

Climate Policy Brief

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Copenhagen: The darkest hour before dawn?

The stale positions

With the Copenhagen climate conference less than two months away, along with the energy and determination one can sense a growing desperation.

There are several interlinked problems that have yet to be faced. The world seems no closer to resolving long-running disputes as e.g. over the level and governance of international finance. Stale positions about technology transfer are reiterated, and the developing countries complain about the inadequacy of developed country actions and commitments.

There is every prospect either of failure, or a broad political agreement that re-emphasises again high level statements about the seriousness of the problem, alongside decisions that convey humanities' apparent inability to act collectively to address it.

What threatens Copenhagen?

North-south divergence

Underlying the specific disputes, there are basic tensions that threaten Copenhagen.

One is a truly fundamental north-south divergence about the nature of responsibilities. At the end of the day, most industrialised country governments are willing to help developing countries and see it as necessary, but see it as just that, and believe that developing countries stand the most to lose from failure. Developing countries see the issue more in terms of obligations based on a sense of equity and historical justice, and simply do not accept framing based on 'assistance', or what their contribution should be going forward at least until the rich world has got its emissions demonstrably declining.

Timing and complexity of the political process

Another obstacle is sheer timing and the complexity of the political processes involved. A still relatively new US administration, beset by domestic challenges, is being expected to offer a deal that they know would be unsellable in the US Senate at least without much stronger Chinese commitments; and the Chinese are far from ready for that and the political complexities it would entail vis-à-vis G77.

How a substantive agreement could be achieved

In such a situation, one needs to look at whether and how the problems can be broken down into slightly more manageable chunks. This is still possible, by exploiting the fact that there are actually several negotiating processes. Aside from the long-term goals, there are at least two key areas in which substantive agreement could be reached, and complemented by mandates that could bring other elements to closure subsequently.

Forestry

The first is on forestry. Agreement on Reducing Emissions from Deforestation is within reach, with strong backing both from the forestry countries in developing countries, and industrialised countries who see this as a 'win-win' option that could address multiple concerns and also offer relatively cheap offsets (crucial in the US context in particular).

Cap, trade, and offsets

The second is that there is sufficient agreement on some basics around the role of cap, trade and offsets that engage the private sector. Indeed, compared to the 1990s there has been a considerable convergence of views that the private sector is crucial to solutions, both in terms of domestic implementation and international investment.

Despite the critics, the Clean Development Mechanism is an important success of the Kyoto Protocol, which has levered unprecedented private finance towards the combined goals of decarbonisation and sustainable development, and also generates funds towards adaptation through the CDM levy.

What about the Kyoto architecture?

Within the Copenhagen process there is a separate negotiating track for the Kyoto Protocol. Whilst many parties consider that Kyoto cannot continue in its current form, due in part to US opposition, much of the fundamental architecture makes sense. A restructured agreement for post-2012 could be agreed by the current Kyoto parties provided it focuses on the core task of defining quantified commitments and the architecture required to create incentives for the private sector, in a form judged acceptable in principle to the US.

A 'de-linking' approach

A new agreement on caps, targets and offsets

The two described components are closely interlinked: a REDD agreement would need to be complemented by an agreement on a basic structure for industrialised country commitments, and the latter would only be possible with a REDD agreement that could be presented both as a meaningful contribution from developing countries, and a source of global efficiency and cost containment.

Moreover, the structural decisions for a post-2012 agreement on cap, trade and offsets, along with accompanying targets, could be taken by the existing Kyoto Parties in close consultation with the US, alongside which the US could declare its agreement to that structure whilst buying another year for it to establish with Congress the strength of the US commitment within such an architecture.

Buying time for China and others

A second side-agreement could clarify that other countries need to take on varied degrees of commitment, also buying another year for China and other advanced developing countries to complete their processes of evaluating and negotiating specific options, both with the US and G77 counterparts.

Establishing key structural elements of a post-2012 deal

In effect, this approach would use Copenhagen to establish key structural elements of a post-2012 deal, and the specific commitments of the current Kyoto 'Annex B' Parties and forestry nations, whilst buying another year for negotiations with particular emphasis between the US, China and the rest of G77 to clarify the wider set of global commitments. It's not an easy outcome to finesse; but to judge from the current state of the debate, it's one of the few credible ways in which Copenhagen can really help to clear the path ahead and move the world on to firmer, safer ground.

Via Bangkok and Barcelona to Copenhagen

Evidence for the likely outcome in Copenhagen is still mixed with messages pointing in both directions. Many observers stress the fact that progress in preparing the Copenhagen conference is much too slow and thus the likeliness of a detailed international climate treaty as outcome of the Copenhagen conference decreases. In this case a more general political deal is expected where the general framework is agreed on and further negotiations are needed for details.

The crunchy issues

Binding emission targets and financing of technology transfer

The main issues in the negotiating process for a post-2012 climate policy architecture are binding midterm emission targets for the industrialised countries and financing needs of the developing countries as well as how to ensure technology transfer.

Up front financing both for adaptation as well as mitigation is seen as key for a legally binding outcome in Copenhagen in December. In return developed nations expect from developing countries and especially from emerging economies national plans to cut emissions.

Crucial in this context are China and India. China, although acknowledging the need to tackle climate change, expresses that economic growth remains the main priority. India emphasizes the responsibility of developed nations to commit to ambitious emission reductions.

The complexity and interactions of these issues, emission reduction targets for industrialised countries, action plans for developing and emerging economies as well as commitments for financial aid, add to the reluctance of single parties to clearly move ahead and motivate others to follow suit.

Emerging US positions in Bangkok

The Bangkok Climate Change Talks from 28 September to 9 October revealed a better picture of the US position on a future international climate treaty. The US is seeking a deal under which all developed countries must commit to economy-wide plans that achieve major emission cuts in the near-term.

The US envisages a deal that can act as an overarching framework for emissions-cutting actions that countries will do domestically or jointly. The role of a multilateral framework would be to support this process. In addition the US supports the expansion of the flexible mechanisms and the establishment of new ones.

New market mechanisms

At the Bangkok negotiations, the role of market mechanisms in international climate policy after 2012 has become substantially clearer. Essentially, a menu of mechanisms is envisaged, among which each developing country can choose.

As for the new mechanisms, substantial divergences prevail and their design is merely sketched. Options on the table include sectoral trading with an ex-ante allocation of credits and ex-post sectoral crediting.

A sectoral policy crediting scheme could be based on intensity targets, which are now pushed by the US, apparently to allow China a solution based on its recent declaration to improve carbon intensity of its economy.

It would either be administered by the CDM Executive Board or a new body. Sanctions in case of non-compliance with the allowance allocation are contested.

Targets

Developing countries insist that rich nations cut their greenhouse gas emissions by at least 40 per cent below 1990 levels by 2020, which is in line with what UN scientists say is necessary in order to avert disaster. But emission pledges from industrialised nations, including the US, range from 11-18 per cent. Over the longer term, developed countries including the US and the EU are pushing for a global cut in emissions of 50 per cent by 2050 based on 1990 levels. However, rich and poor nations are divided on whether these long-term cuts should be based on absolute terms or on a per-capita basis.

Finance

There has been no progress made on how to finance mitigation and adaptation actions in developing countries in Bangkok. This issue will play a major role at the G20 finance minister meeting in November.

The end of AAU trading?

Since the US and other developed countries push national emissions trading schemes that can be linked bilaterally, this could mean the end of the controversial trade in Kyoto-backed government emission rights, known as assigned amount units (AAUs).

The open issues

Although the negotiation text could be trimmed down during the two weeks Bangkok meeting, the negotiations are still in a deadlock over the following issues:

- A treaty with a new architecture seems to be favored by some developed countries while developing nations insist on keeping the Kyoto Protocol framework.
- Currently visible emission reduction targets of industrialised countries are way below the recommendations of science and therefore unacceptable for developing nations.
- Developing countries insist on commitments by industrialised countries for funding climate mitigation and adaptation in the developing world.

Climate Change Talks will continue in the first week of November in Barcelona.

EU blueprint for international climate finance

EU suggests numbers for funding mitigation and adaptation in developing countries

On 10 September the EU Commission presented a Communication "Stepping up international climate finance: A European blueprint for the Copenhagen deal".

The Commission estimates that financial needs of the developing countries for mitigation and adaptation measures are €9 - 13 billion in 2013, rising to €22 - 50 billion in 2020. According to the proposal the EU is willing to contribute between €2 - 15 billion per year.

The Commission furthermore proposes a "Fast start" funding from 2010 on if an international treaty will be adopted in Copenhagen. EU leaders are expected to decide on the proposed climate financing at the summit end of October. The EU thus steps ahead with concrete numbers aiming at breaking the deadlock in the negotiation process.

Emerging reduction targets

According to the findings of the Intergovernmental Panel on 'Climate Change (IPCC) industrialised countries would need to cut their greenhouse gas emissions 25 to 40 percent below 1990 levels by 2020 in order to avoid dangerous climate change.

So far the pledges made by the countries under the Kyoto Protocol amount roughly to an 18 percent cut from 1990 levels.

Country	CO ₂ e target relative to			Offsets	Conditioned on Copenhagen	Status
	2005	1990 excl. LUC low	1990 excl. LUC high			
Australia		13%	-11%	unlimited	yes	officially announced
Belarus		-5%	-10%	unclear	unclear	under consideration
Canada	-20%	-3%	-3%	unclear	no	under consideration
European Union		-20%	-30%	50%	yes	officially announced
Japan	-30%	-25%	-25%	unclear	unclear	officially announced
New Zealand		-10%	-20%	unlimited	yes	officially announced
Norway	-35%	-40%	-40%	unclear	yes	officially announced
Russian Feder.	5%	-10%	-15%	unclear	no	officially announced
Switzerland	-21% / -31%	-20%	-30%	50%	yes	officially announced
Ukraine	73%	-20%	-20%	unclear	unclear	under consideration
USA	-20% / -13%	0%	-4%	ca. 30%	unclear	under consideration

China

With more than 7 billion tons of annual emissions and about 5.5 tons per capita China plays a key role in any climate agreement.

At the UN climate change summit in New York in September the Chinese president Hu Jintao, announced that China will cut CO₂ per unit of GDP by a "notable margin" below 2005 levels by 2020. CO₂ reductions related to a unit of GDP are called intensity targets allowing the growth of absolute emissions.

China wants industrialized nations to cut their emissions by at least 40 percent below 1990 levels and to provide generous financial support and technology transfer for developing countries.

United States

Also the United States emit more than 7 billion tons per year with about 21 tons per capita.

President Obama wants to bring back US emissions by 2020 to 1990 levels and 80 percent below 1990 by 2050.

The American Clean Energy and Security Act of 2009 which passed the House of Representatives in June sets a reduction target of 17 percent by 2020 compared to 2005 which translates to a 4 percent reduction over 1990.

The related Clean Energy Job and American Power Act which is being discussed in the Senate moved the reduction target up from 17 percent to 20 percent.

The United States acknowledge the need for transferring financial funds and technologies to developing countries but expect in turn at least from the largest emitters actions for emissions reductions.

European Union

The European Union emits about 5 billion tons per year with about 10 tons per capita.

The EU agreed to cut emissions unilaterally by 20 percent below 1990 by 2020 and to consider a 30 percent cut if major emitters make an adequate

commitment in the framework of an international climate agreement.

The EU suggests an advance transfer of financial funds to developing countries of €5 to €7 billion per year between 2010 and 2012 which could amount to €100 billion by 2020. In return the EU expects developing countries to curb their emissions by 15 to 30 percent below business-as-usual paths by 2020.

Russia

Russian emissions are close to 2 billion tons per year with about 12 tons per capita.

Prime Minister Putin considers reductions of 10 to 15 percent below 1990 by 2020. Since emissions in 2005 were more than 30 percent below 1990 this would mean actually a rise from current levels.

Russia currently rejects any climate regime that restricts its emissions.

India

India currently emits about 1.5 billion tons per year with about 1.2 tons per capita.

The government is going to come up with suggestions for cuts based on domestic actions but will not accept internationally binding targets.

Also India wants industrialised countries to cut their emissions 40 percent by 2020.

Japan

Japanese emissions amount to about 1.4 billion tons per year with about 11 tons per capita.

With respect to emission reduction targets an important move was made by the newly elected premier in Japan who announced on September 7 that Japan seeks to cut GHG emissions by 25 percent by 2020 compared to 1990. This target is much higher than the previously announced 8 percent of the former government.

Japan indicated its willingness to step up financial and technical assistance.

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European Union		-20%	-30%	50%	yes	officially announced
Japan	-30%	-25%	-25%	unclear	unclear	officially announced
New Zealand		-10%	-20%	unlimited	yes	officially announced
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Switzerland	-21% / -31%	-20%	-30%	50%	yes	officially announced
Ukraine	73%	-20%	-20%	unclear	unclear	under consideration
USA	-20% / -13%	0%	-4%	ca. 30%	unclear	under consideration

Norway

Norway announced that it would raise its 2020 GHG reduction target to 40 per cent compared to 1990. The country's previous target was to cut emissions by 30 per cent by 2020.

Brazil

Brazil currently emits about 2.2 billion tons of greenhouse gases and is considering a cap at 2005 levels. The bulk of this country's emissions stem from Amazon forest destruction.

Considering a 30 percent reduction target for the EU

In the energy and climate package the EU is offering to step up the unilateral reduction target from 20 percent to 30 percent within a multilateral international climate agreement.

In order to obtain a better understanding of the implication of a more ambitious target we summarise a few key numbers of the current EU effort sharing scheme.

The overall cap

20 percent reduction

A 20 percent reduction over 1990 translates into 12.9 percent reduction compared to 2005.

1990	2020	2020/1990
Mt CO ₂ e	Mt CO ₂ e	%-Change

EU Total	5,564.1	4,451.3	-20.0%
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2005	2020	2020/2005
Mt CO ₂ e	Mt CO ₂ e	%-Change

EU Total	5,111.1	4,451.3	-12.9%
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30 percent reduction

A 30 percent reduction over 1990 requires a 23.8 percent reduction over 2005.

1990	2020	2020/1990
Mt CO ₂ e	Mt CO ₂ e	%-Change

EU Total	5,564.1	3,894.8	-30.0%
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2005	2020	2020/2005
Mt CO ₂ e	Mt CO ₂ e	%-Change

EU Total	5,111.1	3,894.8	-23.8%
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The distribution of the overall reduction

20 percent target

A 20 percent reduction target requires a reduction of 659.8 million tons. The split between ETS and Non-ETS follows implicitly from the list of reductions for the Non-ETS sectors agreed upon for the individual Member States. The ETS target results from subtracting the Non-ETS from total.

Compared to the Commission documents which are based on an older data set the effective distribution 58 percent to 42 percent instead of 60 to 40. Analogously the effective reduction requirements of the ETS sector is 12.9 percent instead of 14 percent.

	2005	2020	2020/2005	EC Proposal
	Mt CO ₂ e	Mt CO ₂ e	%-Change	2020/2005 %-Change
EU Total	5,111.1	4,451.3	-12.9%	-14%
EU ETS	2,125.3	1,743.1	-18.0%	-21%
EU Non-ETS	2,985.7	2,708.1	-9.3%	-10%

A 30 percent reduction target requires a reduction of 1,216.2 million tons.

The following table indicates that the distribution of this reduction requirement has a substantial impact on the relative reduction targets for the ETS and the Non-ETS sector.

Sticking to the 60 : 40 distribution of the 20 percent target would require a relative reduction of the ETS sector of 34.3 percent.

Switching this ration would result in similar relative reductions for both sectors.

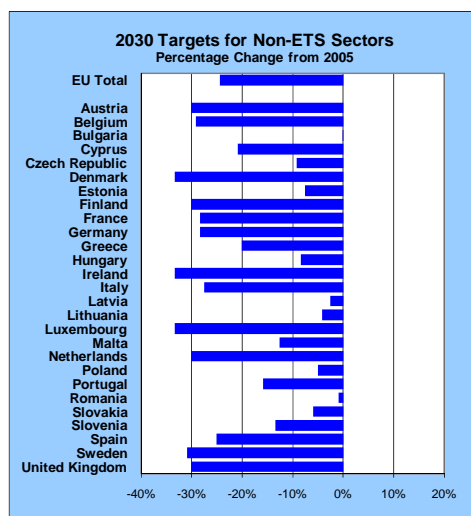
	2005	2020	2020/2005
	Mt CO ₂ e	Mt CO ₂ e	%-Change
EU Total	5,111.1	3,894.8	-23.8%

60 : 40 distribution between ETS and Non-ETS			
EU ETS	2,125.3	1,395.6	-34.3%
EU Non-ETS	2,985.7	2,499.3	-16.3%

50 : 50 distribution between ETS and Non-ETS			
EU ETS	2,125.3	1,517.2	-28.6%
EU Non-ETS	2,985.7	2,377.6	-20.4%

40 : 60 distribution between ETS and Non-ETS			
EU ETS	2,125.3	1,638.8	-22.9%
EU Non-ETS	2,985.7	2,256.0	-24.4%

The Non-ETS target under a 40 : 60 distribution



US Senate introduces Climate Bill

The Clean Energy Job and American Power Act

On September 30 Senators Barbara Boxer and John Kerry introduced the Clean Energy Job and American Power Act which closely resembles the American Clean Energy and Security Act of 2009 authored by Congressmen Henry Waxman and Edward Markey and which passed the House of Representatives in June by a vote of 219 to 212.

A more ambitious reduction target

The target for emissions reductions moved up in the Kerry-Boxer bill from 17 percent to 20 percent by the year 2020 compared to 2005. This is still hardly aggressive in view of the latest Department of Energy forecasts for 2009 which predict emissions about 9 percent below 2005.

More serious are the 2030 target of a 42 percent reduction by 2030 and the 2050 target of a 83 percent reduction of emissions from 2005 levels.

Carbon price corridor

The Kerry-Boxer bill suggests a carbon price corridor. The floor price starts in 2012 at \$ 10 per ton and rises 5 percent per year thereafter. The ceiling price starts in 2012 with \$ 28 per ton and is inflated 5 to 7 percent annually.

A Market Stabilization Reserve would be used to support this price band by purchasing domestic and foreign offsets.

Domestic offsets favored

2 billion tons of offsets may be used each year for compliance, with 500 million from international sources. This amount can be increased if there is not sufficient domestic supply. Starting in 2018, international offsets must be submitted to a 1.25 ratio to emissions.

The Waxman-Markey bill allows the same amount of offsets but equally split between domestic and foreign sources.

The time table

An optimistic mood

New positive signals emerged from the US after President Obama was awarded this year's Nobel Peace Prize. Both Senator Barbara Boxer and Energy Secretary Steven Chu signaled optimism that an energy and climate bill could be finalized before the Copenhagen summit.

This optimistic mood for a bipartisan effort even increased after an opinion piece in the New York Times co-written by the Democratic Senator John Kerry and the Republican Senator Lindsay Graham. In addition health care reform is making progress, thus freeing capacities for energy and climate legislation.

The Kerry-Boxer bill needs 60 out of 100 votes for passage in Senate. Afterwards the Senate and the U.S. House of Representatives need to reconcile their versions of the bills. Only a reconciled bill is sent to the desk of the president for signing. These procedures leave very little time for finishing the energy and climate bill before the Copenhagen summit.