

**WWF EPO's Answer to the  
Public Consultation on the Financial Support for  
Energy Efficiency in Buildings**

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## **(1) Addressing market failures**

**(a) Are the barriers identified in this document the most important ones? If not, which barriers are missing and why are they important?**

**(b) Which market failures would be most urgent to address? At what level (i.e. EU, national/regional/local) would these failures be best addressed?**

**(c) How could these failures be best addressed? For example; how could behavioural change needed for quicker uptake of energy efficiency measures by society be triggered at the national level? How could the development of an energy services market for households be further stimulated? What could be done to increase awareness raising and promotion of energy efficiency in buildings? How could the business community (e.g. building sector, ESCOs, local banks, etc.) be better supported in delivering energy efficiency in buildings? How could the split incentive problem be best tackled?**

The consultation document correctly identifies the main barriers that act as obstacles to a successful market penetration of energy efficiency measures in buildings.

To unleash the positive effects of energy efficiency to economy, consumers, resource efficiency, and climate, an effective set of policy instruments must address all those relevant market barriers. It is difficult to single out one particular barrier to be tackled first as they are interlinked and in general act simultaneously; therefore, it is essential to take a holistic approach that aims at overcoming multiple barriers at the same time.

From a technological point of view, there are no major barriers that impede the implementation of energy efficiency solutions both in relation to the construction of new buildings or in the renovation of the existing building stock. The absence of technological barriers and the persistence of barriers that the market is not able to overcome alone, calls for strong regulatory intervention and economic incentives from institutional actors. In addition, the high price of state-of-the-art technologies remains a limiting factor for their uptake; the public sector therefore needs to act as a first mover to drive market penetration towards reaching economies of scale.

Overcoming different barriers require a well-coordinated approach between the various institutional levels to identify where best to implement policies and measures and to avoid duplication of actions. In principle, the building sector is country-specific, and some time even has regional characteristics, because of climatic differences, construction habits or different market regulations. As such, local or regional authorities would be best suited to act, especially when trying to overcome information barriers. In this respect, some Member States (e.g. Germany) have gained very good experience by setting-up or at least supporting

the set-up of local and/or regional energy efficiency networks or energy agencies<sup>1</sup>, bringing together local/regional energy suppliers, craftsmen, ESCOs, and local/regional authorities.

However, in too many cases local and regional authorities still lack skills and resources to take decisions effectively and to act in this domain; leaving them responsibilities has just resulted in failure to act. In these cases, it is essential that the EU provides clear guidance, as a minimum, and, if needed, financial support to help national and regional authorities to overcome the relevant barriers. The EU may even intervene in line with the subsidiarity principle, when Member States alone are unable or unwilling to empower local authorities to act.

The level and structure of energy prices are definitely an important element that hinders the take up of energy efficiency measures. Energy prices that are directly or indirectly subsidised are artificially kept at a much lower level than they should be in reality, partly because environmental externalities are not factored in. This makes energy efficiency investments have a longer pay back time and look more expensive. To encourage more responsible consumptions patterns, the European Union could push Member States to introduce progressive tariffs that increase the cost of energy per unit when consumption increases in order to provide the necessary incentives to consumers to invest in energy efficiency measures. Of course, when designing such tariffs, fuel poverty should also be taken into account in order not to penalize citizens living in difficult conditions, especially in case of large families.

The occupants of the buildings and their individual behaviour also play a significant role in stimulating investments on energy savings in buildings. Occupants who do not know where the energy is wasted in their building are less likely to act to address the problem. The promotion of information technologies that offer transparent and real time energy use information (e.g. applications for smart phones and user-friendly smart meters, which provide easy to understand on-time data) could help users to become more aware of how much and where energy is wasted. This is the first step to put them on a path towards taking action to improve the energy performance of their houses.

Public authorities have also an important role in changing consumers' behaviour. Public buildings should as far as possible be renovated with state of the art technologies (e.g. deep retrofits,) as this will be an example for citizens to use them. Public authorities should also disseminate their experiences to contribute in reducing the information barriers and also promote the non-financial co-benefits resulting from the implementation of deep energy retrofits, which include enhanced health and comfort, better acoustics, increased working productivity and improved standards of living.

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<sup>1</sup>E.g. the Berlin Energy Agency, <http://www.berliner-e-agentur.de/en> or the Energy &Environmental Center Allgäueza !, <http://www.eza-allgaeu.de/english/>.

In addition, in order to tackle the barrier of split incentives between the owner and the tenant, innovative financing mechanisms like the model of the UK Pay-As-You-Save scheme, should be further explored. Under such options the repayment of a loan can be linked to the property, not to the owner, and therefore avoid that intention to sell a house in the short or medium term act as a barrier to enter a refurbishment contract.

## **(2) Improving access to financing**

**(a) Are the current EU-level financial tools for energy efficiency in buildings effective? How could the uptake of EU-level funding for energy efficiency (including cohesion policy funding) be improved? As a complement to tailor-made national or regional financial instruments (e.g. set up with a contribution from cohesion policy funds), what could be the future role of centrally-managed financial instruments at EU level in this context?**

The current EU-level financial tools for energy savings are not as effective as they should be:

- They are too complex to be understood by potential beneficiaries. This is obvious in Cohesion Policy for example, where in some MS the funds allocated for energy savings (although modest) have not been spent mainly because of the long and heavy procedure to access the funding, the lack of awareness and capacity, etc.
- There is a multitude of different public funds, which makes the access to the funds even more complex, because potential beneficiaries are lost in different funding proposals and eligibility criteria. A new fund requires several years to be known by potential beneficiaries.
- The amounts available for these tools are too small – the European Energy Efficiency Fund launched by the Commission in July 2011 is allocated with only €265 million. According to the Commission's Roadmap to a competitive low carbon economy in 2050, investments in energy savings in buildings should be increased by up to €200 billion over the next decade.<sup>2</sup>

To improve the uptake of EU-level funding for energy savings, an ambitious integrated policy is required, including 3 crucial aspects:

- Create a one-stop shop in each MS for accessing funding for energy savings projects, ensuring a bottom up structure for the funding schemes. Financial tools must be very flexible and have broad eligibility criteria in terms of scope to meet the specific needs of each potential beneficiary on the local level. In addition, EU-level financial tools must support the national/regional funds and policies and not create parallel processes that are confusing for potential beneficiaries. This also means simplifying the existing EU financing tools for potential beneficiaries and improving the current

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<sup>2</sup> Page 9, A Roadmap for moving to a competitive low carbon economy in 2050, Brussels, 8.3.2011, COM(2011) 112 final.

mechanisms instead of constantly creating new ones. Ideally, the rationalisation of these processes should lead to one single funding proposal for all potential funding streams – to avoid a potential beneficiary to be forced to write several funding proposals.

- A massive effort in capacity building is needed. In Cohesion Policy, national/regional administrations must have the capacity to manage the funding for energy savings projects – including designing and monitoring Operational Programmes. The Commission could help Member States by providing specific training to Managing Authorities on how to use EU structural and cohesion funds for improving energy efficiency in buildings. In particular, an active cooperation in this field between DG Regio and DG Energy would be most welcome as energy experts should be actively involved in this task and provide their valuable expertise.
- In Cohesion Policy, two complementary approaches are required:
  - a) energy saving criteria should be mainstreamed in all programmes, notably through strengthening the ex-ante conditionalities on energy savings, systematically including energy efficiency criteria in project selection criteria, and again involving energy saving experts in all Monitoring Committees (including coming from civil society organisations).
  - b) the climate thematic concentration of the European Regional Development Fund should be increased to 25% for developed and transition regions, and to 15% for less developed regions, in the proposal for Cohesion Policy 2014-2020.

**(b) How could more private financing (both from institutional investors as well as building owners) for energy efficiency projects be mobilised? What would be the role of public funding (both at EU and national level) in this context? Is access to (project development) technical assistance an issue and how could it be provided most efficiently at the national, regional and local level? How could both national and EU financing schemes be improved to best cover all segments of the market (residential, commercial, public buildings, etc.)?**

The future role of centrally-managed financial instruments at EU level should not be in designing energy saving expenditures and projects. The role of centrally-managed financial instruments at EU level could rather be focused on raising more capital in a more ambitious way through the access to private financial markets that local projects do not have.

Cohesion Policy funding, EIB, EEEF can design schemes, where they leverage public funding with private money that will be then redirected to the national/regional schemes. Leveraging money will be more attractive for the private markets at EU level than at regional

or even national level with pooling together many relatively small schemes. Targets should be notably institutional investors like pension funds and insurance companies that should be pushed to invest in very ambitious multi-billion EU-level funding schemes for energy savings – (then again redirected to the national/regional schemes). Mechanisms have to be designed to make sure this will be attractive for these institutional investors (like EIB guarantee, green project bonds schemes, etc).

**(c) Is there a need for guarantee systems related to building efficiency investments? If so, what guarantee systems for efficiency investments would be necessary and how should they be designed? Is there a need for other enabling mechanisms (e.g. risk-sharing, investment vehicles)?**

**(d) 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?**

As far as the perceived risk is concerned, there is an urgent need to educate financial actors about the benefits, and not only the drawbacks of lending money to finance energy efficiency measures in buildings, even to consumers. Buildings' operating costs (energy bills) need to be paid regularly and are usually influenced by the fluctuations of the energy prices that are predicted to increase in the next decades. However, homeowners of the most efficient buildings, thanks to generally lower bills, are less exposed to price fluctuations and to energy poverty. As an example, someone living in a passive house, where there is no traditional heating source, and almost no energy bills, will have an income that will be less sensitive to the rise of energy prices and therefore will easier repay its loan. However, most financial institutions are not aware that a loan for energy efficiency investments in buildings helps homeowners to become less exposed to risk of insolvency. An important tool would be to encourage banks to create loans with interest rates that decrease when the energy performance of the buildings increase to take into account this reduced risk. In this respect, the German CO<sub>2</sub> Building Rehabilitation Programme<sup>3</sup> operated by German Federal Bank KfW is a good example. In recent years, private banks started by designing financing products that can be coupled with a loan or credit by KfW (which usually do not cover the complete investment costs of deep retrofits).

**(e) Are there examples of good practice at national or regional level (with data on costs and benefits) that could be applied more widely?**

The German KfW scheme is a very well known successful example of financing building rehabilitation. This scheme, in addition to providing a source of financing, also positively contributed to create quality and energy performance criteria for building retrofits in Germany ("KfW Efficient House Standards") on top of what is established in the German Energy Savings Ordinance (EnEV). Furthermore, Germany has a Renewable Energy Incentive

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<sup>3</sup>[http://www.kfw.de/kfw/en/Domestic\\_Promotion/Our\\_offers/Housing.jsp](http://www.kfw.de/kfw/en/Domestic_Promotion/Our_offers/Housing.jsp)

Program for Residential and Small Business Customers which provided between 300 and 500 million € per year for RES based energy efficient heating and cooling systems.

The German Energy Agency (Dena) published a study<sup>4</sup> that evaluates deep retrofits of different types of buildings that were carried out in recent years in Germany under cost-effectiveness criteria. The study analyses 350 building retrofit projects; on average, energy consumption was reduced in every retrofitted building by 85%. Part of the analysis focuses on the cost-effectiveness and technical issues concerning deep retrofits of rented buildings. It concludes that renovating a building is both beneficial for landlords and tenants, based on renovations that bring the energy consumption of a building to a level equivalent to 70% of the energy use allowed for new buildings in Germany. This is because the landlord can recuperate the cost of its investment by raising the rent and the tenant can benefit from lower heating costs that compensate the increasing in its rent. These positive effects are reached especially when efficiency measures are coupled with regular modernisation and maintenance work.

Furthermore, a recent E3G report<sup>5</sup> on the Macroeconomic Benefits of Energy efficiency presents different examples of successful financing on buildings retrofits. Estonia, for instance, used €17 million from the European Structural Funds and combined them with state money to build a fund of €49 million that supported building retrofits, by providing low interest loans via two commercial banks.

### **(3) Strengthening the regulatory framework**

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

**(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?**

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

As already mentioned in the answer to the first question, a strong regulatory framework is a pre-requisite to stimulate investments in energy savings in buildings.

Measures in the buildings sector as a complement to the Energy Performance of Buildings Directive (EPBD)<sup>6</sup> are urgently needed. The EPBD failed to reduce energy consumption and greenhouse gas emissions from the existing building stock and to create an adequate and

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<sup>4</sup>[http://www.zukunft-haus.info/uploads/media/dena-Sanierungsstudie\\_Teil\\_1\\_MFH\\_01.pdf](http://www.zukunft-haus.info/uploads/media/dena-Sanierungsstudie_Teil_1_MFH_01.pdf). Abstract in english language is available here : [http://www.zukunft-haus.info/uploads/media/IWUStudie\\_Zusammenfassung\\_EN\\_2\\_.pdf](http://www.zukunft-haus.info/uploads/media/IWUStudie_Zusammenfassung_EN_2_.pdf)

<sup>5</sup>I. Holmes & R. Mohanty (2012). The Macroeconomic Benefits of Energy Efficiency: The case for public action. [http://www.e3g.org/images/uploads/E3G\\_The\\_macro-economic\\_case\\_for\\_energy\\_efficiency-Apr\\_2012.pdf](http://www.e3g.org/images/uploads/E3G_The_macro-economic_case_for_energy_efficiency-Apr_2012.pdf)

<sup>6</sup> Directive 2010/31/EU.

stable financing source to support buildings renovations. Additional measures should ideally be done through the Energy Efficiency Directive (“EED”). However, negotiations between the Commission, European Parliament and Council of the EU are still underway to reach a possible compromise on the final text of the EED and at present it is hard to tell whether this new piece of legislation, once it comes into force, would effectively strengthen the regulatory framework for the buildings sector.

The European Parliament, in the adoption of a Report in the ITRE Committee on the EED, has introduced some good amendments to the Commission proposal that are a very useful complement. WWF hopes that such amendments would be retained in the final text of the Directive, but in case this doesn’t happen, the following should be the basis for additional policy measures:

- 1) Member States should establish National Technical and Financial Facilities that should mainly be used to finance energy efficiency investments with high up-front costs (e.g. deep renovation of existing building stock) and help overcoming the financial barriers. These facilities should become an entry point for the different sources of financing available. This will ensure that resources are pooled together and create a critical mass, instead of having a fragmentation of overlapping funding lines that are not easily usable by the possible beneficiaries. These Facilities could be filled in e.g. with Cohesion policy budget, revenues from the auctioning of the ETS allowances, financing from national budget or resources from EIB. They should also provide technical assistance to ensure the good design of the energy efficiency measures, especially for large projects. Carefully-designed projects will have reduced financial risks and will therefore be bankable, which will facilitate the involvement and support of commercial banks.
- 2) Additionally, Member States should establish well-designed Energy Saving Obligation Schemes (“ESO”) that will contribute to change utilities’ business models from the simple supply of energy towards also providing energy services. An effective ESO scheme could ensure a stable source of funding independent from the Government budget, with which energy companies contribute the up-front investments on energy savings projects. ESOs could become a stable financing tool for energy efficiency in the building sector.
- 3) A comprehensive renovation of the existing building stock of each country is necessary, requiring the development of a long-term national building roadmap that defines strategies and policies in order to achieve this goal. These plans will offer a sense of direction to the market and security to investors in order to start providing financing for these retrofits. At the same time, these plans should be linked to national but also EU energy savings strategies that will be in line with the EU long-term decarbonisation objectives for 2050.



Finally, enforcement of existing and future policies is crucial to achieve results. Even the most advanced legislation is useless if it is not implemented successfully. Therefore, it is essential that the EU provides guidance to Members States on how to apply and transpose European legislation and, at the same time, ensures strong monitoring of compliance.