THE PRINCE OF WALES'S

EU CORPORATE LEADERS GROUP

A 2030 framework for climate and energy policies

EU CLG CONSULTATION RESPONSE

Summary

The Prince of Wales's EU Corporate Leaders Group (EU CLG) brings together business leaders from a cross section of EU and international businesses who believe there is an urgent need to develop new and longer-term policies for tackling climate change. The group was brought together by HRH The Prince of Wales and is managed by the University of Cambridge Programme for Sustainability Leadership.

We welcome the opportunity to respond to the European Commission's Green Paper on a 2030 Framework for Climate and Energy Policies and are limiting our responses to questions 4.1 (General), 4.2 (Targets), and 4.3 (Instruments). Our key messages are as follows:

1) The next phase of EU policy beyond 2020 must **give the right long term signals for investments** in low carbon and energy efficient technologies and more innovative competitive industrial development. **Consistent and coherent policy** is the backbone of long-term investment

2) The EU CLG wants to see a **clear and robust** 2030 Climate and Energy Framework with the following key elements:
   a/ An **ambitious and binding Green House Gas** (GHG) Target
   b/ A **stronger ETS**
   c/ A **policy framework supportive of renewable energy, other low carbon technologies & energy efficiency**
   d/ A **Carbon Capture and Storage** (CCS) demonstration programme

3) **Energy Efficiency opportunities** in the non-ETS sectors like the **buildings sector** are largely un-tapped and must be promoted.

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 EU CLG believes that the EU's 2020 Climate and Energy framework has been fundamental in reducing GHG emissions and demonstrating EU low carbon leadership. However, it must be recognised that although emissions have fallen (mainly due to the economic crisis) the EU's policy framework has not delivered the robust carbon market wished for or created the right long term signals for investment in low carbon technologies.

As business leaders, we recommend that the next phase of the EU's climate and energy policy beyond 2020 gives the right long term signals for investments in low carbon and energy efficient technologies and more innovative competitive industrial development.

We therefore urge the Commission to take note of both the following successes and lessons learned from the 2020 framework in its legislative proposal for 2030:

International Success: Internationally the EU's leadership and commitment to 20% GHG emission reductions, 20% energy efficiency and renewable energy objectives has catalysed:

- More than 90 countries to adopt similar pledges. We recognise that further effort should be made to strengthen these pledges, in particular in the BRIC's, but believe that without EU leadership many of these pledges would not have been forthcoming. We look to continued EU leadership in pushing the Durban Platform to deliver an agreement by 2015 on post 2020 GHG reduction objectives.

- Non-EU countries are now implementing or developing legislation for their own emissions trading system (Switzerland, Australia, New Zealand, South Korea, China and several US states). We regret that the current inability to agree on a "backloading" amendment in the European Parliament and Council has put into question the EU's own emissions trading system and could have a knock-on effect in other regions.

Domestic Success: Domestically the EU's climate and energy objectives have resulted in:

- EU wide legislation incentivising investments into low carbon and energy efficiency technologies.
- A 16% reduction in territorial / direct GHG emissions (below 1990 levels) by 2011 thus putting us on track to attaining our 20% goal.
- A 12.4% share of renewable energy of energy consumption in 2010, delivering job creation, energy security, green growth, industrial and technology leadership. To achieve the target for 2020, continued growth of 6.3% per year is needed. In this regard we take note of the positive role that large companies, including EU CLG members, have played in producing, installing and purchasing 'low carbon power'.

Lessons learned:

- **Consistent and coherent policy is the backbone of long term investment**. A 2030 framework must ensure policy optimisation between the objectives of the ETS and any renewable energy and/or energy efficiency targets operating in the same sector. Multiple policies introduce the risk of weakening the carbon price and raising the cost of compliance if such policies are not correctly aligned. Further, it can reorder the implementation of mitigation options with the consequence that one critical technology in particular, carbon capture and storage, typically gets delayed. As such, additional policies in the ETS sector should be limited in scope so as to promote technology development but not overly disrupt the efficient functioning of the carbon market.
- **The next period of the ETS must reflect macroeconomic developments and the potential impact of the implementation of other policy measures on allowances**. Introducing flexibility in the framework to account for economic and market changes is essential. Rapidly fixing a new cap and decreasing the annual linear reduction factor should be priorities.
- **Over burdening Member States and businesses** with complicated, badly designed policy frameworks, which are not complimentary will result in poor implementation on the ground and lack of public acceptance. A clear framework and clear guidance for the introduction of de carbonisation plans at the Member State level is essential.
- **It is important that long term policy commitments** at the EU level are **complemented by the right market mechanisms and short term incentives at the Member State level** (e.g. feed in tariffs, certificate schemes, subsidies etc..). Such incentives must be designed to start building capacity, reduce upfront costs and ensure consumer affordability. However, all support measures should be time bound and gradually phased out so as to avoid un-intended consequences such as over supply to the grid or a sudden collapse in demand.
- With a focus on enabling particular sectors to achieve GHG reductions by 2030, **further consideration should be given to whether ETS related revenue could be used to assist sectors to innovate beyond just the use of auctioning revenues at the Member State level**. Frameworks such as the NER 300 should be better used to stimulate innovation and deployment in low carbon technologies. For example, renewables and carbon capture and storage in the power and industry sector and energy efficiency e.g. in transport and buildings.
- **Voluntary measures have not proven effective**. Due to the voluntary nature of the Energy Efficiency target, the implementation of programmes have been slower than expected and the non-binding target for energy efficiency only resulted in a 10% reduction in energy consumption and without further efforts it is expected that the energy efficiency target of 20% by 2020 will not be reached.
- **More thought needs to be given to public acceptance** of EU climate policy overall.

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?

The EU CLG supports a clear and robust 2030 Climate & Energy Framework with the following key elements:

1. An Ambitious & Binding GHG Target
2. A Stronger ETS
3. A Policy framework supportive of renewable energy, other low carbon technologies and energy efficiency
4. A CCS demonstration programme

The members agree that any framework must be underpinned by:

Firstly: An ambitious binding target of at least 40% GHG emissions reductions domestically by 2030 (1990 baseline). Commission proposals should also address both Member State effort sharing and the role of international credits.

At least a 40% target is widely seen as where the EU needs to be in 2030 if it's to meet its 2050 target of an 80-95% GHG reduction. The IEA think the EU should be at 48% by 2030, the UK government is promoting 50%, and The Netherlands 45%.

Secondly: Immediate reform of the ETS cap to align it with the contribution that the traded sectors should make to the overall GHG target (this could include reducing the ETS cap by 2.5% pa- compared to 1.74% today), and taking into account the impact of other policies and measures.

To support an ambitious domestic GHG emissions reduction of at least 40% by 2030 a robust policy framework is required:

Most of the EU CLG members would like to continue with a 20-20-20 style framework supporting the GHG emissions target by setting binding targets for renewable energy and energy efficiency (both supply and demand side) and putting in place clear support measures for carbon capture and storage. However, this introduces the risk of weakening the carbon price and raising the cost of compliance if such policies are not correctly aligned. Further, it can reorder the implementation of mitigation options with the consequence that one critical technology in particular, carbon capture and storage, typically gets delayed. As such, additional policies in the ETS sector should be limited in scope so as to promote technology development but not overly disrupt the efficient functioning of the carbon market.

Should the European Commission decide not to continue with a 20-20-20 style framework, but focus on an ambitious GHG emissions target cascaded to an ETS/carbon market as the main driver to meet that objective, then this must be underpinned by clear Member State

de-carbonisation plans and measuring mechanisms. This may include national objectives for both low carbon technologies (RES, CCS, other low carbon technologies) as well as energy efficiency goals backed by the necessary policies and measures for implementation.

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

Yes, there are several lessons to be learned from the 2020 framework overall as well as the targets.

- Although the EU CLG maintains that the ETS should continue as one of the EU's main market and pricing policies, **the lack of scarcity of CO_2 certificates has undermined the carbon price and has been a serious shortcoming of the ETS.** This should be rectified urgently by taking allowances out of the market and building into the system the necessary flexibility to take into account macro-economic shocks. In this respect, the EU CLG supports the Commission's "backloading" proposal as a stop gap measure.
- **An effective alignment and strengthening of policy instruments is necessary**: To start with a GHG emissions target should be set ambitiously enough to take the necessary emissions reductions into account. It can be argued whether the 20% 2020 target is ambitious enough to stimulate necessary investment in a low carbon economy.
- **The generous allocation of free allowances plus international credits has not produced the necessary scarcity in the market to deliver a robust carbon price.** This has been compounded by macro-economic shocks and some believe by overlapping targets in the ETS sectors. The ETS should be properly restructured to take these impacts into account starting by withdrawing allowances from the system and integrating the use of **international credits** when setting the overall ETS cap. In addition, modelling and testing must be undertaken of different cap settings over a reasonable range of varying circumstances (delivery of supplementary policies, BAU emissions).
- **Low carbon technology and energy efficiency targets or objectives should be better aligned with the ETS**. The close correlation of the ETS cap with an expected trajectory of deployment of low carbon technologies such as renewables and CCS is indispensable. In addition, large-scale support schemes must be properly implemented and balanced with clear timescales and phase out measures to both ensure investment certainty and avoid market distortion.
- **Member States will have their own local energy targets and objectives** (including energy efficiency, nuclear, RES, coal) and natural resource endowments. An effort sharing agreement, which takes account of this, is necessary.
- **Energy Efficiency opportunities in the non-ETS sectors** like the buildings sector are largely un-tapped and must be promoted. A binding energy efficiency target is necessary to unlock this potential. However, coherence must be ensured between the Energy Efficiency Directive and Energy Performance of Buildings Directive and Resource Efficiency roadmap and the Industrial Policy Communication all of which support energy efficiency as a key element in increasing European energy security, competitiveness and jobs.

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?

Yes, sub targets or other measures could be implemented, in particular in the area of Heavy Duty Vehicles, shipping, and buildings. In addition, thought should be given to financing mechanisms to enable these sectors and the ETS sectors to reach the 2030 and ultimately the 2050 GHG targets.

- With regard to the transport sector, the current vehicle emissions and fuel quality requirements are driving change and are succeeding in reducing CO2 emissions from the sector. However, **further reductions could be made in the area of Heavy Duty Vehicle emissions**. In addition, on the fuel side a solution needs to found to the biofuels indirect land use (ILUC) debate so that low carbon fuel investors are given clarity in terms of the future direction of legislation in this area.
- **Greater effort could also be made in the area of shipping emissions** both at the EU level and through the IMO. However, careful thought needs to be given regarding inclusion of the shipping sector in the ETS in terms of international trade impacts.
- **The buildings sector needs stronger policy for energy efficiency improvements** of existing buildings. The current market signals are too low to drive the changes in existing buildings and management practices that are needed to have an effect on overall energy consumption and cost. Energy efficiency objectives in buildings should be strengthened with further measures at EU and national level. Due to the long life-cycle of buildings, such targets should be set with a 2050 perspective.
- **Legislation should provide clear definitions and codes especially in the area of energy efficiency.** For example, the definition of nearly-zero energy buildings (nZEB) in the Energy Performance of Buildings Directive and its definition of on-site renewable energy. Investments in nearby or off-site energy solutions are at risk of being made redundant if definitions of nZEBs focus solely on on-site solutions. Policy should be none-restrictive, promote a holistic process and value existing infrastructure. (For example nZEB buildings in dense urban environments should be able to achieve nZEB through auditable investments in larger nearby/off-site renewable systems.)

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

The EU CLG believes that:

- The **function of targets should be to reflect major sub sector goals** that will enable the EU to meet its 2030 and 2050 emissions reduction targets and improve supply security.
- **Member States need to create a level playing field** and put in place the right policy and market signals to stimulate the up-take of lower carbon and more efficient technologies and products. The right pricing policies and clear phase out clauses including time limited subsides and tariff schemes are therefore essential so as to create a cost effective and credible market. Namely, the EU CLG asks the Commission to encourage Member States to address pre-deployment support for all low carbon technologies, including CCS, and the necessary phase out structures once technologies reach maturity across all low carbon technologies, so as to reach the EU's overall target yet not over burden Member States.

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?

The EU CLG believes that:

- **Proper energy assessment and modelling of Europe's supply and demand balance** should occur regularly including low carbon technology and energy options and the resulting reduction in the EU and Member State energy import bills.
- The European Commission should **monitor the level of low carbon penetration** in relation to energy security and import costs so as to provide best practice information and guidelines on the most cost effective scenarios and technology/product options.
- Further effort should be made to **assess energy security gains from reduction in demand** not just supply side economics.

4.3. Instruments

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

The EU CLG believes that:

- The body of **instruments chosen must be assessed in terms of their interactions** and the ultimate goal of reaching the targets that will be agreed for the 2030 climate and energy package. It is therefore imperative that national actions, e.g. on capacity mechanisms and regulatory changes on support schemes are in line with the EU targets.
- Decisions regarding **the EU internal energy market should also be assessed** against the objectives of the new climate and energy package.
- **Energy, industrial, environmental, economic, R&D and innovation policies must all go hand in hand** as they act as beneficial levers for promoting innovation and the

competitiveness of Europe's industry. Therefore the EU 2030 policy framework must be coherent and consistent with the existing legislative initiatives on these various areas.

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

The EU CLG believes that:

- **Whatever policy is finally put in place, it must optimise abatement options across all sectors of the economy** thus equalising marginal abatement costs (i.e. exploiting opportunities in all sectors up to the same level of cost), including unlocking barriers to cost-effective energy-efficiency potential. The IEA indicates that "a least-cost response entails deploying abatement options with the lowest implementation costs per avoided tonne of CO2 over the duration of the transition". (Duval, 2008; OECD, 2009). Such a policy would then encourage innovation and diffusion of clean technologies in order to lower future abatement costs (delivering dynamic efficiency).
- **Properly constructed policies, which optimise abatement options** therefore must **have built in flexibility** to take into consideration production cost fluctuations and changes in economic conditions.
- **A macro-economic view must also be built in regarding total costs to the economy and society as a whole**. With regard to the economy, the impact of energy prices and global energy markets must be better accounted for. For example the current dumping of cheap US coal on the EU market as a result of cheaper US shale gas has a direct influence both on EU coal use (and emissions) and the cost competitiveness of the EU market versus the US market due to energy prices. By the same token, thought needs to be given to the potential economic benefits from the recycling of revenues from carbon pricing policies. In order for any policy to succeed, care must be taken to assess the impact on different segments of society in order to ensure firstly that the least cost options are promoted and the distribution of costs are sustainable and secondly, that buy-in from national governments and citizens is maximised.
- **Energy savings are currently cost effective and group the necessary conditions to be rolled out in the market provided an adequate financing framework is developed** to mitigate the large upfront cost associated with retrofitting in buildings for example. The Commission should investigate the possibility of developing such a financial framework at European level and available across the EU to ensure a harmonised approach to stimulate the uptake of energy efficiency.

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

The EU CLG believes that the reluctance to facilitate and invest in infrastructure - allowing physical flow and trade - as well as investors' hesitation to invest in new capacity or storage, from R&D to deployment, is a major obstacle to mobilizing investment in a de-carbonised energy market.

Therefore the following key points should be taken into account:

- Transmission infrastructure development, interconnection, extending network connections.
- Development of energy storage.
- Coordinated actions by member states so as to avoid distorting of the internal energy market.

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

The EU CLG believes that the following measures should be considered to make further energy savings more cost effective:

- **Promoting greater energy efficiency both on the supply and demand side beyond 2020.** Greater energy efficiency is a priority in all decarbonisation scenarios.
- Put in place the right regulatory and non-regulatory signals that enhance a holistic approach and **promote multi-sectoral coordination to optimise both existing cost efficient low carbon infrastructures and technologies as well as new technologies and innovative solutions.**
- **Promoting new, flexible infrastructure development, also beyond 2020**. Investments in electricity, gas and storage infrastructure can accommodate the various pathways in the decarbonisation scenarios.
- **Focus on the built environment and enhancing further energy savings in existing and new buildings by setting a clear and ambitious target for all buildings. Use of EU structural funds 2014-2020 combined with the promotion of sustainable and climate friendly public procurement policies** enhancing both energy efficient and other low-carbon technology projects to become more cost effective and thus more appealing.

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

EU Research and innovation policies can best support the 2030 framework in the following ways:

- **By ensuring more focus and funding for demonstration and deployment rather than just R&D in order to lower future abatement costs**. There is a clear link between the volume of technology deployed and cost reduction. Thus, technology costs will be reduced much faster if deployment is supported, instead of isolated and limited to R&D projects.
- **By promoting the establishment of Centres of Excellence** bringing together academic research, industry know-how and policy makers to ensure that policy is stimulating innovation and synchronised with progress on the ground. This will contribute to Europe's competitiveness while also focusing on tackling the climate challenge.
- **By connecting Horizon2020 with concrete Smart City projects**.

Which elements of the framework for climate and energy policies could be strengthened to better promote job creation, growth and competitiveness?

The framework could be strengthened to promote jobs, growth and competitiveness by encouraging:

- An **ambitious policy and market framework that gives clarity to investors and industry and is focused on minimising costs** where possible.
- **Member State implementation and harmonised market mechanisms** to ensure the creation of a robust low carbon economy.
- **Member States to ensure parity where possible in the pre-deployment support** offered to low carbon technologies such as RES and CCS.
- **Member States to instil subsidy phase out structures on cleaner technologies once certain levels of market penetration are reached** such as used across Europe when phasing out low sulphur petrol and diesel.
- **Investment in the construction sector (currently at a very high rate of unemployment).** From a sectoral perspective, energy efficiency in buildings and the renovation of existing buildings should be further stimulated. This will create jobs for companies of all sizes, including SMEs. For example, it has been estimated that a major retrofit programme could in the UK alone create one job for every ten homes upgraded.
- **The European Social Fund** to be better utilised to enhance energy efficiency and low carbon jobs training.

