

REENERGY' Answer to the Green Paper

A 2030 framework for climate and energy policies

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REENERGY is a European project (<http://www.reenergyproject.eu/>) supported by the INTERREG IVC Programme of the European Commission. The project has been coordinated by the Province of Potenza with the scientific support of the National Research Council of Italy - Institute of Methodologies for Environmental Analysis (CNR-IMAA), INTELI, Intelligence in innovation, Innovation Center (PT) and the Kaunas University of Technology (KTU). The partnership integrates 12 partners from 10 EU countries and besides the above mentioned institutions it includes: BFF Building for the Future Ltd (UK); DCC, Durham County Council (UK); Municipality of Avrig (RO); Municipality of Slagelse (DK); Municipality of Szentes (HU); Municipality of Worms (DE); and PNEC, Association of Municipalities Polish Network "Energie Cités" (PL).

The overall aim of the project is to improve, by means of interregional cooperation, the effectiveness of regional development policies in the area of energy as well as to contribute to economic modernisation and increased competitiveness of Europe by turning urban spaces from energy consumers into energy producers. This project will bring the community added value by developing new and innovative approach and solutions in the field of energy at local and regional level.

The specific objective is to develop an integrated framework for improving energy efficiency and the optimal utilisation of RES by offering an innovative model for creating sustainable energy efficient urban environments.

4. QUESTIONS

4.1. General

- **Which lessons from the 2020 framework and the present state of the EU energy system are most important when designing policies for 2030?**

The main lessons from the 2020 framework to be taken into account in the policies for 2030 should considerate that:

- One of the most prominent issues is related with the harmonization of the financial incentives for renewable energy production. Country market specificities and the unfolding of the opportunities when considering the European scale should shift the policymaking leadership in this scope to the European administration level with specific recommendations to each member state. Country level policies were too unstable (related to the change of governments, especially in less robust economies) and the incentives schemes were unequal. This phenomenon led to several cycles of investment/disinvestments in the renewable, to the creation of secondary markets and sudden increases in additional loads of electricity in unsuitable power grids creating a backlash movement;
- The EU climate deal for 2030 must be more ambitious. The current climate target is not sufficiently striving, and also the renewable energy targets were not high enough at a time when the renewable sector badly needed a catalyst. A new and more ambitious agreement on greenhouse gas targets should be designed, pursuing a 40% reduction on the 1990 levels by 2030, but with a flexibility for the countries to follow customized cost-effective decarbonisation approaches- that is setting differentiated emissions goals to guarantee the economic growth of strategic sectors.

4.2. Targets

- **Which targets for 2030 would be most effective in driving the objectives of climate and energy policy? At what level should they apply (EU, Member States, or sectorial), and to what extent should they be legally binding?**

The RENERGY partnership believes that the EU and Member States targets should be based on ambitious energy efficiency and renewable energy goals and sectorial quantitative targets can be set to foster the achievement of overall targets. It should be also be considered that:

- Member States have specifications and idiosyncrasies that condition the effectiveness of most of the horizontal EU level policies. For example, Southern countries have lower heating needs and more recent building stock. Consequently, dwelling heating and insulation targets should be adapted unsuited to the geography and to the building stock features;
 - Each member state should contribute with the aspects that are easier achieved in its territory. Targets related with the final user would probably be more effective in terms of energy efficiency, which should be the priority, specially in transports and housing heat and power consumption. These measures should however, not be legally binding but market driven. Situation where the legal aspects lead to a “forced” purchase, especially in small markets with low competition levels should be avoided at all costs. Legally binding measures should be limited to corporations, namely power and equipment producers;
 - Energy retrofitting measures should be mandatory in renovation projects (e.g. solar passive systems can be used in Southern countries);
 - Energy certification schemes should acknowledge the level of autonomy of buildings with harmonized energy codes across all Member States.
- **Are targets for sub-sectors such as transport, agriculture, industry appropriate and, if so, which ones? For example, is a renewables target necessary for transport, given the targets for CO2 reductions for passenger cars and light commercial vehicles?**

Definitively targets for sub-sectors are useful. In general, without predetermined goals industry makes nothing:

- Cap and trade mechanisms have proven its inefficiency. The European carbon tax should be applied instead to the systems where there is a viable market low carbon option (for example for transportation where electrical vehicles are now achieving affordable and comparable prices with the conventional solutions);
 - Targets for sub-sectors should be appropriate, provided that there are real measurements to reduce energy consumption / CO2 emission;
 - The already existing renewable target for transport should be revised and redefined taking also into account different possible transport modes to reduce private transport (e.g. mobility management).
- **How can targets reflect better the economic viability and the changing degree of maturity of technologies in the 2030 framework?**

Renenergy partnership considers that are two main ways to achieve this goal:

- Dynamic targets could be implemented. Similar to the German PV feed in incentives schemes where the incentive was proportional to the % of achievement of the national target. Targets could be traded (similarly to the cap and trade scheme), within and among member states. This would allow the incentive to promote lower cost of technologies and R&D in the countries;
 - Often viability of projects are depending on national support-structures (e.g. in form of support of investment, or regulated feed-in tariffs), and it may be questionable if different support systems in different countries boost technology development in an optimal way.
- **How should progress be assessed for other aspects of EU energy policy, such as security of supply, which may not be captured by the headline targets?**

Security of supply and other quality standards should be assured by direct regulations, common to all EU countries. Targets in this field should be measures in terms of % of compliance, set according to the member state economic availability to achieve the standards. Harmonization of voltage, plugs and other issues related with barriers to the free circulation of equipment's among member states should also be included in this scope. Transferability of technology should be assured by direct regulation and horizontal to all member states.

4.3. Instruments

- **Are changes necessary to other policy instruments and how they interact with one another, including between the EU and national levels?**

In fact is necessary to make some changes on the policy instruments:

- Market dynamics and observation are strongly recommended. Portugal for example has a very reduce market size and cartelization and monopolization of several markets may reduce the effectiveness of the policies designed for other scales and realities. Regulation policies and consumer protection instruments should be considered as if one of these fail, achieving the targets may result in a strong reduction of the social welfare;
- Binding renewables targets with pre defined, transparent financial penalties for non achievement would provide a strong background for investments to be made, but

consideration must be taken to ensure binding renewables targets do not adversely affect the cost-effectiveness of delivery. A minimum binding renewables target with an 'expected' set higher would be a compromise solution on this, to ensure investments are made in the renewables sector- which will support innovation, create cost efficiencies and also result in product development, but would not put EU member states in the position where they subsidize inefficient markets and skew the supply chain. Expanding on this proposal, it would be useful if the targets indicate areas where energy efficiency could be actually achieved, such as transport, manufacturing, energy production, housing, retrofit etc, and made it clear that all member states should consider all areas in order to meet their targets. One would not recommend setting exact targets for each area, but it would be useful to request each member state to document how much of their target they expect to deliver via each area. This allows a flexible approach for each country depending on their circumstances and strengths but also provides some indication and confidence for each sector in the respective countries and allows investments and developments to be made.

- The EU could look at the recently introduced UK Green Deal and Energy Company Obligation policy, which allows householders to install cost effective energy efficiency measures at no upfront cost. This policy helps to reduce the barrier of a lack of upfront costs when considering energy efficiency improvements. The Green Deal is not funded by the Government, and therefore does not incur cost- so is a cost effective way of reducing GHG. The framework has been created by the Government to allow the market to develop sales opportunities in this way. The Energy Company Obligation is an obligation but on the energy companies by Government to help the most vulnerable in society and to create carbon savings by subsidizing 'hard to treat' measures such as solid wall insulation. The cost of delivering the ECO is passed onto consumers by the energy companies, which results in consumer bills rising slightly- this should be considered when examining cost effectiveness;
- Consumer awareness, interest and participation are vital in helping member states to achieve the 2030 target in a cost effective way. Awareness raising of cost effective ways people can improve their energy efficiency in cost effective ways as well as promotion of what the state is doing to achieve its targets and why, is important to transparency and engagement. The UK's 2050 pathway tool, <https://www.gov.uk/2050-pathways-analysis>, is an online calculator which helps everyone engage in the debate, and also see the different aspects that need considering. A section in the 2030 target document showcasing what other countries are doing should be considered, as sharing and learning from other states experiences

between member states is important and could help to deliver targets more cost-effectively.

➤ **How should specific measures at the EU and national level best be defined to optimize cost-efficiency of meeting climate and energy objectives?**

- End user awareness and support should be provided. Consumers will be in the end the changing factor. Support the decision making process and inducing market through promoting the supply of the best effective technologies and practices that truly generate a benefit to the consumer. Margins and gains related to the energy efficiency and renewable business sectors should be as shifted as possible to the end user (for example by promoting decentralized, self-consumption policies);
- Zero-Carbon homes will be a very important factor in achieving the EU GHG reduction targets within the built environment. The UK is due to consult on the next steps towards zero-carbon homes shortly, but greater promotion of the need to change building regulations to promote zero-carbon homes in the near term future is vital across the EU.
- The roll out of Smart Meters should be considered as a necessary requirement across all EU countries in order to raise awareness amongst home dwellers of the energy they use and the cost of the energy. Often allowing the customer to see, via an easy to read monitor, exactly what energy at what cost they are using, results in spurring people into making energy efficiency changes to reduce their energy use. The roll out of smart meters has been pushed back to start in 2015, to be completed by 2020 in the UK.

➤ **Which measures could be envisaged to make further energy savings most cost effectively?**

- (Relative) limitation of supply / steplike price increase for power for certain sectors (e.g. private homes/ service/ administration) may be a proposal to be discussed;
- Cost effectiveness today is the result of in place political and financial aspects as well as global and local economy. These features can change significantly (e.g. oil price increase / decrease, or aspect of supply security increases / decreases). Therefore an evaluation of the market uncertainties could be useful.

➤ **How can EU research and innovation policies best support the achievement of the 2030 framework?**

- More meta research is required. Many mistakes have been made in the past in many country members. Promoting meta-research and new researched based in the analysis of past policies and its results could help to understand the direction to take;
- In order to assure an energy technology development that is able to adapt relative quickly to changing priorities, some less-cost- effective projects may be accepted (as kind of test programs);
- Incubators and spin-off companies can be promoted to strengthen the relationships between research institutions, Industries and SME.

4.4. Competitiveness and security of supply

- **Which elements of the framework for climate and energy policies could be strengthened to better promote job creation, growth and competitiveness?**
 - Life cycle and complete business chain analysis of the investments and policies promoted should be considered. Comparative studies and cost-benefit analyses of alternative technologies including also social should be performed. The promotion of SMEs involvement and the market fragmentation and dispersion (supply) not only promotes safety, quality and competition but also foster a sound economy development. Transfer of knowledge, support to f R&D, and incubating technological companies could be helpful to fill the gap between research and end-users that is still quite relevant;
 - Annual reports/conferences involving Member States in order to discuss what policy mechanisms they are using to achieve the targets and the progress towards the targets achievement can be organised to promote co-operation and fair effort sharing highlighting the best practices and the most effective policies
 - The development of the EU Green Investment Bank will be vital in providing support for member states to deliver their GHG reduction targets. The EU Green Investment Bank should be encouraged to give the best rates and support to member states to help them to meet their targets.
- **What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?**

EU energy independence strategy should be pursued as a key issue. The increasing energy prices and the geopolitical problems can lead to a worsening of the economic crisis. It is therefore essential to support the development of stable internal markets and endogenous energy supply chains (by means of taxation of non European energy flows which revenues could be used to finance R&D as well as endogenous energy production).

- **How should uncertainty about efforts and the level of commitments that other developed countries and economically important developing nations will make in the on-going international negotiations be taken into account?**

(See above)

- **How to increase regulatory certainty for business while building in flexibility to adapt to changing circumstances (e.g. progress in international climate negotiations and changes in energy markets)?**
 - Reinforcing the regulation at EU level could be helpful to promote businesses in EU Member states. In fact, EU policy stability will promote investment on the EU territory with positive effects for all the Member States. Retroactive policy adjustments should also be avoided (e.g. the Spanish case of PV);
 - Common rules for out-facing regulations may provide some stability for businesses / projects.
- **How can the EU increase the innovation capacity of manufacturing industry? Is there a role for the revenues from the auctioning of allowances?**
 - Carbon tax on products and services (like VAT, added at each step of the value chain) can be set to foster the production of “green” goods and services and their market penetration;
 - Fossil fuels price increase is a pivotal aspect for boosting innovation.
- **How can the EU best improve security of energy supply internally by ensuring the full and effective functioning of the internal energy market (e.g. through the development of necessary interconnections), and externally by diversifying energy supply routes?**

- Reinforcing the connections between EU countries with dedicated capacity lines;
- Increasing efficiency;
- Fostering regional energy supply with suited measures and valorizing endogenous resources.

4.5. Capacity and distributional aspects

- **How should the new framework ensure an equitable distribution of effort among Member States? What concrete steps can be taken to reflect their different abilities to implement climate and energy measures?**

EU programs as the INTERREG IVC and SEE are significant to promote and accelerate the exchange of knowledge between countries with different features and in this framework the RENERGY project can give a valuable contribution.

- **What mechanisms can be envisaged to promote cooperation and a fair effort sharing between Member States whilst seeking the most cost-effective delivery of new climate and energy objectives?**

Harmonization of standards, regulations and incentives (energy efficiency certification schemes, appliances and financial schemes) is fundamental.

- **Are new financing instruments or arrangements required to support the new 2030 framework?**

The current financial mechanisms are quite exhaustive and could be revised in the framework of general “European decision support systems” aimed at defining suited policy guidelines for final user consumers. Web-based tools could be also useful to share data and information (e.g. European databases, online markets for equipment’s, etc.). Another important instrument to promote innovation is represented by the awards that can increase the motivation.

