Comments on the GREEN PAPER

A 2030 framework for climate and energy policies

Overall the Europe 2020 targets have been effective, even though much of the movement towards reaching our goals were the aftereffects of the economic crisis. Re-launching European economies while casting them on the lower carbon pathway will be quite difficult and will require us to differentiate very well which measures have been truly effective and which we need to find alternatives for. However, we believe that this pathways also offers many opportunities that are yet to be grasped, and perhaps the difficulties we are encountering at the moment may be obscuring the potential for true innovation and change.

However, in terms of Europe's energy path towards decarbonisation, the EU should embark on thorough decarbonisation only if other regions are also committed to strong reductions of GHG emissions. Which means that as long as the commitment of the other regions is not certain, the EU should follow "no regret" pathways, i.e. the EU should not put at risk its economic competitiveness through a singular and demanding climate policy, at any price; instead the extra costs induced by policies promoting lower carbon generation should be kept moderate and in line with those of other geographic areas**.**

On energy policy, Europe should target a balanced achievement of the three objectives: security of supply, competitiveness and **decarbonised energy**. All three objectives need to be delivered and addressed in a balanced way. The Romanian power sector is facing the challenges of replacing aging power plants and restructuring the grid in order to support the transition towards a low-carbon economy. It is essential that both take place at the smallest costs and that the competitiveness of the industry in our country is supported.

The increasing share of intermittent energies in power generation raises new issues. The rest of the supply system must adapt to their expansion, leading to more extensive grid connections, adding dispatchable back-up capacities, storage capacities, demand side flexibilities, and a wider variation range of frequency and voltage. This implies higher system costs to obtain the same level of reliability and the higher system costs are reflected into higher prices to the end consumers.

Therefore it is of prime importance to carefully assess all the system costs and to monitor their evolution in the future. Since electricity prices in the EU are already higher than in other regions, it is of utmost importance to select the most cost efficient pathways towards decarbonisation and security.

The different decarbonisation scenarios should be analysed carefully, since they are likely to display varying performances with respect to system reliability, total electricity generation capacity requirements and the total cost of electricity supply. They rely on different shares of renewables, nuclear, CCS and gas, require different transmission and distribution network solutions (and costs), and require different storage solutions/capacities and costs.

The different studies recently performed show that scenarios with a significant share of nuclear (20% to 30%) are less costly and more robust (that is, less sensitive to the assumed input values in the long term) than those relying on a very high share of renewables.

Therefore we believe that a technology neutral and flexible target for the share of renewable energy could be set by each MS for 2030. Each state should be allowed to decide on the most appropriate and useful technologies as well as the energy mix most conductive to a competitive and secure decarbonising economy, whilst supportive instruments and funds should be considered at EU level for each type of RES forward driver.

In terms of energy efficiency we believe that an overall aspirational target could be established, but it would need to be supported through flexible and interconnected sectoral policies, since so many policy areas are involved. Furthermore, the sectoral targets should be complementary and elastic enough to allow states to choose their own pathway towards the overall target.

The investments in low carbon technologies are driven by the CO2 price, risk perception and the policies in place. Further investment in research and development is necessary not only from public funds, but also encouraged from private donors. Encouraging companies to understand and further their interest in green technologies through new instruments will lower the cost of these technologies and help ensure the effectiveness of policy decisions. However, keeping in mind the globalisation era we live in, our policies have to be correlated with global energy policies; our economies have to be competitive on the global market and we need to avoid carbon-leakage, to keep and further invite economic agents and large-scale industrial producers to remain in Europe in order to promote economic growth and jobs.

We are confident that a suitable solution for Europe's energy for 2030 would be a balanced energy mix, with a balanced support to investments in low carbon technologies, including nuclear power. In order to achieve this balance, market forces and support for renewable energy sources are not enough, more flexibility in state aid support rules is also essential. If we aim to become thriving or at least functioning low carbon economies we must find a way to ensure that long term targets will not come to overrule short-term economic survival. The transitional instruments need to be well thought out, integrated and flexible enough to fit the diverse national and regional contexts.

Answers to the Green Paper Questions

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 20 20 20 targets for environment needed to be better correlated and better balanced – more practicalities in terms of the link between the targets on energy efficiency and carbon emissions, for example, would have been welcome; For the next period binding targets, both European and those specific to the MS, should be seen as complementary to each other and their interactions taken under consideration more effectively – in terms of energy efficiency and emissions reductions in particular.

- Much of the increase in energy prices has been felt mostly by the end consumer. More needs to be done to identify and protect vulnerable end consumers, with consideration given to national circumstances and purchasing power;

- The EU is losing competitiveness because of high consumer energy prices while the rest of the world is emitting more CO2;

- RES support instruments added to the traditional electricity infrastructure and market structure lead to high electricity prices for the end consumer in spite of low wholesale market prices, the latter discouraging new low carbon investments. This has potential future negative consequences on generation adequacy and CO2 emissions.

- The EU is not insulated from the rest of the world and this could hamper the effectiveness of 2020 framework. The lack of new nuclear power programs in the EU is impacting European industry and leading to decreasing European nuclear leadership to the benefit of Asia.

- The security of supply, in the sense of fuel supply together with generation adequacy and the reliability of the electricity grid is an important component of energy policy. But the rising share of intermittent sources (solar, wind) makes it more difficult to ensure adequate and reliable electricity supply (sufficient dispatchable capacity to respond in peak hours). Back-up capacities such as CCGTs are supposed to be connected when solar and wind generation weaken, but investing in such back-up units is not profitable today because the expected electricity price is uncertain at best and the expected load factor too small. Reserve capacity is needed but it has to be rewarded somehow. The effective installation of more interconnections and storage will help but will take time.

- The focus on the support of the production and not on the storing, distribution and transport of renewable energy has led to significant economic spillover effects thus seriously harming the effectiveness of the overall target. Any further policies in this area should take into consideration the entire framework and infrastructure of the integrated internal energy market.

- Furthermore, a technology neutral approach is necessary, since it would allow the market operate freely.

- <u>Market forces alone do not give proper signals for investments on the long run. There should be more room at MS level for incentivising investments in the needed electricity infrastructure in order to reach the desired low carbon and efficient energy mix and to better cope with renewable sources uncertainity.</u>

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?

It is recommended that each of the 3 policy objectives to be pursued.

- In respect to the **GHG emission reduction target**, while ambition is desirable and the UE needs to remain at the forefront, we continue to believe that further measures and higher targets need to be adopted only in the context of serious actions and relevant targets also undertaken by competing advanced economies no matter whether we talk about developed countries or emerging economies;
- **In terms of security of supply,** energy dependency on imports should be decreased by 2030, keeping in mind future competition between big energy importing regions: China, Japan, South Korea, India and EU. Also, grid stability should not be degraded by future developments.
- **In terms of competitiveness,** the role of a well functioning market should be emphasized; relevant performance indicators such as the Lifecycle Cost of Electricity supplied (LCOE), the total electricity consumer price, the cost per avoided ton of CO2, should be monitored at EU and MS level, to help comparison with other regions.

Have there been inconsistencies in the current 2020 targets and if so how can the coherence of potential 2030 targets be better ensured?

There have been inconsistencies:

Setting a binding share for renewables, with strong market incentives has discouraged investment in unsubsidized low carbon technologies and has distorted the market. Consequently, such binding targets at the EU level should not be imposed in the same way for after 2020. At the same time we acknowledge that traditional fossil fuel based energy sources also receive substantial subsidies and designated support at EU level in the 2007 – 2013 financial exercise.

We believe that MS have the right to be flexible, considering the imbalance already created in the system. We must ensure that renewable energy producers are properly integrated in the internal energy market and not impose targets that would require increased renewable energy production.

How can targets reflect better the economic viability and the changing degree of maturity of technologies in the 2030 framework?

Rapid and unpredictable development of different energy technologies makes it difficult to impose certain targets on renewable electricity generation. A better approach is to increase the powers at MS level in order to reach its own best energy mix, by incentivizing investments in the primary sources offering best balance between reduction of CO2 emissions and security of supply, incentivizing investments in the needed balancing and storage facilities and in the needed grid infrastrucuture.

Furthermore, investment in research and development of low carbon technologies should come from both the private and public fields. Instruments could be created

that would encourage and aid companies in adopting and developing new low carbon technologies as they see fit for their sector.

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?

Non compelling targets should be proposed, at EU level for security of supply.

Instruments

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

Any investor needs predictability of the electricity price and regulatory environment, to assure the recovery of the investment. To create such environment, the participants in the market should be allowed to use long term contracts or other methods to reduce their risks. Flexibility in putting in place such mechanisms at MS level – flexibility in state aid rules is needed. These mechanisms should only reduce the risks and not finance investments through state resources.

Electricity market design should be adapted to better accommodate long term energy investments; low carbon technologies, such as nuclear power, coal power stations with CCS and offshore wind, are capital intensive; with the current market design price signals are based on fossil fuel prices and do not integrate long term objectives; they provide no incentive to invest in capital intensive technologies, which will bring high benefits in the long term. Complementing the market forces with regulated mechanisms in order to achieve the best balance mix is a solution. As proof, current renewable energy levels were achieved through such mechanisms and not through market forces.

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

- There should be stability of decisions at the EU level – no change every year.
- More powers at MS level in influencing investments in order to reach the best energy mix.
- Predictability is essential for all the actors in the energy market, including consumers.

How can fragmentation of the internal energy market best be avoided particularly in relation to the need to encourage and mobilise investment?

Competitiveness, affordability and security of supply, reliability of low carbon energy should be the benchmark to judge the balance of investments in the EU. Admitting the importance of nuclear to energy policy goals, MS should have the power to encourage investment in nuclear power, if it decides to do so.

Fragmentation of the internal energy market will be best avoided by increasing the interconnection capacity between MS and by coupling the day ahead and intra-day markets.

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

In the long term, public as well as private funding of research and development (R&D) is the most efficient instrument for the development of new technologies. Shared R&D programs at EU level are an appropriate means to limit the total cost of development and should include all low carbon technologies, particulary where these tehnologies enhance energy efficiency. Also the R&D programs should approach the unconventional safe technologies, if the environmental requirements and public acceptance requirements are met.

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?

Job creation and growth rely significantly on the competitive industrial capacities of our economies. Climate and energy policies should not only drive the internal demand towards more efficiency and less carbon emitting services, but also maintain the competitiveness of our industry. Otherwise the EU will depend more and more on foreign technologies and industries. That means a real industrial policy has to be developed, with priority to maximise domestic added value and create more high level jobs.

Minimising the total cost of electricity supply, a requirement to keep competitive industry in the EU, is an objective which should be more strongly addressed in the 2030 framework.

What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?

<u>The cost of capital</u> is sensitive to risk perception by the investors. The EU policy can influence risk perception through more stable regulatory framework, through loan guarantees, long term power purchase agreements, contracts for differences, capacity markets, through co-funding by financial institutions such as the European Investment Bank.

<u>The cost of new renewable</u> energies; it is an increasing burden as long as their share increases more quickly than their “unit cost” is decreasing through learning effect. Unit cost should be understood as not only the cost of generation but also the impact on total system cost (need of back-up capacity, added grid costs, etc…). Technology neutrality should prevail. Other support schemes can help control the total costs: contracts for difference, premium tariffs, long term power purchase agreements, co-funding of demonstrators, etc…

The price of imported gas. The EU will be in a better position to negotiate with gas suppliers if competing alternative sources of energy are kept at a sufficient level in the mix.

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?

EU can pursue climate policy as a world leader but it should be at reasonable cost to remain competitive: a real "no regret" option should prioritise lower cost solutions as long as other regions are not really embarking in the same constraining climate policy. That means minimising the cost of low carbon energy technologies, for instance by keeping a sufficiently high share of nuclear energy, through Long Term Operation and new build, while maintaining high standards for nuclear safety and security

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)?

Regulatory certainty and flexibility can best be ensured together if market regulation does not favour a specific technology but certain goals: it should remain technology neutral. As concerns the electricity market, value has to be clearly assigned to two top priorities:

- The EU Emissions Trading Scheme (EU-ETS) should remain the main instrument for reducing GHG emissions;
- reliable and secure power supply, best ensured if the share of dispatchable power generation means remain sufficient.

The framework should orient the market towards the technologies offering the double value, being both low carbon and dispatchable. The market will select the most competitive among them but regulatory measures to reduce certain investment risks for the needed investments should complement those market forces.

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?

The use of indigenous conventional and unconventional energy sources should remain under MS sovereignty and MS choice to reach its energy policy and national economic goals**.**

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?

- Support energy producers and help modernise the electricity generation sector within the EU through the continuation and improvement of free allocations

schemes similar to those in article 10c of Directive 2003/87/EC, which would help ensure the stability of supply;

- Diversity of energy sources and origins, diversity of technologies and domestic industrial know-how and capacity are the main contributors to security of supply.
- Limit or better integrate the share of intermittent sources, which are inducing instability of the grid, calling for costly counter-measures (e.g. storage).
- As concerns grid infrastructure, give priority to Interconnections rather than to RES specific expensive connections, at least for as long as it takes to ensure the creation of an effective European integrated market and infrastructure.

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 most helpful step would be to ensure the flexibility necessary for all MS to continue on a path of economic growth while also transitioning towards low carbon economies, which would require flexible, correlated targets and exchange mechanisms. While the measures taken to limit carbon leakage so far are a good step forward, national context as well as EU border proximity mighty be taken into consideration further. Also, trans-border collaboration projects related to energy and climate change policies should be supported more proficiently and consistently. Large scale, cost intensive technologies, such as CCS, might be clarified in terms of providing better support under such schemes, for example seeing as so far any attempt to back such initiatives has proved problematic. The new framework should also ensure that the right for a MS to select its mix is not hindered by other MS.

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

Specific long term financing mechanisms tailored to help reach the new targets and related developments within the 2030 framework have to be defined. We would support instruments that would encourage companies to invest in adopting and developing low carbon technologies and creating and following their own long term green development strategies. Furthermore, we believe that trans-border projects need to find easier to use financial instruments.