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State of play of Post-Bali negotiations

Note

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List of acronyms

Acronym	Description
AP6/ APP	- Asia-Pacific Partnership on Clean Development and Climate
AWG	- Ad hoc Working Group under the Kyoto Protocol
CDM	- Clean Development Mechanism
CER	- Certified emission reductions
CMP	- Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
COP	- Conference of the Parties of the UNFCCC
EGTT	- Expert Group on Technology Transfer
G77/China	- Group of 77 plus China
G8	- Group of Eight
GDP	- Gross Domestic Product
GEF	- Global Environmental Facility
IEA	- International Energy Agency
IISD	- International Institute for Sustainable Development
IPCC	- Intergovernmental Panel on Climate Change
IPCC AR4	- IPCC Fourth Assessment Report
LUCF	- Land use change and forestry
MEM	- US major economies meetings
NGO	- Non Governmental Organisation
REDD	- Reducing emissions from deforestation and degradation
SBI	- Subsidiary Body for Implementation
SBSTA	- Subsidiary Body for Scientific and Technological Advice
UNDP	- United Nations Development Programme
UNFCCC	- United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

The thirteenth Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) and the third Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (COP 13/CMP 3) took place in Bali, Indonesia from 3 – 15 December 2007. With around 12,000 participants from governments, NGOs, private sector, media and science, this conference has been the biggest meeting under the UNFCCC so far. The meeting ended one day late with a successful outcome after a dramatic negotiation session during the last night.

In Bali, delegates managed to agree on the ‘Bali Action Plan’ which together with a variety of other important decisions forms the Bali Roadmap. The latter includes the timing, main elements and steps of the negotiations leading to a climate regime which is to succeed the Kyoto Protocol after 2012. A breakthrough was achieved by initiating “the Ad Hoc Working Group on Long-term Cooperative Action under the Convention” to finalize its work by COP 15, i.e. by the end of 2009. This group is to discuss “mitigation commitments or actions” by all developed countries and “mitigation actions” by developing countries. The conference agreed that the Ad hoc Working Group under the Kyoto Protocol (AWG) would also complete its work in December 2009.

Significant action is urgently required to ensure that global greenhouse gas emissions peak by 2015 and decline to at least half of current levels in order to prevent dangerous interference with the climate system. The next years will be decisive as to whether this can be accomplished.

Future negotiations will cover four main elements of a future climate agreement – often referred to as the building blocks of the UNFCCC process: mitigation, adaptation, technology and financing.

On mitigation, “measurable, reportable and verifiable nationally appropriate mitigation commitments or actions” for developed countries need to be specified, most likely continuing the emission reduction targets under the Kyoto Protocol. A major issue is to define “nationally appropriate mitigation actions” for developing countries. These are to be supplemented by support by developed countries. These will most likely be less strict than emissions reduction targets by developed countries. In addition, the CDM may need refinement. Further, the notion of global agreements between companies of one sector (e.g. electricity, iron & steel, car manufacturers) needs to be explored. Such agreements are seen as supporting government-led activities.

On adaptation, the difficult issue is to define exactly which adaptation activities should be supported by the international system and how developing countries would be able to apply for support. There was no agreement in Bali on additional practical adaptation measures and the issue will be re-visited in June 2008.

On technology, a comprehensive framework for technology transfer has been decided and ways to assess the effectiveness of technology transfer are being developed. Future considerations also need to include technology cooperation, such as joint research efforts for the development of new technologies, exchange of information on the use and applicability of technologies, and setting of standards for efficiencies of types of technologies. Such elements are only starting to be developed.

On finance, the challenge is to create a constant flow of financial resources, substantially larger than the currently available funds. Current funding mechanisms are insufficient and mainly depend on contributions from governments that need to decide on their contributions each time. Automatic mechanisms independent of government budgets have to be found.

Future international climate policy is discussed in various international processes in addition to the UNFCCC. Most of the processes reinforce each other and have led to increased awareness of the issues at stake among decision makers. The diplomatic effort on climate change has never been as focused as it is currently, regularly involving heads of states. The Bali Roadmap has set an ambitious timeline for the coming two years and this pace must continue if a global agreement is to be reached by 2009.

The conference in Bali took process decisions by starting the negotiations on their topics and a timeline. The process and the building blocks will be the basis of a future international agreement on climate change. Now the content needs to be agreed on within the next 2 years.

The Bali conference concluded 24 hours later than planned. The decisions taken were relatively simple compared to the complexity of a future agreement that needs to include many details of the building blocks mitigation, adaptation, technology and financing. Very intense negotiations will be ahead in the next two years.

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1. INTRODUCTION

The thirteenth Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) and the third Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (COP 13/CMP 3) took place in Bali, Indonesia from 3 – 15 December 2007. With around 12.000 participants from governments, NGOs, private sector, media and science, this conference has been the biggest meeting under the UNFCCC so far. The meeting ended one day late with a successful outcome after a dramatic negotiation session during the last night. In Bali, delegates managed to agree on the ‘Bali Action Plan’ which together with a variety of other important decisions forms the Bali Roadmap. The latter includes the timing, main elements and steps of the negotiations leading to a climate regime which is to succeed the Kyoto Protocol after 2012. A breakthrough was achieved by initiating “the Ad Hoc Working Group on Long-term Cooperative Action under the Convention” to finalize its work by COP 15, i.e. by the end of 2009. This group is to discuss “mitigation commitments or actions” by all developed countries and “mitigation actions” by developing countries. The conference agreed that the Ad hoc Working Group under the Kyoto Protocol (AWG) would also complete its work in December 2009.

This briefing paper begins by giving an overview of the negotiation tracks, including the UNFCCC and Kyoto Protocol negotiations, the Review of the Kyoto Protocol, but also of several important initiatives outside the UN negotiations. Chapter 3 examines the main themes or “building blocks” of the UNFCCC process and progress achieved in their domains at the Bali conference as well as the issues to be resolved in the next two years. Chapter 4 provides final conclusions.

Evaluations of the conference can also be found in Pew Center of Global Climate Change 2007, IISD 2007, Müller 2007 and Bals 2008.

2. NEGOTIATION TRACKS

The “Bali-Roadmap”, as it was phrased by the COP president, Indonesian Environment Minister Rachmat Witoelar, is a term used to describe multiple decisions taken at the Bali conference. This section gives a brief overview of the processes that are taking place within the UNFCCC framework, and how they were affected at the Bali Conference.

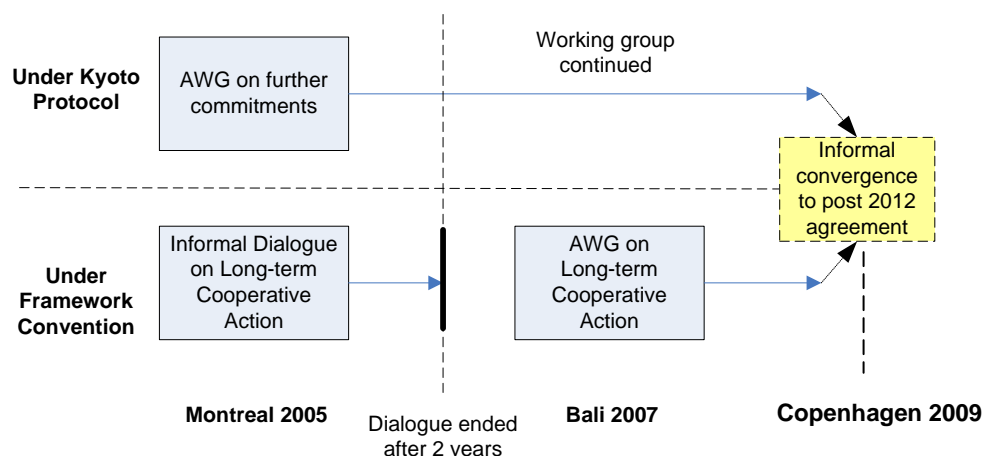


Figure 1. Overview “Bali Roadmap” negotiation tracks

Figure 1 shows the basic existing negotiation tracks for dealing with post-2012 climate action. Within the framework of the Kyoto Protocol, this is coordinated within the “Ad hoc Work Group (AWG) on further commitments for Annex I countries under the Kyoto protocol”, which was established in Montreal at CMP 1 as an open ended negotiation. This track includes those countries that signed the Kyoto Protocol, and consequently excludes the United States. The working group was formed under Article 3, paragraph 9 of the Kyoto Protocol, providing that initiation has to be taken on considering future commitments at least 7 years before the end of the first commitment period (compare Section 4.1.1 of EUP1¹).

In parallel to this working group formed under the Protocol, an informal dialogue was initiated that aimed at exchanging “experience and analysing strategic approaches for long-term cooperative action to address climate change” under the convention at the COP 11 in Montreal. This dialogue ended in August 2007 without resulting in any formal decisions (compare Section 4.1.1 of EUP1). At the Bali conference it was to be decided in which form future climate actions post 2012 are to be considered under the Convention as well as the Protocol, and whether the two tracks are to be merged in the future.

Four different options of the design of the future climate dialogue were considered (see EUP1, Section 5.1). After an exchange of the opinions of the Parties’ delegations, agreement was reached to form an ad hoc working group under the Convention, thus keeping the track under the Kyoto protocol separate.

¹ Throughout this document, “EUP1” refers to an earlier study for the Directorate-General on the design options for future international climate policy (IP/A/CLIM/ST/2007-10).

Consequently, the COP created an “Ad Hoc Working Group on Long-term Cooperative Action under the Convention”. Although it was not written down in formal language, it is expected that the work of the two groups will converge to form a comprehensive and coherent post-2012 agreement at the UNFCCC conference in Copenhagen in 2009.

2.1 UNFCCC Negotiations

The ‘**Bali Action Plan**’ (COP 13 2007a), as the decision was phrased, taken by the Conference of the Parties (COP), included three elements that were subject to negotiation among the Parties. The first question of the design of a future climate negotiation process is described above. The second dealt with the level of ambition for emission reductions and the third with the nature of the commitment or action. The latter two will be described briefly in the following.

It has heavily disputed, whether a reference should be made to the level of ambition of the future treaty expressed in future global reductions or reductions of developed countries. As developed countries are to take the lead in climate protection, an indication of their future ambition level was important to developing countries to agree to start negotiations at all. Initial drafts that were submitted by the EU called for global emissions to peak in 10 to 15 years and to be reduced until 2050 “well below half” of 1990 levels, as well as for emissions from developed countries to decline by 25% to 40% below 1990 levels by 2020. These values were taken from a table of the IPCC Fourth Assessment Report (AR4) IPCC 2007. In the end, agreement could not be reached on these numbers in the negotiations under the Convention and instead it called for “deep cuts in global emissions” and a reference to the IPCC AR4 was included in a footnote. The text agreed under the Kyoto Protocol however included the 25% to 40% range (see below).

Another area of dispute was the how to refer to action by developing countries. For developed countries the text calls for “measurable, reportable and verifiable nationally appropriate mitigation commitments or actions” and for developing countries it refers to “nationally appropriate mitigation actions”. For developed countries this text hints to emission reduction targets as under the Kyoto Protocol, but leaves other similar options open. For developing countries the text is weaker and could include many forms of actions. Developing countries insisted that support for technology, financing and capacity-building from developed countries is also “measurable, reportable and verifiable”.

Besides those decisions on mitigation, further decisions were taken on adaptation, technology transfer and financing. These four parts will be described in the “building blocks” section below (Chapter 3), as this is what they are commonly referred to.

One further relevant discussion revolved around the Russian proposal for voluntary action. This proposal was heavily opposed by the Chinese delegation, and it was postponed by encouraging Russia to continue discussion of its proposal under the review of the Protocol under Article 9 (see below) and the next AWG.

The major success of the conference was that a process was put into motion to negotiate a climate change agreement by the end of 2009 in Copenhagen at COP 15/CMP 5.

2.2 Negotiations under the Kyoto Protocol

Under the Kyoto Protocol, within the Ad Hoc Working Group on Further Commitments for Annex I countries, a reference to an ambition level was an issue just the same as in the COP negotiations. In contrast to the latter, the Parties under the Protocol decided to include direct reference to the reduction targets by noting the usefulness of the findings that emissions need to peak within the next 10 to 15 years and that emissions must be reduced to well below half of the 2000 level. In addition, the agreement recognizes that Annex I Parties need to reduce their emissions in a range of 25% to 40% in order to reach the lowest stabilization scenarios assessed by the IPCC. Most of this text had already been agreed at a preparatory meeting of the AWG in August 2007. This formulation was possible under the Kyoto Protocol because (1) it is only a recognition of this range and not a decision on it and (2) the USA was not part of this decision.

After this has been laid out, the group can now focus on the means of achieving this target, thus evaluating the existing options. To be able to complete this work by 2009, the year chosen as a completion target, the AWG created a detailed work programme. The major part of decisions taken in Bali revolved around this programme.

Concerning the Review of the Kyoto Protocol and Article 9, agreement was reached to review the implementation of the Protocol and not, as was suggested by developed countries, undertake a comprehensive review at CMP 4 which will take place from 1st until 12th of December 2008 in Poznan, Poland. Furthermore, content to be reviewed during this second review of the Protocol was identified and discussed. It was agreed, in line with the other decisions taken, that the review is to be based on the best available science, which includes the IPCC AR4 (CMP 3 2007b; IISD 2007).

2.3 Initiatives outside the UNFCCC

Outside the UNFCCC, several processes with relevance to a future climate agreement have been initiated. Three are of particular relevance: the Gleneagles G8 discussions on climate change, the Asia-Pacific Partnership (AP6) and the US major economies meetings.

2.3.1 Gleneagles G8 discussions on climate change

During the G8 meeting 2005 in Gleneagles, Scotland, at which five developing countries – Brazil, China, India, Mexico and South Africa – participated, the Gleneagles Communiqué and Plan of Action on Climate Change, Clean Energy and Sustainable Development was released. The G8 plus 5 group emphasise the need to stop and reverse the increase of greenhouse gas emissions.

A major commitment of the G8 Summit in Gleneagles was to “take forward a Dialogue on Climate Change, Clean Energy and Sustainable Development, and to invite other interested countries with significant energy needs to join”. This Gleneagles Dialogue is an informal forum for discussion. Its objective is to complement and reinforce the formal negotiations within the UNFCCC by trying to create the conditions necessary for successful agreement.

The dialogue encompasses 20 countries (G8+5 together with Australia, Indonesia, Nigeria, Poland, South Korea and Spain), the European Commission and key international organisations including the World Bank and the IEA. The UNFCCC Secretariat also participates.

Under the German Presidency, the G8 continued working on the Gleneagles Plan in 2007. It was the aim to commit the G8 countries to reduce global CO₂ emissions by 2050 by at least 50%. Due to opposition by the USA, it was agreed to “consider” this goal “seriously”.

An agreement should be reached within the UN process and in cooperation with emerging economies. It agreed to finalise an agreement of the large emitters by 2008 and a global agreement under the UNFCCC by 2009 (see <http://www.g-8.de>).

The 2008 G8 Summit, presided over by Japan, will conclude the G8 process on climate change with a final report on previous work under the dialogue being submitted for the consideration of G8 plus 5 leaders in Japan.

The G8 process has created new momentum for the international discussions on climate change. It has raised the issue to the level of heads of state and given new direction to already-existing institutions such as the IEA and the World Bank. It is seen as a process that can reintegrate the US and at the same time have a constructive dialogue with the largest developing countries. By creating the conditions under which any future agreement could be successfully implemented, the G8 activities can complement the UNFCCC process. As such it did the necessary preparatory work for a positive outcome at the Bali conference. The intended agreement by 2008 will have a major impact on the UNFCCC negotiations.

2.3.2 Asia-Pacific Partnership (AP6)

The Asia-Pacific Partnership on Clean Development and Climate (APP), also known as AP6, is an initiative by Australia, China, India, Japan, South Korea and the US (see <http://www.asiapacificpartnership.org>), and now joined by Canada. Countries first met under this non-legally binding framework in January 2006.

The purposes of this partnership are to “advance clean development and climate objectives [...] The Partners will enhance cooperation to meet both [...] their] increased energy needs and associated challenges, including those related to air pollution, energy security, and greenhouse gas intensities, in accordance with national circumstances” (AP6 2006).

The main institution of the AP6 is the Policy and Implementation Committee, which is chaired by the US. It is responsible for management of the implementation of the cooperative activities of the partnership and its task forces. The Administrative Support Group, which coordinates the communication, was also established by the US. Eight government-industry task forces exist, focusing on technical details in power generation and key industry sectors of the partner countries: cleaner fossil energy (Chair: Australia, Co-Chair: China); renewable energy and distributed generation (Korea, Australia), power generation and transmission (US, China); steel (Japan, India); aluminium (Australia, US); cement (Japan); coal mining (US, India) and buildings and appliances (Korea, US). The transport sector is not covered.

The Asia-Pacific Partnership is seen by some of its members as an alternative to the UNFCCC and Kyoto process and by others as a complement to it. Its impact alone does not seem sufficient to keep the average global temperature increase below 2°C, which is the goal for the EU and others. It also still has to prove to be operational as a new institution. But so far, its existence has not significantly influenced the UNFCCC process. Indeed, it could complement it well, if it focuses on particular industrial sectors and the development and deployment of particular technologies.

2.3.3 The US major economies meetings (MEM)

In May 2007, just before the G8 summit in Germany, US President George W. Bush announced a new initiative, to bring together the largest emitters to agree on a framework for future action on climate change by the end of 2008. Under his guidance, each of the major emitting countries would establish its own greenhouse gas emissions targets, goals and programmes according to national circumstances.

The pledges would be reviewed regularly (US Department of State 2008). Prior to the first meeting on 27 September 2007, the initiative was re-named into major economies meeting on energy security and climate change.

France, Germany, Italy, the UK, Japan, China, Canada, India, Brazil, South Korea, Mexico, Russia, Australia, Indonesia, South Africa and the UN participated in the first meeting, held in Washington, D.C., on 27-28 September. The invitation letter stated that: “The United States is committed to collaborating with other major economies to agree on a detailed contribution for a new global framework by the end of 2008, which would contribute to a global agreement under the UN Framework Convention on Climate Change by 2009”.

The timing of this initiative raised speculation that it was intended to distract attention from the G8 and the UNFCCC process. Many observers commented that such a voluntary pledge and review process could hardly achieve the significant reductions that would be necessary to limit global temperature increases to 2°C. This concern became secondary after the US agreed to the “Bali Roadmap”.

The second meeting of the group took place in Hawaii, 30-31 January, 2008, further strengthening the notion that the MEM serve as a forum supporting the official UNFCCC process by finding ways to develop a detailed contribution of the countries that would take the Bali Action Plan ahead. A follow-up meeting is planned to take place in France in April 2008.

3. BUILDING BLOCKS – TAKING STOCK

Negotiations are converging on four main elements of a future climate agreement – often referred to as building blocks of the UNFCCC process: mitigation, adaptation, technology and financing. These four elements had previously appeared in the report of the co-facilitators of the dialogue on long-term cooperative action (UNFCCC 2007) and were also the basis for the UN high level meeting on climate change in September 2007. The Bali Roadmap includes these four topics as there is broad agreement on them. However, countries' views diverge on the content of these issues, which led to more or less difficult debates at the conference in Bali. The content of the decisions to date, as well as future issues relating to the four building blocks, are summarized below.

3.1 Mitigation

3.1.1 Status

Regarding mitigation, the main outcomes of the Bali conference concentrate on process and not on concrete activities or goals. As has been discussed above, the Bali roadmap specifies the timetable for the negotiations by CMP5/ COP15 in Copenhagen in which mitigation will be a core focus.

Although the EU and others had hoped for specific mention of a 25 to 40 percent emissions reduction target, in the end the Bali Action plan indirectly referred to the related scientific findings in the Fourth Assessment Report of the IPCC. It includes a general call for “enhanced national/international action on mitigation of climate change” and specific calls for “measurable, reportable and verifiable nationally appropriate *mitigation commitments or actions*, including quantified emission limitation and reduction objectives” for developed countries (Article 1.b.i) and “nationally appropriate *mitigation actions*” for developing countries (Article 1.b.ii). The Bali Action Plan also notes that sectoral approaches and sector-specific actions should become part of mitigation efforts (Article 1.b.iv) without further specification (COP 13 2007a).

Reducing emissions from deforestation and degradation in developing countries (REDD) is a separate issue of mitigation. A final decision on reducing emissions from deforestation was neither expected nor reached in Bali. Instead, the COP decision laid the groundwork for developing modalities for a post-2012 period. In order to support this process by gathering practical experience, a framework for a RED pilot-phase was established in Bali.

Countries with tropical forests are asked to start demonstration activities leading to the drafting of indicative guidance for such projects, one goal being to set national baselines based on historic emissions. The decision calls on developed countries to support this effort with capacity building, technology transfer for data collection, monitoring and reporting, etc, without specifying specific contributions.

The Subsidiary Body for Scientific and Technological Advice (SBSTA) supports this through work on methodological issues.

3.1.2 Issues to be resolved

The “measurable, reportable and verifiable nationally appropriate mitigation commitments or actions” for developed countries need to be specified. For the countries under the Kyoto Protocol, it will most likely continue to be emission targets that can be reached flexibly with international emission trading and the Kyoto Mechanisms CDM and JI. As the USA does not accept the Kyoto Protocol, it may be necessary to make an exception to reintegrate the USA.

One option could be to index the emission target to the development of the GDP. Another option would be to allow an unlimited number of additional credits into the system at a given high price (“safety valve”).

It is likely that exceptions made for the USA would also be claimed by Canada, which has ratified the Kyoto Protocol, but which will have difficulties reaching its emission reduction target for the period 2008 to 2012. Japan is also currently undecided whether it would accept national emission targets and promotes targets based on efficiencies in several sectors.

A major issue is to define “nationally appropriate mitigation actions” for developing countries. These are to be supplemented by support by developed countries. The option of “sectoral no-lose targets” for advanced developing countries seem to be very promising as it is a middle ground between the current CDM for developing countries and absolute emission reduction targets of developed countries. It ensures financing through the carbon market but entails no penalties for the participating developing countries if the targets are not met. Action by other less advanced developing countries can be encouraged by a “registry of sustainable development policies and measures”. Developing countries would report on their actions to advance development, which in turn reduce their greenhouse gas emissions.

It needs to be defined which action would be nationally appropriate for a developing country. Countries’ national circumstances and interests are too diverse for a “once size fits all” solution. Preferably it would rather be a system composed of different stages in order to be attractive for as many countries as possible. Determining a countries’ participation level is likely to be based on its responsibility (historical emissions), capability (GDP and human development) and potential (current emissions levels). Large countries (USA, China) may have “stages” of their own.

In a system of diverse targets, the comparability of efforts needs to be ensured. Methodological work on comparing efforts of countries only has started. If the USA is integrated with a commitment other than an emission reduction target, is it a similar effort as the emission reduction targets of other countries?

The CDM may need refinement. It is the Kyoto mechanism that is used most to date. Its volume is increasing fast, but there is also some room for improvement, e.g. in the area of its contribution to sustainable development and ensuring that projects are additional, meaning that they achieve emission reductions that would not have occurred without the CDM. It must be avoided that credits are granted for business-as-usual activities, for example, by just dedicating more resources to checking project proposals.

The notion of global agreements between companies of one sector (e.g. electricity, iron & steel, car manufacturers) needs to be explored. The Bali Action Plan refers specifically to sector agreements. Options for such sectoral agreements are being discussed in various fora (e.g. Egenhofer and Fujiwara 2007) Such agreements are seen as supporting government-led activities.

The treatment of special sectors needs to be addressed. Land use, land-use change and forestry (LULUCF) is only included in part under the Kyoto Protocol. It is envisaged that the currently complicated rules will be simplified. The question will be whether all emissions from this sector will be included under the emission reduction targets for developed countries or only the part of the sector that can be controlled and accurately quantified.

Ways to reduce emissions from deforestation and degradation in developing countries (REDD) need to be agreed. A major question is whether these activities would result in emission reduction credits that can be used by developed countries to achieve their emission reduction targets.

Emissions from international aviation and shipping are currently not controlled by the Kyoto Protocol, because it was unclear to which country they would be accounted. They could be included in the future, e.g. allocated to the country where the fuel is sold, or dealt with as a separate sector.

3.2 Adaptation

3.2.1 Status

One of the big successes of COP/CMP3 in Bali was agreement on the governance of the Adaptation Fund (CMP 3 2007a) under the Kyoto Protocol relatively early during the conference. It will assist developing country Parties to the Kyoto Protocol – in particular those that are most vulnerable to the adverse effects of climate change – in meeting the costs of adaptation. It is funded through the levies on CDM projects (2 percent of CERs) and does not depend on donors. It has currently reached €37 million with an increase expected to an estimated USD \$80- 300 million in the period 2008-2012 with projects in the CDM pipeline alone.

The Adaptation Fund will “finance concrete adaptation projects and programmes that are country driven and are based on the needs, views and priorities of eligible Parties;” and those countries can apply for funding directly without having to go through another organization like the World Bank, UNDP, etc.

The Adaptation Fund is governed by a board consisting of 16 members from each of the UN regional groups as well as additional representatives from Annex I and non-Annex I countries, small island developing states and least developed countries on behalf of the COP/MOP. It will have to develop the specific operational policies and guidelines for the application for funding and its allocation.

The GEF has been invited to perform secretarial functions on an interim basis. Its suggested role turned out to be the major contested point during the negotiations, since it was seen by developing countries as too dominated by developed countries and thus not fit to take over the management of the Fund. The World Bank is supposed to act as the trustee of the Fund, a role to be reviewed every three years.

During the negotiations the EU – with regard to the design of the Fund – had taken the flexible stance that it would in general support any proposal of the G77/China, the USA is not participating in this Kyoto Protocol discussion. It was thus possible to reach a relatively quick decision.

3.2.2 Issues to be resolved

The difficult issue is to define exactly which adaptation activities should be supported by the international system and how developing countries would be able to apply for support. There was no agreement in Bali on additional practical adaptation measures and the issue will be revisited at SBSTA in June 2008.

3.3 Technology

3.3.1 Status

Technology transfer (see also Section 6.5 of EUP1) was also taken up by the COP plenary. Early on it was agreed by the COP that the issue will be considered by both the Subsidiary Body for Implementation (SBI) (COP 13 2007b), responsible for checking whether countries are meeting all their commitments, and the Subsidiary Body for Scientific and Technology Advice (SBSTA) (COP 13 2007c), responsible for technical aspects of a framework for technology transfer. Originally only the SBSTA was dealing with technology transfer. But the G77 and China was concerned that developed countries were not implementing their commitments on technology transfer adequately and therefore proposed that also the SBI would consider the issue. This led to two different decisions taken under the COP and its subsidiary bodies. Three major issues were at the center of discussion in the COP and within the two subsidiary bodies.

First, the discussions centered around the institutional arrangements under the Convention, for which it was decided that the Expert Group on Technology Transfer (EGTT) would continue its work for the coming 5 years. The work of the group will include consideration of technology needs and needs assessment, technology information, enabling environments, capacity building and mechanisms for technology transfer. A set of actions around these themes was adopted by the COP to be considered by the EGTT. The work should be made available to the subsidiary bodies where appropriate.

The EGTT will also be responsible for the issue of “performance indicators, for monitoring and evaluating effectiveness” of technology transfer. It was concluded that the EGTT will develop such indicators and that these will be used by the Subsidiary bodies, in particular by the SBI. The SBI mentions in its decision, that it will use these indicators to “regularly monitor and evaluate the effectiveness of the implementation of the framework” and take meaningful action to enhance the framework.

Another point was the decision upon a “strategic” financing program that will be executed by the Global Environmental Facility (GEF). This program aims at “scaling up the level of investment for technology transfer”. The GEF will elaborate how such a program might be implemented and how it would interrelate with existing programs. The GEF is to report back to the SBI, so that this can be put up for consideration of the parties at the 30th session of the SBI.

3.3.2 Issues to be resolved

The decisions taken in the area of technology transfer are part of a continuing process that will need to result in a more comprehensive agreement covering the whole range of concerns of UNFCCC and Kyoto Protocol Member States by the end of 2009.

Future considerations also need to include technology cooperation, such as joint research efforts for the development of new technologies, exchange of information on the use and applicability of technologies, setting of standards for efficiencies of types of technologies. Such elements are only starting to be developed.

3.4 Finance

3.4.1 Status

The Adaptation Fund described above is the one financial mechanism taking a prominent position in the Bali Roadmap. This fund draws its financial resources from a levy on CDM projects and finances adaptation in countries in need, especially those most vulnerable to climate change.

In addition, financing is a matter that is implicitly relevant in all the above-mentioned building blocks. Explicitly this need is facilitated under the Convention within the financial mechanism that provides funds to developing countries. Two decisions were taken concerning this mechanism at COP 13: the decisions on the fourth review of the financial mechanism and the decision on the additional guidance to the financial mechanism.

Under the review of the financial mechanisms (COP 13 2007d) Parties are invited next to give their comments on a variety of documents dealing with financing that were published and propose options for scaling up financing in consideration of their own experience. The UNFCCC Secretariat is requested to create a synthesis document for the consideration of the SBI. The SBI is then requested to recommend a draft decision for adoption at the COP 14 no “the assessment of funding necessary to assist developing countries”²

In summary, it can be said that a process was started on the extent of the financial support necessary to fund developing countries and that a decision on this should be taken at the next/fourteenth Conference of the Parties. The GEF is the entity entrusted with the financial mechanism under the Convention but has been requested to improve communication with other bodies and Parties.

3.4.2 Issues to be resolved

It has become clear that financial flows need to be enhanced significantly to adequately solve the problem of climate change. The challenge is to create a constant flow of financial resources. Current funding mechanisms are insufficient and mainly depend on contributions from governments that need to decide on their contributions each time. Automatic mechanisms independent of government budgets have to be found. One option would be to extend the already existing levy on the CDM also to JI and international emissions trading under the Kyoto Protocol. This way a constant flow of additional resources is created through the functioning of the carbon market. Another option would be to auction part of the emission allowances to developed countries. A further option is to impose a levy on international air travel if this sector continues to be excluded from emission targets.

² Draft decision-/CP.13, Fourth Review of the financial mechanism“ FCCC/SBI/2007/L.34/Add.1

4. CONCLUSIONS

Significant action is urgently required to ensure that global greenhouse gas emissions peak by 2015 and decline to at least half of current levels in order to prevent dangerous interference with the climate system. The next years will be decisive as to whether this can be accomplished.

Future international climate policy is discussed in various international processes in addition to the UNFCCC (section 2.3). Most of the processes reinforce each other and have led to increased awareness of the issues at stake among decision makers. The diplomatic effort on climate change has never been as focused as it is currently, regularly involving heads of states. The Bali Roadmap sets an ambitious timeline for the coming two years and this pace must continue if a global agreement is to be reached by 2009.

The conference in Bali took process decisions by starting the negotiations, on their topics and a timeline. The process and building blocks will be the basis of a future international agreement on climate change. Now the content needs to be agreed within the next 2 years.

The Bali conference concluded 24 hours later than planned. The decisions taken were relatively simple compared to the complexity of a future agreement that needs to include many details of the building blocks mitigation, adaptation, technology and financing. Very intense negotiations will be ahead in the next two years.

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