1. Introduction

The current economic situation in Europe creates concerns and barriers for local sustainable energy action. Therefore much attention needs to be placed on developing as well as introducing innovative financing models, and redefining and improving existing funding schemes. Also more incentives are needed to stimulate private investments.

Energy efficiency is often mentioned as a priority in policy discussions. However, at the same time Europe does not seem to be able to decide on binding targets for energy efficiency. In order to leap forward, the energy efficiency agenda requires strong regulation supported by adequate financing mechanisms. For example the Energy Efficiency Directive under development, must also carefully consider the funding needs of the measures proposed.

This document looks at the concerns and needs, and provides some recommendations and examples from the perspective of local authorities. However, quite some points and proposals also concern households and the private sector, in particular SMEs, as these are key stakeholders for local authorities.

2. Addressing key barriers and market failures

The key barriers for energy efficiency uptake are linked to a) awareness and know how, b) resources and financing, and on c) lack of adequate regulation.

The key barriers for local authorities include

Securing long term – sustainable – financing
Financial instruments are often short-term. The long term perspective is missing. Only “new ideas” are being funded and not enough emphasis is put for the real uptake of those ideas, working methods or technologies.

How to secure funding for actions and measures with long payback periods?
The modern economy is not organized for measures that have long payback periods. Payback times of some measures can be very long even with the rising energy prices. Due to the economic crisis, companies expect that the return on investment is less than 2 years. And ESCOs often tackle only investments with short returns.

Access to financing
Access to financing is difficult, especially for smaller local authorities, as procedures and application forms of funding instruments are often complex and difficult. There is also lack of (easy-to-understand) information on the available funding schemes and application procedures.

Capacities on integrated planning and selecting feasible measures
Cities are often confronted with a lack of personnel for planning and follow-up. Help is still needed for example for deciding on most feasible and cost efficient measures. Also some energy efficiency measures can be technically quite complex – it might be easier to build a small wood chips installation to a building than renovate it to be more efficient. Also organisation of renovations in
public buildings, such as schools, is difficult because alternative location for daily activities needs to be found (small municipalities).

**Lack of possibilities for using the instruments needed**
There might be restrictions for setting up ambitious rules / regulations locally. For example in Flanders (BE) cities cannot put in place regulations for energy efficiency in new buildings (household level) as this is regulated at regional level. Only incentives for citizens increasing energy efficiency can be provided.

**Building owners and users** are faced with
- lack of awareness of the energy consumption. This can be linked to lack of interest or lack of knowledge on ‘technical issues’ but also energy bills that are difficult to understand;
- lack of knowledge about the energy saving potential. Can the building user really get benefits by renovating the house or an apartment;
- Lack of information on available financial opportunities;
- The funding programmes targeted to buildings can be too complex, short-term and changing too often. The building owner has to face uncertainties and the complex application procedures can lead to the rejection of the programs.

„Subventions and tax reductions are for those who are smart enough to find them and those who are rich enough to invest“ City of Ghent, Belgium

Tackling the issues of awareness, know-how and financial support should be targeted to all local stakeholders. However, this phrase highlights the fact that it is quite difficult to address all building owners and users with subventions and tax reductions. Therefore other means are also necessary, as highlighted later for example when tackling social housing.

**Private sector, in particular SMEs**
- Lack of funding for bigger investments or the security / certainty to pay back loans during a long period
- Small companies lack technical staff who could work on issues such as energy saving
- There is a lack of „energy” managers on SMEs or business park levels

3. **Which market failures would be most urgent to address? Who should address them and how?**

An integrated approach is needed for addressing the above mentioned barriers. A mix of instruments is needed: financial support, regulation, tailor made guidance, capacity building - and higher energy prices.

**1) Ensuring long term financing**

Securing long term financing is the most crucial issue related to funding and securing the implementation of long term energy and climate related strategies such as Sustainable Energy Action Plans (SEAPs) or Climate Plans.

Some recommendations:

- In order to move towards a more sustainable and coherent funding, the Sustainable Energy Action Plan (SEAP) prepared in the context of the Covenant of Mayors could be used as a
‘passport’ – or a kind of a quality standard – for receiving EU funding as the SEAP ensures that the local authority has an overall strategy to strive for sustainable energy.

- Funding schemes should have long-term programs, fitting well with the overall energy policy objectives. (For example: Funding programme of the German KFW Bank, see: [http://nachhaltigkeit.kfw.de/EN_Home/Programmes_and_products/Domestic_loan_programmes/index.jsp](http://nachhaltigkeit.kfw.de/EN_Home/Programmes_and_products/Domestic_loan_programmes/index.jsp))

- National and regional revolving funds could be an important instrument, favouring long term projects.

- Zero % loans would be a solution for small and medium sized municipalities.

- Loans also for small amounts (and not only big sums) should be ensured. Loans for small budgets can be an important tool especially for small and medium sized local authorities to implement key energy efficiency measures.

**(2) Private investments vs. public funding**

Implementing energy efficiency measures can be profitable. And there is a great potential for creating partnerships with private sector to tackle energy efficiency and cover variety of investments. However, there are certain measures that are not profitable and will need financial support. For example:

- Energy efficiency measures targeting social housing: the initial investor is not paying the (lower) energy bills. The same problem is also present within the rented apartments. (See tackling investor-user dilemma under point 5)
- New energy efficient and sustainable districts: New districts are not built as energy efficient as they could be (keeping in mind the CO2 reduction targets for 2050). However, new districts will have a very long term influence on energy use.

The CASH-Project ([Cities Actions for Sustainable Housing](http://urbact.eu/en/projects/low-carbon-urban-environments/cash/homepage/)) highlights numerous obstacles in the financing of schemes and the legal framework to organize and support the energy improvement of social housing.

In addition public funding (either from the EU or national government level) is needed in particular for technical assistance, financing expert and feasibility studies, and helping with the initial investment (e.g. for district heating and cooling).

New financial support mechanisms are needed to cover ‘loop wholes’, which the current funding schemes do not yet address. Guaranteed line of credit is one interesting solution. In Spain, the ICO – IDAE – ESES Fund was launched last year (see: [http://www.ico.es/web/contenidos/6/1/9617/index](http://www.ico.es/web/contenidos/6/1/9617/index)). It was a saving and energy efficiency credit line to facilitate the access to financing for energy service companies.

**(3) Raising awareness and building capacities and know-how**

More information and capacity building is still needed in relation to energy efficiency.

- **EU and national agencies** should organize training and formation for different target groups such as architects, craftsmen, etc. Those active in the building sector are more likely to offer energy efficiency improvements if they are trained and informed.
- Energy advice should **respect certain standards** (qualifications of the experts should be ensured).
- **National platforms** should be identified where easy-to-understand information will be provided on national, regional and local funding instruments and opportunities.

However, local authorities can play a crucial role locally for increasing awareness and know-how of citizens, SMEs and other important local stakeholders. They can also stimulate action via financial incentives. This work needs to be supported both at European and national levels.

**Local authorities** can provide

- Technical assistance for example via energy audits

"**Caça Watts**" is a public initiative allowing Cascais (PT) citizens to get an energy audit worth up to 350 € for a lower price, starting from 25 €, with further discounts depending on personal income. An energy audit reveals home energy usage patterns and points of excessive energy consumption; it compares the energy efficiency of home appliances and electrical equipment and provides recommendations on how and where to save energy. Cascais municipal technicians are equipped with software permitting, together with consumers’ energy bills, to perform a technical analysis as well as specific recommendations. Each year, the Cascais Energy Agency carries out approximately 100 energy audits. This project had an investment of 55 000 € and has been delivering greatest benefits in terms of climate protection and quality of life. Energy consumption has been reduced by 75 MWh/year and CO2 emissions by 28 tons CO2 eq./year. Households participating in this initiative have reduced their energy bills by about 100 € per year and household.

- Financial incentives for building owners and SMEs

**Munich (DE)** has for many years been funding energy efficiency in private and commercial buildings. Subsidies cover a wide range of measures such as building insulation, heat generation and solar thermal systems. They start at 300 Euros up to even 1 Million euros for large-scale housing developments.

- Combine guidance and financial support for example when tackling needs of specific target groups

**The city of Ghent (BE)** organises a collective purchase of roof insulation for citizens, resulting in lower prices. REGent is an office giving advice about energy efficiency for households with a focus on low income households. REGent does free energy scans but also provides the follow up guidance and applies immediately free materials during the visits of the energy scans. Citizens can ask for help to find a constructor, to find and apply for subventions and to help to fill in tax papers. For some works households can obtain a loan (financed by FRGE) with no interest charged. The remaining costs of REGent are financed by the city of Ghent.

- Create partnerships with private sector

**The six biggest Finnish cities** – Helsinki, Tampere, Turku, Espoo, Vantaa and Oulu – have formed an unofficial climate network around the Covenant of Mayors with the aim of exchanging experiences and implementing together actions, which benefit from synergies between the six cities. Their work programme already includes a set of common actions and one of them is exploring partnership models with local business. The aim is to increase competitiveness of SMEs – and reduce their emissions - via eco-efficiency and more sustainable working methods.
4. Improving access to financing

(1) Improving existing funding instruments

European funding schemes such as INTERREG, Intelligent Energy Europe, FP7 (Smart cities and communities initiative) and cohesion policy funds are highly welcomed as they have proved to be very useful. Also, as a consequence of the Covenant of Mayors, some important funding instruments have been created in particular the ELENA(s).

Still, the uptake of EU-level funding for energy efficiency can be improved. Tackling some structural issues highlighted earlier (e.g. length of funding periods, available amounts, procedural changes) is important. However, accessibility to different funds could be easily increased by offering user friendly information, better guidelines, and targeted training sessions as well as by further facilitating exchange among applicants. For example in Germany, a series of workshops are organized in the framework of the National Climate Initiative to address these issues.

(2) Funding under the EU budget 2014-2020

We warmly welcome the ambitious objectives for climate and energy related funding included in the proposed EU budget 2014-2020 (ERDF, Horizon 2020, LIFE Climate Programme). The proposal, for spending 20% of the European Regional Development Fund (ERDF) on energy efficiency and renewable energy in more developed and transition regions, and 6% in less developed regions, is extremely important for a better uptake – and ensuring long term stability – for the energy efficiency measures and projects. The role of social housing / low income housing in this context should be reinforced.

However, the Horizon 2020 has a very technical focus and therefore we are concerned that the ‘non-technological’ Intelligent Energy Europe programme will no longer be part of the programme. The Intelligent Energy Europe is a key funding instrument for local authorities funding networking, awareness raising, and development of innovative management models and financing schemes in the fields of energy efficiency and renewables. We encourage that a separate programme with its own identity, and with a focus on sustainable energy policy, capacity building and mobilizing financing, should be included in the Horizon 2020. This programme should be managed by the DG Energy and its priorities defined together with relevant stakeholders. Finally, a specific budget for this programme should be assigned, taking use considerable share of the 6,5 billion euros dedicated to this part of the Horizon 2020.

5. Strengthening the regulatory framework

(1) Binding targets

Binding targets are clearly needed in order to achieve the EU objectives. The 20% energy efficiency target should be finally set as mandatory. In our view this would be the most credible way to give a real push for the European energy efficiency action.

Climate Alliance also supports the 3 % yearly refurbishment target for public buildings proposed in the new Energy Efficiency Directive. The public authorities must lead by example and this target should be seen as opportunity - and not only as a cost - as it will stimulate the local economies and create jobs. The 3 % refurbishment rate can also serve as an important step towards a more long term targets needed for 2050.

At the same time, as public buildings make up some 12 % of Europe's housing stock (the buildings owned by public authorities accounting for even less) and, with social housing excluded, this
objective could cover substantially less energy savings than expected. Therefore it is necessary to move forward also in other areas.

(2) Tackling the investor-user dilemma – What role can Europe play?

There should be a common legal framework for sharing the financial costs and benefits of improving buildings’ energy efficiency between tenants and landlords. We know that the situation is very different in all EU member states and there are many different legal frameworks relating tenants’ homes. However, the general framework should regulate that the raising of rents must be limited to the lowering of future energy costs. Typically this will cover 1/3 of total energy related modernization costs. Another 1/3 must be taken be the landlord for having a better building quality in future (duty of property). There remaining 1/3 must or can be financed by European and/or national funding to fill the gap and for the contribution for climate targets and lower energy import dependency. This 3*1/3 model is actually discussed in Germany at the national level.

Another solution for the Investor-user dilemma would be to use energy standard as a part of the rent calculation. Or transforming the cost for an energy refurbishment from investor to tenants, but not higher as the reduction of the energy saving cost of the tenants (“Warmmietenneutralität”).

(3) Coherence and complementarity – tackling the problem on all sides

Coherence and complementarity of different directives should be ensured (e.g. the EPBD directive and the proposed Energy Efficiency Directive).

Enabling instruments such as the Energy performance certificates (EPC) are seen as a useful tool. However, they are currently too weak. Energy performance certificates could become a more powerful tool, if building owners with a low performance EPC would be obliged to improve the building.

6. Conclusions

Climate Alliance is launching a working group on financing in May 2012. The objective of the working group is twofold: it will exchange on the innovative local financing mechanisms; and seek to influence the new EU budget 2014-2020 in particular working to ensure energy and climate related funding for local authorities.

Collecting concrete examples of innovative and local funding schemes is an important exercise to learn and exchange on funding mechanisms that are effective. However, these examples also serve as means to demonstrate what actually works at the local level; and to show what type of funding local authorities would need to continue their climate work and investments in this field.

Finally, more information is also necessary related to financial implications of Sustainable Energy Action Plans (SEAPs) / Climate Plans. Currently we can only find limited information on economic information on measures and action within these plans. In order to estimate the overall budget, the Covenant of Mayors signatories are required to assess the costs of each key action and measure up to 2020. This is an extremely laborious task and support for preparing such an economic review for a SEAP is still missing. Such an economic assessment is crucial for setting up the priorities and estimating what type of funding needs to be mobilised. Economic assessment would also deliver valuable information, which measures could be financed by private investors and which measures need public funding. Last but not least, knowledge about the economic benefits of measures like job creation, reduction of energy poverty, etc. could contribute to a shift in priorities, both in the
municipal budgets and in the funding priorities of the regions, national governments and the European Union.
Climate Alliance (www.climatealliance.org)

The “Climate Alliance of European Cities with the Indigenous Rainforest Peoples” is the largest European city network committed to climate protection and preservation of the tropical rainforests. Climate Alliance has over 1,600 members from 18 European countries and helps them to achieve their voluntary commitments to reduce CO₂ emissions by ten percent every five years. Climate Alliance advises local authorities on the implementation of climate protection strategies and develops tools for monitoring energy consumption and CO₂ emissions. To preserve the tropical rainforests, Climate Alliance cooperates with Indigenous rainforest peoples. Their partner in this endeavour is COICA, the umbrella organisation of the nine national Indigenous associations of the Amazon region.

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