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GREEN PAPER

A 2030 framework for climate and energy policies

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4. QUESTIONS (PEP SALAS - PSALAS@SMARTGRID.CAT)

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?
  - National regulation is not aligned neither among countries nor with UE policy
  - Lack of commitment of the big players and market inertia
  - Economic/financial dynamics
  - Lack of indicators
  - Energy accountability
  - Not enough clear which measures affects Electricity and which energy in general (fossil fuels)
  - There are a mix between member states that planning the energy policies and execute it through companies owned by the state and others where the market dynamics has more influence
  - International commitments in CO2 reduction are too weak and it has a negative impact in the economy of the UE
  - There has not been a technology confluence between IT and Energy (smartgrids) → so that some targets, such as renewables, can not be achieved because of the (lack of) infrastructure.

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 sectoral), and to what extent should they be legally binding?
  - Two levels: As ambitious as possible and minimum targets (40% CO2 reduction by 2030)
  - Minimum targets absolutely binding. Achievements beyond minimums will be rewarded very well (positive discrimination)
  - Independent goals for each sectors of consumption: residential, industry, tertiary, primary and mobility. It must taking into account the starting point of each sector.
  - From a regional level up to UE level. Each region has to reach the minimum goals and potentially share their extra achievements with other regions across Europe under a market framework

- Have there been inconsistences in the current 2020 targets and if so how can the coherence of potential 2030 targets be better ensured?
    - The barriers to get the 20-20-20 targets are not mainly technological. Maybe it was in the last 90s, but last years has shown the most important barriers are from the regulation and economy. Therefore, it would be necessary to address them in order to handle the pace to reach the goals.
    - Energy savings goals and financial crisis. Is the reduction of the Spanish energy consumption related to the efficiency or just due to the financial crisis? → it is needed a set of indicators that reflects the evolution of the economy (for instance "energy intensity" or "energy per employee") to qualify the achievements.
    - There are not any economic indexes to boost the most efficiency technologies against the most expensive ones. There would be necessary some sort of economic index, such as a ratio of *€/MWh saved* and *€/MWh CO2-free generated*, promote the cost-benefit analysis for each technology and boost the most efficiency ones.
    - There is not enough transparency neither in the costs of regulated activities, nor among the different technologies for electricity generation. It blinds the market and contributes a non-fair competition.
    - Lack of (clear) financing schemes supervised by the UE to boost the renewables penetration. In Spain there was an extremely well-paid feed-in-tariff that has contributed to put all the electric system to the border of the bankruptcy because it was applied to almost 10 times the power capacity that government had forecasted. Afterwards, some retroactive laws has cut the subsidies down, that means legal uncertainty for the investors and country risk jeopardizing the future development of the sector. For instance, there are not yet the "net metering" scheme to promote the prosumers activity.
- 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 CO_2 reductions for passenger cars and light commercial vehicles?
    - Agriculture is one of the most fossil-dependent-activities and, besides, it is a yearly cycle and it is not an elastic goods, so that, is extremely exposed to the cost of fossil energy. It is urgent to fix specific targets to reduce this dependence, to introduce good low-carbon practices (organic farmers, reduce the use of plastics, promote local producers and high-quality products –labels…-, and so on). Potentially it could be co-financed together with the CAP (Common Agricultural Policy). How can targets reflect better the economic viability and the changing degree of maturity of technologies in the 2030 framework?
- 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?

- There is a concern regarding the electric and gas distribution activities are fundamental to go forward a smart grid overall Europe. It means that it is necessary to focus not only in the cities, but also in the rural areas. Smart Rural has to be considered as a key part of the European energy network due to is where renewables can be caught. And to do so, a specific legal framework has to be considered by the Commission.
- Introducing more competence and information among different players (even those are related to regulated activities). To avoid black-outs, for instance, it is necessary to invest in distribution and storage and it has to be pushed.
- It would be also of strong interest to evaluate the global costs of the energy dependence of Europe and to allocate the financial resources saved to promote smart grids, energy efficiency and renewables penetration. Reporting this economic data will allow the Commission and other stakeholders to monitor the progress of the achievements in energy security of supply.

4.3. Instruments

- Are changes necessary to other policy instruments and how they interact with one another, including between the EU and national levels?
  - At European level:
    - Third Energy Package → assure a real competition among different players and a clear separation of activities (generation – transport&distribution - retail) in all the state members
    - CAP – Common Agricultural Policy → enable financial instruments to allow the rural areas to lead a transition to sustainable areas where smart grid becomes the backbone of social development and new business opportunities.
    - Digital Agenda → it is needed a confluence of IT and energy in terms of infrastructure (for instance, FTTP), Big Data and, special focus in Open Data standards
    - Research, Development and Innovation (include entrepreneurship)
    - Other issues (energy poverty, education, …)
  - Between EU and national levels
    - Harmonize the transposition of UE directives to the different state members in order to have an unique and common view (for instance, Energy Efficiency Directive, Interconnection networks, transport) overview of energy
- How should specific measures at the EU and national level best be defined to optimise cost-efficiency of meeting climate and energy objectives?
  - Improving (in terms of transparency and update) energy-cost statistics by region, segment of consumption and generation cost

- Putting the data from smart metering system as open as possible
- Boosting competition among different players and avoiding bad practices
- Reducing non-technological barriers, such as user acceptance, financial accessibility, legal and administrative permits, involve other stakeholders
- Carbon Budget. A sort of "annual carbon budget per citizen" that allows people to consume energy rationally (electricity, fuel,…) and being penalized or got credit according to the final consumption.

- How can fragmentation of the internal energy market best be avoided particularly in relation to the need to encourage and mobilise investment?
  - Promoting the role of the "aggregator" into the market that operates minimum units of consumption and generation on a regional basis to interact with the market and with the system operators.
- Which measures could be envisaged to make further energy savings most cost-effectively?
  - Measures based on consumer behaviour and education
  - Empower the consumers and citizens with their consumption data collected by the Smart Meter (according to the Directives)
  - Tax Credit to promote private investment in energy efficiency and local energy production (renewables, retrofitting,…)
  - Including a mandatory targets of efficiency and renewable generation to the utilities
  - Internalize the cost of different generation technologies (fossil, nuclear, renewables)
- How can EU research and innovation policies best support the achievement of the 2030 framework?
  - Promoting an ecosystem of innovation that boost the entrepreneurship and intrepreneurship as an effective way to put the research into the market
  - Joining industry, basic research, education (technical and business) and entrepreneurs
  - Having a clear goals well defined and allocate the resources accordingly

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?
  - Development of Rural communities based on high quality of IT and Energy infrastructures. It is essential to provide equal opportunities for people across Europe and maximize the potential of renewables.
  - Distributed generation of energy could create local employee (for instance net metering in urban areas).

- What evidence is there for carbon leakage under the current framework and can this be quantified? How could this problem be addressed in the 2030 framework?
  - Among member states, this problem could be addressed with a mandatory and binding regional targets. Those regions with a strict climate policy must get some extra benefits (to be defined) due to the extra effort done and have the possibility to market the extra CO2 reductions in order to get benefits for the region. What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?
  - Another point could be to boost the *spill-over effect*s of those regions who are more strict in the CO2 reduction, for instance, promote local companies, R&D to become leader regions within Europe
- 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?
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- 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)?
  - Key point. It is necessary a minimum of stability to give enough certainty to the industrial investment. It could be achieved with more information, transparency and regulation of lobbies.
- How can the EU increase the innovation capacity of manufacturing industry? Is there a role for the revenues from the auctioning of allowances?
  - Promoting low carbon technologies and processes
  - High level and know-how in the technical and business universities
  - Joining efforts with companies in the same sector (clusters) and in the same value chain (for instance industrial symbiosis)
  - Yes, there is. However, CO2 reduction is not only a question of cost and market, but of course, could be a way to encourage investments in low carbon technologies.
- How can the EU best exploit the development of indigenous conventional and unconventional energy sources within the EU to contribute to reduced energy prices and import dependency?
  - Evaluation of indigenous resources done by public institutions
  - Exploitation done by private and public partnerships
  - Process under social control
  - Use of these resources to power the energy transition not to increase the dependence of fossil fuels

- 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?
  - 1. Reducing dependences (deeply shift of energy consumption to low carbon resources and maximize local energy production)
  - 2. Diversifying routes and resources
  - 3. High penetration of distributed generation and smart grids at regional level to achieve as much autonomy as possible based on local resources and dynamic demand matching (bottom-up approach)

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?
  - The targets must be mandatory and these member states that do not comply should be penalized harshly
  - It is necessary to following the state of the progress annually to feed back the process and taking corrective decisions, if necessary.
- 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?
- Are new financing instruments or arrangements required to support the new 2030 framework?
  - Yes, of course. But maybe is not question to allocate more resources, but to invest the savings for reducing the fossil dependence.
  - Furthermore, changing priorities among different technologies (for instance, to balance resources for research in renewable energy and nuclear energy) and look for public-private partnerships.

SUBMISSION OF RESPONSES TO THE CONSULTATION

The consultation will be open for until 2 July. For more information on how to contribute to this consultation, see:

http://ec.europa.eu/energy/consultations/20130702_green_paper_2030_en.htm