



SOLVAY ANSWER TO COMMISSION CONSULTATION ON THE OF THE FUTURE OF  
EU ENERGY AND CLIMATE CHANGE POLICIES (2020-2030) BASED ON GREEN  
PAPER – ‘A 2030 FRAMEWORK FOR CLIMATE AND ENERGY POLICIES’[COM(2013)  
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Which lessons from the 2020 framework and the present state of the EU energy system are most important when designing policies for 2030?

- EU energy and climate policy design must set competitiveness and climate objectives on an equal footing. Competitiveness, both in international context and within the EU, is the key to fostering economic growth and employment in the EU. Europe needs a new approach that will restore and preserve its economic pillar and that will address the societal challenges of both its current generation and the generation to come.
- The success of a climate or energy policy cannot be achieved at the expense of its impact on the EU's cost competitiveness.
- Curbing emissions from EU activity has been achieved and needs to be maintained. However de-industrialization of the EU implies that domestic productions carbon content have been substituted by imports embedding carbon emissions which are often higher than those of equivalent EU products; this discrepancy must be addressed in the the 2030 framework. Strengthening the competitiveness of EU low carbon activities must be the choice of reference; proportionate measures are required to maintain a level playing field with higher-carbon regions and to attract again growth-inducing investments in the EU.
- ETS needs to be reinstated as the cornerstone of the EU climate policy. Forcing technologically-mature solutions in the market with tariffs and other regulatory means hides the implicit carbon costs and distorts the carbon price signal. The efficiency of the ETS system is in its ability to deliver emission reductions at the lowest cost and to favour low-carbon investment decisions. For this system to be efficient, target setting for technologies or solutions overlapping with the ETS should be discontinued.
- Predictability must remain uncompromised in the ETS post 2020. Free allocations based on actual output should to be implemented. When based on historical production as in phase III, the system works against supply elasticity (i.e. changes in levels of production) and proves a growth disabler for any production beyond historical record even for the best low carbon installations. The carbon leakage risk status must be granted for a full phase; shorter time periods induce uncertainty that deters investment

- Intra EU competitive distortions arising from the national implementation of state aids for indirect emissions must be eliminated.
- The non-ETS sectors need to make as great an effort as the ETS sectors. Instruments used for this purpose should be carefully designed not to overlap with the ETS and to distort its cost-efficiency
- The increasing difficulty to reach an international agreement post Kyoto must encourage the EU to continue their negotiations with other emitting regions and countries with a view to maintaining the inclusion of international carbon credits (CDM) as a central element in the design of the EU-ETS.
- Any target should foster a net job creation and not only potentially newly created jobs (job creation minus job losses = net job). The existing industry network is of utmost importance to preserve the role of Europe in the global economy. The climate and energy objectives cannot be tackled separately from their influence on the existing manufacturing industry. A balanced approach has proven to be necessary.
- EU energy infrastructure is not yet designed to cope with an offensive policy on renewables especially with the lack of coordination between the Member States (MS) each driving their own energy strategies. National decisions impacting a MS energy mix must be subject to coordination and consultation with other concerned Member States. For example the massive German investment in solar and wind energy combined with existing nuclear and hydro power generation has an impact on electricity flows due to this massive non flexible electricity generation that must be absorbed by the network of surroundings MS. We therefore need ideally a European driven energy policy and at minimum an enforced coordination of MS decisions regarding their energy mix.
- The shale gas revolution in the USA must trigger a complete new design of the gas market in Europe. A total review of the single market and liberalization of the gas market must be included in future energy policies.
- Europe needs a new approach that will restore and preserve its economic pillar and that will address current societal challenges and those of the generations to come.

## **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?

- Any target must be technically achievable at affordable costs that do not put in jeopardy the European competitiveness and growth of both European industrial producers and their customers, notably SMEs.
- A cap on the EU energy consumption as mentioned in the Energy Efficiency Directive is unsustainable since growth and GDP are coupled with energy use.
- Any climate target should only be set in harmony with the progress of international climate change efforts. The Cefic Energy and Climate Roadmap 2050 shows that if Europe extends its lead on the climate path and isolates itself, carbon leakage (production and investment) will unfortunately be a major factor in reducing the European Chemical Industry's emissions. This would only displace the climate issue, not solve it.
- No renewable energy generation target should be continued.
- Any energy target that promotes a choice on the technology or the fuel being used should not be applied if it is not competitive in its own right. In the event that such target would

nevertheless be applied, the related policy should expressly foresee a mechanism to prevent additional cost burden being borne by energy-intensive companies.

- Solvay supports one single target for the 2030 climate objective. It will allow for the stakeholders to take the most economical route within a set environmental objective. Different instruments can then be used to meet that single target.
- The deployment of the climate target across sectors should take into account the technological progress and limitations of each of the sectors. It will have also to recognize the efforts made by each sector so far (eg manufacturing industry with ETS) in order to allocate the burden on an equitable basis between all sectors. Moreover a cap on energy consumption will inevitably lead to limited growth since the two are interlinked.
- Any GHG target at EU level beyond 2020 will have to involve on an equal footing all sectors of the economy, i.e. ETS and non-ETS sectors.

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

- ETS sectors and non-ETS sectors have not been put on the same footing. The effort required from non-ets sectors ought to be intensified since they represent the majority share of the emissions and many of the low hanging fruit that could be achieved in terms of energy and CO2 efficiency.
- Overlapping of targets needs to be avoided. In particular, targets for renewables should be discontinued. In the event that such targets would nevertheless be applied, an impact assessment of such a policy on the emissions target and on the ETS needs to be undertaken and the policy should expressly foresee a mechanism to prevent additional cost burden being borne by energy-intensive companies. The opinion of EU peers should be sought on the effect of policies decided at sub-EU levels as soon as they interfere with EU-wide instruments.
- Putting a target on renewables has proven inconsistent with policies trying to improve the competitiveness of the European industry. Each MS is facing a huge financial burden trying to cope with the financing scheme of such uncompetitive technology. This cost burden is particularly severe for industry and hampers the EU's growth and jobs policy. A solid sustainable economy creating high added-value goods and services must be built on the foundations of a strong existing industry not on its ruins.
- Policies must point the way but not try to make technological or fuel choices. Also, the greater the number of targets the greater the chance of generating incoherencies. Therefore one single target will allow for differentiated policies adapted to each situation.
- The development of immature low CO2 abatement technologies, such as CCS, should be financed and supported by independent adhoc policies in order for their market deployment not to interfere with the market-based, lowest-cost policy principle of ETS that fosters the competitiveness of industry.

A contradictory paradigm is that technology-supporting policy measures aimed at facilitating market penetration are actually inducing more requirements to support these technologies which are eventually borne by industry and therefore drive industry further away from the most cost competitive pathway.

Are targets for sub-sectors such as transport, agriculture, industry appropriate and, if so, which ones? For example, is a renewable target necessary for transport, given the targets for CO<sub>2</sub> reductions for passenger cars and light commercial vehicles?

- The various non ETS sectors need to be mobilized to reduce their emissions at least in the same magnitude as the ETS sectors. Targets may be required to deliver emission reductions at a sectoral or sub-sectoral level necessary for meeting the overall EU emissions policy objective.
- We must avoid technologically imposed targets in any sector of the economy in order to give innovation a chance to explore the best solutions. The current single CO<sub>2</sub> efficiency target for passenger cars allows for various innovations by automotive builders ranging from fuel efficient diesel or gas engines to hybrid or full electric vehicles. Moreover such CO<sub>2</sub> efficiency target allows for continuous growth within the automotive sector since production is not a limiting factor. Such virtuous circle driven by an efficiency target only instead of an absolute one should be taken as an example for solving the growth paradigm that industry is facing with the ex-ante allocation in ETS and the decreasing cap.
- All sectors must contribute to the climate target.

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

- Targets should not be technology-based. The lowest cost pathway logic of the ETS will encourage technologies to enter the market when their overall cost is competitive.
- Immature technologies may require temporary support but any supporting scheme designed to overcome the demonstration barriers (financing and costs) requires to be phased down quickly as the technology matures. Lasting support distorts competition.
- For a 2030 target, the current economic framework demonstrates that any decision on a target can only but be based on the current technologies available and the ones that are economically viable (competitive).

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 should be addressed within a true European energy policy framework and not anymore through isolated MS political decisions.
- Supporting the safe exploration of shale gas and using and supporting all energy generating options currently available in Europe, including nuclear, should be at the core of a European energy policy. Indeed Europe cannot afford to ignore any power generation source when addressing its issue of security of supply. Possible indicators could be to benchmark European gas prices to those of other regions and map global hydrocarbon trade flow.

## **Instruments**

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

- Yes. National decisions impacting a MS energy mix must be subject to coordination and consultation with other concerned Member States. For example the massive German investment in solar and wind energy combined with existing nuclear and hydro power generation has an impact on electricity flows due to the non flexible electricity generation that must be absorbed by the network of surroundings MS. We therefore need ideally a European driven energy policy and at minimum an enforced coordination of MS decisions regarding their energy mix.

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

- Specific measures designed to meet climate objectives which are not economically viable today must not be linked to the ETS nor overlap with the ETS.
- The burden of financing additional breakthrough solutions must not be borne by existing economic activities which are transitioning towards greater sustainability. The objective of ETS is to reduce current emissions at the least cost for industry and it therefore cannot be linked to expensive additional mitigation solutions running the risk of jeopardizing the existing industries.
- Design of instruments to drive emission reductions in the non ETS sectors should be carefully developed to avoid overlapping with the ETS. Appropriate mitigation is necessary to avoid harming the competitiveness of the EU industry.

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

- We need ideally a European driven energy policy and at minimum an enforced coordination of MS decisions regarding their energy mix.

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

- Apply widely and support basic energy efficiency solutions in all sectors. For example public buildings are a major source of energy savings and its energy efficiency target in the Energy Efficiency Directive has been considerably softened.

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

- All ETS auction revenues should be channelled to support the competitiveness of sectors exposed to carbon leakage risks while they transition to lower carbon production, to foster the development of low-carbon innovative products by EU industry and to support the development of immature low carbon technologies.

## **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?

- The differences in the climate change ambition of EU and non-EU countries and the respective national policies adopted for sharing the burden especially with internationally competing industries require mitigating instruments to maintain the competitiveness of EU industry (such as the ETS carbon leakage list). These compensation measures must be maintained as long as no true sectoral agreements exist and enable global level playing fields.
- Predictability and preservation of the compensation measures is paramount to prevent investment leakage. Intra-phase revision that would delete sectors from the carbon leakage list works contrary to the objective and needs to be eliminated.
- Indirect emitters compensation through potential State Aids as foreseen in ETS must be abandoned in favor of free allowances as is the case for direct emissions. It will improve predictability, avoid market distortion within the single market and help to improve the competitiveness of its ETS sectors.
- Within ETS, ex post allocations (actual output based allocations) instead of ex ante ones (historical output based allocations) should be introduced in order to enable a sustained economic growth without curtailing production. It will therefore improve systemic resilience of the ETS to economic cycles.
- The single market for energy with the full implementation of the third energy package should become reality
- The safe exploration of unconventional energy resources in Europe must be encouraged in order to help face the shale gas revolution seen in the USA.

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?

- Carbon leakage can only put an additional burden on the energy leakage phenomena.
- The safe exploration of unconventional energy resources in Europe might be a way to soften the growing pressure on the energy costs differential that Europe is suffering compared to other parts of the world
- Solvay is targeting its major investments towards the growing regions or where competitive edges can be found such as Asia and the USA.
- Energy costs in Europe vis-à-vis the rest of the World are a major driver for Solvay's strategy:
  - Solvay announced on the 6th of June today that it plans to reinforce its position as a world leader in soda ash and improve the activity's long-term profitability by reducing its 2012 European cost base by €100 million per year as of 2016. Solvay will focus on a breakthrough competitiveness improvement of its key synthetic soda ash plants in Europe, while expanding its trona mining-based operations in North America. While demand worldwide has been growing at global GDP rates, demand in Europe has been suffering from the economic downturn which has caused structural overcapacity. In North America, with limited investments, Solvay is gradually expanding its production capacity by about 12%, at Green River, Wyoming, where it operates best-in-class trona-mining industrial assets.

- Solvay also announced on the 7<sup>th</sup> of May its intention to make a partnership with Ineos for its European PVC electro-intensive business and to exit this partnership, and thus the PVC business, between the 4<sup>th</sup> year and the 6<sup>th</sup> year. The planned partnership will improve the competitiveness of its PVC operations in a very challenging environment regarding feedstock and energy costs in Europe.
- To address carbon leakage in a 2030 framework, the first action is to have ready an answer to the question and thus to monitor such change of trade or investment flows that indicate carbon or energy leakage. A change of flow/investment trend should then be the trigger to a range of actions preventing such carbon or energy leakage.
- A recent study from the UK's department for environment, food and rural affairs (Defra) showed that while domestic CO<sub>2</sub> emissions in UK had decreased, its per capita emissions had increased due to an increase of CO<sub>2</sub> embedded in imported goods.

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

- One of the main drivers of the current trend in energy costs in Europe is the overreliance on expensive and uncompetitive renewable energy requiring heavy subsidies the cost of which is past on to consumers (industrial and private).
- Another driver is the lack of a European energy policy or MS coordination which is prompting each MS to ensure independence of energy generation by making decisions based on local political choices instead of an efficient European analysis.
- Massive surcharges and taxes set by Member States or regional/local Authorities are also plaguing the cost of gas or electricity. Various exemptions to those additional costs granted by some MS to its own industry result in energy price distortion between MS.
- EU can influence those cost drivers by coordinating cost effective energy generation policies and by issuing energy policies that drive the costs down instead of pushing the costs up.
- Another driver in energy costs are the different fuel choices made by MS and imposed onto industry through the electricity companies. All energy generation options should be contemplated and developed within a European wide framework including nuclear as Europe, through its MS, cannot afford to make choices.

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?

- By maintaining the EU objective conditional on the commitment of the other countries and dependent on the level of ambition of an international binding agreement.

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 can be increased in ETS by ensuring that the carbon leakage status will not be revised anymore and that the cross sectoral factor is abandoned to reinforce the predictability of the policy which is key to retain or possibly attract investment in Europe.

On the other hand regulatory certainty such as the linear reduction factor which will be playing an ever increasing role in the attractiveness of Europe by appearing as an obstacle to economic growth ought indeed to be revised in order to reflect the necessary flexibility that is required to adapt to changing circumstances.

- Within ETS, by switching to ex post allocation (actual output based allocations) instead of ex ante ones (historical output based allocations) which will allow for changing economic conditions without curtailing production.
- By maintaining the EU objective conditional on the commitment of the other countries and dependent on the level of ambition of an international binding agreement.
- By referring to the “legitimate expectation” principle of any regulatory framework.

How can the EU increase the innovation capacity of manufacturing industry? Is there a role for the revenues from the auctioning of allowances?

- By returning all the auctioning revenues to the industry in the form of support for mitigating climate and energy related emissions.

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?

- By supporting the safe exploration of shale gas and by using and supporting all energy generating options currently available in Europe, including nuclear.

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?

- Better coordination between MS
- Consider all currently available energy options including nuclear

### **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?

- We are a global company where EU is taken as a whole and where an equitable distribution among Member States is not our concern unless it distorts competition within the single market

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?

- The best way is to have a system like ETS which is independent of MS borders and driven at EU level



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

- The first step is to refine, adjust and improve the existing instrument taking advantage of the experience learned until now.
- Uncompetitive solutions or expensive technologies aimed at supporting the 2030 framework should be supported by dedicated policies that do not endanger the competitiveness of European industry or put an unnecessary burden on the existing industries. In particular those policies should not be linked to ETS (e.g. through the price of the EUA) that is currently driving the mitigation efforts of the existing industry.