectives of the Directive. The lists with measures should be submitted every three years, with a first deadline on the 30th of June. It is expected that the list of measures to be included in the National Action Plan on Energy Efficiency.

¹ http://ec.europa.eu/energy/efficiency/buildings/buildings_en.htm

² http://www.eepotential.eu/results_cty_pot.php

³ According to the data from a National Statistic Institute study carried out in 2008 on 3000 households

Suggestions that came out of the workshop organized by RoGBC on the 12th of May:

A. Existing financial measures

There were discussed the existing programs that deal with building rehabilitation and have a big impact at the general citizen level and the private sector (Thermal Rehabilitation Program, Loan program guaranteed by the state for thermal rehabilitation). The main suggestions/points of view expressed in the discussions:

- **Thermal Rehabilitation Program**⁴ is one of the most popular and significantly contributed to raising awareness on the benefits of building rehabilitation and stimulated demand for these types of works from the citizens. However the workshop participants expressed the following points of view:
 - The **Financing process** at the local public authority level is lengthy and challenging (a 2-3 years process from the selection of the project for financing to finalized implementation); the 50% funding share from the government reaches the local public budgets very late and this causes long delays in the implementation phase; the standard cost limits imposed are not realistic and affect the quality of the works
 - The **Level of grant** for rehabilitation works – of 80 to 100% from the state budget – is not sustainable for the long term since the government budget is limited and the building stock that requires rehabilitation is huge. In addition, because the end users (owners' associations) sometimes are not involved financially, they cannot influence the process at all and are not directly interested in checking the quality of the work- Therefore, we need to find solutions to maximize the level of funds that can be invested in thermal rehabilitation works by combining public funding with private funding.
- **The Loan program for building rehabilitation guaranteed by the state**⁵ was considered a good initiative for increasing the rehabilitation rate; the inclusion of individual residential buildings as eligible beneficiaries and the possibility to cover also the costs of rehabilitation of thermal installations and HVAC from the loan - were also considered good changes. However the banks reported a low level of interest from owners' associations in accessing the program and they identified the following weaknesses:

⁴ OG 18/2009 with further modifications

⁵ OG 69/2010

- Lack of program promotion to the owners' associations⁶;
 - The implementation of the two programs in parallel, addressing the same target market is not efficient – owners' associations are more interested in the grant program (100% funding) than in the loan program and they prefer waiting in line for something free (grant) than working out a funding solution that involve personal money by accessing the loan.
- **General solutions proposed by the participants:**
- A. Reorganizing the financial support mechanisms** for energy efficiency measures in buildings so that a higher rate of rehabilitation and higher level of investments from the private sector are ensured through :
1. **Differentiating the level of financial support based on the monthly income** of the families:
 - a. High level of grant (80-100%) to be available only for poor families
 - b. Reduced level of grant combined with bank financing (loan) for families with average incomes
 - c. Only bank financing (loans) – for families with high incomes
 2. Another solution for maximizing the level of funding from private sector would be for public authorities to organize “reverse auctioning for establishing the optimum level for co-financing”. That would require owners' association to bid on the level of co-financing (who comes with a higher rate of co-financing has priority in implementation/receives a level of grant – based on what they bid for)⁷.

⁶ For now the banks see this type of credit as a regular product and think that investing in its promotion is not their duty (is not cost-efficient – due to the lack of interest from owners associations). A circle of blame is being created and it can be broken only through awareness raising and education on the economic and environmental benefits of energy efficiency investments to all stakeholders involved (banks, owners' associations, local public authorities).

⁷ It would be very difficult for the public authorities to estimate which is the optimum level of financing to be offered for thermal rehabilitation projects – so that the owners' associations are interested to co-invest; considering that the Thermal Rehabilitation Program already showed some visible results that would attract the trust and interest of owners associations and the elimination of subsidized price for thermal energy in the winter of 2011 was already announced - it is expected a high increase of the level of interest of owners' associations in thermal rehabilitation works in the next years to come. Therefore encouraging the competition between owners association on level of co-financing (who can contribute with a higher rate) will lead to concrete results in

B. Increasing the level of awareness and education of all the types of organizations involved in the process (local public institutions, owners' associations, banks, construction companies) through information campaigns and training on the economic, social and environment benefits of energy efficient buildings; the promotion of best practices implemented in Romania – monitoring and displaying the results of implemented projects (financial and technical performance) – is essential.

C. New Mechanisms that should be considered

a. Green Mortgages

The main mechanism discussed was Green Mortgages⁸, developed and proposed by RoGBC .

The need for implementing a pilot project for testing the mechanism was discussed. The banks showed interest in adopting and implementing the product, but they need financial and technical data from projects implemented in Romania – to verify the model from financial point of view.

The products would be offered by the banking sector and would benefit both developers (encouraging the development of new residential projects with high energy efficiency levels and low impact on the environment) and the end users (buyers) highlighting the importance and role of energy audits.

b. Allocating at least 40% from the funds obtained from the Green Investment Schemes⁹ after the selling of the CO2 certificates (AAU – Assigned Amount Units) for building rehabilitation projects

According to the declarations of the Ministry of Environment and Forestry, the selling of CO2 certificates could bring 1,5 -2,0 BN to the state budget, and the building sector is already included as an eligible one for investments . It is very important that, when allocating percentage of funding from the GIS in between sectors, the cost efficiency aspect is considered first. The average cost for CO2 emissions abatement through energy efficiency in buildings is of -35\$ per ton compared to measures applied in transportation (-10\$ per ton) or power supply

maximizing the level of investments in building rehabilitation. The local public institutions' role would be to guarantee high level of quality of the works and revise the existing standards of costs.

⁸ Detailed description of the mechanism in Annex 1

⁹ Green Investments Scheme established through HG 432/2010

(20\$ per ton)¹⁰. The cost for CO2 emissions abatement through energy efficiency in buildings is negative because the future energy savings are accounted too.

D. Fiscal measures proposed (in the Fiscal Code) – reducing the VAT for thermal rehabilitation works to 5%; installing a different level of property taxation based on the energy performance level from the Energy Performance Certificate.

According to the Fiscal Code local public authorities have the possibility to reduce local taxes based on Local Council decision. When creating such measures there are several aspects that need to be considered to ensure maximum effectiveness¹¹:

- To whom the facility is addressed and what impact could it have on the final user?
- What is the project performance level and how to measure that and when?

For **refurbishments of existing residential buildings** the measures that would have most impact are tax exemption for authorizing the construction works and VAT reduction¹² to 5%. The tax exemption/reduction could be differentiated based on the level of energy performance of the building (ex. no taxes for authorization of construction works for buildings that obtain an A level, 50% tax reduction for B level).

For **new projects** – residential and or commercial/office buildings – the type of mechanisms that would motivate the developers to implement projects with higher level of energy efficiency are the reduction of the fee for obtaining the building permit and building tax reduction. Here again – the differentiation factor should be based on the level of energy performance reflected in the Energy Performance Certificate at the reception of works (example 50% reductions for A level for the first five years, 30% for B level for three years)

It is important that the measures are targeting and rewarding projects (both refurbishments and new projects) that obtain an A level according to their Energy Performance Certificate. The performance level should be accounted/ verified both in the project planning phase (what the beneficiary declares when applying for building permit or authorizations) and at the final phase

¹⁰ UNEP Report 2010 “Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication” http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER_9_Buildings.pdf

¹¹ The information on the effectiveness of type of local taxes exemption or reduction were obtained in a workshop organized by RoGBC at the end of 2009 with developers, architects and local public institution representatives; more details can be find in the report “[Local Measures for attracting Investments in Green Buildings](#)”, pages 43-45

¹² However this is not a measure that could be decided at the local level, but should be considered by the government

(reception of works) to ensure that the performance level that was declared initially was also accomplished.

For more information and follow up please contact:

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The Romania Green Building Council is a non-profit, non-political association of companies that promotes sustainable constructions by providing specific trainings, implementing pilot projects that demonstrate the feasibility of green buildings in Romania and working with the public authorities for encouraging the necessary legislative measures for building green. It currently gathers over 120 member companies representing developers and investors, architects, technical consultants and engineers, providers of construction materials, facility management companies. A complete list can be found at <http://www.rogbc.org/en/rogbc-members>