

SUMMARY OF ONLINE SUBMISSIONS: ACADEMIC and THINK TANK

The views here represented are those of the submissions to the Commission's online consultation and do not necessarily reflect the opinions of the Commission.

Each bullet pointed entry has been proffered by at least one submission to the consultation; those expressed in bold font reflect commonly expressed views. The views expressed are in no particular order and are the author's paraphrasing of the submitter's position. The full documents can be found online at: http://forum.europa.eu.int/Public/irc/env/action_climat/library

Number of submissions: 16 (including 4 co-authored by Asbjørn Torvanger at the Center for International Climate and Environmental Research in Oslo and 2 co-authored by Benito Müller at the Oxford Institute for Energy Studies)

Summary

It was felt that the EU should to act to promote future action against climate change, both through promoting international cooperation and through leading by example. However, unilateral action was agreed to be insufficient to solve the climate problem.

The 2°C target was seen by some as an acceptable target and a framework for the required long term goals that will allow strategic industrial planning. It was argued that developing country participation should be encouraged through adaptation support and through transfer of sustainable technologies, but doubts were raised about their willingness to participate without US leadership in emission reductions.

Further research and development into new technologies was advocated, but efforts should be made on improving efficiency and reducing the demand side for energy. Carbon capture and storage was felt to be acceptable by several contributors.

Contraction and convergence had its advocates and no views were expressed against maintenance of the fundamental Kyoto architecture; there were calls for the CDM be made bureaucratic and complex. A Coalition of the Willing was suggested as a forum for countries willing to act more stringently than in this framework. However, removal of market barriers in the fields of energy, electricity and transportation was felt to be more important than politically negotiated targets by some contributors.

The wide range of views expressed, and the detail in which they were argued, makes comprehensiveness difficult in a brief overview.

1) Is it important for the EU to continue to show leadership on addressing climate change?

- **The EU should maintain a leadership role**
- **The EU should promote international cooperation**

- The EU should act, even if other major emitters do not participate in a meaningful manner
 - **The EU should lead by example**
 - The EU has increased its structural leadership effort (resources), the EU ETS offers directional leadership (leading by doing), but instrumental leadership is compromised by internal complexities and the ambiguity of the EU as an international actor in climate negotiations
 - The EU should follow the UK's 'courageous' target of 60% GHG emission reductions by 2050
 - **EU action alone will not be sufficient to avoid dangerous anthropogenic impacts on the climate**
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2) On the basis of the EU's 2°C long-term objective, what objectives should the EU set for global and EU climate change policy (including targets, timeframes and pathways for emission reductions)?

- Schemes should be widened to incorporate more countries and sectors
- Action should be based on clear targets, timeframes and pathways
- Action should be equitable and efficient
- **The 2°C target is acceptable**
- The 2°C target still represents a risk of death for thousands if not millions of people, however, as a guesstimate is a useful first step and can be refined as more information becomes available
- A 550ppmv ceiling is unlikely to be adequate to have no regrets in impact levels. 380ppmb is a more realistic no regrets limit.
- A 450ppmv target is unlikely to be politically acceptable, but 550ppmv may be negotiable
- The emissions peak should occur not later than 2030
- Any arrangement to control GHGs is likely to break down without being coupled to a non-debt-based global currency that links the overall size of the world economy with the ability of the planet to cope with that economy's waste
- **A long term perspective is needed to address socio-economic and technological inertias**
- It is not clear that emission control policies, to stabilize atmospheric GHG emissions, are wise because of the socio-economic impacts
- Flexibility in commitment type(s), differentiation between countries, timing and **inclusion of a bigger basket of GHGs** is essential to ensure broad participation
- Concentration and temperature targets are preferable to impacts-based targets
- Keeping a long term perspective and keeping future options open should supersede short term emission reduction targets
- Substantial emissions reductions are needed to reduce the danger of positive feedback mechanisms coming into play
- Mitigation costs and participation attractiveness should be used in evaluating different emission pathways to reach a given ceiling
- Scientific uncertainties make agreeing long term targets difficult, but this should not militate against action being taken
- 2050 is too far away for targets to be set, but goals for 2020 need to be put in place
- The long term aim should be the complete phase out of fossil fuels

3) What type and level of participation should the future climate change regime seek from developed and developing countries, what should be the timeframe for such participation and what should be the contribution from the EU and other countries?

- All countries should participate, developing countries should be supported to develop sustainably
- Those countries with high emissions, high per capita emissions and those that have the capacity to transfer technology are the most important to involve in the international effort
- **Developing countries should be offered incentives to participate in the form of technology policy and transfer, adaptation and sustainable development technologies**
- Developing country commitments need to take into account such factors as GDP per capita and total emissions
- All non-Annex 1 countries not defined as Least Developed Countries should be subject to QELROs in the second commitment period
- All emissions should be included, including bunker fuels
- An international carbon tax should be levied
- **The US must show positive leadership in addressing climate change. Without this, it is unlikely that developing countries will participate**
- The EU should send a high level group of scientists and legislators to the US to address legislators, bureaucrats, TV audiences, journalists, academics etc
- The EU should form alliances with American scientists to promote an alternative to the “suicidal course of American energy policy”
- Climate change should become a top agenda item at future G8 meetings. China should be invited to attend
- Burden sharing rules should be analyzed against the fairness principles of responsibility, need and capacity, and against the operational requirements of universal applicability, ease of operating, simplicity, flexibility for refinement, flexibility and an ability to take different countries’ circumstances into account.
- Ministries other than environment, including trade and the treasury, should play a greater role in climate discussions
- Developing countries are hobbled by the lack of negotiating and analytical capacity
- Anything that will help to build trust between developed and developing countries should be promoted
- The compromises granted to Kazakhstan and Turkey may serve as precedent for getting some of the more industrialized developing countries to make some commitments
- The treaty regime need to be made attractive to participation rather than something that countries should be cajoled into joining
- Increasing frequency of extreme weather events should incentivize participation

4) Which technical solutions should be allowed or promoted (eg renewable energy, nuclear energy, C sequestration, C capture and storage)?

- All technological solutions should be considered

- A technological advancement framework needs to be set up that has clearly defined achievable objectives, is stable over time, incorporates incentives and has enforceable penalties
- **R&D for climate friendly technologies should be encouraged**
- R&D would benefit from greater cooperativity and coordination
- **Energy efficiency should be actively encouraged**
- The appropriate solutions depend on the evolution of the learning curves for each technology
- Best available technologies and retrofitting of existing facilities should be encouraged
- Nuclear, gas and large hydro are business as usual technologies and should not form part of the global climate effort
- Countries should become energy self sufficient through the use of small scale renewable technologies
- Short term sequestration in forests and agricultural lands is acceptable
- Existing nuclear should not be prematurely phased out
- CCS is acceptable and should be used for all carboniferous fuel sources
- CCS will probably be researched extensively by wealthy corporations so government R&D research budgets should be targeted elsewhere
- Marine carbon sequestration is unacceptable
- Unsustainable biomass is unacceptable
- Using CCS is expensive but may be more attractive if used to enhance oil recovery rates
- **CCS has considerable potential for GHG mitigation and should be used**
- More research is needed into leakage rates from CCS sites
- Sinks should play an increasing role in mitigation actions
- The medium for the technology revolution is the global marketplace, but the imperative must come from governments
- Gasoline should be replaced by hydrogen from non-carbon sources
- A renewables-based hydrogen economy should be the goal
- LULUCF accounting should be in some way a continuation of the existing system, but should be able to learn from the experience of the first commitment period
- Climate friendly spillover from developed to developing countries depends on the rapid market infiltration of a technology in a developed countries markets
- Purely technological solutions are unlikely to deliver adequate cuts
- **Energy demand should be substantially reduced**
- The public must be engaged in reducing their emissions through personal carbon rationing, monitored by cards using credit card technology
- Subsidies for nuclear energy should be phased out
- Renewables and efficiency targets should be set
- The EU should continue research work with Japan and the US in plasma physics
- Nuclear power should be left up to states, but should not benefit from subsidies

5) Should the future global climate regime maintain the key elements of the Kyoto Protocol, including the Kyoto Mechanisms (JI, CDM and emissions trading) and what other elements should such a regime contain?

- **Contraction and convergence is an equitable approach**
- The rate of progress if Contraction and Convergence should be subject to negotiation
- Contraction and convergence negotiations at the UNFCCC should be done in regional blocs with national targets being set within regional blocs
- Contraction and convergence should allow annual global emissions targets to be set on a rolling basis over decadal timescales to allow industrial planning
- Expansion and Divergence (the opposite future to Contraction and Convergence) is the product of dysfunctional economic growth
- **Per capita emission permits should be issued to individuals so that they do not become centralized in the hands of corrupt governments: permits should be based on a base year population**
- Targets are the only way to achieve the deep emissions cuts required
- The precautionary principle should be invoked for all climate policy
- EU ETS should be expanded to include gases other than CO₂
- The regime will need to be stable enough to allow long term goals to be set
- Kyoto should remain essentially valid, but modified with changing circumstances based on capacity to pay, current emissions per capita and contain elements of contraction and convergence
- **The Kyoto mechanisms should be maintained, particularly the CDM**
- Further research is needed to reduce scientific uncertainties and inform political actions
- A more formal forum should be established to disseminate experiences on best practices of policies and measures, as for the Renewable Energy Programme of the G8
- The CDM and JI should be used for bidirectional technology transfer
- **The CDM bureaucracy should be reduced and made less expensive, complicated and cumbersome**
- No new flexibility mechanisms should be allowed
- Large scale cap and trade has been shown, by US experience, to be an efficient and effective means of emission reduction and should remain in the future regime
- **Energy subsidies should be eliminated**
- **Regulatory barriers to innovation should be removed**
- **Electricity markets should be deregulated**
- **Transportation markets should be deregulated**
- Pilots should be allowed to fly more direct routes than at present: this could save 17% of emission from this sector in the US
- International transportation should be subject to emissions reductions targets by making the IMO and IATA parties in their own right
- Government interference in markets should cease as this will give economic and environmental benefits “whether or not climate change is a serious threat”

- Consumer willingness to pay for greener energy should be mobilized and facilitated
- **A Coalition of the Willing (or other smaller subsets of countries) should develop alongside the UNFCCC process: if the latter fails there is a complementary political framework in place**
- The flexibility mechanisms require broad participation to be economically efficient
- A broad range of mitigation measures should be on the table so that countries can choose those that best meet their needs and capabilities
- There should be collaboration with the WTO to head off potential conflicts and promote synergies eg through phasing out fossil fuel subsidies
- A reform of international natural disaster relief financing may serve as an adaptation carrot for achieving participation by those countries most at risk from the effects of climate change
- Export Credit Agencies need to be mobilized to promote renewable or other clean energy sources in developing countries: guidelines should be developed
- The CDM and other project level activities are unlikely to achieve sufficient emissions reductions; sectoral or geographical regional approaches would have wider scope and greater benefits
- Best available technologies and retrofitting of existing facilities should be encouraged
- Pollution rather than labor should be taxed

6) What are the costs of taking future action on climate change, including competitiveness impacts, and how can/ should impacts be addressed?

- **Economic damages from ‘unnatural’ disasters**
- No sustainable energy source can support Expansion and Divergence
- GDP rate may slow down or even experience negative growth; however, GDP does not internalize environmental factors satisfactorily
- GDP growth, if achieved unsustainably, may reduce future GDP growth
- Certain sectors are likely to be economic losers in a low-carbon world, but there are few studies on this
- Local stakeholders should be involved in any projects
- Costs are mainly in the investment in new technologies
- Under a business as usual scenario, there is a real danger that, since GDP and oil and gas use are intimately linked, there will be a decline in GDP as oil and gas supplies decline
- Competitiveness loss is a danger if there is not a level playing field
- Studies indicate that cost of inaction is higher than the cost of early action, including for emissions reduction targets of below 450ppmv

7) What are the benefits of taking further action on climate change, including avoided damages, competitiveness impacts and ancillary benefits, and how can/ should these be encouraged or optimised?

- Mitigation can positively impact air and water quality
 - Positive impacts will not occur uniformly
 - There are few studies that can give meaningful scenarios for benefits of action
 - If transport policies reduce auto emissions, then significant urban air quality benefits will accrue
 - Local renewable energy sources allow many actors to gain from selling energy and its side products. Benefits include: greater self sufficiency and supply security, buffering against fuel price fluctuations, decrease in health hazards and water contamination
 - Carbon rationing would have positive impacts on health, and promote domestic tourism, sustainable communities and waste minimization
 - Changing climate may increase wildfires and insect infestations
 - 30-40% of nature reserves are likely to be adversely impacted in a climate change scenario
 - Up to 10% of coastal wetlands are estimated to be lost through rising sea level in a climate change scenario
 - The Greenland ice sheet might not melt if conservative temperature targets are defined and met
 - A progressive transport policy will reduce the 650 275 million euros per year external costs caused by accidents, noise, climate change, air pollution etc
 - Climate] change impacts societies, their ways of life, biodiversity, shared history and quality of life
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