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European Dialogue on the Energy & Climate Challenge IDDRRI/CEPS/FEEM

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“Implications of the Copenhagen accord for the EU climate policy ambition”**

Key Issues for the EU Dialogue

By

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The failure to reach a legally binding, comprehensive and ambitious agreement in Copenhagen has been a set-back not only for the EU but also for the global environment. This Background Paper for the first EU Dialogue meeting on 12/13 April 2010 in Madrid will attempt to frame the discussions and introduce the discussions in Sessions 1 and 2. In particular it will ask whether slogging on – as the European Council seems to suggest – is really a realistic option for EU climate policy or whether EU policy or parts will need to be re-oriented and if so, which ones and how. Focus will be whether EU key assumptions still hold true, EU policies and incentives for low-carbon investment and the effectiveness of the EU’s international negotiations strategy and especially how the EU can defend its interests. In its analysis, the paper will refer to quantitative research results by FEEM and other institutes, to be presented in Session 2 of the European Dialogue.

EU key assumptions

1. The European Council of 25/26 March 2010¹ has re-iterated the long-held EU position that a “global and comprehensive legal agreement remains the only effective way to reach the agreed objective of staying below 2°C increase in global temperatures compared to preindustrial levels” and calls “to bring a new dynamic to the international negotiations process”. This raises two crucial questions.
 - The first is whether the 2 degrees target indeed can still be attained. Analysis by FEEM as well as other research institutes, suggest that this target is most likely not attainable any longer, except under certain far-reaching assumptions, notably as regards the rate of technology improvement through an unprecedented application of radically more efficient

¹ Item 11; p.7 of Presidency Conclusions

old and new technologies. If this analysis is true the EU will need to reflect whether to maintain its current position on the 2°C target and if so, for what political (domestic or international) purposes or whether and when to modify its position in the future.

- More urgency is added to the EU's claim that a "global and comprehensive legal agreement remains the only effective way to reach the agreed objective" since there are very few signs to believe that such an agreement both comprehensive and ambitious enough is within reach in South Africa in 2011. Among other, this would assume first that the Copenhagen Accord, as a kind of bottom-up pledge and review system is only a historical blunder on the way to a truly global agreement worth its name. This assumes also that the world as a whole is ready to discuss and agree on a final carve up of the remaining global carbon budget any time soon. These are two bold assumptions, especially in the light that China and India have shown little appetite for anything other than "extreme" unilateral actions, which has been made this excessively clear². And the US is struggling even with a very modest domestic bill, let alone Australia or Canada.

Question 1: There is a mismatch between official EU statements – 2° target; a comprehensive global agreement by 2011 – and reality that will need to be recognised sooner or later. What will be the implications for the EU?

Decarbonisation of the EU economy after the economic crisis

2. Making the 'successful' outcome of Copenhagen conditional to deepening EU climate change policy is holding the EU hostage to international negotiations. However, decarbonisation of the EU economy cannot depend on negotiation cycles but needs clear and steady long-term objectives, or at least credible sign-posts and significant long-term innovation support. Bickering among member states about burden-sharing will undermine the EU's low-carbon economy strategy. The EU's 20-20 targets have been meant as a means to ensure that – in the absence of a global agreement – there is some kind of 'minimum' carbon constraint that allows decarbonisation to continue.
 - The economic crisis 'threatens' to erode this 'minimum' constraint. Some argue that due to the economic crisis the estimated costs of achieving a 30% target is now less than the costs of achieving the 20% target³, as estimated in 2008⁴. According to the International Energy Agency (IEA), business as usual development of the EU's emissions would see them fall to 16% below 1990 levels by 2020. Taking into account the potential of CDM and JI credits, the IEA concludes that the ETS sector can meet its current emissions cap to 2020 without additional abatement policies⁵. The economic crisis is not a one-off event where EU economies reach their earlier projected level of emissions just a bit later but leads to accumulated output losses that will impact emissions by 2020. Where it not for banking, the EU ETS price may have fallen to below € 10. A low carbon price, especially if it continues

² If anything, the Chinese negotiation position has been remarkably consistent in rejecting any calls for legally binding commitments before something like possibly 2030 and even has a major issue with international monitoring.

³ For example, C Hedegaard, European Commissioner responsible for Climate Action who was cited in the New York Times on 31 March 2010 saying that "To achieve a 20 percent reduction by 2020 is not nearly as ambitious today as it was two years back before the crisis".

⁴ See Spencer, T., K. Tangen and A. Korppoo (2010), *The EU and the Global Climate Regime: Getting back into the game*. The Finnish Institute of International Affairs, Helsinki, Briefing Paper # 55, 25 February 2010; Amann, M., J. Cofala, P. Rafaj and F. Wagner (2009), *The Impact of the Economic Crisis on GHG Mitigation Potentials and Costs in Annex I Countries*, GAINS report, International Institute for Applied Systems Analysis, Laxenburg, November.

⁵ See IEA (2009), *World Energy Outlook 2009*. OECD/IEA, Paris; pp. 182

over a longer period will thwart EU efforts towards a low-carbon economy, one of the key objectives for the new Commission that has taken office in February and notably for the new Commissioner on Climate Action.

- Such figures are preliminary however only and do not necessarily take into account the effects of differentiated economic growth potential of different member states or necessarily the impacts of global economic growth. Research by FEEM suggests that economic growth and therefore GHG emissions might be higher than the figures presented above as a result of global growth driving the EU economy as well.
- Irrespective of the outcome of the exact calculations, it is difficult to see how the EU can avoid moving – relatively swiftly – to a 2020 target higher than the current 20% goal. This is in contrast to governments’ reflexes to avoid ‘additional burdens’ in times of economic crisis.

If one accepts this view, there are two ways of implementing this.

- The first option is re-doing the 2008/9 climate and energy package with a view of upping the target. This would almost certainly trigger very difficult discussion on burden-sharing, finance⁶ and competitiveness. It is unclear at this moment whether the EU’s analytical capacity is sufficient to hold a steady line and ultimately be able to convince member states on some ‘acceptable methodology’ to calculate a new burden-sharing formula. Already towards the conclusions of the ‘old’ package concerns about the impacts of the economic crisis has rendered discussions more difficult. There is a fear especially in those member states with a per capita GDP lower than the EU average that just by being in the EU they are asked to reduce a multiple of what developing countries are asked to do.⁷ They are loath to contributing to large-scale finance transfers to developing countries that are actually richer than they themselves. And finally, an EU move to 30% would quickly squeeze out the substantial excess allocation in the form of Assigned Amount Units (AAUs) under the Kyoto Protocol that these countries possess and are keen to sell internationally.
- A second and to date more plausible option therefore is to target specific sectors with integrated policies such as transport, buildings or by making the energy efficiency target legally binding. The upcoming EU budget review offers an opportunity to make available EU budgetary resources to assist those member states with below EU average GDP per capita to accept to implement energy efficiency policies. Other targeted sectors could be maritime transport or agriculture. Under either scenario, there might be continuous calls for tightening the ETS cap by for example reducing off-sets or even adjusting the cap by law to ensure that the ETS does its bit as well. Incentives through price signals (in ETS sector and by national carbon taxes) are seen as economically more efficient than regulation.

There is a risk that governments in the end might take the easy way out, i.e. favour a policy to postpone action to later in the hope that new back-stop technologies such as Carbon Capture and Storage (CCS) or new nuclear will become available, which will reduce costs for climate change mitigation. Relying primarily on such technology push is a convenient short-term policy

⁶ This subject will be on the agenda at the second Dialogue meeting in Warsaw on 23/24 June 2010.

⁷ For example, Bulgaria’s and Romania’s GDP per capita (in purchasing power parity) is lower than the one of Mexico and less than two-thirds of Korea and only 25% higher than the one of South Africa.

but will ultimately increase costs and risk that Europe is losing out in broad-based incremental technology improvement.

Question 2: Is one accepts the fact that the economic crisis has significantly reduced GHG emissions, how can the EU re-install incentives for domestic-centred decarbonisation policy to stay competitive in the future low-carbon economy? Is it an option for the EU not to move to a higher than 20% reduction target? How should the different depth of the recession across member states be accommodated for? What role should price signals (ETS cap and national carbon taxes) play?

Complementing the EU ETS?

3. The EU ETS is the EU's policy of choice for large industrial and power sector emitters, enjoying a high level of support by industry, governments, the academic community and NGOs. This support combined with serious shortcomings especially in the first phase has led to an (almost) unprecedented level of centralisation of a policy at EU level with both an EU cap (enshrined in law) and EU-wide allocation methodologies. On the positive side, this reduces tensions within the internal market. On the negative side, it reduces member states' unilateral ability to push forward with de-carbonisation in these sectors (or approximately 40% of emissions) as they remain 'frozen' by EU legislation. Given that a review of the ETS *de facto* would need to be done by consensus (in the European Council), those member states reluctant to up the current target may inhibit others from moving forward. This will inevitably raise questions of how member states can provide additional short and long-term incentives to the ETS sector to press on with decarbonisation. The call for additional regulation (such as performance standards, technology quotas etc.) are misplaced as they destroy the very essence of emissions trading, i.e. flexibility but carbon price guarantees for example through government sponsored carbon contracts or financial instruments developed by the financial service industries might be feasible. At the same time, the EU ETS will become the major source for funding for domestic and international climate change policy. An un-ambitious cap will undermine its finance function.

Question 3: Is there room or necessity for the EU or member states to introduce complementary measures for the ETS sector? How can the ETS fulfil its function as revenue raiser?

Turning on the 'innovation machine'

4. The SET-Plan is Europe's way to turn on the 'innovation machine', recognising that both environmental and industrial policy objectives do not only require market pull (through carbon price or regulation) but also technology push. In an unparalleled way, the EU attempts to support EU-wide technology development. This has served as an unprecedented catalyst for industry outside the ETS to engage with the EU on low-carbon technologies and products. For the EU this constitutes a unique opportunity to forge ahead with technology leadership across the board. This chance must not be squandered. Various challenges still exist.

- The first is the **level of financing** in times of extremely tight budgets. With substantial **EU funding** being required for a low-carbon future in Europe, the budget review in 2011 is a unique (and only) chance to re-allocate funding towards SET-Technologies. In 2007, the EU share of public funding for non-nuclear energy R&D has been 20%. Within the SET objectives, this will need to go up to 50%. Such an objective will not be achievable if

governments continue to insist on *juste retour*, meaning some sort of national quotas for the money.

- Some sort of 'efficient' *juste retour* can be achieved by creating **member state clusters for each European Industry Initiative** with potentially a large member state in the lead assisted by smaller member states and national and EU officials. Clusters take into account the technology specialisation of member states/regions⁸ regions, create member state ownership for technologies to push the SET plan through Council and by extension can establish a positive dynamic among member states.
- But the EU alone will not be enough. **Member states** will need to contribute the other half of the required public money. Member states therefore will need to substantially increase SET-Plan funding too. The only realistic opportunity appears to be re-investing 50% of their ETS revenues⁹. In addition, one could think of channelling the public SET-Plan funding through a newly created "**EU Low Carbon Fund**" to increase visibility and reduce excessive political interference. This in particular raises the issue of **management** of such a fund by the European Commission, eligibility criteria for example to ensure that innovation is rewarded, which is pre-requisite that the most innovative of firms participate, participation in the six European Industry Initiatives but also safeguards to maintain technology neutrality.

Question 4: Public support for innovation of considerable scale is indispensable to achieve EU climate change objectives. How can the EU be able to deliver the required scale of public money at EU and member state level and allocate it in an economically efficient way?

The EU's international strategy and the EU's self interest

5. Internationally, the EU has attempted to lead by example and it had a number of successes. One can make a reasonable case by saying that the EU has been the driving force behind other developed countries' domestic climate policy formulation. In some cases, EU policy innovation has been able to pull, or has at least been helpful in pulling along other – often reluctant – developed countries, including in the United States. The ETS is but one – and most obvious – example¹⁰. This, however, must not be confused with 'transferring' or 'imposing' its approach on other countries. As the EU has (rather painfully) come to realise, among others in the U.S., Australia and Canada, national climate change policy moves at the domestic pace, and is largely shaped by national preferences and circumstances. The limited EU influence at the international level should come as no surprise, as the EU is a relatively minor player in terms of projected emissions up to 2030 and beyond and as a result of the 'unilateral' package and the ratification has been set on its course already long before Copenhagen. Most importantly, such a 'leading by doing' approach – quite predictably – has cut little ice with developing countries where problems are quite different.

While progress has been made in Copenhagen, notably in engaging countries that hitherto did not have reduction commitments achievements still falls significantly short of EU aspirations. So what are the EU options?

⁸ One could imagine the lead solar could be Germany, for CCS UK and Poland, for nuclear France and Spain for wind.

⁹ The Emission Trade Directive states that member states *should* (i.e. non-binding) reinvest 50% of ETS revenues in climate friendly technology.

¹⁰ Others are the 2°C target, the introduction of unilateral binding mid-term targets, the effort-sharing methodology and the thinking about the global carbon market.

- One school of thinking argues that a unilateral EU pledge of -30% could reinvigorate EU leadership and infuse new dynamics into global climate change discussions. The number of supporters of this view is shrinking fast and there seems to be little support in the Council and the Commission for this position.¹¹
- Some in the foreign policy thinktank world wonder whether the EU is not “too soft in its soft policy”, failing to defend EU interests by leading the world that does not want to follow. Mark Leonard, Director of the European Council of Foreign Relations for example argued that the EU should not “hope that China will become responsible, but rather to make the existing order China-proof”.¹² Quite predictably, he turns to the issue of applying carbon border taxes, which indeed are the only credible and realistic option the EU has to defend its interests. Currently such a move is still highly controversial not only between but also within member states and within the Commission because of potential implications for the EU’s relations with China and India, the world trade regime and international relations but also for European businesses operating internationally. From a purely economic perspective however, this would be a straightforward means of moving towards a global ‘shadow’ carbon price, even in the rest of the world, if the taxes are levied on embedded carbon and not only on products of energy-intensive industries, which are relatively little traded. Carbon leakage from embedded carbon is a far more likely scenario given that for example a Chinese unit of GDP is produced by 4 to 5 times higher carbon intensity than in the EU¹³. It thereby creates a mechanism that enforces the pass-through of carbon costs across the globe, thus making domestic consumers pay the full cost of carbon¹⁴. Precondition would have to be a 30% reduction target or more, 100% auctioning of allowances under the EU ETS and a national or an EU carbon tax CO₂ tax for the non-trading sector, not a likely but a possible scenario. Importantly, the EU will need to take a position, or otherwise delegate the outcome of this debate to Capitol Hill in the U.S. Research by FEEM can analyse whether globally it is really necessary to impose penalties and/or constraints on China and India now or whether we can wait for a few years by simply announcing that such measures will be introduced say by 2020.
- A third option and what seems to be chosen by the EU is to slog on by attempting to integrate the achievements of the Copenhagen Accord into the two UN negotiations tracks and then hope to achieve a legally binding global agreement, a scenario that this Background Paper has seen a not very likely, yet seems to be the EU’s preferred approach.

Question 5: Is the ‘leading by doing’ leadership still the way forward for the EU or should the EU become more assertive internationally by defending its interests as foreign policy analysts argue? Should the EU envisage border measures to defend its interests in line with U.S. approaches? When will emerging economies need to be ‘enticed’ or ‘forced’ to take on significant GHG reduction policies?

¹¹ As Commission President Barroso has put it, nobody in Copenhagen has asked the EU for going to 30%.

¹² ‘Beyond nostalgia and emotion’, *Security Times*, p. 1, February 2010 (Supplement to *German Times*)

¹³ Note that the leakage effect is related to the imposition of a carbon price and not the imposition of costs related to climate change policy.

¹⁴ For details, see Gros, D. and C. Egenhofer, *Climate Change and Trade: Taxing carbon at the border?* CEPS Paperback (forthcoming)