The original purpose of the conference in Copenhagen (COP 15) had been to complete negotiations on a new international agreement on climate change to come into force when the Kyoto Protocol’s first commitment period came to an end in 2012. In the last two years, however, climate change has assumed such an important role in the global agenda that an unprecedented number of heads of governments – almost 120 were present – decided to meet in Copenhagen to provide political leadership and give the final push for a global climate change agreement, hoping thereby to lay the foundations for the new ‘global climate change order’. Days after the meeting ended, people are still asking themselves whether the gamble paid off. Almost everyone agrees that the outcome was far less than most had hoped for. On the other hand, the final outcome is better than what even the most optimistic observer could have wished for after the conference entered into deep negotiations in the second week, where deadlock built up. It is still unclear whether the agreement is “a disaster” (Swedish EU Presidency) or represents “an unprecedented breakthrough” (US President Obama). Even the EU seems to be divided. German Chancellor Merkel hailed the outcome as a ‘step, albeit a small one towards a global climate change architecture’. What is striking is that the outcome is generally seen in a more favourable light in the US than in Europe. This difference, however, can be explained by different expectations and perspectives.

**Expectations**

Let us first start with the expectations. First, there has always been a high degree of optimism behind the assumption that heads of governments – even at an unprecedented number – could break the deadlock that has developed over the last two years. It has been the very same governments whose heads met in Copenhagen that have been instructing the negotiators to stick to their positions and made them dig themselves ever deeper into their trenches. And ever since the end of last summer, it had become clear to virtually all participants that a legally binding agreement was not possible – the downgrading started at the latest in mid-October and was rubberstamped by heads of state at a meeting in Singapore of the Asia-Pacific Economic Conference. Nevertheless, the EU continued to hope for a ‘comprehensive
and operational’ agreement, including especially commitments for GHG reductions and finance in line with their ‘responsibilities and capabilities’.

Second, closely related to the first point, the negotiations have become too complex for the heads of governments to conclude. As argued by Thomas Kleine-Brockhoff of the FT, who characterised them as ‘systems overload’,\(^1\) in the end the negotiations included issues involving macroeconomic transformation, trade, development, R&D and innovation, technology transfer, intellectual property rights. To conclude each of these negotiations separately is a tall order on its own. To move them to the global scale, in addition requires that negotiations are concluded in parallel. The belief that this can be achieved requires an immense dose of optimism.

Third, for the EU Copenhagen was originally about the final sharing-out of the remaining carbon budget of cumulative GHG emissions of around 1,550 billion tonnes of CO\(_2\)eq that are left until 2050. For many other, including industrialised, countries, COP 15 has been more about architecture than about cuts in carbon emissions as such.

**Perspectives**

We can find similar differences when it comes to perspectives. First, many developing countries see climate change mitigation – rightly – as a short-term ‘constraint on economic growth’, mainly but not only because it puts a constraint on the use of coal. Industrialised countries regularly respond with the ‘benefits of a green growth model’. As a result, in the EU and some other industrialised countries, climate change mitigation is framed in the context of green growth and jobs and future competitiveness.

Second, while the UNFCCC has set out the principle of historical responsibility, some developing countries prefer to frame the debate in terms of carbon debt, thereby suggesting that developed countries first need to pay back these debts (in terms of reductions or finance) before developing countries take action. The emissions figures however tell us differently. Without reductions by emerging economies, global climate change targets of 50% reductions by 2050 simply cannot be met.

Finally, for many developing countries and emerging economies, the climate change issue is framed in the context of adaptation. Impacts are typically the highest in countries with more extreme weather conditions. In many cases, these countries are developing countries or emerging economies. The government of India typically claims to be spending around 2.5% of GDP on climate change. Moreover, developing countries, especially least-developing countries are more vulnerable as their adaptive capacity tends to be lower than that of ‘richer’ countries.

1. **Main results of the Copenhagen Accord**

Judging from the high rhetoric heard before the Copenhagen meeting, urging parties to complete negotiations on a new international agreement on climate change to follow the Kyoto Protocol, the results must be seen as a failure. The Copenhagen Accord – the substantial outcome of the negotiations – does not impose actual and verifiable obligations, or binding emissions targets in particular or finance contributions. This fact, however, should not be allowed to belittle the significant progress has been made in at least three areas: financing, deforestation and adaptation.

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• Developed countries for the first time commit to a goal of jointly mobilising $100 billion annually by 2020 from both public and private sources. Not only could this unlock the finance standoff, it also gives further impetus for the development of carbon markets. In addition, there is a collective commitment to provide ‘new and additional, predictable and adequate funding’ amounting to $30 billion for the period 2010-12, with ‘balanced allocation between adaptation and mitigation’ with adaptation funding being prioritised for the most vulnerable developing countries. The major question is whether this commitment will be honoured, given the past record of governments in bringing up really additional finance.

• There is an explicit acknowledgement to act on deforestation and forest degradation and the establishment of a mechanism, i.e. a body, to mobilise the required resources.

• Action and cooperation on adaptation particularly in the least developed countries, small island developing states, and Africa have been given ‘urgent’ attention with developed countries committing to provide financial resources. This could open the way to addressing a key concern of developing countries.

For the EU, item 7 on ‘opportunities to use markets’ is of particular importance as it recognises the importance of carbon markets, a key plank of EU policy.

Progress is also represented by the recognition of the scientific case for keeping the rise in global temperatures to 2°C, but this recognition falls short of providing a credible pathway for reaching this objective. Instead, the Copenhagen Accord inserts ‘domestic pledges’ to be submitted by the end of January 2010. Emissions reductions for the Annex I parties will be measured, reported and verified according to guidelines, yet to be established. Mitigation actions taken by non-Annex I parties will be subject to domestic measurement, reporting and verification (MRV) reported through national communications, with international consultation and analysis. The latter has been a major point of contention between the US and China. Beyond that, the Copenhagen Accord remains vague. It makes a reference to 50% reductions by 2050 compared to 1990. There is also a reference to developed countries’ commitment to reducing their emissions by at least 80% by 2050 but without mentioning 1990 as the base year. It also repeats the ‘equitable right of access to the atmosphere’. Conspicuously absent is the recognition of ‘historical’ responsibility, despite a reference to the UNFCCC.

No meaningful progress has been made on international aviation and maritime transport. Following 2015, the Accord foresees a review including the long-term target.

Finally, due to opposition from a small number of countries, the COP itself did not adopt the Accord but merely took note of it. It is therefore still uncertain what role it will play in future climate change negotiations.

2. An important first step?

Despite the ‘legal limbo’ in which the Accord is currently suspended, if and once adopted, it could have major implications. These implications are to a large extent linked to the absence of legally binding ‘targets’ and commitments, an area that so far has been at the centre of attention – even if one has faith in the national pledges countries are due to file by the end of January 2010. But the implications of the Copenhagen Accord go beyond this. The document also introduces a number of ‘architectural changes’ with potentially major repercussions for the future climate change agreement.
2.1. A new architecture: From targets and timetables to voluntary pledges?

At about the same time that it became clear that there would be no legally binding agreement – around October 2009 – it gradually transpired that what now has become the Copenhagen Accord would not follow a ‘top-down’ Kyoto-style ‘targets and timetable’ approach, but rather would take the form of ‘unilateral pledges’ or what the Harvard Project calls the ‘portfolio approach’ with some – of a yet unknown nature – mixture of domestic and international compliance. This is not dissimilar to the ‘bottom-up pledge-and-review’ model that the Japanese government proposed prior to the negotiations leading to the Kyoto Protocol in 1996. If this approach prevails, it means that the Kyoto Protocol’s top-down targets-and-timetables approach has been buried in Copenhagen.

By extension, this means that the original objective of “vacating and redistributing the remaining carbon space” has been postponed and may never materialise. Those who have been occupying this carbon space – such as the US, Europe or the countries of the former Soviet Union, and to a lesser extent many of the emerging economies – will continue to occupy it to the detriment of least developed countries or countries with low per capita emissions such as India and Indonesia. This has major implications for financial transfers. The failure to ‘vacate’ the occupied carbon space due e.g. to physical limitations can only be compensated by financial transfers, which constitute a kind of ‘rent’.

2.2. Inequitable carbon budgets

The Copenhagen Accord has confirmed that the current ‘grandfathering’ practise, expressed through percentage reductions in current actual emissions, favours those currently occupying the carbon space. Some simple calculations make this clear. On the basis of preliminary figures – derived from pledges (see also section 3) – in all likelihood this means that the remaining carbon budget will largely be used up by those occupying it now. For example, there is a 50% chance of limiting the warming to 2°C at a maximum budget of cumulative GHG emissions of around 1,550 billion tonnes of carbon dioxide equivalent (Gt CO₂eq). This chance could increase to 74% if the remaining cumulative carbon budget – left until 2050 – since the end of 2008 – to be distributed among the world’s nations is reduced to around 1,050 Gt CO₂eq. Some calculations show that developed (or Annex I) countries, accounting for 20% of the world’s population in 2005, have already contributed around 75% of the cumulative CO₂ emissions (from energy) until 2000 and above 50% of the cumulative CO₂ emissions since then. Given the range of pledges listed at Copenhagen, these countries will have used up at least 25-30%, or 36-43% for the stringent but more realistic budget, of

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2 We took the respective global carbon budget (2000-49) for the above-mentioned probabilities from Meinshausen et al. (2009) and subtracted the cumulative 450 Gt CO₂eq (assuming a constant two-thirds of GHG emissions are CO₂ emissions) emitted in the period 2000-08.

3 Climate Analysis Indicators Tool (CAIT), v 7.0., World Resources Institute, Washington, D.C., 2009.

4 Assuming a linear decrease between 2008 and 2020 and then between 2021 and 2049, which is an optimistic scenario as emissions should already have peaked in that case.

5 We take the Climate Action Tracker analysis as in Höhne et al. (2009) giving a high pledge for developed countries of 19% reduction of GHG emissions (excluding LULUCF) below 1990 levels by 2020 (see also den Elzen et al., 2009) and a low pledge of 11% reduction. The lower figure of the range for Annex I cumulative 2009-49 emissions also includes an assumption of reaching annual emissions of 90% below 1990 levels in 2050,
the total remaining GHG budget stock.\textsuperscript{6} And, meanwhile, some of the emerging economies such as China, Brazil, Mexico, Korea or South Africa are about to consume the remaining part, potentially curbing the economic growth ambitions of the least-developed and other low-income countries (including India and Indonesia).\textsuperscript{7} The latter group of countries collectively might need as much carbon budget as the developed countries are about to take up from now until 2050, if they were to merely reach per capita GHG emissions of 4 t CO\textsubscript{2}eq by 2030\textsuperscript{8} and maintain that level until 2050.\textsuperscript{9} Many would expect such per capita emissions as reasonable in order to make possible the approximately 8% economic growth needed to lift people out of poverty. In all likelihood, currently existing and affordable technologies will not enable this kind of economic growth without a significant per capita carbon emissions increase. One could argue that during the review of the Copenhagen Accord starting in 2016, the target might be strengthened, as incidentally the Accord suggests. We leave the judgement of the likelihood that this will actually happen to the reader.

### 2.3 An emissions pathway towards 3.2°C at best

The Copenhagen Accord asks Parties to formalise their pledges by the end of January 2010. To date, the most ambitious upper limit of the pledges for 2020, combined with the implementation of the national plans in China and India, would bring the globe towards a 3.2°C increase by 2100 at best, according to estimates by the Climate Action Tracker.\textsuperscript{10} These pledges are estimated to reduce the projected 57 GtCO\textsubscript{2}eq in 2020 to 48 GtCO\textsubscript{2}eq. Such a level of emissions increases the likelihood of exceeding 2°C to roughly 70%, according to Meinshausen et al. (2009). Impacts will be mainly felt in least-developed countries and in other low-income countries – as they have least means to adapt – but also by future generations in emerging economies and developed countries.

### 2.4 More questions on the negotiation mode

The events in Copenhagen have exposed institutional shortcomings. Copenhagen has raised doubts on whether the ultimate resource, i.e. heads of government, was deployed in the most efficient way. Even high-level participation did not ensure that the deep divisions between developed and developing countries would be overcome. At the same time, the negotiations have called into the question the assumption that a deal can be more easily reached if the

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\textsuperscript{6} Climate change is caused by GHG concentrations as emissions stay in the atmosphere for up to 100 years. Hence, historical cumulative emissions, i.e. the stock, matter.

\textsuperscript{7} A typical low-income country in terms of GHG emissions per capita is India with an average around 1.7 tonnes of CO\textsubscript{2} equivalent per person in 2005 (see the CAIT database). An average EU citizen emits more than 6 times as much with around 10.3 tonnes, while a US citizen uses about 14 times the Indian carbon space. Hence, in effect, developed countries together with most of the emerging economies have been occupying the world’s carbon space.

\textsuperscript{8} This could be compared to the world average in 2005 of 5.9 t CO\textsubscript{2}eq per capita (see CAIT database).

\textsuperscript{9} For illustrative purposes, we took the countries with the lowest per capita GHG emissions in 2005, which combined account for a population of roughly 3 billion (including Indians and Indonesians), as given in the CAIT database. Taking their combined total GHG emissions in 2005 as a starting point (corresponding to almost 2 tCO\textsubscript{2}eq per capita excluding LULUCF), we then assumed a linear increase to 4 tonnes per capita in 2030 that remains constant until 2050 while keeping for the sake of simplicity the 3 billion population fixed over the whole 2005-50 period. This results in a cumulative 425 Gt CO\textsubscript{2}eq (2009-49).

\textsuperscript{10} See Höhne et al. (2009).
number of countries involved is kept small. These two analyses, however, pull into different directions and warrant closer examination.

3. A new world order?

A major difference in the appraisal of the Copenhagen outcome on both sides of the Atlantic may lie in the fact that the world has witnessed – possibly for the first time in history – fundamental new realities of the ‘new world order’. As the Washington Post notes, developing nations, though not always united, nonetheless exercise a commanding role in a large majority in United Nations gatherings such as the Copenhagen conference. At some point, these majorities prevail. Copenhagen therefore may have been a glimpse into a new world order in which international diplomacy will increasingly be shaped by cooperation between the United States and emerging powers, most notably China. In fact, the Copenhagen negotiations boiled down to President Obama and Chinese Premier Wen Jiabao personally hammering out a pact both could live with, even if many other leaders could not. Jake Schmidt, international climate policy director for the Natural Resources Defense Fund, an environmental NGO, cited in the Washington Post (20 December), remarked: "Coming into this conference, it was about 193 countries, and coming out of it, it clearly came down to a conversation between the leaders of those two superpowers." The leaders of Europe, Japan and other countries at the summit were largely left to rubber-stamp the deal. This may have been why the Swedish Prime Minister’s office let it know that the result was ‘a disaster’.

Therefore, the Copenhagen Accord essentially reflects the domestic political realities not only in Washington but also Beijing. Both remain more cautious than for example the EU about establishing a strict set of international rules. The agreement, which allows nations to set their own emissions reduction targets without a firm deadline for signing a binding international accord, ensures full national sovereignty. This may have touched a raw nerve revealed by the findings of a new report by the European Council on Foreign Relations (see Shapiro & Witney, 2009) that documents how the US under Obama works towards a network of partnerships with itself at the core to preserve its influence in the world.

4. What are the EU’s options?

As we have said before, the EU went into the negotiations shoulder to shoulder with the US with the objective to achieve a ‘comprehensive and operational’ agreement, leading to a roadmap towards legally binding commitments on GHG reduction targets and finance. It did not get it. In the end, the fact is that Europe as well as Japan played a very limited role at the centre of the negotiations. This state of affairs will surely provoke some internal reflections in the EU on its future role in the international negotiations.

The EU faces several options:

1. The EU could attempt to declare Copenhagen a success. Chancellor Merkel made an earnest effort at it, attempting to discredit stakeholders and climate activists by saying they were overly pessimistic.¹¹ French President Nicolas Sarkozy and British Prime Minister Gordon Brown spoke along similar lines.¹² However, this would throw away the opportunity for Europe to reflect on what ‘leadership’ or at least a considerable

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¹¹ See http://www.guardian.co.uk/world/feedarticle/8865971

role would mean. We would expect that the press coverage in Europe would not allow this strategy to persist much longer.

2. The Lisbon Treaty, as the EU’s new ‘constitution’, offers an opportunity for the EU to play a bigger role in the negotiations, if it so wishes. Ironically, the bad press that all EU leaders received, including the climate leaders, may trigger a rethink on their part on the desirability of attempting to play a bigger role in the future. Now that Merkel, Sarkozy and Brown realise that international climate change negotiations do not automatically allow for a shining role, they may find it attractive to allow the European Commission to do more work in the negotiation trenches. The next months, which will see the implementation of the Lisbon Treaty, will be a crucial window of opportunity.

3. The EU will have to answer the question whether it wants to keep its close relationship with the US in the negotiations – as we described in a recent CSIS/CEPS publication (see Egenhofer et al., 2009) – or whether it wants to develop its own distinct position. This would require the EU to continue to develop its own position as well as to challenge the US, where required. Given the importance it attaches to historical responsibility and finance, the EU could become a possible bridge between developed and developing countries. Already in Copenhagen negotiators and observers wondered whether a break between the EU and the US position would not have made a difference with respect to the outcome. So far, the EU has preferred to stick closely to the US, which may explain why the EU did not play a major role in the negotiations.

4. The EU could exercise leadership in future climate talks by pursuing a global ‘level’ pricing of carbon. There are two ways of doing this. One route would be to pursue scaled-up post-2012 mechanisms that allow the establishment of a global carbon price, but this would require the cooperation of other countries, notably developing countries. Another route would be for the EU to impose an import tax on the content of CO\textsubscript{2} of all goods imported into the EU from countries that do not have their own cap-and-trade system or equivalent measures. From a purely economic perspective, this would be a straightforward way to move towards a global ‘shadow’ carbon price even in the rest of the world. Such an import tariff improves global welfare because it transfers, at least partially, via trade flows, carbon pricing even to those parts of the world where governments have so far refrained from imposing domestic measures of any magnitude. In other words, it creates a mechanism that enforces the pass-through of carbon costs across the globe, therefore making domestic consumers pay the full cost of carbon. A key effect of such a tariff is that it would always lower global emissions. A paper by Gros and Egenhofer (2009) shows that there are solutions to issues such as WTO compatibility and equity, the latter for example through rebating. The latter move would have potential implications for the world trade regime and international relations. Nevertheless, it should not be dismissed out of hand. What is clear from the result at Copenhagen is that EU must engage in some serious re-thinking of its strategy. We strongly believe that business-as-usual is no longer a viable option. If the EU continues to believe that climate change policy is important, it may need to make radical choices. Otherwise the recent period of EU leadership in this critical domain risks becoming a mere footnote in history.
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