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Dow Chemical's response to the European Commission's green paper on establishing a framework for a 2030 climate and energy package

Introduction

Dow Chemical welcomes the opportunity to provide input into this consultation. We believe the 2030 framework must adequately address all three pillars; economic growth for Europe, energy security for all its citizens and environmental progress at the global level. However current EU policy needs substantive rebalancing in order to prove effective with respect to those three objectives. In particular it needs to start with economic growth in order to generate the revenues required to invest in an economically sustainable energy future.

At the final consumer level, energy is an undifferentiated commodity; this means that the lower cost energy supply option will always ultimately win. Lower net energy costs also translate into higher GDP growth. Accordingly if Europe wishes to re-establish global leadership in this energy and climate domain, it will need to demonstrate how it can grow, significantly reduce net industrial energy costs and achieve substantive gains in efficiency at the final end user.

General points

- Improve predictability, affordability and policy coherence:
  - Drive full implementation of 3rd energy package and the completion of the internal energy market
  - Diversify and use all energy sources (including benefiting from the growing availability of unconventional sources of oil and gas)
  - Introduce goals to reduce the cost of renewable energy instead of mandating targets for a specific proportion of renewable energy.
- Ensure economic growth by including the goal for a 20% industry share of GDP by 2020 and beyond
- Remove all caps on growth such as an absolute energy consumption cap (which anyway becomes less relevant as energy sources become more sustainable)

- Adopt a global approach to climate policy. Set a climate target conditionally and only in conjunction with a genuine global agreement that sets comparable burdens for industries in all major economies.
- Support ETS beyond 2020 by adopting structural changes to maintain ETS as an effective market based system, allowing for predictable supply side flexibility while avoiding short- term fixes.

Specific Remarks

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?

A 2030 framework must be redesigned to deliver an outcome that is environmentally effective and sustainable, but also economically and socially sustainable.

The EU is strongly impacted by developments around the world. This is particularly true for sectors exposed to global competition such as the EU chemical industry. Setting unilateral targets for Europe has proven to be ineffective when dealing with a global problem such as climate change: while EU countries have reduced direct emissions from industrial installations, global emissions have risen exponentially at the same time. An unchanged EU climate policy would reward exporting emissions together with production and jobs.

A new CO2-reduction policy should allow efficient installations to grow and encourage new manufacturing investments.

In this regard:

- Europe cannot pursue environmental objectives in isolation and "at any cost". The goals of economic and social sustainability require the consideration of the potential impact on the wider economy and international competitiveness.
- Securing sustainable growth and jobs will depend on wealth generation. Investment in the transition to a lower-carbon economy will generate new jobs and added value when such investment can survive in market competition without subsidies.
- The transition to a lower carbon economy will prove more effective if we shift from the approach of subsidizing supply (and thus increasing burdens and costs) to measures that stimulate demand for example for more energy and resource efficient solutions.

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?

- As far as climate policy is concerned, the objective is to limit the increase in temperature due to increased levels of atmospheric CO2 by reducing carbon emissions. The objective, as far as energy policy is concerned, is to ensure competitive prices and security of supply. Industrial policy has the objective of securing economic growth and jobs. All targets should recognise and reconcile all these objectives.
- Any legally binding target for Europe must be directly dependent upon concrete, measurable and verifiable progress of international climate change efforts.
- A climate target must be technically achievable and cost-efficient, without putting in jeopardy the EU's competitiveness of both industrial producers and its customers such as SMEs.
- Instead of a target requiring a particular proportion of renewable energy in the mix, there could be an economic and innovation driven goal to reduce the cost of renewable energy by an agreed amount
- If Europe adopts more expensive measures than its key competing regions sectors exposed to global competition should be exempted from any resultant RES and CCS charges.
- Public funding support schemes should be technology-neutral, limited, harmonised and temporary in order to avoid picking expensive, uncompetitive technologies that depend on long-term subsidies.

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

- Yes, the three targets overlap and conflict. The renewables target and the energy efficiency target for 2020 are driving efforts that tend to reduce the demand for carbon allowances under the ETS.
- Efficiency improvements should focus on the biggest potential which is buildings and transport. These sectors require higher standards, better enforcement and more effective financing options as opposed to being part of an economy wide target.
- Efficiency amongst large and energy intensive manufacturers is already driven effectively via global competition and does not require additional burdens imposed at the EU or national level.
- As previously indicated renewables goals should be linked to cost reduction efforts and public private initiatives in this area should focus on those areas of research, development and demonstration that private industry on its own is unwilling to undertake

- The ETS is and should remain the tool to reach the agreed emission reduction target at the lowest cost.
- Reducing carbon emissions through innovation and technology will result in reduced carbon emissions but this will take considerable time to be achieved at the global level.

- 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?

- Additional policies at sectoral level might well be needed but this does not necessarily mean an EU wide target is required. Policies and instruments should be based on a bottom-up approach, focused on the actual potential for improvement and any public policies should only be applied where there are failings in the existing market based approaches.
- In general burdens should be shifted from production towards consumption. This would help to reduce the carbon leakage that is currently a significant contributor to meeting EU targets under today's ETS, but also a contributor to the growing global GHG emissions.
- Technologies should not be imposed top down so that innovation is allowed to yield the best solutions. The current single CO2 efficiency target for passenger cars allows for innovation by automotive builders ranging from fuel efficient diesel or gas engines to hybrid or full electric vehicles. Moreover, such a CO2 efficiency target allows for continuous growth within the automotive sector. Such a flexible framework should be taken as an example for resolving ETS restraints.

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

All targets should include a clear and transparent measure of the economic cost and the impact of these technologies on those sectors of society that called for their introduction.

- 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 need to refocus EU and national policies across the board so as to assure competitive cots to those industries that underpin manufacturing in the EU. A mix of policies is required, including:

- Implementation of existing policies such as energy market liberalization and the completion of the internal energy market
- Structural reform of the ETS and assurances of industry supportive measures that can effectively prevent carbon leakage
- The development of unconventional energy sources including shale gas

- The elimination of technology exclusions at the national level, as each such restriction imposes costs and moves Europe further away from the European market approach it is espousing
- Investments in infrastructure including interconnections, pipelines, storage, terminals and gas distribution should be made a priority
- A long-term strategy for delivering the necessary investment and innovation should be brought together in a coherent strategy that has **a lower cost transformation** towards a lower-carbon economy **as its primary goal.**

4.3. Instruments

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

- A structural ETS policy reform is needed that can cope with the economic cycle in a predictable way and is designed to minimize carbon leakage.
- ETS **should not be redesigned as a government revenue generating mechanism** as its goal is to reduce emission sat lowest cost
- European policy coordination on energy generation and security of supply is needed
- National decisions have an impact on other member states, so national energy mix decisions require coordination and consultation with other member states

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

- Specific measures designed to meet climate objectives which are not economically viable today should not be linked to the ETS. The objective of the ETS is to reduce current emissions at the least overall cost to society. As market approaches invariably provide the most cost effective means of achieving goals, then policies should be designed to transition to market approaches in the fastest manner with the least disruptions to the participants involved.
- The current "absolute targets for industry approach" curbs growth and reduces the resources and finances required for new investments. Absolute emission reductions should rather focus on approaches which stimulate GHG efficiency gains via sustainable consumption policies including for example measures for the building sector. The chemical industry provides many of the products needed for this and in general the technologies for substantive improvements are available today and represent a far more cost effective approach than the current trend of increasing subsidies.

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

Completion of the internal market for energy is a key strategy for minimising the cost of energy and securing supply. With Europe seeking to re-industrialise and to generate enough wealth to earn its way out of the current financial crisis, a programme to re-invest in the basic industrial infrastructure of Europe is required.

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

- Measures should be used to encourage and incentivize sectors outside the ETS by for example stimulating investment in much more energy efficient buildings and infrastructure. This would stimulate the EU economy and help to deliver competitive, lower carbon solutions throughout the value chain.
- Measures should also be designed to tackle market failures such as access to low cost financing as many of the more sustainable energy options require substantive up front capital. However these policies should not lead to long-term subsidy dependency.

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

- Research and innovation should remain an essential component of EU energy and climate goals and need to be closely reconciled with the need for competitiveness and economic growth.
- The chemical industry plays an important part in delivering solutions for energy and resource efficiency in the process industries and throughout the value chain.
- A more targeted approach to R&I policies is needed in which key barriers are identified and efforts focused on overcoming those barriers. In many instances this will require that research is targeted at finding lower cost ways of achieving our lower carbon objectives. This in turn will require that more of the public sources of funding are shifted from deployment to programs aimed at reducing the costs of those alternatives (which in turn will then reduce the cost of deployment)

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?

Europe needs affordable energy and for energy intensive industries security of supply means competitive energy when compared to major competing regions. Climate and energy policies can stimulate sustainable economic growth when they reduce burdens in the production process or increase demand in the final consumption process – for example by increasing demand for insulation in housing or light weighting in transport.

- As far as the ETS is concerned, the financial compensation of indirect emitters through state aid should be transformed into free ('indirect') allocation of allowances.
- The transition to the single market for energy with the full implementation of the third energy package should be accelerated

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?

Competitive pressures have existed for decades, however the cumulative cost impacts of multiple policies as well as fuel mix choices at national level have accelerated the rate of investment leakage. More recently, the process of EU divestments have accelerated as the USA has been faster to reap benefits from unconventional oil and gas (including shale gas). New investments worth an unprecedented $100 billion have been officially announced for the US. Unless there are EU policy changes, when these plants come on stream, their direct products and downstream products will gain market share at the expense of European producers.

- To address carbon leakage in a 2030 framework, the first action is to monitor such change of trade or investment flows that indicate carbon leakage. Any change should then be the trigger to a range of actions preventing such carbon leakage.
- Carbon leakage is linked to energy costs, a concrete step to partially mitigate this is to accelerate the safe exploration of shale gas in Europe.

In addition the 2030 framework must exclude unilateral EU policy-driven cost increases for industry that would further weaken the competitive position of domestic producers and speed up relocation and divestment.

The EU remains a net exporter of chemicals, but there has been negligible new EU investment in basic chemicals production for many years. As this production foundation weakens, effects up the value chain become more severe. These basic chemical building blocks act as an early warning indicator for overall EU manufacturing and more generally for overall growth and jobs in the EU economy. Cefic has recently released a 2050 Roadmap Study[1] reviewing various policy scenarios. For example continuing unilateral European climate action would turn Europe into a net importer of chemicals while in parallel increasing net global emissions.

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

Multiple factors contribute to the cumulative increase in energy costs that the EU faces compared to its major competitors. This includes; specific renewables

[1] Cefic Energy Roadmap (2013): European chemistry for growth, Unlocking a competitive, low carbon and energy efficient future

deployment targets, inadequate energy market liberalisation, incomplete internal energy market, a lack of cross-border connections and competition, conflicting national targets and policy mix decisions, bans on specific fuels at national level, restrictions on the exploration of unconventional energy, etc.

The EU could and should encourage sustainable exploration of unconventional and cost-optimised use of renewables at a speed that is aligned with their market integration capability .

- 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?

The concept of the EU taking on increasingly heavy top down burdens in the hope that other major global economies would follow has proved not to be workable as the others essentially have not followed. The EU should therefore move to a bottom up benefit sharing approach if it wants to maintain a leadership position without further undermining its economy. It is worth noting that the EU will decrease its share of global emissions from about 16% in 1990 to about 8% in 2020, and its tendency to pre-announce unilateral goals ahead of international climate meetings simply undermines its negotiating strength.

- 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)?

The ETS should be reformed towards a more flexible instrument that can adapt to EU economic growth via a pre-agreed and predictable mechanism. There should be no deadline or end date for a sectors' carbon leakage status as this should automatically continue until comparable burdens apply in the other major competing regions. The EU should maintain a conditional objective for EU emission reductions dependent on levels agreed by other major economies.

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

The auctioning of allowances and all other energy and carbon related costs reduce economic margins and thus reduce the capacity of industry to invest and to innovate. Returning this revenue to industry would be an essential first step, however there is to date no evidence that all countries would accept this approach.

Industries invest where and when they see the possibility of a better return compared with their alternative investment options. The optimum way to stimulate EU investment is to create additional demand for the new end products that are required for our lower carbon and more resource efficient future.

However in any case, ETS is a Cap and Trade tool which means its primary goal is to deliver reductions at lowest net cost. Accordingly it should not be turned into a tool to increase revenues as directly counters its primary policy objective.

- 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 development of unconventional energy sources as a means of keeping the cost of energy (and feedstock) competitive should be a high priority for Europe. The EU can contribute to this by ensuring a clear and stable regulatory framework that facilitates the safe exploitation of these resources. By making use of these naturally occurring local resources the EU will also be able to negotiate better terms for its imported energy.