

Position paper on the European Commission's proposal for the Regulation of the European Parliament and of the Council establishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)

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# Energy Cities calls for innovative non-technological solutions to be supported within the Horizon 2020 in the spirit of the Intelligent Energy Europe programme!



www.energy-cities.eu

## **Energy Cities' position paper**

## Context:

**The European Commission** published a proposal for a regulation establishing **Horizon 2020** - **The Framework Programme for Research and Innovation** for the years 2014-2020. A budget of **€6.5bn** is earmarked for a Specific Objective 3 entitled **"Secure, clean and efficient energy"**. This specific objective should help the EU to achieve its energy and climate targets: "To achieve the targeted  $CO_2$  reductions, significant investments need to be made in research, development, demonstration and market roll-out of efficient, safe and reliable low-carbon energy technologies and services. **These must go hand in hand with non-technological solutions** on both the supply and demand sides" <sup>1</sup>. However, the proposal also reads: "The activities under this challenge will therefore form the **technological backbone** of European energy and climate policy."

**Energy Cities** warns that achievement of Europe's energy and climate targets might be endangered if nontechnological solutions are neglected. Indeed, non-technological actions empowering local authorities & actors are essential for Europe's success. They facilitate the implementation of the EU's energy and climate policy at local level, prepare the field for successful uptake of sustainable technological solutions and investments and favour the acceptance of those innovations by the general public. Non-technological actions also help overcoming market failures, financial and regulatory barriers as identified by the European Commission in the Consultation Paper "Financial support for energy efficiency in buildings"<sup>2</sup>. In the past years, **the Intelligent Energy Europe Programme (IEE)** supported such measures. For instance, without it, the Covenant of Mayors (www.eumayors.eu) gathering some 4,000 cities voluntarily committed to meet and exceed the EU 20% CO<sub>2</sub> reduction target would not have seen the light of day and the same goes for the innovative technical assistance programmes such as ELENA & Mobilising Local Energy Investments (MLEI). According to the Energy Roadmap 2050<sup>3</sup>, the implementation of any of the four scenarios suggested by the European Commission will need the involvement of all actors. Local authorities need to be prepared for that.

#### **Consequently, Energy Cities requires that:**

- A strong support is given to innovative non-technological solutions as these are indispensable for the successful uptake of sustainable technological solutions and investments. In the spirit of the IEE programme, actions empowering local authorities & actors to drive Europe's energy transition are essential, especially those building and strengthening <u>human capacities</u>:
  - <u>Visioning</u>: setting up long-term energy & climate local strategies and targets, a vision based on integrated territorial approach, etc.
  - <u>Implementation of innovative technologies</u>: new skills & qualified experts for the implementation of sustainable energy action plans, uptake of sustainable energy technologies in buildings & facilities, transport, local energy production & consumption, etc.
  - <u>Financial innovation</u>: implementation of innovative financial instruments, setting up new business models appropriate for sustainable energy projects, etc.
  - <u>Social innovation</u>: inventing and implementing new local governance, participatory processes, communication, ways of mobilizing local actors & citizens, changing behaviour, etc.
  - <u>Networking</u>: new ways of exchanging knowledge & innovative practices, taking multi-level actions, etc.
- 2. A clear and separate budget heading is dedicated to non-technological solutions within the spirit of the IEE programme and that it is managed by DG ENER/EACI.
- 3. The budget allocated to the future IEE programme reaches at least €1bn which would be a significant leap in respect of the IEE programme 2007-2013 (worth €730 million).
- 4. Innovative non-technological solutions created and tested within the IEE 2014-2020 budget are **used to trigger and orient massive investments** financed through the Cohesion policy funds, national, regional, local, private funding and other financing mechanisms.
- 5. **Member States uptake innovative non-technological solutions** identified at the EU level (e.g. ELENA & MLEI technical assistance) and replicate them at national / regional level.

<sup>2</sup> European Commission. DG ENER. Consultation Paper "Financial support for energy efficiency in buildings": <u>http://ec.europa.eu/energy/efficiency/consultations/doc/2012 05 18 eeb/2012 eeb consultation paper.pdf</u>

<sup>&</sup>lt;sup>1</sup>COM(2011)809 final: European Commission's proposal for the Regulation of the European Parliament and of the Council establishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)

<sup>&</sup>lt;sup>3</sup> COM(2011)885/2: Energy Roadmap 2050: http://ec.europa.eu/energy/energy2020/roadmap/doc/com\_2011\_8852\_en.pdf

### Learn more: detailed background for Energy Cities' position paper

#### a) European energy & climate objectives and related policies

The European Union is committed to the following **medium and long-term energy and climate objectives:** 

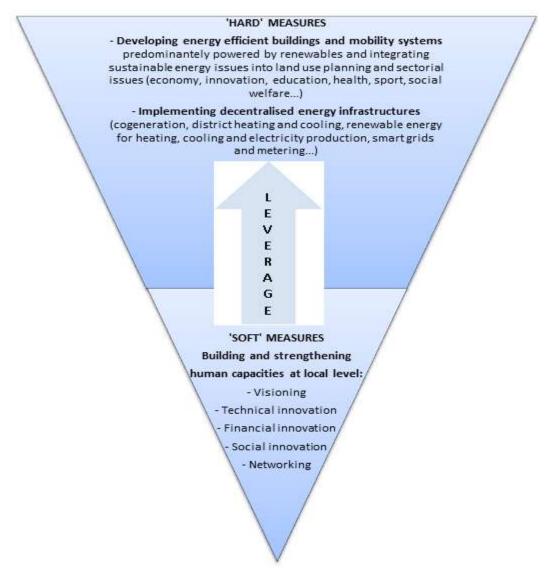
• Medium-term objective: Reducing GHG emissions by 20%, increasing the share of renewable energy sources (RES) by 20% and increasing energy efficiency (EE) by 20% by 2020 comparing to 1990 levels.

This objective was adopted within the EU Energy and Climate Package which became law in June 2009. In 2010, the 'Strategy Europe 2020' replaced the Lisbon and Gothenburg strategies and put much more emphasis on energy and climate issues, triggering development of several related medium-term strategies, plans and European directives.

#### • Long-term objective: Reducing GHG emissions by 80-95% by 2050 comparing to 1990 levels.

This EU objective, re-confirmed in February 2011 by the European Council, gives Europe a long-term vision. Consequently, several strategies have been developed to identify measures and investments Europe needs to undertake, using the back-casting method, such as the Roadmap 2050 for moving to a competitive low carbon economy, Energy Roadmap 2050 or White Paper on the future of transport.

## b) What measures would accelerate the transition towards low energy cities with a high quality of life for all?



Increasingly dynamic and complex developments in the fields of legislation, technology, informatics (internet), finance, communication, participative processes and the like require strong professional skills to keep up with the changes and seek innovative solutions.

Today the **demand is already growing** for:

- Energy and climate managers and local energy and climate agencies
- Urban planners with a knowledge of the low energy city concept
- Architects and construction companies designing low energy and passive buildings
- Financial engineers and lawyers able to set up innovative financial schemes and public private partnerships
- Companies manufacturing and installing low energy and renewable energy technologies (e.g. green public transport)
- Experts in communication, networking, participative processes and behavioural change, etc.

Demand for **technical, financial and social innovation skills** is going to increase even more as soon as innovative financial instruments foreseen by the European Commission are introduced<sup>4</sup>. These are supposed to replace traditional grants and subsidies provided by the EU budget within the MFF 2007-2013. If they are to be largely replicated within the EU, the **competences and capacities of local and regional authorities to use them must be enhanced in parallel.** 

The same assumption applies to the **European Commission's plan to mainstream climate action into many policy areas**, in particular the Cohesion policy, the Common Agricultural Policy and Research and Innovation.<sup>5</sup> The lack of awareness of the benefits of sustainable energy and climate protection actions and the lack of capacities of final beneficiaries to prepare projects integrating energy and climate criteria will condemn this ambition to failure.

Soft measures are an essential lever for the implementation of hard measures. The transition towards a low carbon & low energy economy will not occur without reskilling qualified workforce at all levels.

 <sup>&</sup>lt;sup>4</sup> <u>http://europa.eu/press\_room/pdf/a\_budget\_for\_europe\_2020\_\_part\_ii\_policy\_fiches\_en.pdf</u> (p. 75)
 <sup>5</sup> <u>http://europa.eu/press\_room/pdf/a\_budget\_for\_europe\_2020\_\_part\_ii\_policy\_fiches\_en.pdf</u> (p. 13)

#### Reskilling qualified workforce

#### 1. Visioning, technical & financial innovation

Vocational training and creation of new organisational structures are necessary within three categories:



In-house staff of local and regional authorities: elected representatives, energy managers and experts and other "non-energy" experts

Role: setting up a vision based on integrated territorial approach, policy making, adopting a budget, developing sustainable energy action plans, embedding energy issues into sectorial policies, preparing tenders (green public procurement), negotiating energy performance contracts, etc.



Local and regional energy, climate & development agencies and publicly owned local companies

Role: acting as interface between the local authority and citizens, local private, public and associative stakeholders, providing policy makers and energy managers with professional assistance, preparing, developing and implementing sustainable energy action plans at territorial level



**External experts:** businesses, SMEs, craftsmen, planners, architects, developers, banks & financial institutions, public authorities, communication agencies...

**Role**: implementing actions comprised in the sustainable energy action and investment plans, ensuring the effectiveness of the planned measures and expected results.

#### 2. Social innovation, networking and exchange of knowledge



Amongst all the means that can be used to facilitate the transition, the power of "networking" has been largely underestimated. Basically, net-working is a mode of working which is based on direct and horizontal relations between people involved in similar activities.

It aims at providing and getting know-how and ideas, creating something together and enhancing the capacities of people on the ground to carry out innovative activities. It is a new way of thinking and working which fosters participatory

methods. It opens the door to new forms of governance that are needed at European, national, regional and local levels.

While **European networking** is very powerful to enlarge the field of vision of practitioners to various experiences and to benchmark working methods, **national and regional networking** is absolutely essential as it is the most adapted to enter into details, discuss in depth with colleagues using the same language as well as referring to the same actual legal, administrative, fiscal, etc. frameworks at national and regional level.

At **local level**, public authorities should facilitate networking – oversee and coordinate energy and climate actions taking place within the municipality, facilitate communication between municipalities, local stakeholders and citizens, promote the European and local objectives, organise events (e.g. local forums) to encourage exchange of opinions and experiences and discuss involvement of different local actors in developing and implementing an energy action plan, etc. How local authorities play this role is decisive for the success of energy and climate actions at local level.

The success of social networking in our society demonstrates that such methods need to be further exploited in the sustainable energy field in order to speed up the aforementioned transition.

## **EXAMPLES:** Replicable European initiatives supporting 'soft measures'

#### Technical and financial innovation: European Local ENergy Assistance - ELENA

Although EU budget allocations to sustainable energy projects are very low, the first experimental schemes of **technical assistance** co-financed by European money proved to be very successful.

ELENA (European Local ENergy Assistance) facility, financed by the Intelligent Energy Europe programme, run by the European Commission (DG ENER) and the European Investment Bank, provides grants for technical assistance to local and regional authorities being committed to the EU energy and climate objectives – especially the signatories of the <u>Covenant of Mayors</u>. The wide range of measures eligible for such financial support includes: feasibility & market studies; structuring of investment programmes; business plans; energy audits; preparation of tendering procedures & contractual arrangements and allocation of investment programme management to newly recruited staff. The aim is to bundle dispersed local projects into systemic investments and make them bankable. So far ELENA has provided  $\leq$ 21.8 million in support of 12 large scale projects in total, mobilizing an expected  $\leq$ 1-1.6 bn in private and public investments. Building on the success of ELENA, three more instruments have been created – <u>ELENA-KfW, ELENA –</u> <u>CEB</u>, technical assistance "Mobilising Local Energy Investments".

This facility has been launched as a response of the EU institutions to the needs of Covenant of Mayors signatories – more than 4,000 local authorities (in May 2012) - whose local and regional political representatives voluntarily committed to contributing to the EU energy and climate objectives by reducing  $CO_2$  emissions on their territories by at least 20% by 2020.

## Vila Nova de Gaia (Portugal): Qualified team of 6 experts set up within the municipality

Vila Nova de Gaia (288,749 inhabitants):

- Signed up to the Covenant of Mayors in 2009
- Set up the objective of at least a 25% CO<sub>2</sub> emissions reduction by 2020, taking 2005 as a baseline year
- Prepared an action plan with priority measures to be carried out in the field of urban transport (promotion, electric vehicles), public lighting and buildings (public, private, social housing)



#### Project in a nutshell:

**ELENA** allowed the municipality to:

- Carry out several **feasibility studies** to evaluate the **technical and economic viability** of different technological solutions in sustainable energy projects
- Set up a **qualified 'ELENA team'** (6-7 persons for 3 years) within the municipality and sub-contract **external experts** to provide **technical, legal and contractual** support (preparation of the **tendering procedures**, **contractual agreements and investment programme implementation**)

#### Social innovation and networking: Project « ENGAGE »

The objective of the project financed by the **Intelligent Energy-Europe programme** is to mobilise municipal departments, stakeholders and citizens to jointly contribute to the Covenant of Mayors objectives at local level.

#### **Expected results:**

- Efficient, participative **communication campaign** implemented in all partner cities
- Publicly visible posters displaying engagements of at least 3,300 stakeholders and citizens to carry out climate friendly actions
- On-line poster development tool

More info (en): <u>www.citiesengage.eu</u>





## www.energy-cities.eu

The European Association of local authorities inventing their energy future. The Association created in 1990 represents more than 1,000 towns and cities in 30 countries.

Energy Cities leads the Covenant of Mayors' Office (www.eumayors.eu).

Other related Energy Cities' position paper and documents:

- Energy Cities' Position Paper on the European Commission's legislative proposals for the EU Cohesion Policy 2014-2020, April 2012 <u>http://www.energy-cities.eu/IMG/pdf/Cohesion\_policy\_legislation\_position\_paper\_ENC\_final\_10\_04\_2012.pdf</u>
- Energy Cities' press release "Intelligent Energy Europe" must be maintained within the Horizon 2020 programme!, 28 March 2012 http://www.energy-cities.eu/IMG/pdf/120328 Press-release IEE in Horizon 2020 en.pdf
- Energy Cities' Position Paper on the European Commission's proposal for the Multi-annual Financial Framework
  2014-2020 August 2011
  <u>http://www.energy-cities.eu/IMG/pdf/FUTURE\_EU\_BUDGET\_Energy\_Cities\_FINAL-2.pdf</u>
- Energy Cities' press release "Intelligent Energy-Europe Programme must be maintained", 22 July 2011 <u>http://www.energy-cities.eu/IMG/pdf/2011-07-22 IEE must be maintained en.pdf</u>
- Energy Cities' position paper on the Conclusions of the 5<sup>th</sup> Report on Economic and Social Cohesion, 31 January 2011
  <u>http://www.energy-</u>
  <u>cities.eu/IMG/pdf/5h\_Report\_on\_Economic\_and\_Social\_Cohesion\_consultation\_ENC\_final\_31January2011.pdf</u>
- Low-energy cities with a high quality of life for all http://fr.calameo.com/books/0001260423b56a6f28003

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