ISSN 1863-2025 April 2008





The Bali Conference

Climate Breakthrough or Anti-Climax?

Out of the equation:

Aviation and shipping emissions



Dear Readers,

Politicians, scientists, environmental groups almost everyone had great hopes that the United Nations Climate Change Conference in Bali the 13th session of the Conference of the Parties to the UNFCCC - would produce some very good outcomes for international climate protection. Yet assessments of what was achieved in 13 exhausting days of negotiations vary very widely. So how do the researchers at the Öko-Institut (Institute for Applied Ecology) - who were directly involved in the talks and who have been addressing urgent climate issues in numerous studies and projects for years - judge the outcomes of the Conference? Find out about this and more in this current issue of eco@work.

Wishing you a sunny start to spring,

Yours, Katja Kukatz for deste k.kukatz@oeko.de

Imprint

eco@work - April 2008

Published by: Öko-Institut e.V. Edited by:

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Coverphoto: © chriszwaenepoel-Fotolia.com

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Account Details for Donations:

Sparkasse Freiburg - Nördlicher Breisgau Bank Code No.: 680 501 01 Account No.: 2 063 447 IBAN: DE 96 6805 0101 0002 0634 47 BIC: FRSPDE66

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"The CDM needs a major overhaul"



Lambert Schneider, expert in international climate policy at the Öko-Institut.

Mr Schneider, what do you see as the CDM's particular strengths?

The CDM has made a business out of climate protection and has done so at global level. Many major companies in developing countries are now looking systematically at how and where they can cut their emissions so that they can then sell Certified Emission Reductions (CERs) - carbon credits, if you like via the CDM. This has created a new awareness of climate protection in a number of developing countries. The financial sector, too, is now thinking about climate issues. In London, the carbon market is worth several billion euros, and banks and insurance companies are also integrating international carbon trading into their business portfolios.

But in practice, there are massive problems. Your report caused something of an uproar before Bali.

Yes, that's right. We were commissioned by WWF to look at around 100 registered CDM projects in developing countries and the emerging economies. Unfortunately, we found that many of the internationally agreed criteria for CDM schemes were not being met. First of all, there are major

The Clean Development Mechanism (CDM) is a flexible mechanism under the Kyoto Protocol that allows countries and businesses to offset their emission reductions from greenhouse gas (GHG) abatement projects in developing and newly industrializing countries. But just how effective is the CDM in practice? That is a hotly debated issue – not least due to the major flaws in its implementation, recently revealed by an Öko-Institut report. So should the CDM be scrapped? No, says Lambert Schneider, an expert in international climate policy at the Öko-Institut and author of the report – but the CDM needs a major overhaul. He shared his ideas with eco@work.

> shortcomings as regards the Designated Operational Entities (DOEs) - the independent specialist companies which act as "auditors" and are responsible for monitoring compliance with the rules. Unfortunately, some companies clearly haven't taken the monitoring very seriously. And the second problem is that many of the projects would have been carried out anyway, even without the sale of CERs. These projects are generating additional emissions rights for industrialized countries or businesses which they can sell via the emissions trading schemes, but are not producing any additional emissions reductions in the developing countries. And thirdly, some projects contribute virtually nothing to sustainable development even though this is one of the criteria for project approval.

But surely these findings cast serious doubts on the CDM's effectiveness?

Some things have undoubtedly gone awry, but it's a new instrument and I don't believe that it should be scrapped just because of these teething troubles. What is clear, however, is that it needs a major overhaul.

You make numerous recommendations in the report. Can you give us some examples?

In the short term, the key issue is to improve certification. The DOEs need clearer guidance for the validation and verification process, with tough penalties if they don't do their job properly. Their independence could also be improved if they were paid not by their own clients but by the UN. In addition, objective criteria, such as emissions benchmarks, would offer better opportunities to determine whether additional emissions reductions are indeed being achieved. The CDM has clear limits over the long term. From a global perspective, the mechanism does not achieve any additional emissions reductions; all that happens is that emissions are reduced in developing countries rather than in the industrialized world. Under a future climate regime, we need the developing countries to make their own net contribution to climate protection. So in the long term, the CDM should be replaced by other climate instruments such as emissions trading.

Did the climate negotiations in Bali do any more than simply take note of your recommendations?

Yes, besides the major issues such as the Bali Action Plan, the delegates also talked about the further development of the CDM. The EU and Switzerland have taken up various proposals which are now being discussed in the review of the Kyoto Protocol.

Thank you for talking to eco@work.

The interviewer was Katja Kukatz.

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After Bali:

Ambitious negotiations now required

Bali launched the process: at the **United Nations Climate Change** Conference in Bali last December, the world community signed up to two years of talks to hammer out a climate regime for the post-Kyoto period from 2012. The Bali Action Plan provides the framework for the marathon negotiations on a new agreement which are about to begin. Climate experts from the Öko-Institut were among those sitting around the negotiating table for the German and EU delegations in Bali. So how do they view the Bali outcomes? Lambert Schneider and Anke Herold offer their assessment.

Roadmap charts the way



"Please get out of the way!"

The final day of the United Nations Climate Change Conference in Bali in December will go down in history. After an extra day of dramatic and emotional debate, with some delegates weeping and coming close to physical collapse, the international community finally reached a consensus on the roadmap for talks on a new international climate agreement. To loud jeering, the USA had initially refused to accept the formulation put forward.

In the event, it fell to a little country to play a big role: it was Papua New Guinea which changed the game at the Conference with its appeal to the USA: "We seek your leadership. But if for some reason you are not willing to lead, leave it to the rest of us. Please get out of the way." Finally, after further wrangling over the precise positioning of a comma, the USA became the last of the world's coun-



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International climate protection at the Öko-Institut

International climate protection is a key area of research at the Öko-Institut. For around fifteen years, issues such as monitoring and reporting of greenhouse gas emissions, emissions projections, policies and measures to cut emissions, and flexible climate policy mechanisms such as emissions trading and carbon sinks have been studied and analysed by the Institute's researchers in numerous projects and reports. Their findings inform national and EU decision-making processes. Anke Herold, Jakob Graichen, Lambert Schneider and Dr Felix Matthes attended the Bali Climate Conference on behalf of the Institute and negotiated for the German and EU delegations. *k k* tries to endorse the compromise and clear the way for a new climate process.

Despite the general relief at this consensus, one thing is clear to everyone: with the adoption of the Bali Action Plan, the international community is merely at the start of a very difficult negotiating marathon, due to end in December 2009 with a new international climate agreement for the post-Kyoto period after 2012. But the interests are far too diverse for this to be a straightforward process.

The main criticism from the USA, which has never ratified the Kyoto Protocol, is that emerging economies such as China and Mexico are not re-

ments. The USA's main concern is

that this will result in rising costs

and falling competitiveness for its

quired to take on

binding commit-

USA, climate laggard

The industrialized countries bear an historic responsibility for global warming. own economy. For the USA – even under a new administration – substantial emissions cuts for the emerging economies are therefore a condition for its endorsement of any new climate regime. The USA is also sceptical about the basic architecture of the Kyoto Protocol and its binding emissions limits for industrialized countries and is therefore championing looser forms of cooperation instead, e.g. on the promotion and development of new technologies.

Most developing countries emphasise the industrialized countries' historic responsibility for global warming, their own relatively low per capita emissions, weaker economies, and greater vulnerability to climate change. Most of them are therefore pushing for higher emissions reductions from the industrialized countries while rejecting binding commitments of their own. And indeed, the per capita emissions





Key outcomes of Bali

The world community, including the USA, agreed a roadmap for negotiations, due to end in 2009, on a new climate regime for the post-2012 period. Industrialized and developing countries alike must commit to stepping up their efforts to reduce their greenhouse gas emissions. The industrialized countries will agree to specific targets, while other types of commitment are under discussion for the developing countries.

Curbing deforestation is a key building block in the Bali roadmap and will now be included in the future climate regime. Pilot projects are now to be launched to look at ways of curbing deforestation and crediting

KNOWLEDGE

the relevant measures. Other pillars of the roadmap are the commitment to enhanced action on adaptation to climate change, as well as international cooperation on the development and transfer of new technologies to support action on mitigation and adaptation, including scaling up their market launch and access for developing countries. New sources of funding must also be developed for climate change mitigation. These are also to be included as elements of the future climate regime. Another important decision is to establish a fund to finance adaptation to climate change in developing countries. kk

Curbing deforestation is a key building block for global climate protection.

from the industrialized countries are far higher than those produced by most developing countries. Climate change will also hit many developing countries harder than the industrialized world.

To some extent, the EU is caught between two stools - the developing countries and the USA. On the one hand, the EU is lobbying to ensure that the industrialized world cuts its emissions by 30 percent by 2020 compared with the 1990 baseline. This is an ambitious goal, given that emissions in the USA and some other industrial countries have actually risen by 15 percent and more since 1990. On the other hand, the EU - like the USA - is also demanding that the developing countries make efforts of their own, but has signalled its willingness to provide financial support for this process.

This difficult constellation is now reflected in the Bali Action Plan

Climate breakthrough or anti-climax?

ected in the Bali Action Plan which will form the framework for the next two years of negotiations. Among politicians, academics and environmental groups, views on the Bali outcome vary widely.

German Environment Minister Siegmar Gabriel, for example, welcomed the Bali outcome as "major progress", Germanwatch described the event as a "breakthrough" in view of the USA's climbdown, while the German Advisory Council on Global Change (WBGU) spoke of an important, albeit partial last-minute success. For Greenpeace, by contrast, the outcome is "a disappointment", Friends of the Earth Germany describes the decision as "inadequate" and the WWF takes the view that it is "weak on substance".

The fact is that in Bali, the longstanding blockade of a new climate process - especially by the USA - has finally been breached. This is unquestionably a major success. There is now a consensus among the world community that a new climate agreement must be hammered out by 2009, and the topics to be included on the agenda for the forthcoming negotiations on future commitments have also been fixed. And despite justified optimism in advance of the Bali Conference, this positive outcome was never certain.

Another key aspect of the Bali decision is the international community's recognition that drastic emissions cuts must be made by 2050. Not only have all the industrialized countries signed up to this; the developing countries are now on board as well.

Besides the new global negotiating mandate for the next stage in the climate process, major decisions on the fulfilment of existing commitments were also taken in Bali, e.g. on the operation of the Adaptation Fund, established to finance adaptation projects and programmes in developing countries that are parties to the Kyoto Protocol, or the REDD Scheme aimed at Reducing Emissions from Deforestation and Forest Degradation. This is a major step forward as well.

Bali has established the basis for the world community to get round the table and discuss the right issues in an intensive process. On the other hand, the Bali Action Plan lacks any quantitative emission reduction targets, simply describing the percentage spectrum by which the industrialized countries must cut their greenhouse gas emissions by 2020 compared with 1990.

The next two years of negotiations must now produce commitments which are sufficiently ambitious to curb global climate change. The framework is in place, but only time will tell whether this historic opportunity will be utilized to the full.

Lambert Schneider and Anke Herold / kk

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International shipping and aviation: A climate factor

International shipping and aviation account for a massive proportion of global greenhouse gas emissions, yet these sectors are not covered under the Kyoto Protocol – and no one can foretell at this stage whether this situation is likely to change as a result of the negotiations on a post-2012 climate regime. Yet there is no shortage of methodological approaches for the inclusion of shipping and aviation. The Öko-Institut has already developed specific proposals on this issue, and its ideas could garner broad-based international support. The main obstacle, however, is the lack of political will. Industry lobbyists argue that shipping and aviation have virtually no impact on climate and therefore do not need to be covered by international climate commitments: shipping, they say, is the most efficient mode of transport in existence, while aviation produces less than 2 percent of global GHG emissions. While this information is correct, it distorts the picture: for each of the two sectors is responsible for emissions on a scale equivalent to those of France - a country whose contribution to climate change no one questions. Besides producing CO₂ emissions, aviation damages the troposphere in other ways: in particular, the combustion of aircraft fuel during flight leads to

ozone and cloud formation. As a result, aviation has an effective warming impact that is 2–5 times stronger than industry lobbyists, arguing on the basis of the industry's CO₂ emissions alone, would have us believe.

In 1997, the international community failed to agree to include emissions from international shipping and aviation in the Kyoto Protocol. This was not only due to political differences. Key methodological issues also remained un-

resolved: how can these international emissions be attributed to individual countries? Should they be allocated to the take-off, transit or destination coun-

tries? Should they be classed according to passengers' nationality, the origin of the freight being transported, or the refuelling country? Opinions diverge widely and various approaches are being discussed, but there has been no substantive work on this issue within the climate process for years. Some OPEC countries and the USA are blocking progress every step of the way and are now obstructing any debate about this issue.

Cloud and ozone formation from aviation

cluded in a post-2012 climate regime, these methodological issues need to be resolved and the political stalemate broken. Researchers from the Öko-Institut,

So that the two sectors can be in-

massively working on behalf of the German damages the Federal Environment Agency climate.

(UBA) and the European Environment Agency (EEA), have therefore driven forward the debate about issues of methodology, developed new proposals for the inclusion of the two sectors, and unveiled fresh ideas which could gain international support. Substantive elements of its project outcomes flowed into the EU's negotiating position at the international climate talks in Bali.

The question of how to calculate emissions from international ship-

Methodology is not the problem

ping and aviation can now be regarded as resolved as well: an international workshop in Oslo in October 2007

concluded that the inclusion of international shipping and aviation in the new climate regime is now primarily a political, not a technical problem.

As regards proposals on who should be responsible for cutting emissions, a great deal of progress has been made in recent years as well. In the past, all the proposals simply focussed on allocating the emissions to individual countries according to a specific

formula, with these emissions then being covered by national reduction commitments. However, this would

mean that countries were required to cut emissions over which - for economic and legal reasons - they exert very little in-

fluence.

As an alternative, the Öko-Institut has therefore proposed sectoral approaches in which airline and shipping companies are directly responsible for reducing/offsetting emissions themselves. This could be operationalized, for example, through an emissions trading scheme such as that already proposed by the European Commission for aviation. Countries would have to design, launch and monitor the scheme, but would not be responsible for actually cutting emissions from shipping and aviation. This responsibility would fall to the companies themselves. However, it is essential to establish safeguards so that no one deploys the simple methods of changing the company's nationality or cleverly selecting places for refuelling, for example, in a bid to shirk their responsibilities.

The most difficult and still unresolved challenge for the inclusion of the two sectors in a future climate regime is still the lack of political will at international level, however. An incentive could be created by ensuring that the funds generated from the auction of emissions certificates for shipping and aviation were used to benefit the developing countries, e.g. by financing adaptation schemes or forest conservation.

According to calculations by the UNFCCC Secretariat, if a proportion or all of the certificates were auctioned rather than given away free, depending on their price, as much as 40 billion US dollars per year could be generated. This

As much as 40 **billion US dollars** annually

would provide the developing countries with a dependable and substantial source of fundina. It would

also mean that the industrialized countries would not have to bear the budgetary burden of direct financial transfers and justify them to taxpayers.

Although inclusion in a future climate regime is technologically and methodologically feasible, it is highly uncertain whether a political consensus on this issue will be reached in the negotiations on the post-2012 agreement. If not, the only hope is that the EU will take a lead role and launch a regional scheme for aviation and shipping emissions.

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