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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

**AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION
UNDER THE CONVENTION**

Fourth session

Poznan, 1–10 December 2008

Item 3 (a–e) of the provisional agenda

Enabling the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012, by addressing, inter alia:

A shared vision for long-term cooperative action

Enhanced national/international action on mitigation of climate change

Enhanced action on adaptation

Enhanced action on technology development and transfer to support action on mitigation and adaptation

Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation

**Ideas and proposals on the elements contained in paragraph 1
of the Bali Action Plan**

Submissions from Parties

1. The Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), at its second session, invited Parties to submit to the secretariat ideas and proposals and, where appropriate and to the extent possible, specific textual proposals on the elements contained in paragraph 1 of the Bali Action Plan (decision 1/CP.13), taking into account the interlinkages among the elements and the specific subparagraphs under each of the elements, in order to focus the consideration of all the five elements by the AWG-LCA.¹
2. At its third session, the AWG-LCA invited its Chair to prepare a document assembling the ideas and proposals presented by Parties on the elements contained in paragraph 1 of the Bali Action Plan, taking into account the ideas and proposals presented by accredited observer organizations. The ideas and proposals shall be those received by 30 September 2008 in response to the invitations contained in the Bali Action Plan and in the conclusions of the first and second sessions of the AWG-LCA, as well as those that were presented during the first three sessions and in the in-session workshops.²
3. Given the large number of submissions by Parties that arrived soon after 30 September, the Chair, in preparing the document referred to paragraph 2 above, intends, to the extent possible, to take into account submissions received by 10 October.

¹ FCCC/AWGLCA/2008/8, paragraph 25.

² FCCC/AWGLCA/2008/12, paragraph 27.

FCCC/AWGLCA/2008/MISC.5

GE.08-63670

4. The secretariat has received 32 such submissions from 19 Parties. As requested by the AWG-LCA, they have been posted on the UNFCCC website.³ In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced* in the language in which they were received and without formal editing. The secretariat will continue to post on the UNFCCC website any submissions received after the issuance of the present document. The secretariat will also issue an addendum to this document prior to the fourth session of the AWG-LCA to include submissions that are received after 10 October.
5. Submissions received from accredited intergovernmental organizations will be compiled in document FCCC/AWGLCA/2008/MISC.6. Submissions received from non-governmental organizations will, in line with established practice, be posted on the UNFCCC website, at http://unfccc.int/parties_and_observers/ngo/items/3689.php.

³ <http://unfccc.int/meetings/items/4381.php>.

* These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

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**Proposal by the G77 & China
for**

**A Technology Mechanism
under the UNFCCC**

I. Rationale

Enhanced mitigation and adaptation under the UNFCCC requires an acceleration in the development, deployment, adoption, diffusion and transfer of environmentally sound technologies among all Parties, particularly from Annex II Parties to non-Annex I Parties, in order to avoid the lock-in effects of non-environmentally sound technologies on developing country Parties, and to promote their shift to sustainable development paths, thus enhancing the goals of the Convention. There is a critical and urgent need to provide access to technology for adaptation at a regional and national level, enabled by capacity-building and provision of new and additional funding to meet the costs of both integration of adaptation into the development process and stand-alone adaptation activities.

Currently, access to financing is limited, and should be enhanced to deliver technology development, deployment, adoption, diffusion and transfer to non-Annex I Parties. Barriers to technology transfer also inhibit the adoption of environmentally sustainable technologies in non-Annex I Parties, highlighting the urgency for access to these technologies while balancing rewards for innovators with the common good of humankind, including jointly developed technology and intellectual property rights (IPR) sharing.

The immediate and urgent delivery of technology development, deployment, diffusion and transfer to non-Annex I Parties requires suitable responses, including a continued emphasis by all Parties on the enhancement of enabling environments, facilitating access to technology, and financing that leverages private sector financial resources. Current institutional arrangements are insufficient to deliver immediate and urgent technology development, deployment, diffusion, and transfer to non-Annex I Parties.

To address these challenges, this mechanism will build on existing activities within the Convention, including the work of the EGTT, and promote coherence by integrating expanding and ongoing activities related to technology. It will provide a means to enhance delivery on the Convention obligations on technology and related finance and capacity building.

II. Objective of a Technology Mechanism

An enhanced institutional mechanism will address all aspects of cooperation on technology research, development, diffusion and transfer in accordance with Articles 4.1(c), 4.3, 4.5 and other relevant articles of the Convention, in order to enable mitigation and adaptation under the relevant paragraphs of decision 1/CP.13.

III. Guiding Criteria

The technology mechanism will operate under the authority and guidance of the COP and be accountable to it. It shall aim to achieve:

- Accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on mitigation and adaptation;

- Provision of full costs and full incremental costs, as per Article 4.3 of the Convention;
- Adequacy and predictability of funds for technology transfer;
- Removal of barriers for technology development and transfer.

IV. Institutional Arrangements

The mechanism comprises an Executive Body and a Multilateral Climate Technology Fund operating under the Conference of Parties.

A. Executive Body on Technology

An Executive Body on Technology shall be established as a subsidiary body of the Convention in accordance with Article 7(2)(i) to enable implementation of the Convention by enhancing action on technology development and transfer to support action on mitigation and adaptation. This subsidiary body shall comprise government representatives, elected by the COP and with balanced regional representation, who are experts on matters related to technology transfer, and be open to input from other experts. The Executive Body would comprise and be supported by:

- i. **Strategic Planning Committee** to: develop strategy; provide regular guidance; assess and elaborate technology-related matters; continuously evaluate progress; and develop updates for the Technology Action Plan, as described below, at regular intervals.
- ii. **Technical Panels** to generate and compile current expert information related to: capacity building; policies and measures; intellectual property cooperation; sectoral, cross-sectoral, and cross cutting cooperation; assessment, monitoring and compliance; and other necessary topics. The Executive Body may establish additional technical expert committees, panels, or working groups or other bodies to provide scientific, technical, and operational expertise and to consolidate and provide advice to the Executive Body and COP in order to assist it in the performance of its functions. In this context, it shall take fully into account the consideration of regional balance.
- iii. **Verification Group** to verify the financial and technological contributions made to the mechanism in accordance with the overall “measurable, reportable, verifiable” requirement of Decision 1/CP.13.
- iv. **Secretariat** to support and facilitate the activities of the Executive Body. The secretariat will compile and prepare a final report on financial and technological contributions made and reported by Parties to the technology mechanism, in accordance with the overall “measurable, reportable, verifiable” requirement of Decision 1/CP.13.

B. Multilateral Climate Technology Fund (MCTF)

This fund will provide technology-related financial requirements as determined by the Executive Body. The fund will operate under the COP as part of the enhanced multilateral financial mechanism described in the relevant G77 & China proposal.

- The MCTF shall be financed by assessed contributions from Annex II Parties. Contributions to the mechanism shall be additional to other financial transfers to non-Annex I Parties and shall meet the costs incurred by such Parties.
- An agreed proportion of contributions by developed country Parties and other Parties included in Annex II of the Convention to bilateral and regional co-operation may be

considered as contributions to the MCTF, provided that such co-operation is consistent with the policies and scope of the mechanism.

- Financial transfers to the MCTF shall be counted as measurable, reportable and verifiable commitments under para 1.b(ii) of the Bali Action Plan. Any funding not under the authority and guidance of the UNFCCC shall not be regarded as the fulfillment of commitments by developed countries under Art. 4.3 of the Convention or decision 1/CP.13.
- The MCTF shall cover, inter alia, eligible costs of activities approved by the Executive Body; administrative costs of the Executive Body, Secretariat, and Trustee or Trustees; and costs associated with other specific decisions of the Conference of the Parties.
- In the context of the enhanced multilateral financial mechanism proposed by the Group of 77 & China, the MCTF shall be managed by a Trustee or Trustees, selected through a process of open bidding, who shall have fiduciary responsibility and administrative competence to manage the MCTF, and shall hold in trust, the funds, assets, and receipts that constitute the fund, and shall comply with the principles and modalities for their management and disbursement as stipulated by the Conference of the Parties.

V. *Technology Action Plan*

A Technology Action Plan shall serve as a starting point for the work of the Executive Body. It will include clear actions and dates for the first three years, and will be updated for successive three-year periods. To realize the full potential of technology, the Action Plan shall support all stages of the technology cycle, including:

- **Research.** The Action Plan will accelerate research and invention through scientific and technical cooperation at all levels, including that of scientists and institutions.
- **Development.** The Action Plan will accelerate the rate at which technologies are developed and brought into effect.
- **Transfer and diffusion.** The Action Plan will ensure financing for technology transfer (including all available means to ensure the affordability of technologies, products and related services).

The Technology Action Plan will define specific policies, actions, and funding requirements for all relevant technologies under the following classifications:

- **Public domain technologies.** The Action Plan will identify needs, and establish an international cooperation system to ensure lowest cost options, as well as transferring know-how to use and maintain the technologies and adapt them to local conditions, including endogenous technologies.
- **Patented technologies.** The Action Plan will ensure that privately owned technologies are available on an affordable basis including through measures to resolve the barriers posed by intellectual property rights and addressing compulsory licensing of patented technologies. Technologies with shared ownership (government and private) will be made available on an affordable basis by facilitating transfer of the government proportion on a reduced or no-cost basis. Technologies that are government owned will be made available on an affordable basis by facilitating transfer at reduced or no-cost basis.
- **Future technologies.** The Action Plan will support the establishment of national and regional technology excellence centers and will reinforce north-south, south-south and triangular cooperation, including joint research and development.

VI. Eligible Activities

The mechanism will cover technologies in all relevant sectors and endeavor to remove barriers to effective technology development, deployment, diffusion and transfer. It will articulate with the overarching financial mechanism of the Convention to secure necessary financing. The following list of activities and costs eligible for support by the mechanism is indicative and may be modified by the COP at any time.

Activities eligible for support from the mechanism include, inter alia:

- Promotion, facilitation and implementation of activities along the entire technology cycle to enable the accelerated adoption of ESTs;
- Support for research, development, manufacture, commercialization, deployment and diffusion of technologies for adaptation and mitigation in accordance with Decision 1/CP.13.
- adaptation technologies to address the adverse effects of climate change and finance the removal of barriers to the large-scale transfer of technologies for adaptation;
- technologies to address the adverse impact of response measures, and finance the removal of barriers to the large-scale transfer of technologies for reducing the adverse impact of response measures;
- capacity-building to manage and generate technological change, enhance absorptive capacity, create enabling conditions in developing countries, inter alia, costs of:
 - Research, development and demonstration of new technologies;
 - Enhancing human and institutional capacity;
 - Guarantees on foreign direct investment for environmentally sound technologies.
- Commercialization of new and emerging technologies, inter alia:
 - Venture capital, with public investment leveraging private capital markets for emerging technologies;
 - Research, development, and demonstration of new technologies, financed by venture capital and other sources;
 - Joint technology development.
- Creation of manufacturing facilities for EST, including low-GHG emission technologies, inter alia, costs of:
 - Compulsory licensing, cost associated with patents, designs, and royalties;
 - Conversion of existing manufacturing facilities or of establishing new facilities;
 - Research and development activities, including joint research, development, design, and demonstration;
 - Technology adaptation;
 - Retraining and dissemination of know-how;
 - Operation; and
 - Monitoring and verification.
- Procurement of low-GHG emission technologies, including software and hardware, inter alia:
 - Cost of premature modification or of replacement of existing equipment, as well as the cost of new equipment;
 - Cost of retraining and dissemination of know-how;
 - Cost of technical assistance for the design, installation, and stable operation of the technology;
 - Cost of fuel and other operational costs;
 - Cost of technologies for fuel switching;
 - Cost of monitoring and verification.

PAPER NO. 2: ARGENTINA

**Submission for the Ad-Hoc Working Group on Long-Term Cooperative Action
(AWG-LCA)**

views on

**Enabling the Full, Effective, And Sustained Implementation of the Convention
through Long-Term Cooperative Action Now, Up To, and Beyond 2012**

September 2008

At its third session held in Accra, 21-27 August 2008, the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) invited parties to submit their views of the ongoing work of the group regarding all elements of paragraph 1 of Decision 1/CP.13, the Bali Action Plan, taking into account the inter-linkages and the specific subparagraphs under each of the elements.

The Government of Argentina hereby submits its views and suggestions to the AWG-LCA.

We note that while our submission addresses each of the five elements that constitute the Bali Action Plan, any discussion and agreement on all elements should be carried out in an integrated manner.

I. A SHARED VISION

Climate change threatens food and water availability world-wide, thereby putting the livelihoods of millions at risk, particularly communities in climate vulnerable States and regions. The impacts of and necessary responses to climate change at the national level – both in terms of adaptation and mitigation – present a huge and perhaps insurmountable obstacle to the development aspirations of many nations.

The Government of Argentina considers that a shared vision for long-term cooperative action should continue to be guided by the principles laid out in Article 3 of the UNFCCC. Specifically, the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof. The specific needs and special circumstances of developing countries, of those particularly vulnerable to the adverse effects of climate change, and of those who will bear a disproportionate burden, should be given full consideration.

A shared vision is an integrated approach to addressing climate change and should enable sustainable development for all societies. The early establishment of mid-term targets for Annex I countries, and a clear agreement on the levels of financing, technology and capacity building that will be made available will assist an eventual discussion of appropriate long-term goals.

Addressing climate change necessarily requires reorienting current global economic growth patterns, which in turn poses a tremendous costs and barriers for many governments and other actors to decisively change their behavior in order to climate change. Because of this, it we firmly believe that the practical success of any future agreement necessarily depends on early and decisive action to ensure that the financial and technology support is available to developing countries in order to ensure and maximize their potential contributions to solving this global problem.

Argentina believes that a shared vision may be guided by the equitable determination of long-term objectives, drawing on the recommendations made by the IPCC in its Fourth Assessment Report, and

based on an equitable burden sharing paradigm that ensures equal sustainable development potential for all citizens of the world, taking into account historical responsibility and respective capabilities. Any decision on burden sharing must reflect not only scientific, but also equity, economic, social, political and other considerations.

Considering that economic and social development, poverty eradication and adaptation to climate change are the top priorities for developing countries, as recognized by the Bali Action Plan, emission reductions in these countries to meet any agreed global goal necessarily requires the support for technology development and transfer, capacity building and financing from developed countries. Any agreement that increases the participation of developing countries will restrict available development policy options for governments, and especially in those countries that have not yet reached a level of economic growth sufficient to guarantee basic needs. For this reason, a shared vision and any global goal must address the impacts that a future global agreement will have on the development prospects of developing countries. Consequently, such a vision necessarily includes technology development and transfer, financial support, and other associated support from developed countries to equitably secure developing countries' sustainable development.

II. ENHANCED NATIONAL/INTERNATIONAL ACTION ON MITIGATION

Developed countries must demonstrate – through practical actions – that they are taking the lead in modifying longer-term trends in emissions, consistent with the objectives of the Convention. Mid-term targets and deeper long-term commitments for all developed countries, accompanied by a sound approach to enabling and ensuring compliance, are critical factors to achieve necessary global emission reduction. Full performance by Annex I Parties of their Kyoto Commitments, as well as deep and binding emissions cuts in the context of a second commitment period under the Kyoto Protocol, are also prerequisites for reaching global stabilization levels and for any future agreement.

As population, economic growth and development continue on their upward curve, emissions must decrease dramatically between 2020 and 2050. Clearly, reaching stabilization levels will mean reorienting production, consumption, and access to resources on a global scale. Any global mitigation strategy will affect the access that millions of people have to basic public goods and can potentially affect food, water, and health security, consequentially impacting the cultures and livelihoods, and well being of countless communities and individuals. The IPCC 4th Assessment Report leaves no doubt that any future global mitigation strategy will have consequences in terms of distribution of responsibilities and resources. It is our firm belief that developing countries should not have to compromise their growth and development as a result of climate change. Indeed, mitigation in developing countries is essential and should increase significantly in order to achieve global climate stabilization. One way is for developing countries to move quickly towards low-carbon economies. This will only be possible, however, with the associated technology, financing, and capacity building in place to catalyze and maximize mitigation action.

Argentina is committed to contributing its utmost to mitigating climate change. This contribution necessarily depends on striking the balance between our responsibility to our citizens – ensuring they have access to minimum standards of security, human rights, and social benefits, such as food, health, education, shelter, and opportunity for self-development – and the means available to implement mitigation activities.

One task of the AWG-LCA is to frankly and openly discuss how to guarantee continued economic development while also achieving the necessary sharp global cuts.

In this regard, the concept of contraction and convergence, supported by adequate financing, technology and capacity building and compensation for lost development opportunity, remains an option for our

consideration within these negotiations. This approach provides one option for balancing the effort by developing countries to secure their development needs while reducing GHG emissions over time. As countries secure their development objectives, they are better equipped to adapt to climate change and mitigate without detrimental impacts on their societies.

The continued use of flexible mechanisms to reduce GHG emissions requires close consideration given their potential to displace domestic action by Annex I countries and capture, primarily, only the least expensive mitigation activities in developing countries. Argentina believes that market-based mechanisms have a role in mobilizing capital and technology at the level needed to global GHG mitigation. However, we strongly believe that market alone cannot deliver the expected outcomes soon enough to avoid irreversible climate change. The private sector can be leveraged and guided with the use of substantial new and additional resources, and in coordination with other international organisms and fora where governments are represented.

At the same time, carbon markets do need to be scaled up to deliver additional financial flows to accomplish the task ahead. In exploring the development of carbon markets, we need to identify ways of financing low-carbon investments in developing countries that do not involve transferring the burden of mitigation from the developed to developing world. Any approach for carbon market mechanisms should also contain conditions, criteria and factors that promote better regional distribution of mitigation activities and their associated benefits. An improved carbon market mechanism should also incorporate conditions that avoid market biases, such as those that have arisen in the current CDM in relation to activities that mitigate GHG different from carbon dioxide.

Reducing emissions from deforestation and forest degradation (REDD)

On reducing emissions from deforestation and forest degradation, as well as on the role of conservation, sustainable forest management and enhancement of forest carbon stock in developing countries, Argentina considers these are key issues under the AWG-LCA and are an important part of the global agreement due both to the enormous potential they have for GHG mitigation and also for their intrinsic relationship to sustainable development.

We propose, in the first place, to concentrate the discussions on these issues under the AWG-LCA, allowing for an integral debate that includes technical, financing and political matters. In this sense, a contact group could be created under the AWG-LCA to deal with the technical and methodological aspects that are unique to this subject. Moreover, concentrating the discussions in the AWG-LCA will allow small developing countries delegations to follow the issue closely and give it due attention, considering the direct implications for many developing countries.

While policy approaches are fundamental in pursuing reducing emissions from deforestation and forest degradation in developing countries, mitigation efforts in this sector require adequate and appropriate financial support from developed countries, as well as other positive incentives. Furthermore, financial resources should precede the implementation of activities in this sector, not come as subsequent payment for successful forest protection activities. Equitable risk sharing, acknowledging that the results on reducing deforestation and forest degradation are not always certain is an important principle in REDD efforts. In addition to supporting sustainable development and addressing financial resource scarcity common in most developing countries, this approach builds on the spirit of long-term cooperative action and collaboration to reach common goals.

Finally, REDD approaches to climate change have significant development and social implications and should be carried out with due attention to possible outcomes, particularly in climate vulnerable States, regions, and communities. The World Bank estimates that 90 percent of the 1.2 billion people living in extreme poverty around the world depend for their livelihoods on forest resources. In Argentina,

hundreds of thousands of people rely on forests for food, water, medicines, energy, and income. Clearly, any global approach to forest will have an impact – positive or negative – on the lives and rights of many of the world’s most vulnerable people. Therefore, any future global approach to REDD should incorporate safeguards to ensure that global scale activities, such as sales of REDD credits, are coherent with national development goals protection of the countries concerned.

III. ENHANCED ACTION ON ADAPTATION

IPCC 4th Assessment report clearly underscores the economic, environmental, and social impacts of climate change, and the particular climate vulnerability of certain communities, countries, and regions. Among the most prominent social impacts of climate change are on local livelihoods, especially related to food, water, health, and local economies. In this regard, it is increasingly evident that climate change seriously undermines countries’ – and especially developing countries’ – ability to ensure citizens’ basic human rights, including the rights to health; rights to food, water, shelter and property; rights associated with livelihood and culture; with migration and resettlement; and with personal security in the event of conflict, and even the right to life.

When developing countries stress their development priorities in the context the climate negotiations, these are the fundamental issues. Poverty alleviation is intimately tied to these basic rights, which each government has the responsibility to deliver.

Moreover, resource shortages, governance, and institutional challenges severely limit developing countries’ ability to respond and adapt to climate change. Specifically, the lack of assessment instruments, methodologies and scientific precision on the impacts on local communities hinder countries’ ability to develop appropriate climate adaptation strategies.

The Human Rights Council of the United Nations recently adopted a resolution on Human Rights and Climate Change stating that States are “concerned that climate change poses an immediate and far reaching threat to people and communities around the world and has implications for the full enjoyment of human rights”. In a similar initiative, the States of the Americas adopted Resolution 2429 on Human Rights and Climate Change in the Americas, calling on States “to counter the adverse effects of climate change, and to build resilience and the capacity to adapt to the phenomenon of climate change among vulnerable states and populations”. Presently, both the High Commission on Human Rights and the OAS Inter-American Commission on Human Rights are undertaking research on the social and human rights impacts of climate change in order to better prepare climate vulnerable countries to confront the present and imminent impacts of climate variations.

Information

An effective global response to adaptation requires information and analysis of where climate change will cause the most severe damage. Developing countries, which are generally located in highly climate vulnerable areas, require more adequate information, proper diagnostic and policy tools, as well as financing for adaptation. All of these are all severely lacking at present – lagging sorely behind information available on mitigation potential. Expertise, financing and information tend to be concentrated in developed countries, where there is more complete diagnosis about the likely impacts of climate change and suitable responses. The IPCC cites many examples of adaptation in the developed world, but forecasts for developing countries are lacking or ambiguous. [Even the World Bank’s Climate Strategy, which should be oriented to climate vulnerable communities and countries, offers little in terms of tools and specific strategies to address adaptation needs.]

Endogenously sourced scientific information for adaptation planning is critical and will help both to inform national and regional policy guidance on the social and other development impacts of climate change and to generate local ownership and relevance to climate adaptation policies and programs.

Argentina considers that, in informing our global response on adaptation, our decision-making could be served by developing indicators and benchmarks that guide our resource and research allocations, as well as priority-setting. For example, while it is vital to know at what temperature increase we lead to severe droughts or sea-levels rise, it is no less important to know *who* these events will affect and *where*, what institutional or other support exists on the ground and how to bolster this support.

Studies carried out by UN and other international humanitarian bodies can inform the global climate process. The work of the Office of the High Commission on Human Rights and the specialized agencies of the OAS, which are presently undertaking studies and consultations to evaluate the impacts of climate change on human rights realization, will be useful in ensuring that climate response takes place within a strong sustainable development framework. The Government of Argentina sustains that a humanitarian and human rights lens can, in clarifying the social impacts of climate change, provide us with a compass for policy orientation. We also welcome efforts by the World Bank, presently examining social impacts and human rights implications of climate change.

Argentina believes that better quality scientific information and reduction of uncertainties of climate change modelling may be achieved by establishing monitoring networks and other technological resources, including early warning systems. These systems should especially focus on climate vulnerable communities where climate change is most seriously impacting local livelihoods and where communities are most vulnerable to climate change. As an early action, we propose the AWG-LCA to move forward a program aiming to disseminate such technologies.

In this regard, we would like to underline the benefits and efficiency inherent in applying and further developing many of the technologies for adaptation that are available in developing countries. Thus, while information gathering should continue with all possible sources and support available, technology development, transfer and diffusion should incorporate criteria that address: climate vulnerability, cost-effectiveness; geographic, social, and cultural appropriateness; and sustainability considerations, and human rights relevance.

National Planning

Immediate national planning for adaptation is necessary world-wide. All developing countries should have access, if necessary, internationally provided resources, capacity, and support to elaboration national adaptation programs of actions (NAPAs) or similar. National adaptation planning will allow for assessing, identifying and prioritizing adaptation objectives and actions as well as integrating these actions as additional elements into sustainable development policies and measures. The creation of enabling environments, such as institutional capacity building as well as a regulatory framework that contributes to diversify economic activities and to strength economic resilience should be part of the national adaptation planning. Adaptation planning should also address risk management and risk reduction strategies, including risk sharing and insurance mechanisms.

Economic evaluation of the impacts of climate change as well as the potential development paths required to optimise mitigation, secure adaptation, and put in place nationally appropriate policies to sustain growth in the most climate-friendly manner, is a key dimension to any national plan. Economic information and evaluation capacity, which are key to mainstreaming adaptation into sustainable development, lacks in most developing countries. This tool could be a component of an Adaptation Action Plan under the AWG-LCA.

Argentina sustains that any financing for adaptation must not be counted towards meeting the UN-agreed target of 0.7 per cent for aid. Developed countries have delivered just \$48m to international funds for least-developed country adaptation, and have counted it as aid. This practice undermines international development and poverty alleviation efforts, upon which current official development assistance is currently founded.

Regarding the financial support for national adaptation actions, we are concerned about the diversity of funds created or being created both within and outside the UNFCCC with the subsequent dilution and ineffectiveness of current global efforts. As such, it is the position of this government that funding for adaptation should be structured and governed under an umbrella financial mechanism of the UNFCCC. We believe that the funds available under the Convention should aim to cover all financial needs for developing countries to adapt to the adverse impacts of climate change, as per the Framework Convention.

In this sense, we consider that public financing from developed countries should be scaled up according to their historic contribution to climate change, with consideration for national circumstances, in order secure adequate financing and reach the levels urgently required to address adaptation through the UNFCCC for developing countries.

III. ENHANCED ACTION ON TECHNOLOGY DEVELOPMENT AND TRANSFER

Argentina fully supports the proposal made by the G77 & China on an institutional structure under the Convention to enhance technology development, deployment and transfer and associated enabling activities such as capacity building at institutional level, technical training among private and public stakeholders, and bilateral and multilateral research and development cooperation.

Further enabling activities for technology development and transfer should include activities at all stages of the technology development cycle, i.e. research and development (R&D), institutional capacity building and technical training, technology demonstration, deployment and diffusion. In fact, transfer of technology involves the pursuing all these issues and not simply the technology trading and post-sale services. Transfer of technologies should also be supported by appropriate domestic policies, regulations and standards, and institutional arrangements in the recipient countries.

We would like to stress the need for collaborative R&D between national and regional research centres in a North-South and South-South cooperation scheme. Enhancing international cooperation on R&D of specific technologies and establishing joint ventures to accelerate deployment and diffusion of technologies will contribute to effectively deal with intellectual property rights issues by sharing these rights among parties involved.

Finally, Argentina believes that the work being done by the Expert Group on Technology Transfer (EGTT) on developing indicators for technology transfer, assessing new financing resources for development and transfer of technology, and on a long-term strategy on technology development and transfer is of great value to discussions on technology under the AWG-LCA and can provide valuable elements at this stage of its work of the AWG-LCA.

On cooperative sectoral approaches

The Government of Argentina believes that sectoral approaches and sector-specific actions, as reflected in the Bali Action Plan, provide one useful means among others for achieving the overarching objective of Article 4.1(c) of promoting and cooperating in the “development, application and diffusion, including transfer, of technologies, practices and processes”. To the extent they are useful, sectoral approaches can provide a lens through which to assist developing countries to identify their needs in particular areas, the

technologies available to meet these needs, the barriers to transfer of these technologies, and the financial, capacity and other requirements to overcome these barriers. They are not, however, the only means for achieving these objectives.

The Convention provides that all Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall promote and cooperate on technology-related matters in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors. (Article 4.1). Notably, discussions on many aspects of sectoral implementation for Annex 1 countries are already underway under the Ad-hoc Working Group on the Kyoto Protocol. The Government of Argentina believes that these discussions should continue under the AWG-KP and should not be transferred or confused with new discussions on sectoral approaches to implement Article 4(1)(c) under the AWG-LCA.

On this basis, the Government of Argentina considers that a cooperative sectoral approach and sector specific actions fall within a national development-oriented approach to implementing the Convention focusing on key sectors of relevance when mitigating and adapting to climate change. In particular, we note the potential value of a domestic focus on economic (as opposed to industry) sectors in securing the full, effective and sustained implementation of the Convention in a manner that supports national development objectives and helps integrate considerations of mitigation, adaptation, technology and finance at the national level. Furthermore, this approach can and should be carried out as in order to effectively implement the technology development and transfer provisions of the Convention.

Finally, sectoral approaches to technology transfer and deployment can enhance developing countries capacity to implement nationally appropriate and nationally determined actions to support sustainable development. It is important that discussions focus on the specific technology development and transfer objectives set out in Article 4.1(c) and the Bali Action Plan. They should not, for example, serve as a pretext for introducing a broader discussion of approaches targeting sectoral emissions that could be used by Annex I Parties to reach their emission reduction targets, which are being addressed in the Ad-hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol.

IV. ENHANCED ACTION ON FINANCING

The Government of Argentina supports the proposal made by the Philippines on behalf of the Group of 77 and China to establish a “Financial mechanism for meeting financial commitments under the Convention”. We believe that this proposal is coherent and harmonious with numerous other proposals made for institutionalizing the provision of financing under the Convention. We further consider that early discussion and advance on this topic will pave the way for a successful outcome in Copenhagen.

As regards financing for climate change, the Government of Argentina stresses the importance of coordinating financial flows and market-based mechanisms oriented to mitigation of and adaptation to climate change under the UNFCCC. Much needed additional funding from multilateral financial institutions, under bilateral or multilateral development programs, should be brought in line with the principles and objectives of the Convention. The cross-cutting nature of climate change provides many opportunities for synergetic activities, which should be capitalized. By the same token, the interconnectivity presents risks and potential pitfalls. In this sense, we consider critical the need to articulation the work of UNFCCC with other UN agencies and relevant international fora, inter alia, UNIDO, FAO, IFIs, WTO and MEAs. Transparency, information sharing, equity, and alignment should be guiding principles for all actors in this regard.

The Government of Argentina wishes to emphasize the important role of public financing from developed countries for climate change. Public sector finance from developed countries should lead the

response to climate change in both adaptation and mitigation. Public finance is transparent, predictable, and can be oriented based on a broad set of sustainable development priorities. It is more stable, responsive, and applicable to a wide variety of social, environmental, and development needs. It should constitute the majority of Adaptation financing because of these inherent characteristics. Furthermore, it should do so because adaptation is a local, publicly implemented responsibility, and because the need for adaptation is a liability with historic, nation-based responsibility. The public sector can also leverage and guide additional financing from the private sector, and stimulate other actors to participate who can further create the enabling environments that enhance mitigation and adaptation actions in developing countries. The private sector and market-based mechanisms can be instrumental to scale up the level of financial flows for the massive technology development, deployment, and transfer required to address climate change. Yet because of their unpredictability and dependence on regulatory frameworks that function beyond the bounds of the UNFCCC, they require national level supervision and guidance.

PAPER NO. 3: BELIZE, BOLIVIA, CAMEROON, CENTRAL AFRICAN REPUBLIC, COSTA RICA, DEMOCRATIC REPUBLIC OF THE CONGO, DOMINICAN REPUBLIC, EQUATORIAL GUINEA, GHANA, GUATEMALA, GUINEA, KENYA, LESOTHO, LIBERIA, NICARAGUA, PANAMA, PAKISTAN, PAPUA NEW GUINEA, SINGAPORE, SOLOMON ISLANDS, THAILAND, UGANDA AND VANUATU

**Reducing Emissions From Deforestation and Forest Degradation
in Developing Countries; and the Role of Conservation, Sustainable Management of Forests
and Enhancement of Forest Carbon Stocks**

I. Mandate

The Second Session of the Ad Hoc Working Group on Long-Term Cooperative Action under the United Nations Convention on Climate Change (UNFCCC), held in Bonn, Germany, invited Parties and accredited observer organizations to provide additional information, views and proposals on Paragraph 1 of the 'Bali Action Plan' by 14 August 2008. Further, the Parties have agreed that at the 3rd Session of the AWG-LCA, a workshop would consider policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

For this purpose, a number of like-minded developing countries met to consider these issues in Santa Cruz, Bolivia, from July 28 - 29, 2008. This submission has been prepared in reflection of those discussions and incorporating input from many other developing country Parties.

II. Introduction

The IPCC's 4th Assessment Report estimates that around 5.8 GtCO₂ is released annually into the atmosphere from global deforestation and forest degradation. Therefore, without prompt action to reduce emissions from deforestation and forest degradation, almost 30 GtCO₂ may be released into the atmosphere between 2008 and 2012.

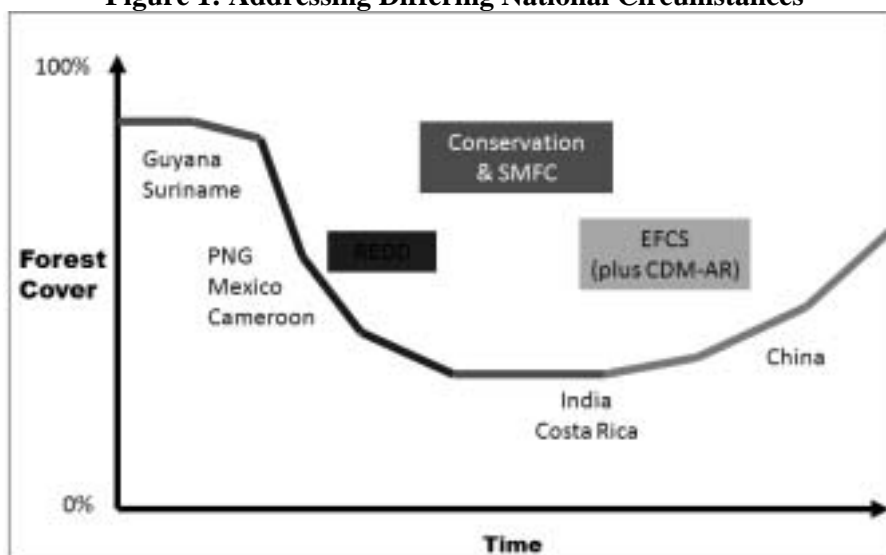
It is estimated that deforestation and forest degradation in developing countries may today contribute approximately 20% of the world's GHG emissions. As a result of human activities, large-scale deforestation has been occurring for several centuries with the balance shifting from developed to developing countries in recent decades. While this has not carried a long-lasting correlation with economic development, it has been found that as rural incomes rise, rates of deforestation tend to decrease over time.

Along with the objectives of the Convention, therefore, a system of policy approaches and positive incentives to reduce emissions from deforestation and forest degradation should recognize the rights and roles of rural communities, native and indigenous peoples in order to ensure the sustainability of REDD implementation. The REDD Mechanism should also recognize their traditional knowledge, their intrinsic relationship with tropical forests and should significantly support their social, environmental and economic development.

At present, however, most developing countries struggle to adequately address the drivers of deforestation, conserve forests, or enhance forest carbon stocks because of insufficient domestic resources and overly cumbersome requirements from international agencies and donors. Further, effective implementation will be continue to be unlikely without confidence that the opportunity costs associated with forgone land-use activities will be replaced. As such, REDD Mechanisms should be on voluntary basis and developed to be fair and equitable, recognizing differing national circumstances.

Therefore, new, substantial and sustainable resources must be mobilized in order for such mechanisms to be effective. Further, any alternative revenue streams must be transparent, predictable, sustainable and sufficient.

Figure 1: Addressing Differing National Circumstances



III. Maximizing Participation while Accommodating National Circumstances

a. Category I: Readiness & Capacity Building

Objective: Consistent with individual national circumstances, each Party should take leadership over their own REDD process of analysis, capacity building, institutional evaluation and policy development along with demonstration activities in preparation for expanded implementation of related efforts to reduce deforestation and forest degradation, conservation, sustainable management of forest carbon stocks (SMFC), and/or enhancement of forest carbon stocks (EFCS).

Voluntary: Participation by developing countries in such ‘readiness activities’ is voluntary and should not prejudice any future negotiations within the context of the Convention, the AWGLCA, the AWG, or any such processes.

Readiness Coordination: The Parties may consider inviting interested multilateral, bilateral and international agencies to use existing platforms, such as the World Bank Forest Carbon Partnership Facility (FCPF), to coordinate programs and initiatives for efficiency, consistency and to avoid redundancy between donors, agencies, and programs that will simply complicate developing country participation and the effectiveness of related actions. Parties should rely upon and strengthen local capacities, and when possible, also promote South-South cooperation.

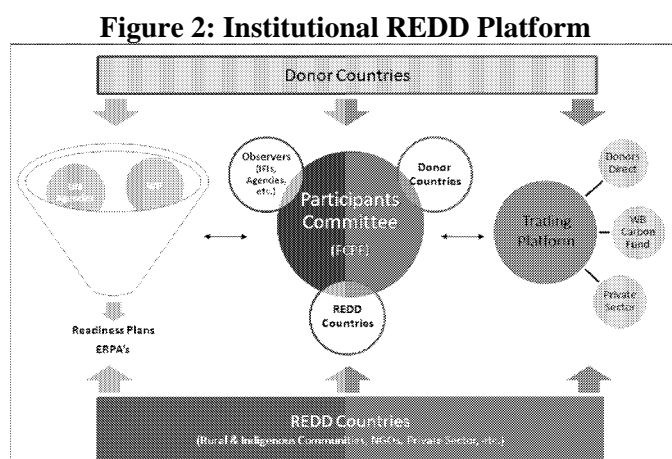
Coordination of Funding Sources: The Parties must consider better coordinating the mobilization of resources, including donors, non-governmental organizations, and the private sector, in order to maximize the access to, and the flexibility of, necessary funding sources. Such funding must be based on the specific financial needs of REDD countries, not be subject to stringent conditionality nor linked to issues not within the scope of climate change, and where possible, be designed to improve knowledge, increase transparency and standardize relevant methodologies, modalities, formats, templates and strictly defined procedures.

Institutional REDD Platform: Parties may consider leveraging the FCPF Participant’s Committee into an international ‘*Institutional REDD Platform*’ for developing countries, donors, international agencies, and along with representatives from the private sector, civil society and indigenous peoples as observers, to better coordinate, evaluate and reach consensus related to activities, standards and performance.

Integrating the UN-REDD Initiative: While there is general understanding on how developing and donor Party participation may be organized under the FCPF, there is a need to further integrate other relevant agencies within the United Nations System, such as the UNDP, UNEP and UNFAO, now operating as the ‘UN-REDD Initiative’. In order to effectively leverage existing programs and avoid redundancy while increasing the effectiveness of efforts, under the guidance of the Participants Committee, the World Bank and the UN-REDD Program should jointly coordinate and manage the FCPF as an ‘*Institutional REDD Platform*’ by:

- Joint Chairing the Participants Committee, in a non-voting role;
- Joint staffing the Facility Management Team;
- Development of a ‘Joint Readiness Strategy’ that leverages the core competencies, and harnesses the specific national relationships of each agency.

Selecting a Lead Agency: Under the leadership and guidance of each host Party and based on development priorities, each REDD country should have flexibility to select a lead agency, as required – WB, UNDP, UNEP, and/or the FAO – to sub-coordinate national readiness activities.



b. Category II: Expanding Implementation under the Convention and through non-compliance and voluntary market instruments

Objective: Consistent with individual national circumstances, each Party should take leadership over their own process to expand the implementation of policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries, and of the role of conservation, sustainable management of forest carbon (SMFC) and enhancement of forest carbon stocks (EFCS) in developing countries.

Voluntary Participation: Based upon national circumstances, along with the results of ‘readiness activities’ undertaken within Category I, where applicable, Parties may voluntarily notify the UNFCCC Secretariat of ongoing activities and their intention to operate under Category II. These activities should not prejudice any future negotiations within the context of the Convention, the AWG-LCA, the AWG or any related process.

Timeframe: Category I activities may be undertaken in parallel with Category II activities depending on national circumstances. Further, participation in Category II should not be limited by time, meaning that Parties may take whatever time necessary to develop the capacity, institutions, policy approaches, incentive frameworks, etc, with sufficient robustness to support a national accounting system and/or participation in market-based instruments, where relevant.

Activities under the Convention: Category II activities must operate within the context of the Convention and can thereby facilitate development of approaches for implementation at the national, sub-national, local and project scales. There can be significant learning-by-doing resulting from such activities.

Flexible Scale: A range of national, sub-national, local and project-level activities are presently being applied by many Parties under the Convention and should be encouraged and expanded. As agreed by the Parties, sub-national activities should be designed to be a ‘step toward’ a national accounting system.

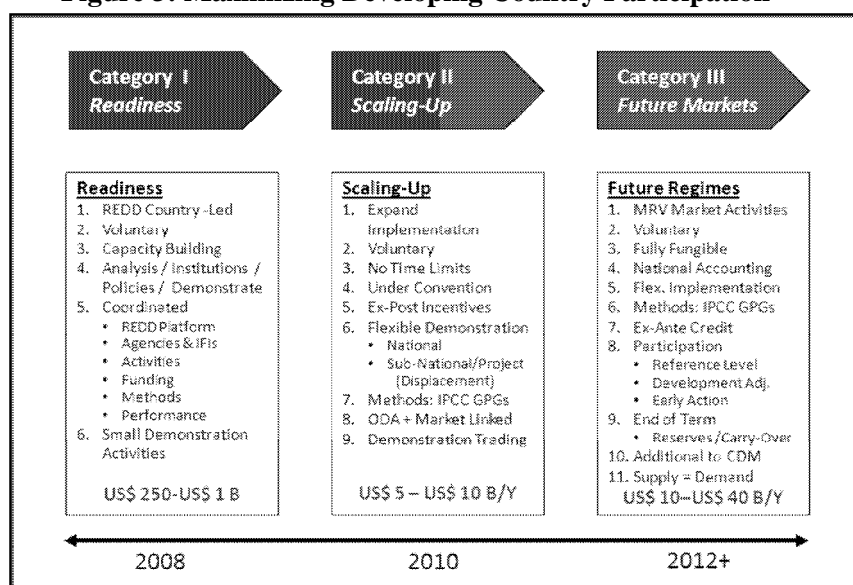
Methods: The Parties will apply methods approved by the UNFCCC, including application of the IPCC GPGs, and the ‘Indicative Guidance’ provided by Decision 2/CP.13 where possible.

Coordination: Through the ‘*Institutional REDD Platform*,’ the Parties should continue to coordinate implementation activities, methodological standardization, and frameworks to transparently and equitably distribute positive incentives within the context of national circumstance.

Mobilizing Increased Resources: To be adequate, activities under Category II will require significant increases in funding. Therefore, initiatives like the World Bank Forest Carbon Partnership Facility, the Norway REDD Initiative, the G8 Special Climate Fund, and other similar efforts, must be welcomed and encouraged. However, these necessary funding increases may again be best coordinated through the ‘*Institutional REDD Platform*’ described in Category I.

Demonstration Trading: Where market-based positive incentives may best be applicable, the Parties should consider establishing a voluntary ‘Demonstration Trading Platform’ administered by the Participant’s Committee of the ‘*Institutional REDD Platform*’ designed to simulate market conditions and facilitate learning-by-doing – bearing in mind that early action taken before 2012 should be credited within future international agreements on climate change.

Figure 3: Maximizing Developing Country Participation



c. Category III: Measurable, Reportable & Verifiable (MRV) Emission Reductions through Compliance Based Market Mechanisms

Objective: Consistent with national circumstances, each Party not included in Annex I may pursue sustainable development and contribute to the ultimate objective of the Convention by participating in a REDD Mechanism. At the same time, a REDD Mechanism will also assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol, or similar article in a successor agreement.

Voluntary: Participation in a REDD Mechanism is voluntary and must be approved by each host Party.

Timeframe: Parties may agree to participate within a REDD Mechanism at any time where a relevant international agreement on climate change is in force and continue participation until the expiry of that agreement.

Implementation: Under a national accounting system, Parties could implement at any scale that is appropriate (national, sub-national, project) for each specific policy approach and/or positive incentive framework, based upon national circumstance.

Participation: Parties shall inform the UNFCCC, through the Secretariat, of their intention to participate in a REDD Mechanism, which could include the following information for consideration by the Parties:

- *Reference Scenario:* a reference emissions level taking into account historical data and national circumstances, including low rates of historical deforestation and forest degradation, and assessed over a period of at least five years;
- *Developmental Adjustment:* an appropriate development adjustment factor when assessing reference emissions levels (see below);
- *Early Action:* MRV emissions reductions achieved under a national accounting system during the period 2005 – 2012, subject to independent review by an Expert Team supported by the Secretariat.

Credit for Early Action: As a result of activities undertaken from 2005 - 2012 within the context of Decision 1/CP.13 and Decision 2/CP.13 and subject to independent review by Expert Teams supported by the Secretariat, the Parties should ensure that MRV emission reductions achieved up to the commencement of any future international agreement on climate change can be used to assist in achieving future compliance by Annex-1 Parties (following the precedent granted to the CDM in the Kyoto Protocol.)

Developmental Adjustment: Based on national circumstances, environmental, social and economic factors could be taken into consideration in order to determine an appropriate development adjustment factor when determining reference emissions levels. Any developmental adjustment should be applied on the basis of equity and in accordance with common differentiated responsibilities and respective capabilities, thereby contributing to the objectives of Article 3.1 the Convention.

Reporting: Parties would apply reporting principles already established under UNFCCC (transparent, consistent, comparable, complete and accurate) and may also implement a new principle of ‘conservativeness’.

Methods: Parties would apply the relevant methodological guidance developed by the IPCC and approved by the Parties (IPCC LULUCF Good Practice Guidance – ‘IPCC GPGs’.)

Fungibility: MRV emissions reductions units earned under an agreed ‘reference emissions level’ should guarantee direct market access, be fully fungible with AAUs, and transacted at a price equal to that applied to credits earned by Annex-1 Parties.

Ex-Ante Crediting: A Party could issue allowance credits ‘ex-ante’ against an agreed ‘reference emissions level,’ subject to the ‘end of term responsibility’ outlined below, considering that a REDD Mechanism effectively constitutes a ‘sectoral approach’ for a system of policy approaches and positive incentives.

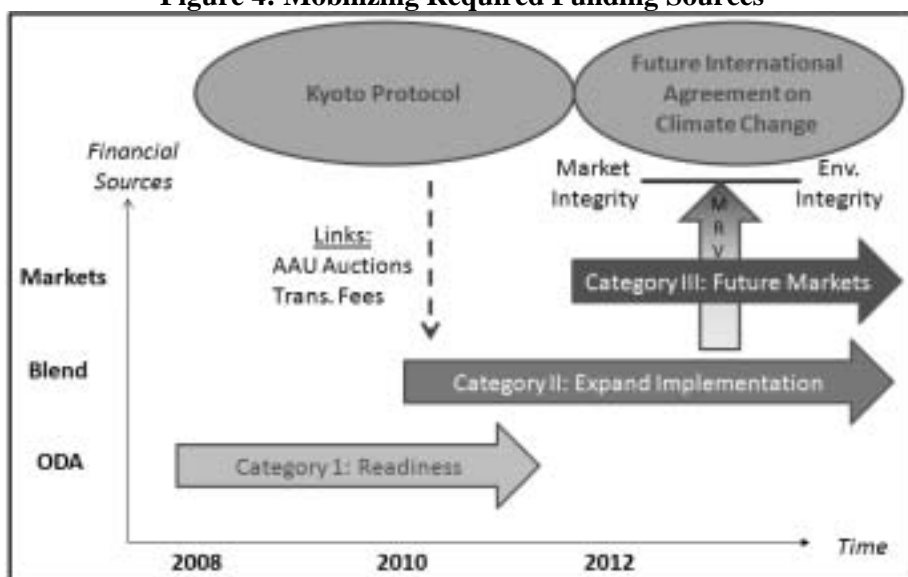
End of Term Responsibility: For developing countries, it is important that there is no obligation to acquire emission reductions externally for any unanticipated emissions increases in the forestry sector remaining at the expiration of a future international agreement on climate change. However, atmospheric integrity must be maintained under a REDD Mechanism, or any other such instrument. Therefore, in spite of the voluntary nature of a REDD Mechanism, a Party should be responsible for any final quantity of emissions above the reference emissions level at the conclusion of an international agreement on climate change. This final quantity could be:

- Deducted from the total of credits remaining within a national ‘reserve’ account,
- Transferred to a subsequent assessment period, or subsequent international agreement on climate change (where applicable).

Additional to the CDM: A new mechanism for REDD cannot simply compete with, and lower market prices for, actions taken under the Clean Development Mechanism (CDM). Therefore, while REDD should be addressed within a separate mechanism, a REDD Mechanism must be complementary and additional to the CDM.

Balance Supply & Demand: When considering cap-and-trade market instruments, leadership by Annex-1 Parties, in the form of deeper targets that are truly additional, must precede the introduction of a new supply of carbon credits from reduced emissions for deforestation in developing countries. Therefore, Annex-1 Parties should agree to deeper emissions reductions than would otherwise be agreed to support a REDD Mechanism.

Figure 4: Mobilizing Required Funding Sources



Draft Article for REDD Mechanism:

1. A mechanism is hereby defined and effected to reduce emissions from deforestation and forest degradation and to enhance forest carbon stocks (REDD Mechanism.)
2. The purpose of the REDD Mechanism shall be to assist Parties not included in Annex 1 in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex 1 in achieving compliance with their quantified emission limitation and reduction commitments.
3. Under the REDD Mechanism:
 - (a) Parties not included in Annex 1 will benefit from REDD activities resulting in measurable, reportable and verifiable (MRV) emissions reductions; and
 - (b) Parties included in Annex 1 may use the MRV emission reductions accruing from such activities to contribute to compliance with part of their quantified emission limitation and reduction commitments, as determined by the Conference of the Parties.
4. The REDD Mechanism shall be subject to the authority and guidance of the Conference of the Parties.
5. Emission reductions resulting from each REDD activity shall be independently reviewed by an 'Expert Review Team' supported by the Secretariat, on the basis of:
 - (a) Voluntary participation approved by each Party involved; and
 - (b) Real, measurable, and long-term benefits related to the mitigation of climate change.
6. The REDD Mechanism shall assist in arranging funding of relevant activities as necessary.
7. The Conference of the Parties shall, at its next session, elaborate modalities and procedures, applying the relevant methodological guidance developed by the IPCC and approved by the

Parties (IPCC LULUCF Good Practice Guidance) where relevant, with the objective of ensuring transparency, efficiency and accountability through independent review of REDD.

8. Participation under the REDD Mechanism, including activities mentioned in paragraph 3 above may involve private and/or public entities, and is subject to any guidance provided by the Parties.

9. MRV emission reductions obtained during the period from the year 2005 up to the beginning of the commencement of a future international agreement on climate change can be used to assist in achieving compliance under the terms and conditions of that agreement.

IV. Important Issues Requiring further Consideration

The Parties may consider that Forest Management (FM) activities could be accounted as ‘forest land remaining forest land’ under the IPCC Guidelines on GHG inventories, including efforts to reduce forest degradation, the sustainable management of forest carbon, and conservation. Accordingly, the Secretariat could convene an Expert Group to consider and make recommendations related to forest degradation, enhancement of forest carbon stocks, sustainable management of forest carbon, and conservation, along with metrics upon which to transparently elevate emissions reference levels, or apply non-market instruments to support such efforts. The outcomes of this Expert Group should be considered by the AWG-LCA.

Forest Degradation: The relevant methodological guidance developed by the IPCC and approved by the Parties (IPCC LULUCF Good Practice Guidance) is believed sufficient for the purposes of forest degradation.

Enhancement of Forest Carbon Stocks & Sustainable Management of Forest Carbon: Parties may consider methods to enhance forest carbon stocks or otherwise sustainably manage forest carbon, as defined by each host Party, and account for the carbon stock implications, where relevant. There is a need to strengthen and expand the enhancement of forest carbon stocks in order to have a real and meaningful impact toward climate objectives and such activities should be considered as an eligible mitigation activity under Category III. However, the standards imposed by the international community to achieve traditional sustainable forestry management (SFM) are very high and require a significant increase in financial resources. Serious consideration should thus be given to provide adequate incentives to promote the broad implementation of activities to enhance forest carbon stocks or SFM practices, as these have been shown to be an effective approach to controlling deforestation in developing countries.

The Role of Forest Conservation: In order to recognize the efforts of countries that have maintained or reached a stable level of forest cover, the following approaches should be considered by the Parties:

a) *Low Rates of Deforestation:* Parties could intentionally increase their reference emissions level under Category II or Category III in order to generate the revenues necessary to continue maintaining carbon stocks while overcoming risks of alternative opportunity costs;

b) *Permanent Forest Conservation Areas:* For Parties seeking to increase or consolidate permanent forest conservation areas within the context of a REDD Mechanism, certain forest areas could be permanently identified as conservation areas. In such cases, nonmarket instruments, such as auctioning AAUs with Parties listed in Annex-1, could be used to support efforts to increase carbon reservoirs;

c) Countries should have the opportunity to use REDD instruments and also participate in nonmarket instruments for permanent conservation activities.

PAPER NO. 4: BRAZIL

VIEWS AND PROPOSALS ON PARAGRAPH 1 OF THE BALI ACTION PLAN

Brazil recalls the invitations to Parties expressed in the Bali Action Plan (decision 1/CP.13) and in the conclusions of the AWG-LCA sessions (documents FCCC/AWGLCA/2008/3 and FCCC/AWGLCA/2008/8), and welcomes the opportunity to submit additional views and proposals on paragraph 1 of the Bali Action Plan.

A) Mitigation

2. In a context where all must act to face the challenge of climate change, it is essential to remember that mitigation measures of developing and developed countries are different in nature, as clearly defined in the Convention, Kyoto Protocol and, more recently, in the Bali Action Plan. The UNFCCC is based on the principle of common but differentiated responsibilities, which is reflected in distinct Annex I and non-Annex I legal obligations throughout the provisions of the Convention. This principle is a cornerstone of the regime and should guide the work of the AWG-LCA.

3. A key element for the AWG-LCA work programme in 2009 will be to define the basis of comparability for the mitigation commitments and actions of developed country Parties, including quantified emission reduction targets. Comparability should be considered regarding both the nature of actions and commitments and the quantitative mitigation impact of these actions and commitments.

4. An important equity factor in determining the burden sharing for mitigation will be the historical responsibilities for climate change. Historical responsibility means that, in facing the challenge of climate change, countries should contribute to the solution according to their contribution to the problem. This is not a simple general reference, but a solid foundation which we can scientifically translate into a specific and fair distribution of commitments. Considering historical responsibility does not imply disregarding the future; it implies acting in the present, with a view towards the future, in a way that is equitable regarding the past.

5. In this context, developed countries must achieve absolute reductions in the emissions of greenhouse gases. This result should be achieved under article 4.2 of the UNFCCC, through measurable, reportable and verifiable mitigation commitments, including quantified emission limitation and reduction objectives. The results of such actions should demonstrate the leadership required from developed countries in reducing emissions.

6. While Annex I Parties are obliged to reduce emissions to comply with their quantified targets, non-Annex I Parties, implementing nationally appropriate mitigation actions in the context of sustainable development, will seek to reduce their rate of emissions growth, as indicated in the IPCC 4 AR. All countries should contribute to the global effort of mitigation, but Annex I Parties and non-Annex I Parties contribute in different ways, guided by their specific responsibilities, capabilities and needs regarding economic and social development and poverty eradication. Developed countries have their infrastructure in place and the essential needs of their societies fully satisfied; developing countries do not and therefore face the challenge and extra burden of combining economic growth and mitigation actions.

7. In Brazil's view, measurability, reportability and verifiability are different for Annex I countries and non-Annex I countries. What must be measured, reported and verified, in the case of Annex I countries, is the extent to which emission limitation and reduction complies with a quantified emission limitation and reduction objective. This must follow Convention guidelines for Annex I inventories. On the other hand, what will be measured, reported and verified, in the case of non-Annex I countries, is implementation of sustainable development actions that reduce the rate of emissions growth. Also, non-

Annex I actions should be supported by finance and technology from Annex-I Parties in a way that is measurable, reportable and verifiable. This MRV component should be ensured by means of the new financial and technology mechanisms to be established under the Convention, as proposed by the G77.

8. Brazil recalls Article 4, paragraph 7 of the Convention, which establishes that the extent of developing country actions depends on the level of support they receive by means of enabling technology, finance and capacity building. Brazil has made it clear that it will continue to fight climate change, through national actions, to the full extent of its capacity. However, Brazil is ready to do more, if international positive incentives are established.

9. Implementation of the Bali Action Plan would benefit from full recognition of the mitigation actions that have been and are being implemented by developing countries. This would help avoid the false view that mitigation so far has been achieved only by a limited group of Annex I Parties.

B) Reducing emissions from deforestation and forest degradation (Bali Action Plan, paragraph 1.b.iii)

10. Actions on REDD are an important part of mitigation efforts by several developing country Parties, implemented in the context of sustainable development, to be supported and enabled by technology, financing and capacity-building. To ensure short-term mitigation results, simple approaches should be adopted to quickly implement mitigation activities in the forest sector. The UNFCCC should enhance endogenous capacities for monitoring and assessment in developing countries (establishment of reference emissions rate and the rate of emissions from deforestation, access to remotely sensed data of adequate spatial and spectral resolution, sound sampling design, etc.). Forestry mitigation efforts depend on institutional capacity; investment capital; technology; research and development; appropriate policies and incentives.

11. Brazil is of the view that forest mitigation activities under the UNFCCC should not be discriminated from the treatment of other non-forest mitigation activities. Although REDD will play a role in mitigation, actions in the forest sector will be insufficient to combat climate change if ambitious results are not achieved in the reduction of emissions from the use of fossil fuels, the main cause of climate change. According to the IPCC 4AR, climate change can affect the mitigation potential of the forest sector.

12. Brazil proposed, in 2006, an arrangement, under the UNFCCC, to provide positive incentives to countries that demonstrate, in a transparent and credible manner, reductions in emissions from deforestation. The proposal was further developed under the SBSTA, in 2007, and provided elements that were captured in the Bali Action Plan. The proposal aimed to implement Articles 4, paragraph 1(b) and (c), as well as 4, paragraph 3 of the UNFCCC by stimulating further action that could result in emission reductions in developing countries. The proposal is not a mechanism that could be used by Annex I countries to meet their quantified greenhouse gas emission limitation and reduction commitments under the Kyoto Protocol. It is an additional effort by developing countries. Its ultimate goal is to contribute to the objective of the Convention, set forth in article 2.

13. The proposal is based on the distribution of financial incentives to countries that demonstrate, voluntarily, in a transparent and credible manner, a net reduction in their emissions from deforestation. These financial incentives should be provided by Annex II countries that engage in the arrangement, and shall be new and additional to financial resources provided for other activities (according to Article 4, paragraph 3 of the UNFCCC). Such resources will assist countries in the implementation of both existing and new national public policies and measures that reduce emissions from deforestation.

14. Participating countries are entitled to financial incentives from the arrangement after they demonstrate, in a transparent and credible manner, that they have reduced their emissions from

deforestation. This approach is based on *ex-post* results. The proposal is not, therefore, linked to the concept of maintenance of carbon stock on forest land, such as in the concept of “avoided deforestation” or “conservation”, but rather is based on effective reduction of emissions from deforestation.

15. Brazil believes that this proposal on REDD will help enable the full, effective and sustained implementation of the Convention, which is the mandate of the Bali Action Plan. The methodological issues on REDD have advanced in the SBSTA, but further discussions on the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries are still needed.

16. The carbon mitigation potential from reducing deforestation, reducing forest degradation, forest management and afforestation differs by activity, regions, time and horizon. Regardless of the mitigation potential of different forest activities, Brazil is of the view that all these activities are entitled, under the Convention, to financial support.

17. Brazil restates the elements presented in its submission dated February 26, 2007 (document FCCC/SBSTA/2007/MISC.2) and the importance of fully developing methodological issues related to forests within SBSTA.

C) Adaptation

18. Developing countries, despite their limited historical responsibility for climate change, face the highest costs regarding its impacts. This, along with the fact that adaptive capacity to climate change is uneven across countries, requires enhanced international cooperation to face increasing adaptation needs. The Bali Action Plan mandate to achieve full, effective and sustained implementation of the UNFCCC also involves commitments regarding adaptation, such as the financial support commitments defined for Annex II Parties in Article 4, paragraph 4.

19. Current barriers that hinder adaptation include knowledge gaps, impediments to information flows relevant for adaptation decisions and, most importantly, insufficient resources for building adaptive capacity and translating it into action in developing countries. As indicated by the IPCC, “the implementation of adaptation measures faces a number of financial barriers” (AR4, WGII, chapter 17, p. 734). The fact that only 15 countries had completed their National Adaptation Programs of Action (NAPAs) by mid-2007 clearly indicates that enhanced cooperation is needed.

20. The development of a comprehensive and robust work program on adaptation is an important first step to enable enhanced action under the Convention. Such a program should take into account lessons learned from the “Nairobi work program on impacts, vulnerability and adaptation to climate change”, which is expected to conclude in 2010. It will be crucial to increase capacity to translate data into information for users and, thus, into action.

21. One element that Brazil highlights in such a work program is vulnerability mapping regarding impacts in key areas, in light of economic, environmental and social indicators. This must be country driven and based on national circumstances. Another important focus is the establishment, or the identification and strengthening, of national and regional centers of excellence on vulnerability and adaptation.

22. The establishment of national and regional centers is necessary for adaptation planning, which is mandated by article 4.1(b) of the Convention and therefore is entitled to full incremental costs funding. These centers could assist Parties to build endogenous capacity for, *inter alia*: i) the development of analytical tools to enable scenario generation and downscaling for current and future impact assessments; ii) the research, development and transfer of adaptation technologies, for example in the areas of food, forestry, water resources, human health, industry, human settlements and society; iii)

awareness raising; iv) support of pilot projects; and v) publication of studies on adaptation. The creation of partnerships, under the Convention, among companies and research institutions of developed and developing countries for adaptation would also be a useful tool for enhanced action in this area.

23. The implementation of NAPAs would also require institutional strengthening. The establishment, under the Convention, of national climate change committees for adaptation, similar to the “ozone units” created by the Multilateral Fund of the Montreal Protocol, would enhance coherence in national policies for adaptation. Since adaptation planning must be undertaken by a wide range of local and national governmental and non-governmental entities, dealing with a variety of social and economic aspects, a national coordination mechanism, with technical capacity, supported by the Convention, would be an important element in the effective implementation of adaptation provisions.

24. Brazil is of the view that enhanced implementation of the adaptation provisions established in the Convention will require significant new financial resources. Financing for adaptation should be considerably increased in order to redress the balance in the allocation of funds under the climate change regime. To bridge the adaptation gap, predictable, stable and adequate funding should be ensured by means of the new financial mechanism to be established under the Convention. Considering the additionality of the adaptation effort regarding the existing challenge of development, resources for adaptation should be new and additional, beyond ODA.

D) Technology

25. In seeking to fulfill its mandate of achieving “full, effective and sustained implementation” of the Convention, the Bali Action Plan calls for “enhanced action on technology development and transfer to support action on mitigation and adaptation”. Brazil believes that the combined challenge of climate change and social and economic development demands the development and transfer of environmentally sound technologies for both mitigation and adaptation. Low levels of development and transfer would undermine the global effort as a whole. Brazil would like to recall the specific suggestions it has already presented on this topic by means of its submission on the development and transfer of technologies (FCCC/SBI/2008/MISC.1). The list of actions presented in this document includes the following:

- a) reinforce north-south, south-south and north-south-south cooperation, including joint development;
- b) promote climate change related new technology development, deployment, and transfer among country parties;
- c) accelerate the transfer of existing environmentally sound technologies and know-how to other country Parties, in special developing country Parties, to support action both on mitigation and adaptation;
- d) promote capacity-building and strengthen the development and autonomous use of technology in developing countries;
- e) stimulate innovative approaches, including strengthening the public availability of government sponsored technologies;
- f) increase the contracting of technological research in developing countries;
- g) consider new approaches that combine intellectual property rights protection and facilitated technological sharing, bearing in mind the example set by decisions in other relevant international fora related to intellectual property rights, such as the Doha Declaration on the TRIPS Agreement and Public Health;

- h) consider incentives to stimulate technology transfer within companies, with a view to strengthening capacity in subsidiary companies located in developing countries;
- i) enhance technology transfer through public companies;
- j) foster the establishment of national/regional technology excellence centers to promote technology development, deployment and transfer, stimulate capacity building, improve access to information, support an innovation culture and establish an appropriate international cooperation environment;
- k) consider mechanisms, including performance indicators, to measure, report and verify the effectiveness of technology transfer to developing countries, taking into consideration, as appropriate, inputs from the work undertaken according to decision 4/CP.13, paragraph 4;
- l) consider the removal of barriers to transfer of mitigation and adaptation technologies to developing country Parties; and
- m) establish new financing mechanisms and tools for scaling up the development, deployment and transfer of technology, in particular privately owned technology, to support action on both mitigation and adaptation to climate change in accordance with Article 4 paragraph 3.

26. It is important to bear in mind that the Convention determines that technological support is a specific obligation of developed countries (Article 4, paragraph 5) and that the extent of actions by developing countries will depend on the level of financial and technological support that they receive from developed countries (Article 4, paragraph 7). The Bali Action Plan adds an element by defining that technological support from developed countries should be measurable, reportable and verifiable.

27. There is general recognition on the need for institutional strengthening within the Convention. In decision 4/CP.13, for example, Parties agreed that “current institutional arrangements, access to financing and suitable indicators for monitoring under the Convention for the implementation of Article 4, paragraph 5, are limited and should be enhanced to deliver immediate and urgent technology development, deployment, diffusion and transfer to developing countries”.

28. Brazil believes that a new mechanism under the Convention should be created to address these issues. We recall the proposal of a technology mechanism presented by the G77, which we support. The mechanism should be guided by the Convention (particularly Article 4, paragraphs 3 and 5), comprehensive (covering different stages of technology research, development, diffusion and transfer) and would build on the work of the EGTT. The technology mechanism should operate under the authority and guidance of the COP and be fully accountable to it.

29. The mechanism should include an Executive Body and a Multilateral Climate Technology Fund (MCTF). The Executive Body would have planning, monitoring and technical responsibilities and, by means of a verification instrument, would control contributions made to the mechanism in accordance with the “measurable, reportable, verifiable” requirement. The MCTF would operate within the framework of the new financial mechanism to be created under the Convention, as proposed by the G77.

E) Finance

30. Brazil recalls that the Bali Action Plan’s mandate to achieve full, effective and sustained implementation of the Convention includes implementing enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation. The Convention, in Article 4, paragraphs 3, 4, 5, 8 and 9, offers clear examples of funding commitments that

must be met in order to achieve full implementation. Additionally, the Bali Action Plan states that the financial support offered by developed country Parties should be measurable, reportable and verifiable.

31. Brazil supports the establishment of a new financial mechanism under the COP. The proposed new financial mechanism should be comprehensive, efficient and oriented towards the needs of non-Annex I Parties for funding for mitigation and adaptation activities, as well as technology development, deployment and transfer related to such activities.

32. Regarding the nature of such a mechanism, Brazil recalls the proposal presented by the G77 during the third session of the AWG-LCA, which we support. As defined in the proposal, such a mechanism must be based upon the principle of common but differentiated responsibilities and respective capabilities; operate under the authority and guidance of the COP and be fully accountable to it; have an efficient and transparent governance, with equitable and geographically balanced representation of Parties; enable direct access to funding by the recipients; and involve the recipients in the identification, definition and implementation of their projects. It is essential that the mechanism, in its operations, follow a country-driven approach.

F) Shared vision

33. Brazil believes that a shared vision is needed on the practical implications of the principles of the Convention for mitigation, adaptation, financing and technology development and transfer. The principles contained in the preamble and Article 3 of the Convention should inform and define all discussions regarding international norms to address climate change, especially decisions adopted by the Conference of the Parties. Principles such as the common concern of humankind (Preamble, paragraph 1), common but differentiated responsibilities (Article 3, paragraph 1), precaution (Article 3, paragraph 3), along with the idea that developed countries “should take the lead in combating climate change” (Article 3, paragraph 1), the consideration of specific needs and special circumstances of developing countries (Article 3, paragraph 2) and the right to promote sustainable development (Article 3, paragraph 4) are elements that must determine the implementation of the Convention.

34. The principle that climate change is a common concern of humankind defines a common endeavour, differentiated according to Parties’ capacities and responsibilities. A shared vision requires, therefore, the recognition that all states should do more, in the context of a global effort. This means that deeper absolute reductions in emissions are required from developed countries, while developing countries should implement mitigation actions, supported by finance and technology, with a view to deviating emissions trends from the baseline.

35. The principle of common but differentiated responsibilities and respective capabilities manifests itself in the very structure of the Convention. It is based on elements such as distinct historical responsibilities regarding global warming, distinct financial and technological capabilities and distinct national development challenges. A shared vision should reiterate the established legal distinction between the obligations of Annex I and non-Annex I Parties.

36. The precautionary principle has special implications for the implementation of the provisions of the Convention on adaptation. Article 3, paragraph 3, by making reference to precautionary measures to mitigate the adverse effects of climate change, explicitly mandates a precautionary basis for action on adaptation. This means that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing the implementation of adaptation provisions, including financial, under the Convention.

37. The obligation of developed countries to lead mitigation actions is also reflected throughout the Convention. Article 4, paragraph 7 is a clear example: it conditions the implementation of commitments

by developing countries to developed countries' compliance with their commitments related to financial resources and the transfer of technology. This link is also present in the reference made in paragraph 1(b)(ii) of the Bali Action Plan to measurable, reportable and verifiable support by Annex I Parties to actions in non-Annex I Parties.

38. Brazil considers a global goal as an important element of a shared vision. It should reflect the best available science, particularly IPCC AR 4 and recommendations therein. This includes ambitious mid-term goals for Annex I Parties of at least 25% to 40% reductions, regarding 1990 levels, by 2020.

PAPER NO. 5: CHINA

**CHINA'S VIEWS ON ENABLING THE FULL, EFFECTIVE AND SUSTAINED
IMPLEMENTATION OF THE CONVENTION THROUGH LONG-TERM COOPERATIVE
ACTION NOW, UP TO AND BEYOND 2012**

28th September 2008

China presents this document as a submission of views on the elements contained in paragraph 1 of the Bali Action Plan, taking into account the interlinkages among the elements and the specific subparagraphs under each of the elements, as requested in the document FCCC/AWGLCA/2008/8, paragraph 25.

1. A shared vision for long-term cooperative action

- a) A shared vision for long-term cooperative action is an exchange of views or ideas about how to enable the full, effective and sustained implementation of the Convention, addressing cooperative and enhanced action on mitigation, adaptation, technology, finance and capacity building, guided by the ultimate objective of the Convention and the principle of "common but differentiated responsibilities" between developed and developing countries, with developed countries taking the lead in reducing their emissions of greenhouse gases, while ensuring development rights and spaces for developing countries;
- b) A shared vision in itself shall not be a final result or anything that would be reflected in the textual language in the agreed outcome to be reached at COP15 in Copenhagen, but rather to provide general and clear guidance for actions to enable the full, effective and sustained implementation of the Convention;
- c) While it is desirable to share views on the long-term global goal for emission reductions, it is most important to firstly set the mid-term emission reduction target for developed country Parties. Only with such a mid-term target being clearly determined, is it meaningful to talk about any long-term goals for emission reductions. Any long-term global goals shall be based on sound science, economic practicality, technology feasibility, environmental integrity and the principle of equality, ensuring adequate spaces for developing countries to achieve substantive development and eradication of poverty goals.

2. Enhanced national/international action on mitigation of climate change

- a) The Annex I Parties that are not Parties to the Kyoto Protocol shall maintain quantified emission reduction targets that would be comparable to the commitments under the Kyoto Protocol undertaken by the developed country Parties;
- b) All developed country Parties to the Convention shall commit to a reduction in GHG emissions by at least 25-40% below 1990 levels in 2020 and by approximately 80-95% in 2050;
- c) Commitments under the Convention and associated actions by Annex I Parties shall be measurable, reportable and verifiable in accordance with the methodologies, procedures and mechanisms, similar to those under the Kyoto Protocol;
- d) Nationally appropriate mitigation actions by developing country Parties shall be taken in the context of their sustainable development and, supported and enabled by technology transfer, financial assistance and capacity building to be provided by the developed country Parties;

- e) Technology transfer and the provisions of financial support and capacity building by developed country Parties for national mitigation actions in developing country Parties shall be measurable, reportable and verifiable, and be new and additional to ODA;
- f) The principle of “common but differentiated responsibilities” between developed and developing countries is the keystone of the Convention and the Bali Action Plan. Any further sub-categorization of developing countries runs against the Convention itself and is not in conformity with the consensus reached in the Bali Action Plan;
- g) The aim of cooperative sectoral approaches and sector-specific actions is to enhance implementation of Article 4, paragraph 1(c) of the Convention. That is, to enhance cooperation between Parties at sectoral level for the purpose of promoting development, deployment, diffusion and transfer of GHG emissions control technologies, practices and processes. Any twist of this understanding or discussion under the AWG-LCA leading to global sectoral standards, benchmarks or emission reduction targets is not acceptable.

3. **Enhanced action on adaptation**

- a) With regard to National Planning for Adaptation:
 - i. Prepare National Adaptation Programmes of Action (NAPAs) in all developing countries:
 - o Assess the vulnerability to current climate variability, extreme events and future climate change;
 - o Assess adaptation cost and identify key adaptation measures;
 - o Identify priority activities/projects intended to address urgent and immediate adaptation needs of developing country Parties.
 - ii. Integrate climate change considerations into their relevant social, economic and environmental policies and actions.
- b) With regard to Streamlining and Scaling up Financial and Technological Support:
 - i. The developed country Parties shall fulfill their commitments as stipulated in Article 4.3, 4.4, 4.5, 4.8, and 4.9 under the Convention to provide new, additional, adequate, and predictable resources for the implementation of adaptation;
 - ii. Establish Adaptation Fund under the Convention. Annex I Parties shall provide necessary financial resources, including assessed contributions. The fund shall be used to support and enable developing country Parties to:
 - o Prepare NAPAs;
 - o Integrate adaptation actions into sectoral and national planning;
 - o Improve the assessment on vulnerability and adaptation, including assessment of adaptation cost;
 - o Implement urgent adaptation actions;
 - o Implement adaptation projects and programmes;
 - o Implement risk management and risk reduction strategies;
 - o Build climate resilience through economic diversification;
 - o Exchange information;
 - o Promote education, training and public awareness related to climate change;

- Enhance capacity building, including institutional capacity, for preventive measures, planning, preparedness of disasters relating to climate change;
- Have access to adaptation technologies, develop and enhance endogenous capacities and technologies;
- c) With regard to Enhancing Knowledge Sharing:
 - i. Support public information and awareness;
 - ii. Establish and maintain databases on adaptation related information;
 - iii. Prepare and disseminate compilations and syntheses of best practices for adaptation;
 - iv. Strengthen information Networks.
- d) With regard to Institutional Framework of Action:
 - i. Establish “Regional Adaptation Network Centers” in Asian, African, Pacific, South American regions for capacity building and knowledge sharing, etc. The centers shall:
 - Provide research, training, education as well as scientific and technical support in specialized fields of climate change;
 - Enhance capacity, including institutional capacity, to integrate adaptation into sustainable development programmes;
 - Coordinate and disseminate information on best practices and technology transfer;
 - Support pilot or demonstration projects;
 - Support capacity building, including institutional capacity, on preventive measures, planning, preparation of disasters related to climate change;
 - Strengthen early-warning systems for extreme weather and/or climate events.
 - ii. Establish “Adaptation Committee” under the Convention to enhance adaptation actions. The committee shall provide guidance for enhancing adaptation, planning, capacity building, information sharing, monitoring and evaluating adaptation actions.

4. **Enhanced action on technology development and transfer**

- a) A subsidiary body under the Convention shall be established by the COP;
 - i. Organizational framework. The Subsidiary Body for Development and Transfer of Technologies shall be an operational and implementing body. It consists of a strategic planning committee and several panels on (1) technology needs assessment and information; (2) dialogue and coordination for enabling policy and measures, intelligent property management; (3) management of financial resources targeting at development, transfer, and deployment (D&T&D) of environmentally sound technologies (ESTs); (4) capacity building; and (5) monitoring and assessment of performance.
 - ii. Functions.
 - Provide advice, guidance and recommendations;
 - Coordinate actions by different international stakeholders and governments’ policies;
 - Guide and supervise utilization of special TT fund based on public finance;
 - Promote communication and info/knowledge sharing; and
 - Monitor and assess the performance and progresses.

- iii. Governance: member distribution and decision-making process. The Subsidiary Body for Technology is open to all the Parties. Members of corresponding committee and panels shall be determined by the COP. Decisions shall be made by consensus.
- b) Performance assessment and monitoring. The speed, range, scale, and barriers of technological flows from developed to developing countries shall be regularly monitored and assessed. A set of indicators, data base, steps and modalities shall be developed to implement monitoring and assessment. The results of monitoring and assessment shall be fully used for planning and further decisions;
- c) Financial mechanism. The basic idea of the financial mechanism supporting D&T&D of ESTs is to develop public private partnership by linking public finance with carbon market, capital market and technology market and, leveraging larger amount of private finance by smaller amount of public finance. A Multilateral Technology Acquisition Fund (MTAF) shall be established with sources mainly from public finance from developed countries. The sources for the MTAF may be from parts of the regular fiscal budget for R&D, fiscal revenues from taxation on carbon transaction and/or auction of emission permit in carbon market, as well as fiscal revenues from energy or environmental taxation. The MTAF shall be used as a catalyst to provide stakeholders with incentives to implement D&T&D of ESTs by means of proper policy instruments, financial instruments/products and investments;
 - i. The policy instruments, among others, may include:
 - o Subsidies in R&D for invention and demonstration of identified ESTs in prioritized areas;
 - o Insurance to curb risks of investment in D&T&D of new ESTs;
 - o loan guarantee or subsidies for exporting and diffusing ESTs;
 - o Direct investment in D&T&D of ESTs as share holder in normal forms or via venture capital investment;
 - o Investment in financial products related to D&T&D of ESTs by holding stocks, bonds and other potential financial products;
 - o Investment in infrastructures like information, transaction platform, monitoring and enforcement system;
 - o Expenses on capacity building in developing countries with development of human resources as a priority;
 - o Purchases of ESTs by governments;
 - o Permits, compulsory licensing for patented ESTs, etc.; and
 - o Others.
 - ii. Incremental costs for D&T&D of ESTs in developing countries shall be compensated by appropriate policy instruments as mentioned above. Agreements shall be reached on methodologies to determine baseline cost of technological change in specific sectors and technological areas, against which incremental costs are estimated;
 - iii. Full costs of such activities as capacity building, technology need assessment, information service, construction of policy infrastructure, among others, shall be covered by the proposed financial mechanism.
- d) With regard to Intellectual Property Rights. The existing IPR system does not match the increasing needs for accelerating D&T&D of ESTs to meet challenges of climate change. Compulsory licensing related patented ESTs and specific legal and regulatory arrangement to curb negative effects of monopoly powers shall be put in place as part of the efforts to

implement the UNFCCC. An innovative IPR sharing arrangement shall be developed for joint development of ESTs;

- e) With regard to Cooperative Sectoral Approaches and Sector-Specific Actions. Cooperative sectoral approaches and sector-specific actions shall enhance the implementation of Article 4, paragraph 1 (c), of the Convention. To this end, priority areas shall be identified sector by sector and technology by technology. Most climate sensitive sectors, including GHG-intensive and climate-vulnerable sectors shall be fully considered for D&T&D of ESTs. A list of major ESTs needs shall be assessed on a regular basis with analysis of reliability, costs, penetration range, sectoral shares of market production capacity and market obstacles. Measures shall be taken to overcome obstacles of D&T&D in specific sectoral context.

5. **Enhanced action on the provision of financial resources and investment**

- a) China fully supports the establishment of a Financial Mechanism for Meeting Financial Commitments under the Convention, proposed by Philippines on behalf of G77 and China, for the operationalisation of an effective financial mechanism under the COP;
- b) Developed country Parties shall take substantive action to provide financial resources mainly from their public finance on grant and concessional basis for developing country parties, in accordance with Article 4.3, 4.4, 4.5, 4.8, 4.9 and Article 11 of the UNFCCC;
- c) The financial resources provided by developed country Parties shall be new, additional, adequate, predictable and sustained. The funding scale shall be 0.5-1% of the annual GNP of Annex I Parties and additional to the existing ODA;
- d) The funding is used to enhance actions on adaptation, mitigation and technical research, development, demonstration and transfer, as well as related capacity building, through establishing specialized funds such as the Convention Adaptation Fund, the Mitigation Fund and the Multilateral Technology Acquisition Fund;
- e) The governance of the financial mechanism shall follow specific principles, such as A) being under the authority and guidance of, and fully accountable to the COP, which is entitled to decide the climate change policies, programme priorities and eligibility criteria for funding; B) equitable and balanced representation of all Parties with a transparent and efficient system; and C) easy access and lower management cost;
- f) The financial mechanism shall facilitate linkages between various funding sources and separate funds in order to promote access to a variety of available funding sources and reduce fragmentation. Modality/ies of determining the role of existing funds and entity/ies for the operation of the mechanism shall be developed;
- g) Any funds pledged outside the UNFCCC shall not be regarded as the fulfillment of commitments by developed country Parties in Article 4.3 of the Convention and the Bali Action Plan.

6. **Reducing emissions from deforestation and forest degradation (REDD)**

- a) Successful implementation of REDD shall enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012;
- b) Developed countries shall provide policy approaches and positive incentives to encourage maximum participation of developing countries in REDD, however it is subject to developing countries' own decision on whether participating in the implementation of REDD;
- c) It is very important to equally treat reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and

enhancement of forest carbon stocks in developing countries, in accordance with paragraph 1(b) (iii) of decision 1/CP13;

- d) The successful implementation of REDD in developing countries relies on adequate, predictable and sustainable financial resources, financial and technical support, and the provision of new and additional resources as well, including official and concessional funding for developing countries, and relevant aspects as elaborated in Paragraph 1(e) of decision 1/CP13;
- e) The implementation of REDD shall promote sustainable development and poverty reduction as well as maximize co-benefits in the forest region in developing countries.
- f) Reliable methodology is very important for implementing REDD to achieve real and integral mitigation effect. However, development of concrete and reliable methodology, especially the modalities and procedures to guide the implementation of REDD remains unsolved. Therefore, it is necessary for the SBSTA to discuss relevant methodology issues and keep certain flexibility in the development of methodology, taking into account the specific circumstances of developing countries. The Good Practice guidance on LULUCF developed by IPCC is a good basis for detailed discussion on relevant REDD methodology issues;
- g) Discussion on policy approaches and positive incentives shall be included in the AWG-LCA agenda. Discussions on non-market and market-based mechanisms related to policy approaches and positive incentives are welcomed;
- h) Developed countries shall provide concrete and strong supports to developing countries to implement REDD actions. To improve the capacity of developing countries, similar international processes on REDD shall be further harmonized and complement each other;
- i) Demonstration activities shall be further encouraged at both sub-national and national levels, so that sufficient lessons and experiences can be accumulated. The REDD website launched by the secretariat of UNFCCC shall serve as an important platform for sharing those lessons and experiences.

PAPER NO. 6: ICELAND

Views on comparability of efforts in the Bali Action Plan

Submission by Iceland to AWG-LCA

30 September 2008

The Bali Action Plan calls for ensuring comparability of efforts among developed country Parties, taking into account differences in national circumstances. It is difficult to come up with an objective formula for comparability of efforts, but the AWG-LCA should consider what parameters are relevant in this respect. A number of parameters have been listed in a technical paper^{*} produced to aid the work of the AWG-KP, which are relevant and useful in this respect. Iceland believes that analysis of sectoral mitigation potentials can also be helpful in this regard, with comparable methodology employed for developed countries. One way to address these issues would be to discuss them in a workshop to be held in 2009.

One question to consider in this respect is comparability of efforts between large and small Parties. In the case of a Party as small as Iceland, the commission or decommission of a single factory can cause emissions to rise or fall by 5 or 10% or even more. This issue was addressed by the Convention in Decision 14/CP.7, which deals with the impact of single projects on emissions in small economies. Iceland would like to ensure that this issue be dealt with in an enhanced mitigation regime in a way that small parties would face neither disproportionate advantages or disadvantages due to lack of flexibility of actions. Iceland wants to cooperate with other parties in the AWG-LCA and other relevant fora to ensure that this issue is taken care of in deliberations towards Copenhagen. This issue is of course especially of concern to small parties, but it can also be seen as reflecting on the fairness and effectiveness of the mitigation regime as a whole.

* Synthesis of information relevant to the determination of the mitigation potential and to the identification of possible ranges of emission reduction objectives of Annex I Parties Technical paper (FCCC/TP/2007/1).

PAPER NO. 7: JAPAN

**Japan's proposal for AWG-LCA:
For preparation of Chair's document for COP 14**

Japan hereby submits its concrete proposals as inputs for AWG-LCA Chair's document prepared for COP 14.

Japan has already turned in the submission documents on its views regarding AWG-LCA (see references at the end). As for further details of Japan's views on each element of paragraph 1 of the Bali Action Plan, please refer to these submissions.

0. Basic Structure of the Future Framework

- The final decision on the legal structure of the framework beyond 2012 is to be made after legal scrutiny, but in order to establish a framework in which all countries take responsible actions, our preferable option is to adopt a new protocol. Another option would be to amend the Kyoto protocol, provided that it can cover all the necessary elements.

1. Shared Vision

- Under the UNFCCC negotiations, all Parties should adopt the long-term goal of achieving at least 50% reduction of global emissions of greenhouse gases (GHG) by 2050 as a shared vision. Toward realizing this goal, the peaking-out of the global GHG emissions in the next 10 to 20 years should be pursued. Further development of innovative technologies and measures to realize low carbon societies should be strengthened from a long-term perspective.

2. Mitigation

(1) Commitments or actions by developed countries

(a) Scope of "developed countries"

- Each "Party included in Annex I" (hereafter called "Annex I country") under the Kyoto Protocol continues to fulfill its responsibility as Annex I country.
- Countries which fall under any one of the following three categories should assume obligations of Annex I country: (i) OECD member countries, (ii) countries that are not OECD members but whose economic development stages are equivalent to those of the OECD members, and (iii) countries which do not satisfy the conditions of (i) and (ii), but which voluntarily wish to be treated as Annex I country. Qualifications of countries which fall under category (ii) should be made in a comprehensive manner according to, for example, the following criteria.
 - GDP per capita
 - GHG emissions per capita
 - Human development index
 - GHG emissions per GDP
 - Share of the country's GHG emissions in the world
 - Contributions to historically accumulated GHG emissions / future GHG emissions
 - Industrial structure, energy composition

- Population, demographics
- Natural and geographical characteristics (including land area and climate conditions such as temperature, etc.)

(b) Substance of commitments or actions

- Each Annex I country bears the obligation to achieve its quantified national emissions reduction target as its commitment. Annex I country should achieve its national target, in principle, through domestic measures. But, the use of flexible mechanism should be allowed as a supplementary measure. Also, LULUCF should be included as part of the national target in a proper way, ensuring the continuity and consistency with the rules under the first commitment period.
- Annex I country's national target in the period 2013 to 20XX should be indicated as:
 - reduction rates from the plural number of base years including the latest year for which data are available
 - total volume of its GHG emissions

(c) Ensuring comparability

- Reduction target of each Annex I country should be set on the basis of each country in a manner which ensures comparability of its mitigation efforts of each country. (Countries may, individually or jointly, fulfill their agreed reduction targets.)
- In setting a national emission reduction target, comparability of mitigation efforts of Annex I countries should be ensured by utilizing the Sectoral Approach which compiles reduction potentials in each sector, using indicators such as energy efficiencies or GHG intensities, with due consideration to the marginal abatement costs and total abatement costs as percentage of GDP.
- Sectors for analysis are, for instance, as follows;
 - Iron and steel, cement, aluminum, power generation, other industries, residential / commercial , transportation (freight / passengers), agriculture, LULUCF, wastes

(2) Actions by developing countries

(a) Differentiation of developing countries

- Developing countries should be classified into the following 3 groups in accordance with the principle of “common but differentiated responsibilities and respective capabilities”:
 - (i) developing countries which are expected to take further mitigation actions, based on their economic development stages, response capabilities, shares of GHG emissions in the world, etc;
 - (ii) developing countries whose emissions are very little and which are vulnerable to adverse effects of climate change, especially LDCs and SIDS; and
 - (iii) other developing countries
- The differentiation of developing countries described above should be made through comprehensive consideration using, for example, such criteria as indicated in (1)(a).

(b) Substance of actions of developing countries

- Developing countries' actions should be considered, focusing on the following;
- A country under group (a)(i) should;

- set out binding targets for “GHG emissions per unit” or “energy consumption per unit” in major sectors (e.g. power generation, iron and steel, cement, aluminum and road transport), taking into consideration national circumstances.

This is not to imply in any way adopting trade restriction measures.

- set out binding targets for economy-wide “GHG emissions per GDP” or “energy consumption per GDP”, taking into consideration national circumstances. Each country should also provide an estimate of total volume of its emission as reference, based on its economic growth forecast.
 - establish a national measurement system for its targets, with international assistance. Under the system, necessary data and information should be collected which then should be submitted to the Conference of the Parties. Experts should verify these data and information.
 - submit its voluntary national action plan, including policies and measures for mitigation, to the Conference of the Parties. The Conference of the Parties should periodically review the voluntary national action plan.
- A country under groups (a)(ii) and (iii) should;
 - submit its voluntary national action plan, including policies and measures for mitigation, to the Conference of the Parties. The voluntary national action plan should be reviewed periodically.

(3) Graduation

- When a developing country has met the conditions of an upper group in the light of such criteria as indicated in (1)(a), due to its economic development and so on, that country should be graduated into the upper group upon a COP decision.
- A country which voluntarily commits itself to stricter mitigation commitments or actions should be included in the upper group, even if the country does not meet the conditions set out for the group.

3. Adaptation

- Measures on adaptation for countries that are vulnerable to the adverse effects of climate change should be strengthened, especially for those mentioned in 2 (2)(a)(ii). Ways to respond to new financial needs should be considered in addition to the effective use of existing financial mechanisms (see infra “5. Finance”).

4. Technology

- In order to achieve the long-term target, developed countries, along with developing countries that are willing to take part, should accelerate innovative technology development in cooperation with the relevant international organizations, through expanding investment in research and development, sharing technology roadmaps, and strengthening international cooperation.
- In order to support the actions by developing countries indicated in 2(2)(b), sectoral sub-groups should be established with participation of private sectors. The sub-groups should examine necessary assistance measures through sharing information on progress of technology transfer, analyzing reduction potentials, and creating achievement indices as well as making assessment in a quantitative manner. The result of this examination will be utilized to assist technology transfer under the financial mechanism (see infra “5. Finance”).

5. Finance

(1) New financial contributions of each country should be assessed in a comprehensive manner, taking into account various factors (contributions to funds under the UNFCCC, contributions to other multilateral funds including Climate Investment Funds under the World Bank, ODA contribution, technology assistance, R&D investment, investment through market, etc.).

(2) Improvement of existing financial mechanisms

- For effective use of the existing funds established under the Convention (SCCF and LDCF), each Council of SCCF and LDCF should discuss appropriate improvements including the following points.
 - Accelerate procedures
 - Ensure equity of geographical balance
 - Prioritize vulnerable countries
 - Ensure the balance between mitigation (including technology transfer and capacity building) and adaptation
 - Utilize funds properly through improvement of screening criteria
 - Ensure follow-up evaluation

(3) Response to new financial needs

- Measures to meet the new financial needs for both mitigation and adaptation, including contributions from the Parties, should be considered from the perspective of broad international cooperation.

(4) Assistance for mitigation actions in each sector

- Sectoral crediting mechanism will be discussed as a means to assist nationally appropriate mitigation actions by developing countries.
- Consideration should be given to how to promote private loans for technological inducement and investment which are related to the improvement of intensity in each sector and measures with co-benefits (such as energy efficiency improvement, reduction of air pollution, etc.). Other measures such as labeling also need to be considered.

6. Entry into Force

- Appropriate requirement for entry into force of the new framework should be considered with a view to realizing an effective framework.

(Reference: Japan's already-presented submissions)

- FCCC/AWGLCA/2008/MISC.1/Add.1 p.3~11
- FCCC/AWGLCA/2008/MISC.2 p.13~39
- FCCC/AWGLCA/2008/MISC.4 p.8~16
- FCCC/AWGLCA/2008/MISC.4/Add.1 p.8~9

PAPER NO. 8A: NEW ZEALAND

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention and to the Ad-hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol

A shared vision, including a long-term global goal

30 September 2008

Introduction

1. This submission outlines New Zealand's preliminary views on a shared vision, including a long-term global goal. Decision 1/CP.13 calls for a shared vision for long-term cooperative action, including a long-term global goal for emission reductions. A shared vision, including a long term global goal, is required to guide future mitigation efforts under the Convention and its Kyoto Protocol.
2. A shared vision describes what we want the future to look like. It describes a pathway to fulfil the ultimate objective of the Convention, with a quantified long-term global goal as a fundamental component.

A shared vision

3. We consider the following as the primary element of a shared vision:
 - Global emissions¹ are following an agreed quantified pathway that will lead to achieving the agreed quantified long-term goal to stabilise greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system.
4. The shared vision would also include the following supportive elements:
 - Economies have successfully decoupled economic growth from greenhouse gas emissions;
 - All significant investment and planning decisions factor-in climate change considerations, including mitigation and adaptation;
 - All significant sources of greenhouse gas emissions are priced;
 - For those economies participating in emissions trading, there is an effective and integrated global carbon market;
 - Enabling environments support adequate finance and investment flows to better help countries respond to the challenges of climate change, especially to those vulnerable countries with limited internal resources to address climate change;
 - All countries have removed any trade and economic measures that inhibit the achievement of the long term global goal;

¹ Global emissions refers to both emissions from sources and removals by sinks.

- All countries continue to help the most vulnerable countries adapt to the physical impacts of climate change;
- Needed technologies continue to be developed and deployed;
- Food is produced and distributed in a way that sustains the world's population.
- All countries' efforts to address climate change are known and are recognised as part of international action.

A long-term goal

5. Science will continue to inform and guide our judgement of the long-term global goal. Parties agree that the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC) provides the most comprehensive assessment of climate change science to date.
6. To guide Parties in meeting their contribution to the long-term global goal, near and mid-term quantified milestones for global emissions will also be needed. The IPCC indicates the level of emissions reductions required of developed and developing countries by 2020 and 2050².
7. There is a clear relationship between work on the scale of reductions to be achieved by Annex 1 under the guidance of the AWG-KP, and the work on mitigation commitments and actions taking place under the AWG-LCA. Both work programmes must progress in tandem, especially as they have a common shared vision, resulting in all countries taking appropriate action.
8. A long-term global goal for emissions reductions requires accurate monitoring. Annual greenhouse gas inventories, at least covering the bulk of global emissions, now, up to and beyond 2012, will enable regular assessment of progress against the agreed global emissions pathway. New Zealand has made separate submissions on finance and measurement, reporting and verification that propose specific tools for these purposes.

² See Box 13.7 of the IPCC AR4 WG III report (pg. 776) and subsequent explanation by the IPCC authors at SBSTA 28.

PAPER NO. 8B: NEW ZEALAND

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention

Cooperation on research and development of current, new and innovative technologies, including win-win solutions

30 September 2008

Enabling environments

1. Creating “enabling environments” is very important for research and development (R&D) and commercial deployment of current, new and innovative technologies. When creating enabling environments, governments need to recognise the important role of the investment/business community in developing and deploying technology, and make full use of the range of policy support measures available to them.
2. For R&D and deployment of mitigation technologies the investment community needs clear incentives. New Zealand considers that a carbon price signal and removal of environmentally harmful subsidies are critical foundations. To maximise incentives and to minimise leakage, this carbon price signal needs to apply as broadly as possible. There may be a need for transitional financial incentives to supplement the carbon price signal, as well as other policy measures to overcome non-price barriers.
3. It is important to recognise that the technology pathway for adaptation may be different than for mitigation. The characteristics of “enabling environments” need to reflect these differences. For example, the introduction of a carbon price will not provide an effective signal for research and development on adaptation technologies.

Cooperation on R&D of current, new and innovative technologies

4. Cooperation is important to increase the size of investment and to speed up the development and deployment of technologies.
5. New Zealand welcomes more discussion on the early stages of the technology pathway; we consider it necessary to draw a distinction between the transfer of existing, commercially-available technologies; and R&D and commercial deployment of new and innovative technologies.
6. The latter will be essential to achieve stabilisation of greenhouse gases at safe levels. Accelerated development and deployment of future technologies is also essential to avoid lock-in from major capital investments with long life-spans taking place in the near-term. New Zealand encourages scaled-up international technology cooperation in key sectors with large mitigation potential and where significant knowledge gaps exist.
7. New Zealand considers that technology should be defined in the broadest context and in this regard technology includes “soft technology” such as information and knowledge sharing.

The role of the UNFCCC in promoting cooperation on R&D

8. The most important contribution that the UNFCCC can make is the development of an effective global agreement on climate change that establishes a price on carbon to apply as broadly as possible, and sends a clear signal to the global investment community to set up and direct resources to towards technology development and innovation.

9. New Zealand also considers that we should look to strengthen the catalytic role of the Convention¹ to promote and facilitate multilateral technology cooperation inside and outside of the Convention, and build upon existing initiatives/institutions. In this regard, Parties could make an explicit political commitment to actively promote and resource global technology cooperation.
10. For cooperation in specific sectors², all countries should clearly articulate technology needs, including identifying where significant information gaps or barriers exist, and areas where potential future technologies could enable additional mitigation.

Cooperation in agriculture technology R&D

11. New Zealand considers that we need to focus more attention on cooperation on research and development of innovative technologies for the agriculture sector.
12. The IPCC Fourth Assessment Report³ identifies a number of important considerations:
 - Globally, agricultural CH₄ and N₂O emissions have increased by nearly 17% from 1990 to 2005
 - During that period, the five regions composed of Non-Annex I countries showed a 32% increase, and were, by 2005, responsible for about three-quarters of total agricultural emissions.
 - The other five regions, mostly Annex I countries, collectively showed a decrease of 12% in the emissions of these gases.
 - Many mitigation opportunities use current technologies and can be implemented immediately, but technological development will be a key driver ensuring the efficacy of additional mitigation measures in the future.
 - Despite significant technical potential for mitigation in agriculture, there is evidence that little progress has been made in the implementation of mitigation measures at the global scale.
 - Barriers to implementation are not likely to be overcome without policy/economic incentives and other programmes, such as those promoting global sharing of innovative technologies.
 - Current GHG emission rates may escalate in the future due to population growth and changing diets. Greater demand for food could result in higher emissions of CH₄ and N₂O if there are more livestock and greater use of nitrogen fertilizers.
 - Deployment of new mitigation practices for livestock systems and fertilizer applications will be essential to prevent an increase in emissions from agriculture after 2030.
13. New Zealand is committed to international cooperation on research and development of technologies in the livestock agriculture sector and we are seeking other countries to actively cooperate with us in this effort. We established the Livestock Emissions and Abatement Research Network (LEARN

¹ Decision 1/CP.13, paragraphs 1(b) (vii) and 1(c)(v)

² Decision 1/CP.13, paragraphs 1(b)(iv) *Cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention*; and 1(d)(iii) *Cooperation on research and development of current, new and innovative technology, including win-win solutions*; and 1(d)(iv) *The effectiveness of mechanisms and tools for technology cooperation in specific sectors.*

³ Smith, P., D. Martino, Z. Cai, D. Gwary, H. Janzen, P. Kumar, B. McCarl, S. Ogle, F. O'Mara, C. Rice, B. Scholes, O. Sirotenko, 2007: Agriculture. In *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

www.livestockemissions.net) to facilitate collaborative research and development on non-CO₂ greenhouse gases in livestock production systems.

14. Agricultural systems are highly differentiated with more variability between production systems than in any other sector. When developing mitigation strategies we need to better understand the processes involved in the production of greenhouse gases and the social and environmental context in which agricultural production occurs.
15. In the context of food security concerns, New Zealand strongly believes that we need to develop mitigation practices that do not threaten food production and that enable economic development to proceed in a sustainable manner. In this regard, cooperation on research and development of win-win solutions will be critical.

Cooperation in energy technology R&D

16. New Zealand is committed to international cooperation on research and development of technologies in the energy sector, and we are always seeking new opportunities to enhance our existing cooperative relationships with other countries in this respect.
17. The key focus of our international energy technology research and development effort is our work under a number of IEA Implementing Agreements.
18. There are also number of other energy technology cooperation efforts taking place under the umbrella of organisations such as APEC, and via bilateral relationships with countries like Australia (notably CCS) and the US.

Measurement, Reporting and Verification

19. Greenhouse gas inventories are important tools for research and development of technologies. Regular reporting combined with a facilitative review process is extremely beneficial for inventory improvement.
20. For mitigation in the agriculture sector, national greenhouse gas inventories can allow for mitigation opportunities to be more readily identified. New Zealand is willing and able to provide information and advice on the development of greenhouse gas inventories in the livestock agriculture sector. New Zealand launched the LEARN Fellowship Programme⁴ on World Environment Day in June 2008 to provide capacity building opportunities for researchers from developing countries.

Linkages

21. Parties should build upon existing work in the UNFCCC, should consider what can be pursued outside of the UNFCCC process, and whether additional financing or institutional structures are required.

⁴ See www.newzealandeducated.com/int/en/institutions_courses/scholarships/incoming/

PAPER NO. 8C: NEW ZEALAND

Enhanced Action on Finance

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention

30 September 2008

Introduction

1. This submission outlines New Zealand's preliminary views to enhance finance and investment flows to support actions under decision 1/CP.13 (the Bali Action Plan).
2. We propose some general principles to guide discussions on finance and propose ways to measure, report and verify (MRV) the actions of all Parties to ensure mutual accountability.
3. New Zealand agrees that more finance is needed for mitigation, adaptation and technology. Greatly increased funding implies higher mutual accountability between Parties.
4. Noting that the various reports on financing requirements for mitigation, adaptation and technology conclude (albeit with large variances) that the level of finance required is an order of magnitude greater than current levels, leveraging the private sector through carbon markets and/or regulation is essential to achieve the outcomes sought under the Bali Action Plan.
5. New Zealand notes that effective financing requires action at multiple levels, including through redirecting private and public investment, the financial mechanism of the Convention, Official Development Assistance, national policies and proposed new financing options and mechanisms.

General Guidance

6. **Finance is a cross-cutting issue that needs to be discussed consistently and coherently.** Under the AWG-LCA various proposals have been made; to auction emissions allowances, levy, establish funds, and tax. Under the AWG-KP proposals have been made to extend the share of proceeds to Joint Implementation and Emissions Trading, plus new sectoral market mechanisms to further engage the private sector/carbon market in delivering technology/finance for mitigation. Extending the share of proceeds is also being discussed under the second review of the Kyoto Protocol¹. The current negotiating processes will not deliver effective decision making nor efficient and effective outcomes if financial issues are not treated consistently and coherently across the negotiating agendas. In this regard we look forward to the Secretariat's further work on finance and investment flows prior to COP14.
7. Two documents on aid effectiveness and financing for development hold useful principles that can also be applied to climate change finance discussions. Helpfully, many parties to the UNFCCC are also parties to both the Paris Declaration on Aid Effectiveness², expanded by the Accra Agenda for Action, and the Monterrey Consensus on Financing for Development³.

¹ New Zealand has submitted separately on its views regarding extending the share of proceeds under the second review of the Kyoto Protocol.

² See www.oecd.org.

³ See www.un.org/esa/ffd/monterrey/MonterreyConsensus.

8. A useful principle contained in the Paris Declaration is ‘**mutual accountability**.’ This means donors and partner countries must account transparently to each other for the use of finance, and to their citizens and parliaments on the results. This is most relevant under paragraph 1(b)(ii) of Decision 1/CP.13 where the results of actions enabled by finance and technology must be measured, reported and verified and the finance and technology provided must also be measured, reported and verified. Greatly increased funding implies higher mutual accountability between Parties.
9. The September 2008 endorsement by 100 countries of the Accra Agenda for Action reinforces the Paris Declaration principles and particularly highlights results, accountability and ownership founded on mutually agreed conditions based on national development strategies. Countries agreed that “... *challenges such as climate change and rising food and fuel prices underline the importance of applying aid effectiveness principles.*”
10. The Monterrey Consensus on Financing for Development, agreed by UN members in 2002, embraces six areas encompassing both private and public sector financial flows. It acknowledges action at multiple levels and certain pre-conditions that enable sustainable development, and makes specific reference to protecting the environment. It appropriately recognises that domestic policy and regulatory frameworks also assist sustainable development. In developing solutions to address climate change through the Bail Action Plan, **Parties must remain cognisant of what is achievable within the United Nations process.**
11. A number of finance submissions have called for funding to be prioritised for certain groups of countries and/or for donor contributions to be based on specific criteria e.g. common but differentiated responsibilities and respective capabilities or GDP per capita. **New Zealand supports the use of objective criteria to guide eligibility for finance and for its provision.** Currently, the Convention is not responsive to the changing circumstances of countries, including their level of development and capability. Further and more systematic reflection of the wide diversity of national circumstances among countries, and the significant changes in many countries since the Convention was agreed in 1992, is required. This necessitates amendment of Annex II of the Convention and creation of a dynamic mechanism to enable adjustment as economies and national circumstances evolve.

Assessment of Financial Needs (Assessing)

12. Before deciding on how funds should be raised, Parties should first focus discussions on what needs to be accomplished through mitigation, adaptation and technology funding. The debate must move on from general statements calling for increased funding to specific and identifiable needs at the country level.
13. All National Communications should explicitly state adaptation, mitigation and technology needs⁴. It must be made clear what Parties can do within their existing resources and what level of ambition is achievable with assistance.
14. We propose that developing country Parties better utilise their National Communications to describe climate change plans and to specify adaptation, mitigation and technology needs⁵. National Communications could also identify areas where potential future technology would enable additional mitigation. This is consistent with Articles 12(1)(b) and 12(1)(c) of the Convention.

⁴ The Center for Clean Air Policy has advocated national plans to determine those actions that can be achieved unilaterally and those that would require assistance.

⁵ The Center for Clean Air Policy has advocated that the UNFCCC could develop a common reporting format for National Plans and/or sectoral/SD PAMS strategies as distinct from the National Communications. Each national plan would lay out the specific mitigation actions in detail (unilateral plus additional). See www.ccap.org

Means for Finance (Collecting)

15. Many Parties have identified new mechanisms to source finance for mitigation, adaptation, and technology. Others have called for the extension, scaling up or review of existing mechanisms.
16. New Zealand has a strong preference to avoid unnecessarily creating new funds and/or mechanisms. Problems with existing mechanisms should be addressed prior to consideration of additional avenues.
17. As noted previously, leveraging the private sector through carbon markets and/or regulation is essential to achieve the outcomes sought under the Bali Action Plan. Parties should consider the need, identified in the Bali Action Plan, for financing to be adequate, predictable and sustainable, and for it not to have perverse outcomes for markets.
18. It will be important to analyse all options together in order to decide which option or mix of options will be most effective and efficient in meeting identified needs.

Country Responsibilities (Delivery)

19. To enhance mutual accountability we propose the following responsibilities for countries:
 - Countries should cooperate to enable the scaling-up of finance for mitigation, adaptation and technology, harnessing and expanding the important role of the private sector.
 - Developed countries should report more frequently on the provision of financial resources and the transfer of technology (Articles 4.3, 4.4 and 4.5 of the Convention). The relevant National Communication tables could be submitted at the same time as the national inventory report⁶.
 - All countries should measure and report mitigation and adaptation actions in a prompt and verifiable manner⁷. More frequent reporting and projections of greenhouse gas emissions are needed to ensure continued effort sharing, satisfy donor country citizens and parliaments and assess progress against a long-term global goal.
 - New reporting requirements need not be the same for all countries⁸. At a minimum, economies accounting for the bulk of global greenhouse gas emissions must regularly report national greenhouse gas inventories⁹. Where assistance is required for compiling inventories, sufficient funding should continue to be available.
20. A combination of the above tools will provide a more accurate global picture of adaptation, mitigation and technology efforts, needs and costs over time.

⁶ Decision 1/CP.13 paragraph 1(b)(ii) requires finance and technology transfer from developed to developing countries to be measurable, reportable and verifiable. New Zealand now views a wider group of countries being able to contribute finance.

⁷ Decision 1/CP.13 paragraph 1(b)(ii) requires mitigation in developing countries to be measurable, reportable and verifiable.

⁸ Developed Parties have a comprehensive and well-tested reporting and review process, based on the requirements under Article 12 of the Convention (and associated COP decisions) and supplemented with the requirements under articles 5, 7 and 8 of the Kyoto Protocol (and associated CMP decisions). Annual greenhouse gas inventories for developed Parties have been a requirement since the COP adopted decision 11/CP.4 in 1998.

⁹ In 17 years under the Convention only four Non-Annex I Parties have submitted two or more National Communications.

ANNEX A - The Paris Declaration, Accra Agenda for Action & Monterrey Consensus

The Paris Declaration

The Paris Declaration is grounded on five mutually reinforcing principles:

- **Ownership:** Partner countries exercise effective leadership over their development policies and strategies, and coordinate development actions.
- **Alignment:** Donors base their overall support on partner countries' national development strategies, institutions, and procedures.
- **Harmonization:** Donors' actions are more harmonized, transparent, and collectively effective.
- **Managing for results:** Managing resources and improving decision making for development results.
- **Mutual accountability:** Donors and developing countries must account more transparently to each other for their use of aid funds, and to their citizens and parliaments for the impact of their aid. The Paris Declaration says all countries must have procedures in place by 2010 to report back openly on their development results.

The Accra Agenda for Action

In the Accra Agenda for Action (AAA) 100 countries, including all major economies, committed to addressing three major challenges to accelerating progress on aid effectiveness:

- Country ownership is key.
- Building more effective and inclusive partnerships.
- Achieving development results – and openly accounting for them – must be at the heart of all we do.

The AAA acknowledges the contributions of all development actors, and in particular, the role of middle-income countries as both providers and recipients of aid. It also agrees that as new global challenges emerge, donors will ensure that existing channels for aid delivery are used and, if necessary, strengthened before creating separate new channels that risk further fragmentation and complicate coordination at country level.

The Monterrey Consensus on Financing for Development

The Monterrey Consensus establishes a “*new partnership between developed and developing countries*” (to mobilise and increase) “*the effective use of financial resources and (achieve) the national and international economic conditions needed to fulfil internationally agreed development goals to eliminate poverty, improve social conditions and raise living standards, and protect our environment...*”.

Key principles include:

- Each country has primary responsibility for its own economic and social development, and the role of national policies and development strategies cannot be overemphasised.
- National development efforts need to be supported by an enabling international economic environment.
- A commitment to sound policies, good governance at all levels and the rule of law.
- Resources should be created and used effectively and strong, accountable institutions established at all levels.
- Globalisation should be fully inclusive and equitable.

PAPER NO. 8D: NEW ZEALAND

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention

Measurable, reportable and verifiable actions

30 September 2008

1. This submission outlines New Zealand's preliminary views on measurement, reporting and verification.

Key points summary:

2. Measurement, reporting and verification can provide an audit of global mitigation effort, better inform emissions projections, and provide an estimate of progress in relation to targets and goals.
3. Frequent and up to date greenhouse gas inventories and baseline projections - at least covering the bulk of global emissions¹ - will be essential now, up to and beyond 2012.

Bali Action Plan

4. We note the importance of measurable, reportable and verifiable (MRV) actions in the Bali Action Plan (Decision 1/CP.13). In particular in paragraphs 1 (b)(i) and 1 (b)(ii) as outlined below:

1 (b) Enhanced national/international action on mitigation of climate change, including, inter alia, consideration of:

(i) Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties, while ensuring the comparability of efforts among them, taking into account differences in their national circumstances;

(ii) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner

The role of MRV

5. The concept of measurable, reportable and verifiable actions is important because in the first instance it enables us to measure and report progress against commitments, for example regarding greenhouse gas emissions and removals, financial assistance and technology transfer. Verification or assessment of "compliance" with commitments, actions and comparability of effort is then possible. Once national greenhouse gas emissions and removals are better understood, and have been quantified and reported, mitigation opportunities are more readily identified. This applies to both developed and developing countries.
6. National communications (under Article 12) are at the heart of the Convention process – providing the vehicle for all Parties to communicate progress with implementation of the Convention. The

¹ Frequency of submission will be dependent on a country's contribution to global emissions; for example we anticipate major emitting economies would report annually and LDCs less frequently given that just over 80% of global emissions come from only 25 countries.

UNFCCC website states the following about national communications and the importance of reliable data:

Accurate, consistent and internationally comparable data on GHG emissions is essential for the international community to take the most appropriate action to mitigate climate change, and ultimately to achieve the objective of the Convention. Communicating relevant information on the most effective ways to reduce emissions and adapt to the adverse effects of climate change also contributes towards global sustainable development².

7. Article 12 of the Convention provides a sound basis for all Parties to report on actions taken in response to the Convention. In New Zealand's view, we must build upon existing reporting and review processes and strengthen reporting requirements in key areas. Our own experience is that regular reporting of greenhouse gas inventories combined with a facilitative review process is extremely beneficial for inventory improvement.
8. National communications provide an opportunity for countries to report on the progress they are making to prepare for the adaptation to the impacts of climate change, to describe adaptation planning and identify needs and priorities. More regular reporting of this information by developing countries would assist in the development of adaptation plans, in estimating costs of adaptation, and in accessing financial resources for implementation.
9. Annex I Parties have a comprehensive and well-tested reporting and review process, based on the requirements under Article 12 of the Convention (and associated COP decisions) and supplemented with the requirements under Articles 5, 7 and 8 of the Kyoto Protocol (and associated CMP decisions). Annual greenhouse gas inventories for Annex I Parties have been a requirement since the COP adopted decision 11/CP.4 in 1998. We also note that Annex I national communications are comprehensive and already have a requirement to report on finance and technology transfer.
10. Requirements for the reporting of information under Article 12 of the Convention by non-Annex I Parties have resulted in much less regular reporting than that of Annex I Parties. A consequence of this is that actions already being taken by developing countries to implement the Convention and address climate change, may not be recognised nor are their adaptation needs and priorities understood.
11. The vast majority of non-Annex I Parties have submitted only one national communication. This means that for most of these countries the information is not current, and because there is no requirement for a national inventory system (as for Annex I Parties under the Kyoto Protocol) capacity building and institutional arrangements for national greenhouse gas inventories will likely be an issue that will need attention with each national communication cycle (instead of being an ongoing activity). While acknowledging the work of the Consultative Group of Experts on national communications from Parties not included in Annex I to the Convention, there is no formal review process for greenhouse gas inventories from these Parties.

What needs to change?

- Measurable, reportable and verifiable actions or commitments are central to the mutual accountability of all Parties under the Convention.
- Measurement, reporting and verification are necessary to ensure access to finance and the carbon market by non-Annex I Parties, for example via a mechanism that addresses the reduction of emissions from deforestation and forest degradation (REDD).

² See http://unfccc.int/national_reports/items/1408.php.

- Greenhouse gas inventory reporting and review requirements for major developing economies must mirror Annex I requirements.
- The frequency of reporting on financial resources and transfer of technology (actions to implement Articles 4.3, 4.4 and 4.5 of the Convention) could be increased, with the relevant national communication tables being submitted at the same time as the national inventory report. Enhanced implementation of Article 12 of the Convention is easily achieved with modifications to, and broader application of, current national communications guidelines.

PAPER NO. 8E: NEW ZEALAND

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention and to the Ad-hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol

Mitigation

30 September 2008

1. This submission outlines New Zealand's preliminary views on mitigation in the context of a comprehensive global agreement.
2. New Zealand is prepared to take on its fair share of future commitments to address climate change, in the context of a global agreement that has comparable effort from all developed countries and nationally appropriate mitigation action from developing countries. A long term global goal will be important to guide the international community's mitigation efforts.
3. To reach an ambitious global long-term emission reduction target, and ensure that global emissions begin to decrease in the next 10-15 years¹, will require nationally appropriate mitigation commitments and actions from all major emitting countries. Relying only on further commitments from those Annex I Parties that have ratified the Kyoto Protocol will not be enough, as aggregate emissions from these Parties make up less than 30 percent, and a rapidly declining share, of total global anthropogenic emissions. New Zealand's support of a new Annex I² aggregate target will therefore be contingent on a comparable and equitable effort from all countries (developed and developing), so that in aggregate global emissions are set on a trajectory that avoids dangerous levels of climate change³.
4. A decision in the AWG-KP on the aggregate emissions reduction target for Annex I Parties to the Kyoto Protocol is, scientifically and politically, complementary to the mitigation commitments and actions agreed under the AWG-LCA for developed and developing countries, all contributing to a shared vision and global goal. As the level of ambition for mitigation under the AWG-LCA is not yet well defined, we need to ensure that both work programmes progress in tandem as there are clearly links between the two. One important link between the two is the fact that both the AWG-LCA and the AWG-KP refer to a shared vision in their terms of reference. Logically, this shared vision will be common to the two AWGs. Indeed, the shared vision under the AWG-KP refers to the challenge set by the ultimate objective of the Convention.
5. To ensure an equitable effort from each developed country, and in discussion on effort sharing principles and associated ranges of emission reduction targets for individual Annex I Parties, it is necessary to take into consideration the mitigation potential that is available within each country. Given the extra effort and associated costs that countries with limited mitigation potential face in reducing emissions and meeting commitments, New Zealand is encouraged that the AWG-KP has made a clear linkage between national circumstances, mitigation potential and targets for individual

¹ To avoid any major overshoot of atmospheric concentrations, the IPCC AR4 states that global emissions will need to peak in the next 10-15 years.

² Refers to both the scale of mitigation ambition and future composition of Annex I.

³ The IPCC AR4 Working Group III report (pg. 776), and elaborated by the IPCC authors at SBSTA 28, illustrates the type of commitments and action needed from all Parties to ensure atmospheric greenhouse gases are stabilised at specific concentrations.

Parties. We look forward to further discussion on factors and criteria that could be used to compare the national circumstances and mitigation potential across all countries.

6. The recent IPCC AR4 conclusions indicate that to avoid exceeding a stabilisation concentration of 450ppm CO₂-e, Annex 1 Parties in aggregate would need to reduce emissions by 25-40 percent below 1990 by 2020. As this is the lowest stabilisation range assessed by the IPCC, New Zealand considers it as a useful indicative range to inform the setting of a new Annex 1 aggregate target, as part of a broad global effort⁴. We further note the properties of emission pathways for alternative ranges of CO₂ and CO₂-e stabilisation targets presented by the IPCC in WGIII Table 3.10 (annexed to this submission).
7. New Zealand's support of a 25-40 percent reduction for Annex 1 Parties in aggregate is contingent on comparable effort from all developed countries, and action from developing countries that reduces their aggregate emissions in the range of 15-30 percent below baseline⁵. This reduction effort from developing countries should be done in a measurable, reportable and verifiable manner, and be additional to any reductions that result from projects used to meet Annex 1 Parties' commitments (for example the Clean Development Mechanism).
8. While 25-40 percent below 1990 provides a useful indicative range for where aggregate Annex 1 emissions need to be by 2020 (as does the 15-30% reduction below baseline for non-Annex I countries), New Zealand considers further discussion and clarification is needed on the relationship between the long-term global emission reduction goal and the necessary commitments and actions that developed and developing country Parties will need to undertake from 2013 to ensure this goal can be met. This will require discussion on how to allocate the effort of developed and developing countries to achieve the long-term global goal for emission reductions.
9. A long-term global goal for emissions reductions requires accurate monitoring. New Zealand has made a separate submission on measurement, reporting and verification that proposes specific tools for these purposes.

⁴ We note however the serious physical impacts of climate change, even at this stabilisation scenario (see WGII Table TS.3 annexed to this submission) and urge all Parties to pursue ambitious emissions reductions.

⁵ This latter range was presented by the IPCC at the SBSTA workshop at Bonn in June 2008 as a further explanation of information contained within Box 13.7 of the IPCC AR4 Working Group III report (pg. 776), and gives the commensurate scale of reductions required by non-Annex I Parties if Annex I Parties were to reduce, in aggregate, their emissions by 25-40 percent below 1990 by 2020.

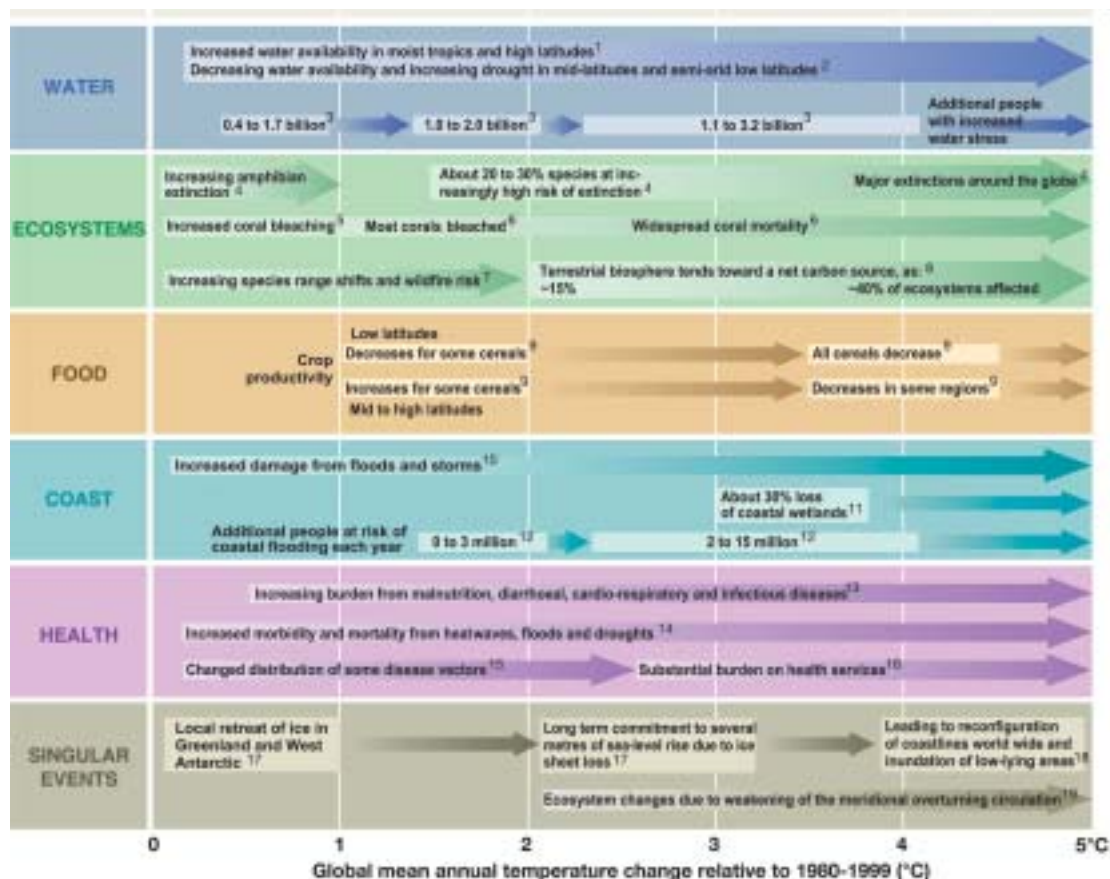
WG III Table 3.10:

Table 3.10: Properties of emissions pathways for alternative ranges of CO₂ and CO₂-eq stabilization targets. Post-TAR stabilization scenarios in the scenario database (see also Sections 3.2 and 3.3); data source: after Nakicenovic et al., 2006 and Hanaoka et al., 2006

Class	Anthropogenic addition to radiative forcing at stabilization (W/m ²)	Multi-gas concentration level (ppmv CO ₂ -eq)	Stabilization level for CO ₂ only, consistent with multi-gas level (ppmv CO ₂)	Number of scenario studies	Global mean temperature C increase above pre-industrial at equilibrium, using best estimate of climate sensitivity ^{a)}	Likely range of global mean temperature C increase above pre-industrial at equilibrium ^{a)}	Peaking year for CO ₂ emissions ^{b)}	Change in global emissions in 2050 (% of 2000 emissions) ^{b)}
I	2.5-3.0	445-490	350-400	6	2.0-2.4	1.4-3.6	2000-2015	-85 to -50
II	3.0-3.5	490-535	400-440	18	2.4-2.8	1.6-4.2	2000-2020	-60 to -30
III	3.5-4.0	535-590	440-485	21	2.8-3.2	1.9-4.9	2010-2030	-30 to +5
IV	4.0-5.0	590-710	485-570	118	3.2-4.0	2.2-6.1	2020-2060	+10 to +60
V	5.0-6.0	710-855	570-660	9	4.0-4.9	2.7-7.3	2050-2080	+25 to +85
VI	6.0-7.5	855-1130	660-790	5	4.9-6.1	3.2-8.5	2060-2090	+90 to +140

Notes:
 a. Warming for each stabilization class is calculated based on the variation of climate sensitivity between 2°C –4.5°C, which corresponds to the likely range of climate sensitivity as defined by Meehl et al. (2007, Chapter 10).
 b. Ranges correspond to the 70% percentile of the post-TAR scenario distribution.
 c. 'Best estimate' refers to the most likely value of climate sensitivity, i.e. the mode (see Meehl et al. (2007, Chapter 10) and Table 3.9

WG II Table TS.3:



PAPER NO. 8F: NEW ZEALAND

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention

Overview comments on the Bali Action Plan

30 September 2008

Introduction

1. The following submission provides New Zealand's preliminary overview comments on negotiations under the Bali Action Plan. New Zealand has submitted its specific views on a shared vision, mitigation, MRV, technology and finance.

Shared Vision

- A shared vision describes what we want the future to look like.
- An agreed quantified long-term goal for emissions reductions is the fundamental component of the shared vision and is needed to ensure global emissions are following an agreed quantified pathway that will lead to achievement of the ultimate objective of the Convention.
- There is a clear relationship between the work on the scale of reductions to be achieved by Annex 1 under the guidance of the AWG-KP, and the work on mitigation commitments and actions taking place under the AWG-LCA. Both work programmes must progress in tandem, especially as they have a common shared vision, resulting in all countries taking appropriate action.

Mitigation

- A common shared vision, including a long term global goal, is required to guide future mitigation efforts under the Convention and its Kyoto Protocol. Further defining the range of emission reductions to be achieved by Annex I Parties in aggregate will depend upon defining an agreed quantified pathway for all countries that will lead to achieving the agreed quantified global long-term goal.
- The Intergovernmental Panel on Climate Change's Fourth Assessment Report provides useful indicative ranges of emissions reductions required by all Parties by 2020.
- New Zealand supports an indicative range of emissions for Annex I Parties as a group of 25 to 40 per cent below 1990 levels by 2020 (as the lowest greenhouse gas stabilisation band currently assessed by the IPCC), in the context of a global goal and agreement that has comparable effort from all developed countries and nationally appropriate mitigation action from developing countries¹.
- New Zealand supports the use of objective criteria to guide mitigation commitments and actions.

Differentiation

- The science tells us that meeting the ultimate objective of the Convention will require an ambitious global effort involving all Parties. Parties' contribution to this effort should be based on equity and common but differentiated responsibilities and respective capabilities, and take into account different national circumstances. These principles are embodied in the Bali Action Plan.

¹ At the SBSTA 28 workshop in June 2008, the IPCC authors provided further explanation of the AR4 Working Group III report (pg. 776): an aggregate emissions reduction for Annex I Parties of 25-40 percent below 1990 by 2020 had a concurrent reduction in non-Annex I Parties' emissions in the range of 15-30 percent below baseline.

- Parties are already differentiated in practice under the Convention and the Kyoto Protocol. Further differentiation among Parties is now appropriate, to reflect the fact that the national circumstances of many countries have significantly changed since 1992 (when the Convention was agreed), and will continue to do so.
- Static categories of “developed” and “developing” country, or “Annex I/II” and “non-Annex I” Parties are no longer helpful. Instead, there should be a dynamic continuum with different commitments, actions and support for different countries based on common, objective criteria. Some of the criteria being discussed under the AWG-KP in the context of mitigation, including GDP per capita, and others such as the Human Development Index, could be relevant.
- Differentiation is a cross-cutting issue and needs to be considered in the context of all elements (mitigation, adaptation, technology, financing) of the Bali Action Plan.

Adaptation

- The Nairobi Work Programme provides the information base for countries to improve their understanding and assessment of impacts, vulnerability, and adaptation, and to make informed decisions on practical adaptation actions and measures.
- Assistance to adapt to the physical impacts of climate change should be targeted at the most vulnerable countries.

Finance

- Finance is a cross-cutting issue that needs to be discussed consistently and coherently across the Convention and its Kyoto Protocol, if the current negotiating processes are to deliver effective decision making and efficient and effective outcomes.
- Greatly increased funding implies higher mutual accountability between Parties for the use of finance, and to their citizens and parliaments on the results². The Paris Declaration on Aid Effectiveness supplemented by the Accra Agenda for Action, and the Monterrey Consensus on Financing for Development provide relevant principles.
- “Financing” is a three step process: assessing needs, collecting the funds, and delivering (according to need).
- New Zealand supports the use of objective criteria to guide eligibility for finance and for the provision of finance.

Measurement, reporting and verification (MRV)

- Measurable, reportable and verifiable actions or commitments are central to the mutual accountability of all Parties under the Convention.
- Measurement, reporting and verification can provide an audit of global mitigation effort, better inform emissions projections, and provide an estimate of progress in relation to targets and goals.
- Frequent and up to date greenhouse gas inventories and baseline projections - at least covering the bulk of global emissions (noting that just over 80% of global emissions come from only 25 countries) - will be essential now, up to and beyond 2012. Greenhouse gas inventory reporting and review requirements for major developing economies must mirror Annex I requirements.
- Enhanced implementation of Article 12 of the Convention is easily achieved with modifications to, and broader application of, current national communications guidelines.

² This is most relevant under paragraph 1(b)(ii) of Decision 1/CP.13 where the results of actions enabled by finance and technology must be measured, reported and verified and the finance and technology provided must also be measured, reported and verified.[0]

- Measurement, reporting and verification are necessary to ensure access to finance and the carbon market by non-Annex I Parties, for example via a mechanism that addresses the reduction of emissions from deforestation and forest degradation (REDD).
- The frequency of reporting on financial resources and transfer of technology (actions to implement Articles 4.3, 4.4 and 4.5 of the Convention) could be increased, with the relevant national communication tables being submitted at the same time as the national inventory report.

Cooperation on Technology Research and Development

- Parties should build upon existing work in the UNFCCC, should consider what can be pursued outside of the UNFCCC process, and whether additional financing or institutional structures are required.
- Cooperation on technology research and development is important to increase the size of investment and to speed up the development and deployment of technologies, particularly in sectors with large mitigation potential, or where significant knowledge gaps exist.
- Enabling environments are fundamental to the research and development of technologies and to the successful deployment of new technologies. A carbon price signal and removal of environmentally harmful subsidies are critical foundations. To maximise incentives and to minimise leakage, this carbon price signal needs to apply as broadly as possible. There may also be a need for transitional financial incentives to supplement carbon price signals, as well as other policy measures to overcome non-price barriers.
- We should look to strengthen the catalytic role of the Convention to promote and facilitate multilateral technology cooperation inside and outside of the Convention, and build upon existing initiatives/institutions. Parties could make an explicit political commitment to actively promote and resource global technology cooperation.

Soft technology (information and knowledge) is an important element of technology cooperation, particularly in sectors where significant knowledge gaps exist (e.g. agriculture). New Zealand established the international Livestock Emissions and Abatement Research Network (LEARN) to cooperate on research and development of technologies in the livestock agriculture sector and welcomes the active cooperation of other countries in this effort³.

³ See <http://www.livestockemissions.net/>.

PAPER NO. 8G: NEW ZEALAND

A submission to the Ad hoc Working Group on Long term Cooperative Action under the Convention

Workshop on risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance

30 September 2008

In setting up the content and agenda for the AWG-LCA workshop in Poznan on risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance, New Zealand suggests that the secretariat should approach the following organisations to make presentations:

- International Strategy for Disaster Reduction (ISDR)
- World Bank
- re-insurance industry
- Caribbean Catastrophe Risk Insurance Facility (CCRIF)
- World Health Organization
- UNEP, Disaster Management Branch

In order to focus the workshop, New Zealand believes it would be useful to pose some questions in advance to these organisations and any others that are invited to make presentations. Such questions could include the following:

- How does the insurance sector deal with uncertainty?
- Are climate change impacts anticipated by policies?
- What other mechanisms are used to transfer risk from civil society to others?
- How difficult is it to re-insure after an event?
- Does risk reduction through recovery occur?
- What are the incentives to manage and reduce risk?
- Do collaborative arrangements exist between governments (central and local), insurers and civil society to reduce risk?

New Zealand also notes that the IPCC has agreed to hold a scoping meeting for a Special Report on "managing the risk of extreme events to advance climate change adaptation" to take place early in 2009. The outline of the proposed IPCC Special Report (as presented by Norway) covers areas of relevance to the topic of risk management and risk reduction strategies. The timing of the AWG-LCA workshop in December means that there is an opportunity for discussions at the workshop to influence the final scope of the IPCC Special Report and this could be explicitly built into the outcomes from the workshop. Although the IPCC Special Report will not be finished until 2010, risk management and risk reduction strategies will be evolving and improving as we learn more, and it will make a timely input into future developments in this area.

PAPER NO. 9A: NORWAY

SUBMISSION FROM NORWAY

AWG-LCA Carbon capture and storage as a key technology for the full implementation of the Convention now, up to and beyond 2012

Norway welcomes the opportunity to provide views on the elements contained in paragraph 1 of decision 1/CP.13 (the Bali Action Plan), and note the conclusions of the third session of the AWG-LCA held in Accra 21-27 August where the group invited its chair to prepare a document assembling the ideas and proposals presented by Parties received by 30 September 2008.

Introduction

To ensure the stabilization of the greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate, the increase of global average temperature must not exceed a maximum of 2 °Celsius compared to pre-industrial level.

It is crucial that the international climate regime establishes a framework that welcomes, promotes and contributes to funding research, innovation and implementation of all technologies that contribute to reducing emissions. This requires increased focus on renewable energy and energy efficiency. But we must also meet the challenge of securing a sustainable future energy supply by reducing the emissions from the production and use of fossil fuels. Carbon capture and storage is one of the most promising technologies to achieve this. These technologies will complement other climate change mitigation actions by providing an option for using fossil fuels, including coal, during the transition to a low-carbon economy.

The Intergovernmental Panel on Climate Change states that with the current climate change mitigation policies and related sustainable development practices, global greenhouse gas emissions are expected to continue to increase over the next few decades. The “Business as usual” scenarios in the Intergovernmental Panel on Climate Change’s Fourth Assessment Report project a 25-90% increase in global greenhouse gas emissions between 2000 and 2030. Fossil fuels are projected to maintain their dominant position in the global energy mix to 2030 and beyond. The CO₂ emissions between 2000 and 2030 from energy use are projected to grow 40-110% over that period. More than two thirds of the increase in energy related emissions is projected to come from non-Annex I countries.

A similar picture is drawn by the International Energy Agency in the base case scenario of the World Energy Outlook 2007. The global primary energy demand is expected to increase by 55% between now and 2030. 74% of the rise in demand is expected to stem from developing countries. Globally, fossil fuels are expected to remain the dominant source of energy to 2030 and coal is by far the most important energy source in power generation. This is driven mainly by power generation. Non-hydro renewable energy, including wind, solar and geothermal energy, are expected to have the strongest growth, but from a small base.

Obviously, the energy consumption trends in these scenarios do not represent a sustainable development, and the existing policies and measures will by no means make it possible to reach a long term goal of limiting the global warming to a maximum of 2 ° Celsius.

Achieving this goal will require deeper cuts in developed countries emissions, as well as increased efforts to reduce emissions of green house gasses through REDD activities and through the implementation of CCS activities at a global scale.

Potential for emission reductions

Carbon capture and storage offers the potential to reduce CO₂ emissions by as much as 85- 95% from fossil fuelled power plants. This technology also offers a large potential for reduction in emissions from other industrial processes.

According to the Intergovernmental Panel on Climate Change, carbon capture and storage has, after energy efficiency, the second largest potential for global emission reductions. This view is supported by the International Energy Agency which stresses that carbon capture and storage is a key technology in reaching a long term goal of limiting the global temperature increase to a maximum of 2 ° Celsius compared to pre-industrial level. Similarly the International Energy Agency's Energy Technology Perspectives 2008 shows that carbon capture and storage could contribute with approximately 20% of the reductions needed to reduce emissions to reach a 450 ppm scenario. An enforced effort to stimulate development, deployment and dissemination of this technology at a global scale will in our view be vital to keep the increase in global average temperature within 2 ° Celsius.

Norwegian experience

Carbon capture and storage is an integral part of the Norwegian mitigation strategy. The Norwegian government's strategy for implementing carbon capture and storage technologies has been to introduce a combination of means such as financial support and regulation (requirements in permits). Norway has since 1996 extensive experience in storing CO₂ in geological structures. Monitoring data show the precise subsurface location of the CO₂ plume and confirms that the CO₂ is confined securely within the storage reservoir.

We are also gaining more experience on capturing CO₂ from fossil fuelled power plants. The Government intends to provide for full scale carbon capture and storage solutions at two gas fired power plants. Our aim is to jump-start a development that could contribute to the further implementation of carbon capture and storage technologies not only in Norway, but at a global scale as well.

Action on carbon capture and storage in a international climate change regime

The Bali Action Plan paragraph 1 d) deals with efforts for enhanced action on technology development and transfer to support action on mitigation. The Convention on Climate Change does not distinguish between different mitigation technologies for countries to reach the ultimate goal of the Convention. The Kyoto Protocol's Article 2 encourages Annex I countries to implement and/or further elaborate policies and measures in accordance with national circumstances, such as inter alia "research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies".

The international climate regime must strengthen the promotion of technology development and transfer. In order to mobilize the financial resources needed to enable and disseminate climate friendly technologies, a framework that incentivizes investments in these technologies should be established. Concerning carbon capture and storage technologies we still face challenges both regarding cutting the costs and overcoming barriers to make the technologies market competitive at a global scale. At the same time we know that there are already emissions ready to be captured and stored if financial and other conditions are in place. Norway is open for considering different kinds of incentives that could help facilitating implementation of carbon capture and storage technologies at the international level. Given the potential these technologies have for reducing CO₂ emissions substantively from a wide variety of sources, it could be useful to explore further whether there is a need to develop specific means, including financial incentives that will facilitate the deployment of these technologies.

There is ongoing work on the issue of carbon capture and storage in a number of different international fora, but we believe that the effort needs to be further intensified and that there is a need for specific global actions under the Convention in this area to give the impetus to an early market implementation of this important technology at a global scale.

Norway welcomes the opportunity to explore alternative solutions and frameworks under the AWG-LCA in this respect. Undoubtedly being a win-win technology, we propose that the workshop that is to be held in Poznan gives priority to the question of deployment of carbon capture and storage. We are also aware that there are important issues regarding carbon capture and storage that need to be further assessed. These issues must be an integral part of the further assessment on how to facilitate the deployment of carbon capture and storage at a global scale.

PAPER NO. 9B: NORWAY

**Submission to the AWG-LCA by Norway
30 September 2008**

Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD)

Norway welcomes the invitation contained in the Bali Action Plan and in the conclusions of the first and second session of the AWG-LCA to submit views on the elements contained in paragraph 1 of decision 1/CP.13 (the Bali Action Plan), and note the conclusions of the third session of the AWG-LCA held in Accra 21-27 August where the group invited its chair to prepare a document assembling the ideas and proposals presented by Parties received by 30 September 2008.

1. Introduction

Emissions from deforestation in developing countries make up 20 percent of global greenhouse gas emissions. These emissions are so far neither regulated by the Kyoto Protocol nor effectively regulated by the UNFCCC.

Norway considers limiting the increase in global mean temperature to a maximum of 2 degrees compared to pre-industrial level to be essential, but not necessarily sufficient, in order to avoid the most serious damage to ecosystems, economy and society in accordance with Article 2 of the Convention. According to IPCC this means that global emissions have to be reduced by 50-85 percent from 2000 to 2050 and to peak no later than 2015. To follow this reduction scenario developed countries as a group must reduce their emissions by 25-40 percent below 1990 levels by 2020. In addition to these efforts, emissions in developing countries have to deviate below their projected baseline emissions within the next few decades.

Achievement of these goals will be impossible without significant reductions in emissions from deforestation and forest degradation in developing countries. In this regard, Norway underlines the need for early action through REDD in order for global emissions to peak by 2015. For Norway it is also a prerequisite that reduced emission from deforestation and forest degradation are additional to, and not a substitute for, deep cuts in developed countries' emissions.

The international response to this situation should be twofold:

- 1) The inclusion of a REDD mechanism in a post-2012 global climate change regime. The mechanism should ensure substantial, predictable, results based, and long term financial flows to developing countries that achieve measurable and verifiable reductions in emissions from deforestation and forest degradation.
- 2) An international support program for building REDD readiness in interested developing countries, to contribute to their ability to participate in the REDD mechanisms of a potential future global climate change regime.

In addition to emission reductions, a REDD-regime should promote sustainable forest management, contribute to the protection of biodiversity and secure the rights and involvement of local communities and indigenous peoples.

2. A REDD mechanism in a post-2012 global climate change regime

Programs to improve forest governance and management have existed for a long time. What is genuinely new in the current situation is the opportunity to secure substantial, predictable, results based and long term financial flows as compensation for such efforts. Establishing such flows should be the main focus of the mechanism. However, to ensure the integrity both of the mechanism itself and the broader regime, it is crucial that solid systems for monitoring, reporting and verification of emissions from deforestation

and forest degradation are established, and that the mechanisms ensure transparent, global and long-term results.

Below are mentioned some issues which need to be addressed to establish a successful REDD mechanism.

2.1 *The overall architecture of a REDD mechanism*

A future REDD regime should first of all be able to deliver measurable, reportable and verifiable reductions in emission from deforestation and forest degradation, and hence the regime must establish:

- a reliable framework and capacity for monitoring, reporting and verification of emission reductions from deforestation and forest degradation; and
- a robust, effective and sustainable system for mobilizing financial resources, and a results based mechanism for the distribution of these resources to tropical forest countries willing and able to reduce emissions from deforestation and degradation or to conserve or enhance their forest carbon stocks.

A robust, effective and sustainable system for mobilizing financial resources, and a credible results based mechanism to distribute them, should be the cornerstone of a future REDD mechanism. Norway acknowledges the differences between developing countries with regard to capacity for monitoring and reporting, institutional arrangement and governance, underlying drivers, as well as the rate of deforestation and degradation. Hence, there is a need for differentiated use of incentives and policy approaches.

On this basis Norway believes a combination of markets and fund based mechanisms may be needed. A market based mechanism could be useful in mobilizing resources from the private sector, but could be less effective for countries with low rate of deforestation. Further, a market based mechanism would not be relevant for building up developing countries' capacity for implementing policy incentives, and for monitoring e.g. changes in forest carbon stocks. On the other hand, a fund based mechanism that solely relies on external aid donations would not necessarily be sustainable in the long run.

Independent of the type of incentive it is of the utmost importance that reduced emission from deforestation and forest degradation in developing countries are additional to deep cuts in developed countries' emissions. This implies that if a market based regime is introduced with an offset mechanism for developed countries, the developed countries' need to reduce their collective emissions *more* than 25-40 percent in order to limit the increase in global mean temperature to a maximum of 2 degrees.

If a fund based mechanism is introduced, without an offset mechanism, it is essential that a robust, up-scaled, effective and sustainable system for mobilizing financial resources is established. A system for auctioning of allowances as proposed by Norway could be a source of revenue for meeting the financial need of a fund-based REDD mechanism.

2.2 *Need for capacity building – a stepwise system*

Norway finds it particularly important to develop incentives for enhancing national capacity related to monitoring and implementation of effective national REDD activities. This is already taking place through different initiatives (see chapter 4 in this submission), and it is crucial to create incentives for such activities which will encourage developing countries to participate.

A system for building capacity probably requires a stepwise approach, including a readiness phase, where developing countries are funded to develop capacity and institutional arrangements to monitor and report emissions and carbon stocks and implement REDD policy on the ground. Crediting of reduced emissions from deforestation and forest degradation should, however, only take place after reliable national systems for monitoring, reporting and verification have been established.

2.3 *The scope of a REDD mechanism*

Norway believes the focus should be on deforestation and forest degradation due to the high rate of emissions from these activities. However, in many countries the deforestation rates are historically low, but likely to increase in the future (such as countries in the Congo Basin), or the deforestation rate is very low since much of the forests already have been deforested. It is important to establish a regime where these countries, too, recognize incentives or policy approaches addressing their concern. Therefore, Norway supports a future regime that promotes both conservation of existing forests, sustainable management of forests and incentives to enhance carbon stocks in existing forests.

We also believe that a broad scope, where all activities aiming to preserve or enhance forest cover, including enhancement of carbon stocks through sustainable forests management, will reduce the risk for displacement of emissions (leakage) within countries since the coverage is more comprehensive.

2.4 *Monitoring, reporting and verification*

In order to deliver real and measurable emission reductions, it is essential to establish a reliable framework for monitoring, reporting and verification. In this regard, Norway believes that the methodologies included in guidelines developed by IPCC and approved by Parties must be the basis for a monitoring framework. There is a need, however, for capacity building and development of country specific parameters for countries that are to participate in a future REDD mechanism.

Capacity building for implementing and managing of national forest inventories will be crucial for monitoring forest areas and related biomass. Without ground based inventory systems, or systems combined with remote sensing, it will be very difficult to detect forest degradation and carbon stock changes in existing forests.

It will be impossible to establish a comprehensive monitoring system covering deforestation, degradation and forest management from “day one” in all countries. In most developing countries this will take several years. But it is essential that a post-2012 regime establishes clear incentives for developing countries to continuously improve their monitoring system. By following the IPCC tiered approach for greenhouse gas inventories developing countries would need to establish a system for continuous improvements. To further strengthen the incentives to improve the monitoring system an accounting system could be established which increases the credits as the accuracy of the monitoring system is improved and verified.

To ensure credibility Norway finds it particularly important to establish an independent verification system for reported emissions reductions as well as defined reference levels. We believe that a verification mechanism for REDD should be similar to the expert review system that Annex I countries have established under Article 8 of the Kyoto Protocol and in decision 19/CP.8 on inventory review guidelines under the UNFCCC. Broad inclusion of developing country experts in this system could be an effective means to promote exchange of experience and knowledge between these countries.

2.5 *Reference level*

In principle we believe the reference levels should be based on historical emission data. However, for many countries with low rates of deforestation and degradation such historical rates would not give a sufficiently strong indication of the threat for increased deforestation and degradation in the future. Norway would therefore be open to other approaches to setting reference levels, approaches that must be closely integrated with e.g. the financial architecture of the REDD regime.

2.6 *National versus sub-national*

We believe the focus should be on national approaches in order to reduce the risk of leakage of emissions within the country. Such a national approach would in the long run necessitate a monitoring system that covers all forests in the country. However, some countries would have difficulties in achieving such a

comprehensive geographical coverage overnight. Transitional solutions may be needed to help countries in developing national approaches. Such transitional solutions must address the risk for intra-national leakages, e.g. by limiting credits from sub-national REDD activities to fund based approaches, without an offset mechanism. Sub-national transitional solutions should be of limited duration, and include clear schedules for progress and a sunset clause.

2.7 *Leakage of emissions and non-permanence*

If the REDD system focuses on national approaches, the risk for intra-national leakages would be reduced. The international leakages, however, would only be fully addressed through global participation in the regime. The REDD regime should address this problem, even if it is difficult. By aiming at a REDD regime that has the potential to address emissions from deforestation and forest degradation in all developing countries, the risk for international leakages would be minimized. In the initial phase of a post-2012 REDD regime, when still a limited number of developing countries are taking part, it may be necessary to consider other approaches to address international leakages.

3. Biodiversity and involvement of indigenous peoples

Reduced deforestation and degradation would normally be effective means to secure biodiversity in the forests. However, incentives to enhance carbon stocks through forest management could have a negative influence on biodiversity if the policy is not carefully designed. Norway believes that a strong commitment to sustainable forest management, including spatial zoning, is necessary to ensure the protection of biodiversity.

Furthermore, we believe any regime should ensure the involvement of local communities and indigenous peoples in order to avoid that REDD actions lead to negative effects related to sustainable use of forest products and services. Even though a REDD mechanism should be adopted at a national level, many of the key decisions affecting the rate of deforestation and forest degradation are taken at the local level. The indigenous peoples live in or depend on the forests and are already suffering the effects of global climate change, and should be involved in the construction of mechanisms that compensate them for the forest protection they promote.

4. International support for REDD readiness and implementation efforts

Undoubtedly there is a need for immediate support for capacity-building both at technical and institutional level in developing countries. In order to facilitate and expedite a system of support for capacity-building, we believe there is a need for an effective, efficient and coordinated international architecture for REDD support.

Significant REDD readiness and implementation support programs are in the process of being implemented through the establishment of programs such as the United Nations Collaborative Program on REDD (UN REDD), the Forest Carbon Partnership Facility (FCPF) and the Forest Investment Program by the World Bank, and the establishment by the African Development Bank of the Congo Basin Forest Fund (CBFF). We believe there will be great benefits arising from a close coordination and integration of these efforts.

These initiatives should not be seen as a substitute for any REDD mechanism under the UNFCCC. Rather they should be seen as contributions to stimulate early action, generation of experiences and capacity-building on national REDD strategy development and implementation. The role of these initiatives in a post-2012 regime will have to be adjusted according to the outcome of the negotiations. Norway expects that there will be a long-term need for support for readiness activities in developing countries also after a post-2012 REDD mechanism under the UNFCCC has been implemented.

PAPER NO. 9C: NORWAY

SUBMISSION FROM NORWAY

AWG-LCA – Shared vision for long-term cooperative action including a long term goal for emission reductions

1. Norway welcomes the opportunity to provide views on the elements contained in paragraph 1 of decision 1/CP.13 (the Bali Action Plan), and note the conclusions of the third session of the AWG-LCA held in Accra 21-27 August where the group invited its chair to prepare a document assembling the ideas and proposals presented by Parties received by 30 September 2008.

2. Paragraph 1 (a) of the Bali Action Plan addresses the need for the global community to agree on a shared vision on how to tackle the long term challenges related to climate change, including a long term goal for emission reductions. It is imperative to establish a long term goal which responds to the actual challenges we are facing according to scientific findings by the IPCC. Hence, Norway believes that the core issue in the discussions on a shared vision should be a specific global emission reduction target, either related to maximum increase in the global mean temperature, or to specific levels of atmospheric concentrations of green house gases.

3. A shared vision should include both midterm and long-term emission reduction targets. It is essential that short-term and midterm targets are transformed into legally binding obligations for the Parties ensuring that we reach those goals that the global community agrees upon.

4. It is Norway's view that the increase in global mean temperature should not exceed 2 degrees in order to avoid the most serious damage to ecosystems, economy and society in accordance with Article 2 of the Convention. According to the IPCC, this means that global emissions have to be reduced by 50-85 percent from 2000 to 2050, most likely as much as 85 percent, and to peak no later than 2015. To achieve such a reduction scenario, developed countries as a group must reduce their emissions by 25-40 percent below 1990 levels by 2020. Norway believes that these findings by the IPCC, should guide the establishment of the emission reduction target post 2012. Such a target should be established early in the process, before the discussions on distribution of efforts between countries and sectors take place.

5. In addition to these efforts, emissions in developing countries have, in accordance to the IPCC, to substantially deviate from projected baseline emissions within the next few decades. Efforts by developing countries should be supported and enabled by technology and substantial financial support and capacity-building from developed countries in a reliable and predictable manner, and in accordance with the national circumstances and capability of the receiving countries.

6. The right to economic growth and poverty eradication is fundamental for developing countries. Hence a shared vision has to combine the overall need for emission reduction at a level outlined in paragraph two, with the need for economic growth in an environmentally sustainable manner. A shared vision must thus elaborate on the establishment of the necessary incentives for turning the global economy into a low carbon economy. Norway believes that necessary measures for the expansion of the carbon market, seeking to establish a global price on all greenhouse gas emissions, should be a part of a shared vision.

7. Norway looks forward to further engaging in the discussions on a shared vision and a long term goal for global emission reductions.

PAPER NO. 9D: NORWAY

SUBMISSION FROM NORWAY

AWG-LCA – Sectoral Approaches

1. Norway welcomes the invitations contained in the Bali Action Plan and in the conclusions of the first and second sessions of the AWG-LCA to submit views on the elements contained in paragraph 1 of decision 1/CP.13 (the Bali Action Plan), and notes the conclusions of the third session of the AWG-LCA held in Accra 21-27 August where the group invited its chair to prepare a document assembling the ideas and proposals presented by Parties received by 30 September 2008.
2. As a follow up of the constructive workshop on cooperative sectoral approaches held in Accra, Norway believes that sufficient time should be provided for further exploration of this issue as the AWG-LCA continues its deliberation of enhanced national/international action on mitigation of climate change.
3. There is need to discuss and consider specific proposals from Parties for sector based approaches and mechanisms in this respect. Discussions so far in the AWG-LCA show that there are various proposals for sector based approaches, but also that there is a large degree of convergence around the basic principles that should guide sector based approaches.
4. Based on solid scientific message provided by the IPCC deep cuts in global emissions are necessary to avoid dangerous climate change. In order to limit the increase in global mean temperature to 2 degrees Celsius compared to pre-industrial level it is essential that countries, sectors and emission sources are given incentives to appropriate mitigation actions in a future climate change regime. A future climate change regime should therefore aim towards a comprehensive coverage including as many emission sources as possible.
5. Sector based approaches should be in line with the principle of “common but differentiated responsibilities and respective capabilities” and should not replace economy wide and quantified reduction targets under the Kyoto Protocol/UNFCCC. It is further essential that robust schemes for monitoring, reporting and verification are established to ensure environmental integrity and compliance.
6. The right to economic growth and poverty eradication is fundamental for developing countries. Hence, the need for economic growth in an environmental sustainable manner should be reflected in the discussions on sectoral approaches. The concept of crediting mechanisms, including emission trading systems, as a means to provide incentives for actions are among the issues that should be explored further. Sector based approaches could be a means for the transfer of resources from developed countries to developing countries in the context of moving towards a low-carbon economy.
7. New mechanisms must be created in order to facilitate a policy establishing incentives to appropriate mitigation actions. Norway is especially interested in further exploring sector based approaches and mechanisms that can contribute to nationally appropriate mitigation actions in a measurable, reportable and verifiable manner. In our view the present project based mechanisms will not be sufficient to achieve the necessary global emission reductions and do not to a sufficient degree involve the authorities in the countries concerned.
8. Due to their particularities Norway suggests that international transport should be treated separate from other sectors in the discussions.
9. Some of the issues that should be discussed in the further process under the AWG-LCA are:
 - Identification of various options for creating incentives for mitigation action, including sector based emission objectives.

- Common definition of sectors in the economy
- Measurement, reporting and verification

10. Norway looks forward to engaging in constructive discussions on the concept of sectoral approaches.

PAPER NO. 10: PANAMA

REDUCCIÓN DE EMISIONES INTERNACIONALES PANAMÁ

Mandato:

El AWG-LCA en su tercera sesión “*invita a los Presidentes a preparar, bajo su responsabilidad, un documento que incluya las ideas y propuestas a ser presentadas por las partes sobre los elementos contenidos en el paragrafo 1 de la decisión 1/CP.13 (del Plan de Acción de Bali), tomando en cuenta las ideas y propuestas presentados por las organizaciones observadoras acreditadas. Las ideas y propuestas deberán ser enviadas a más tardar el 30 de septiembre de 2008 en respuesta a las invitaciones contenidas en el Plan de Acción de Bali y en las conclusiones de la primera y segunda sesión del AWGLCA, 1 tal como fue presentado en las primeras tres sesiones y en la sesión de talleres del AWG.LCA. El documento debe ser preparado de acuerdo con la estructura del párrafo 1 del Plan de Acción de Bali. El AWG-LCA solicitó al secretariado que el documento esté disponible antes de la cuarta sesión (diciembre 2008). Asimismo, invitó al Presidente a actualizar el documento antes de finalizar la cuarta sesión del AWG-LCA basado en las submisiones recibidas antes del 30 de septiembre y con las ideas y propuestas expuestas durante esta sesión*”.

A través de esta submision, Panamá, desea aportar sus ideas y propuestas ante la Presidencia del AWG-LCA. Nuestra submision se basa en lo planteado en el Artículo 1 (a), (b), (d) y (e).

Introducción:

El Artículo 1 (b) se basa en lo siguiente: (i) Todas las partes deben presentar acciones medibles, reportables y verificables de mitigación; (ii) los países en desarrollo deberán aplicar acciones de mitigación de acuerdo a sus realidades nacionales asociadas con la aplicación de tecnología, financiamiento y construcción de capacidades.

Consideramos que el trabajo del AWG LCA es importante porque es el único foro donde se llegan a acuerdos globales de mitigación de los GEIs. En Accra, el grupo de contacto sobre mitigación del AWG LCA abordó interesantes e importantes discusiones. Como país en desarrollo, nos gustaría ver que los países desarrollados asuman con responsabilidad las consecuencias de sus emisiones, a través de resultados tangibles mediante la implementación y transferencia de tecnología e incrementando los recursos de apoyo a los países en vías de desarrollo, los cuales somos más vulnerables al cambio climático y presentamos bajas capacidades para enfrentar los impactos.

Panamá está sumamente preocupado por el Cambio Climático, lo cual dejamos claramente expresado en esta submisión ante la CMNUCC. Somos un país altamente vulnerable por los patrones climático, incluyendo las temporadas de huracanes, que si bien es cierto no nos impactan de forma directa, nos trae como consecuencias torrenciales lluvias, ocasionando graves problemas de inundaciones, así como las sequías extremas que atentan contra la seguridad alimentaria del país. Vale la pena mencionar los efectos por el ascenso del nivel del mar y las graves consecuencias en los ecosistemas marino costeros y las poblaciones que basan en las actividades costeras su sustento diario. Es por esto que Panamá está anuente a buscar una solución para combatir el cambio climático bajo el principio de responsabilidades comunes pero diferenciadas.

Posición de Panamá

Panamá es consciente de la necesidad de implementar acciones para la reducción de emisiones de gases efecto invernadero (GEI) para reducir los impactos del cambio climático.

Todas las decisiones a largo plazo para la reducción de emisiones deben ser guiadas de forma objetiva por la CMNUCC. Los esfuerzos globales deben ser ambiciosos y reflejar la urgencia y suficiencia de la aplicación de acciones para salvaguardar las Partes más vulnerables de los efectos adversos del cambio climático.

Nuestro país cree que todas las Partes deben participar de este esfuerzo, de acuerdo a sus circunstancias nacionales y capacidades.

Igualmente nuestro país reconoce los esfuerzos que adelanta la Organización Marítima Internacional (OMI) para la mitigación de (GEI), a través de la aplicación de buenas prácticas y tecnología para mejorar la eficiencia de las naves. Concordamos con que los beneficios emanados de esta reducción puedan ser reclamados por este organismo para garantizar la continuidad de tan importante iniciativa.

De igual manera enfatizamos en que el principio de responsabilidades comunes pero diferenciadas deberá prevalecer en el sector.

Sin embargo, deseamos expresar nuestro planteamiento como país No Anexo I no estamos de acuerdo con algunos puntos:

- Las emisiones marítimas internacionales no pueden ser responsabilidad del país que abandere las naves.
- Tampoco pueden ser responsabilidad del país donde se abastezca de combustible la flota de transporte marítima.

La línea base de las emisiones marítimas deberá estar basada únicamente en las emisiones ocasionadas por los buques o naves.

Consideramos importante plantear que cada país está en libertad de implementar medidas de mitigación por sus propios esfuerzos y esto deberá ser reconocido por la Convención en aras de que el mismo pueda reclamar los beneficios que emanen de dicha iniciativa.

PAPER NO. 11: PANAMA ON BEHALF OF COSTA RICA, EL SALVADOR, HONDURAS,
NICARAGUA, PANAMA

**The Bali Action Plan:
Suggestion to move forward**

Mandate:

The AWG-LCA in its third session “*invited its Chair to prepare, under his own responsibility, a document assembling the ideas and proposals presented by Parties on the elements contained in paragraph 1 of decision 1/CP.13 (the Bali Action Plan), taking into account the ideas and proposals presented by accredited observer organizations. The ideas and proposals shall be those received by 30 September 2008 in response to the invitations contained in the Bali Action Plan and in the conclusions of the first and second sessions of the AWG-LCA, as well as those that were presented during its first three sessions and in the in-session workshops of the AWG-LCA. The document shall be prepared in accordance with the structure of paragraph 1 of the Bali Action Plan. The AWG-LCA further requested the secretariat to make the document available before its fourth session (December 2008). It further invited the Chair to update this document before the closure of the fourth session of the AWG-LCA based on submissions received after 30 September 2008 and the ideas and proposals put forward during that session.*”

Through this submission, the countries of Central America, acknowledging the importance of the process, are bringing their ideas and proposal to the attention of the Chair. Our submission pertain to Article 1 (a), (b), (d) and (e).

Introduction:

We would first like to capture the essence of Article 1 (b): (i) All developed parties should engage in measurable, reportable and verifiable mitigation for all developed Parties; (ii) Developing countries should engage in nationally appropriate mitigation actions associated with MRV technology, financing and capacity building and (iii) Policy approaches and positive incentives for REDD; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

We see the work of the AWG-LCA as crucially important because it is the only forum where a global agreement on mitigation of greenhouse gases could be reached. In Accra, the contact group on mitigation of the AWG-LCA raised interesting and very important discussions. As developing nations, we would like to see developed countries taking more responsibility for their historical and present emissions through greater commitments, tangible results (implementation) and technology transfer and increased resources to support developing countries. Developing countries are the most vulnerable to climate change and we also are ill equipped to face the crisis.

Countries of Central America are ready to move forward toward voluntary and nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable manner. Central American countries are deeply concerned with Climate Change and have repeatedly shared their preoccupation through submissions to UNFCCC. As a region we are highly vulnerable to the impact of changing weather patterns, including but not limited to increasing frequency of hurricanes and tropical storms. The devastating impact of recent atmospheric phenomena (e.g. hurricane Mitch and the year 2001 drought) revealed the deep environmental erosion suffered in the Central American Isthmus, particularly that of Nicaragua and Honduras. Climate change scenarios developed for Costa Rica and Nicaragua indicates a tendency for rainfall reduction (up to 30%) along their Pacific watersheds, which is where 70% of the population lives. In other countries such as Belize, Honduras and Panama increasing sea level is threatening coral reefs, with a possible major impact on tourism and populations embodying traditional

lifestyle such as the Miskitos and the Kunas. Therefore Central American countries are committed to find a way forward and take action to combat climate change in keeping with the Principle of common but differentiated responsibilities.

I. Paragraph 1.a BAP Shared Vision

Any decision on a long term global goal for emission reduction must be guided by the ultimate objective of the Convention. Global efforts must be ambitious and must reflect the urgency of our collective endeavor in order to have a relevant impact on emissions reduction and should be sufficient to safeguard the most vulnerable Parties to the Convention from the adverse impacts of climate change.

The avoidance of further climate change impacts on vulnerable developing countries, including Small Island Developing States and Central American countries, must be one of the key benchmarks for assessing the appropriateness of any long term goal.

Our countries believe that all Parties should make efforts, according to their national circumstances and capabilities and taking into account the principle of common but differentiated responsibilities and asymmetries among region. We expect incremental efforts on behalf of developed countries, as a practical and tangible manner to show their leadership.

Mitigation activities undertaken in accordance with the premises of the Convention and its Protocol must be sufficient to ensure that long-term temperature increases below 2 degrees Celsius above pre-industrial levels, and to that end, to stabilize GHG concentrations *as far below 450 ppm CO₂e as possible*. Efforts should be based on best available scientific knowledge. We value in this regard the contribution of Working Group III to the Fourth Assessment Report (AR4) of the IPCC, which indicates that global emissions should be reduced by 50% by 2050 compared to 2000 levels, and that Annex I Parties as a group should reduce emissions in a range of 25–40 per cent below 1990 levels by 2020, in order to stabilize GHG concentrations in the atmosphere at the lowest levels assessed by the IPCC's scenarios.

II. Paragraph 1.b.iii (and its relation to 1.b.i and ii)

Proposal to move forward on REDD:

We suggest that Reducing Emissions from Deforestation and Forest Degradation (REDD) can, in important ways, contribute to the objectives of the Bali Action Plan. The countries of Central America followed the *in-session* workshop on “Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries” in Accra with care. We feel that there was much ground for agreement between parties. We therefore think that it is possible to move forward on REDD, as a mitigation option, building on the work done in SBSTA since COP 11.

We have been thinking about a process that would allow us to do this. We propose that the AWG-LCA asks COP 14 to suspend temporarily the current contact group of REDD under SBSTA, that is focused on methodological issues, and **focus on a new working group in AWG-LCA**, that would have a broader scope corresponding to paragraph 1 of Decision 1/CP13, in particular biii. Our proposal is based on the following:

- Last Workshop on Methodological Issues relating to Reducing Emissions from Deforestation and Forests Degradation in Developing Countries, held in Tokyo last June, concluded that “discussions on policy approaches and incentives can be initiated given the current knowledge

of methodological issues, while the implications of different approaches will need to be further explored". We consider that it is about time that negotiations on policies and incentives start, and the best venue for this is under AWG-LCA.

- We recognize that forests issues are always very complex and sensible, and also, that land use change, particularly deforestation in developing countries, represent around 20% of the emissions. We should allocate appropriate time for such an important matter.
- Additionally, given the limitation of our delegations, that are having great difficulty to follow the current very crowded negotiation agenda, it is impossible for us to address this issue in both SBSTA, as it is presently the case, and in AWG-LCA.

REDD as a mitigation tool

The countries of Central America believe that a future REDD mechanism could help developed parties to increase their emission reduction commitments under Article 1 b(i) of Decision 1/CP 13. Furthermore, in the context of Decision 1/CP13 Article 1b(ii), REDD could also form a central role in mitigation actions for developing countries. In most Central American countries, for example, deforestation is the main source of emissions. As a consequence, we propose a REDD mechanism with two tracks, one serving as a new *flexible mechanism* to help developed countries achieving higher reduction emissions target and the other serving directly as a mitigation option for developing countries. Modalities to determine participation in each track would have to be negotiated in due time.

Track 1, under Article 1b(i) of Decision 1/CP 13 would borrow from the experience gained in the Clean Development Mechanism to develop a compliance-based market for REDD according to article 4.2.a of UNFCCC, in which all developed parties to the Convention would participate. In other words, emissions reductions from REDD activities could be allocated in international markets and used by Annex 1 as an alternative to compensate their emissions. These emission reductions can only be accredited to the country acquiring the units. Activities under this new REDD-Market would be approved by an Executive Board and an international transaction log would credit the developed party buying the REDD units. Acceptable activities under Track 1 REDD would be those in which a differential in emissions or carbon stock could be measured such as reductions of emissions from deforestation and forest degradation as well as increment in forest carbon stocks.

Track 2 would serve as mitigation option for those developing countries that so desire and consequently would not be linked with any compliance market. Track 2 could be financed through funds and allow inclusion of a broad range of LULUCF activities besides REDD such conservation. In the context of Article 1b(ii) of Decision 1/CP 13, developing countries mitigation efforts would need to be supported by the appropriate financing, technology transfer and capacity-building. Therefore sufficient, stable and predictable sources of financing for Track 2 REDD need to be identified. Those developing countries choosing to follow this track can consider their efforts of emission reductions as part of their voluntary nationally appropriate mitigation actions under paragraph 1.b.ii of BAP.

The *in session* workshop on paragraph 1.b.(iii) of BAP, held in Accra, proposed various new options for financing such as auctioning allowances or assigned amounts. The Central American countries were pleased with this advance. We further think that, as an urgent next step, a financial flow analysis needs to be carried out to identify sustainable sources of funding for Track 2. We therefore wish that the new contact group on paragraph 1.b(iii) that we propose above under AWG-LCA includes consideration of delivering on financing, technology transfer and capacity building. This would allow REDD to move forward in an integral way while other complex issues are addressed in the other three contact groups of AWG-LCA. Stressing once more, the importance of REDD for mitigation in the Central American region and our limited ability to follow effectively negotiations that takes place in several negotiation forum, consolidating REDD under AWG-LCA to deal with both policy and financing is the most efficient, appropriate and equitable way forward.

REDD in the context of long-term cooperative action

Our ideas on paragraphs 1(a) and (e) from BAP follow from our interest on REDD. We salute the notion of long-term cooperative action. For us an important underpinning of long-term cooperative action is that risk should be shared between partners. For example, the negotiations on REDD that took place under SBSTA suggested that developed countries were not willing to share the risks. Developed countries were arguing for ex-post payment of possible REDD units thereby suggesting that financial compensation would only come after developing countries had been successful at reducing deforestation. We believe however that, paragraph 1 (a), sets the stage for another way forward. As indicated above, the countries from Central America are willing to take positive and nationally appropriate steps to mitigate climate change. This however represents an economical and a political risk in our countries where poverty alleviation is a priority. We believe that the spirit of cooperation should manifest itself as bilateral or multilateral collaboration to reach some common goal of emissions reduction. The time has now started to imagine mechanisms to foster such new cooperation. Developed countries should understand that, results might not be certain, and be willing to share the risk working together with developing nations toward common mitigation efforts.

III. Paragraphs 1.(d) and (e) Financial flows and technology transfer

Both paragraphs 1 (d) and (e) speak for the necessity of technology development and transfer, financial flows and investment to sustain the long-term cooperative actions to mitigate climate change. The countries of Central America think that a clear, transparent and verifiable reporting system needs to be established to ensure that this goal is met. We propose a process involving three different steps:

- 1- Developed countries should agree to a quota of technological and financial transfer to sustain voluntary mitigation actions in developing countries.
- 2- Developing countries could establish a list of possible mitigation options each associated with a cost.
- 3- The developed countries could then bid or select from the developing country proposals therefore allowing countries to cooperate to reach this common mitigation goal.
- 4- The technological and financial support pledged by the developed countries should be verified by an independent body to ensure that countries meet this new commitment.

Whether this strategy of long-term cooperation or another one is retained, the countries of Central America feel that it is essential that developed countries commit to a target of financial aid and technology transfer to sustain the effort of developing countries to reduce their green-house gas emissions. Without a clear, transparent and sustained new financial flow, mitigation efforts will not succeed.

We salute the vision of Norway, the first and only developed country moving forward unambiguously to support mitigation efforts from developing countries. Norway's pledge REDD fund could serve as model for long-term cooperative actions.

PAPER NO. 12: REPUBLIC OF KOREA

**Proposals for AWG-LCA
Republic of Korea**

For Mitigation:

Proposal: To establish a Registry of NAMAs (Nationally Appropriate Mitigation Actions) of developing countries as part of the agreed outcome to be adopted at COP 15 next year.

Rationale: Developing countries are expected to take NAMAs as is agreed and contained in the Bali Action Plan Decision 1 Para. 1(b)(ii). These actions have to be recognized internationally as implementing the actions in the Bali Action Plan. In order to be recognized internationally, these actions could be registered in a Registry of NAMAs. Then, those actions registered in the Registry of NAMAs could be recognized internationally as mitigation actions of developing countries.

In fact, many developing countries are already taking numerous meaningful domestic actions for mitigation. However, these actions are not recognized internationally as mitigation action simply because they are taken only in the context of domestic actions. Parties need a mechanism through which these actions could be recognized as international actions for mitigation.

Once those actions are registered in the Registry of NAMAs, these actions could be recognized as international actions for mitigation. Actions that can be registered are voluntary and non-binding. The nature of the actions to be registered will be comparable to the capabilities of each Party. Registering those actions in the Registry is also voluntary. It is up to each Party to decide whether to register its domestic actions or not. The Registry of NAMAs could serve as a basis of institutional framework of recognizing domestic actions of developing countries as international mitigation actions in the Post-2012 climate regime.

Details of the operation of the Registry, such as the extent and scope of the actions that can be registered, monitoring and reviewing of the progress of those actions registered in the Registry can be worked out through the negotiations till COP 15 next year.

For Finance and Technology Transfer Mechanism:

Proposal: To recognize carbon credit for the verifiable mitigations arising from the NAMAs (Nationally Appropriate Mitigation Actions) of the Bali Action Plan Decision 1 Para.1(b)(ii) as a sustainable source of finance and technology transfer for mitigation actions of developing countries. Carbon credit for NAMAs could be established under the UNFCCC as one of the means of finance and technology transfer mechanism for the Bali Action Plan while the CDM under the Kyoto Protocol is primarily a compliance mechanism for Annex 1. Revenue from the sales of the credits will channel financial resources and technologies necessary for the NAMAs of developing countries.

Rationale: Mitigation actions of developing countries have to be supported by financial flow and technology transfer. However, most of the financial resources and technologies are in the hands of private sector and the governments of the Annex 1 Parties can only play a limited role in transferring financial resources and technologies.

A new climate regime needs a sustainable source of finance and technology for the mitigation actions of developing countries. Public funds which are being proposed by the public sector such as governments and development financing institutions are limited in scope and size. Public funds will not

be large enough to sufficiently cover all the financing and technology transfer needs of developing countries.

If Parties agree to recognize carbon credit for the verifiable mitigation from NAMAs, developing countries could have a sustainable source of financial resources and technology transfer. The revenue from the sales of carbon credit generated from NAMAs will function as a channel for transferring finance and technology to developing countries. Carbon credit for NAMAs will engage private sector to play an active role. Carbon credit could provide incentives for investment in mitigation projects in developing countries.

Parties can agree on the principle of recognizing carbon credit for the verifiable mitigation from NAMAs as part of the agreed outcome that could be adopted at COP 15. Details on operating the scheme of carbon credit for NAMAs, such as criteria and extent of credit could be worked out after the COP 15 as was the case of the CDM under the Kyoto Protocol.

PAPER NO. 13: RUSSIAN FEDERATION

Российская Федерация приветствует возможность представить свои идеи и предложения относительно элементов, содержащихся в п. 1 решения 1/СР.13 (Балийский план действий). В данном представлении содержится мнение относительно пп. 1 (а) и 1 (b) плана.

1. Полагаем, что для прогресса в рассмотрении элементов Балийского плана действий, СРГ-ДМС должна достичь совместного понимания "общего видения", с тем, чтобы добиться согласованных результатов в отношении долгосрочных мер сотрудничества. В основе "общего видения" должна лежать основная цель Конвенции, выраженная в ее Статье 2.

2. Достижение этой цели будет возможно только при наличии общей решимости всех ведущих экономик в течение определённого времени замедлить, прекратить и повернуть вспять глобальное увеличение выбросов и продвигаться к низкоуглеродному обществу.

3. Мы разделяем видение цели сокращения на 50% глобальных выбросов парниковых газов к 2050 году и выражаем готовность рассматривать эту цель в рамках переговоров под эгидой РКИК, признавая, что достижение этой цели может быть обеспечено только общими усилиями, в частности, вкладом всех ведущих экономик в соответствии с принципом общей, но дифференцированной ответственности и учёта имеющихся возможностей.

При этом, понимание основного принципа Конвенции должно быть наполнено новым содержанием, в соответствии с новыми доступными знаниями о климате и меняющейся социально-экономической ситуацией в мире.

4. Указанная долгосрочная цель должна быть "желаемым" ориентиром (aspirational goal) и не являться отправной точкой для распределения "сверху вниз" юридических обязательств между странами по сокращению выбросов парниковых газов.

5. Для достижения этой единой цели, новый климатический режим должен быть усовершенствован в части эффективности и справедливости, в первую очередь, исходя из национальных особенностей стран и их реальных возможностей.

6. По нашему мнению, Балийский план действий является базисом для дальнейшего развития Конвенции и открывает возможность для ее усовершенствования. Считаем устаревшей и не соответствующей современным реалиям группировку стран на "Стороны, включенные в Приложение 1" и "Стороны, не включенные в Приложение 1". Это признано и в Балийском плане, где стороны согласились оперировать такими терминами, как "развитые страны" и "развивающиеся страны". Эти понятия требуют дальнейшей расшифровки, и на это должны быть направлены усилия в рамках СРГ-ДМС.

7. Без нового взгляда на дифференциацию стран невозможно далее развивать долгосрочные меры сотрудничества в рамках Конвенции. Для новой перегруппировки стран должны быть выработаны показатели, такие как ВВП на душу населения, а также иные общепринятые критерии, описывающие социально-экономические различия между странами. Для выработки таких критериев можно привлечь такие авторитетные организации, как Статистическая комиссия ООН, Мировой Банк и др.

8. При рассмотрении дифференциации стран также должна приниматься во внимание Статья 4.10 Конвенции об особых обстоятельствах Сторон, "экономика которых в значительной степени зависит от дохода и/или потребления ископаемых видов топлива и связанных с ним энергоёмких

продуктов, и/или такого использования ископаемых видов топлива, при переходе от которого к другим альтернативам, стороны испытывают серьезные трудности".

9. Что касается формирования среднесрочных климатических целей, то они должны строиться на основе национальных инициатив и мер в отдельных отраслях. Считаем эффективной разработку секторальной системы национальных обязательств, включая набор целевых показателей "чистого развития", которые должны формироваться странами самостоятельно и подлежать международной верификации.

Считаем необоснованным фиксирование диапазона сокращения коллективных выбросов для группы стран, будь то страны Приложения 1 либо те, кого называют развитыми странами, включая диапазон в 25-40% сокращения развитыми странами выбросов к 2020 году от уровня 1990 года.

10. В период после 2012 года потребуется гибкость в конструкции новых глобальных договоренностей. Закрепление новых юридических обязательств на этот период возможно лишь при соблюдении следующих условий:

- режим не должен быть карательным и принудительным;
- в нем должны быть предусмотрены эффективные стимулы выполнения всеми участниками обязательств;
- наличие процедур и механизмов, позволяющих при необходимости корректировать эти обязательства по ходу их выполнения;

11. Считаем также, что новый климатический режим должен предусматривать преемственность усилий мирового сообщества – необходимо сохранить базовые точки отсчета обязательств и обеспечить учет выполнения обязательств Сторон по Конвенции и Киотскому протоколу.

12. Рыночные подходы являются одним из эффективных средств по снижению затрат на действия по смягчению, но не панацеей в борьбе с климатическими изменениями. Как показывают последние события на мировом фондовом рынке, рынке продовольствия, мы еще не вступили в эру, когда глобальный рынок может стать надежным регулятором международных усилий в решении глобальных проблем человечества. Баланс спроса и предложения на углеродном рынке может стать инструментом спекулятивных действий, и не являться индикатором реальных мер бизнес-сообщества по противодействию климатическим изменениям.

13. Как страна с переходной экономикой, Россия привержена обязательствам, закрепленным в Конвенции, и своевременно выполнила обязательства, закрепленные в Ст. 4.2 Конвенции, по стабилизации выбросов парниковых газов к 2000 г. на уровне 1990 г.

14. Российская Федерация уже не раз акцентировала внимание на срочной разработке мер по расширению участия развивающихся стран в мерах по противодействию климатическим изменениям.

Мы приветствуем недавние выступления ряда крупнейших развивающихся государств о необходимости признания их добровольных действий в климатическом режиме. Именно на это были направлены наши усилия в ходе продвижения т.н. "российского предложения" начиная с КС-11 в Монреале в 2005 г.*

* FCCC/KP/CMP/2005/8, proceedings, item 75.

FCCC/KP/CMP/2006/10, agenda item 21, Report of the President on consultations concerning the proposal of the Russian Federation to develop appropriate procedures for the approval of voluntary commitments.

FCCC/KP/CMP/2007/9, agenda item 20(a), Report of the President of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session on the workshop on the proposal by the Russian Federation.

Основой для дальнейшей дискуссии о различных формах признания и стимулирования добровольных действий развивающихся стран, могли бы быть предложения Российской Федерации, сделанные на семинаре в ходе 26-ой сессии ВО РКИК в мае 2007 г. в Бонне:

http://unfccc.int/meetings/workshops/other_meetings/items/3971.php

[INFORMAL TRANSLATION AS SUBMITTED]

The Russian Federation welcomes an opportunity to submit the ideas and proposals on the elements of paragraph 1 of the decision 1/CP.13 (Bali Action Plan). The views regarding p. 1(a) and p.1(b) of the Plan are presented in this submission.

1. We believe that in order to the progress should be made on further consideration of the Bali Action Plan elements AWG-LCA should come to joint understanding of "shared vision" in order to achieve the coherent results regarding long-term cooperative measures. The "shared vision" should be based on the ultimate objective of the Convention stated in its Article 2.
2. The achievement of this objective is subject to common determination of all major economies over an appropriate time frame to slow, stop and reverse global growth of emissions and move towards a low-carbon society.
3. We share a vision of 50 % reductions of global GHG emissions by 2050 as a goal and we express our readiness to consider this goal under the UNFCCC negotiations, recognizing that this global challenge can only be met by a global efforts, in particular, by the contributions from all major economies, consistent with the principle of common but differentiated responsibilities and respective capabilities. Herewith, the understanding of the basic principle of the Convention should be enriched with a new content based on the recent and available knowledge of the climate science and changing social and economic situation in the world.
4. The specified long-term goal should be aspirational and should not be a starting point for a "top-down" approach in the distribution of GHG emissions reduction commitments among the countries.
5. In order to achieve this global goal, a new climate regime should be improved with regard to its effectiveness and fairness, and first of all based upon national circumstances and real capabilities of the countries.
6. In our opinion the Bali Action Plan is the basis for further development of the UNFCCC which opens an opportunity for improvement of it's implementation. We consider a grouping of countries by "Annex I Parties" and "non-Annex I Parties" obsolete and irrelative to present-day realities. This was also recognized in the Bali Action Plan, wherein the Parties had agreed to handle with such terms as "developed countries" and "developing countries". These terms needs to be further defined, and this is where AWG-LCA should focus its further activities on.
7. Without a new vision of the differentiation of the countries it is impossible to develop further long-term cooperative measures under the Convention. Parameters, such as GDP per capita and other standard criteria describing social and economic distinctions between the countries, should be elaborated for a new regrouping of the countries. Such authorized organizations as the UN Statistical Commission, the World Bank, etc. could be involved into development of such criteria.
8. The Article 4.10 of the Convention about circumstances of Parties "with economies that are highly dependent on income generated from the production, processing and export and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives" should be taken into account while considering differentiation of countries.
9. Mid-term targets should be based on the national initiatives and measures in the sectors. We consider it effective to develop a sectoral system of national commitments, including a set of target values of "clean development" that should be formed by the countries themselves and are subject to the international verification.

We consider it is unreasonable to set a collective range for reduction of emissions for a country group, whether they are Annex I Parties or those who are referred to as developed countries, including a range of 25-40 % emissions reductions by 2020 in comparison to 1990 levels by the developed countries.

10. Flexibility in designing new global post-2012 regime will be required. Setting of new legally binding commitments for this period will be possible only under the following conditions:

- the regime should not be punitive and enforceable;
- it should envisage the effective incentives for the participants to fulfill their commitments;
- it should contain procedures and mechanisms allowing, if necessary, to adjust these commitments in a course of their implementation.

11. We also believe that a new climate regime should provide for continuity of the efforts of the world community – it is necessary to preserve the base starting points for setting the commitments and to assess the implementation of the commitments under the Convention and Kyoto protocol.

12. Market approaches are one of the effective means to reduce costs of mitigation actions, but not a panacea in tackling climate change. The latest events in the global stock market or food market show that we have not yet entered the era when global market would be a reliable mechanism of international efforts regulation in response to global challenges of the mankind. The balance of supply and demand over the carbon market could become a tool of speculative actions and might not serve as an indicator of real measures of business-community aimed at combating climate change.

13. As a country with economy in transition Russia is confined to the implementation of the commitments fixed in the Convention and has duly fulfilled those set in Article 4.2 of the Convention on stabilization of GHG emissions at a level of 1990 by 2000.

14. The Russian Federation has repeatedly emphasized the urgency of the development of measures to broaden the participation of the developing countries in climate change mitigation actions.

We welcome the recent statements of a number of the major developing countries related to the necessity of recognition of their voluntary actions in climate regime. This is particularly what our efforts on promotion of so called "the Russian proposal" have been directed to since COP-11 in Montreal, 2005*.

The proposals of the Russian Federation made at a workshop during the UNFCCC SBs-26 session in Bonn, May 2007 (http://unfccc.int/meetings/workshops/other_meetings/items/3971.php) could provide a basis for further discussion various forms of recognition and encouragement of voluntary actions of the developing countries

* FCCC/KP/CMP/2005/8, proceedings, item 75.

FCCC/KP/CMP/2006/10, agenda item 21, Report of the President on consultations concerning the proposal of the Russian Federation to develop appropriate procedures for the approval of voluntary commitments.

FCCC/KP/CMP/2007/9, agenda item 20(a), Report of the President of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session on the workshop on the proposal by the Russian Federation.

PAPER NO. 14: SINGAPORE

Submission to the Ad-hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA)

1 In response to the invitation of the Ad-hoc Working Group on Long-term Cooperative Action (AWG-LCA) to all Parties, Singapore had in July 2008 put forward its submissions on the elements contained in para 1 of the Bali Action Plan, namely, a) shared vision; b) mitigation; and c) adaptation. At the 3rd session of AWG-LCA in August 2008 in Accra, the AWG-LCA Chair was requested to prepare a document assembling ideas and proposals presented by Parties on the elements of the Bali Action Plan at the first three sessions of the AWG-LCA¹. This submission aims to supplement Singapore's three earlier submissions in providing the AWG-LCA Chair with further input for the above-mentioned document.

Alternative Energy-Disadvantaged Countries

2 Addressing climate change requires a collective and comprehensive global solution which must give sufficient consideration to the vital importance of economic growth to all countries, especially the developing nations. It is thus imperative that the AWG-LCA in its work fully respects the principle of "Common but Differentiated Responsibilities" (CBDR), as enshrined in Article 4(1) of the UNFCCC. In particular, the diverse and unique individual circumstances of developing countries must be taken into account to ensure that any mitigation actions imposed will not lead to a slowdown in economic growth or affect national efforts to alleviate poverty.

3 The mitigation of climate change and the reduction of emissions must entail the replacement of fossil fuels with non-carbon dioxide emitting alternative sources of energy. This is the central challenge in climate change. The extent to which a country is able to switch to non-fossil fuel alternatives will determine its capability to reduce carbon dioxide emissions. Many developed countries, particularly the larger ones, have the means and option of switching to renewable sources of energy, as well as nuclear power, for the generation of their electricity. This allows them to reduce emissions and contribute to efforts to address climate change, without excessive loss of economic growth.

4 On the other hand, developing countries in general will not find it easy to switch away from fossil fuels as they often do not have the economic, financial or technological means to do so. Electricity generation by alternative energy sources is more expensive than with fossil fuels, and often requires the construction of new infrastructure and facilities and investment in storage technologies and backup generation. The financial and technological assistance from developed countries are essential to help developing countries make the switch over to alternative energy sources.

5 Among the developing countries there are some which even if they possess the financial and technological means will find it difficult to move out of fossil fuels because of constraints such as size and other physical and geographical limitations. These are the "alternative energy-disadvantaged" countries whose dependence on fossil fuels and inability to switch over to alternative energy sources are recognised in the UNFCCC under Articles 4.8(h) and 4.10. Any global effort to collectively mitigate the

¹ As stated in FCCC/AWGLCA/2008/L.7

effects of climate change must therefore take into consideration the limitations faced by such alternative energy disadvantaged countries.

6 It should also be noted that many “alternative energy-disadvantaged” countries have small populations. Their per capita GDP and per capita emissions are consequently often inflated and do not accurately reflect the state of their economic development or contribution to global GHG emissions. In absolute terms, the gross GDP and total emissions of these countries are insignificant when compared to those of the developed Annex 1 Parties. The use of per capita GDP or per capita emissions to assess climate change responsibilities would thus only further penalise those countries that are “alternative energy-disadvantaged”.

Singapore’s “Alternative Energy-Disadvantaged” Situation

7 Singapore exemplifies the "alternative energy-disadvantaged" country. It lacks the natural endowments necessary to make use of non-fossil alternatives. Singapore's greatest limitation in switching from fossil fuels to alternative sources of energy is its small physical size and high population density. As an island city-state of only 700 square kilometres with no hinterland, Singapore is smaller than Lake Geneva in Switzerland and about one-fifth the size of Long Island in New York. Even cities like Tokyo, London and Sydney are two to three times larger than Singapore. As home to 4.8 million, it is in fact the second most densely populated country in the world. The shortage of land constrains the use of renewable energy sources and nuclear power in Singapore.

8 Singapore's small size, geographical location and other physical attributes leaves it with virtually no access to clean energy sources. Without a major river system, the option of hydroelectric power is completely unavailable. Singapore also does not have access to sources of geothermal energy. Its relatively calm seas mean that Singapore cannot harness tidal energy. Biomass, which is used by many countries as an alternative to fossil fuels, is also not viable for Singapore. Singapore already combusts much of its waste – providing about 2% of its electricity needs – but again due its small size, it does not have the necessary land space to cultivate biomass on the scale required for an energy source.

9 While nuclear energy is a source of low-carbon electricity², it poses considerable challenges in safety and waste disposal. As Singapore is a small densely populated city-state, any nuclear accident would have a catastrophic effect. This is unlike the situation in larger countries where land, often larger than the entire island of Singapore, can be set aside as safety buffer zones around nuclear reactors.

10 There is limited potential for wind energy in Singapore. The average wind speed in Singapore is 2 metres per second (m/s) which is way below that of countries where wind power is a significant source of energy. Furthermore, in a densely populated city-state like Singapore, the lack of space makes the installation of wind turbines unfeasible. The adverse effects of wind farms such as noise would also be amplified, presenting a hazard to the health of its population.

11 The Straits of Singapore is one of the busiest international shipping channels in the world. Approximately a third of world trade and half of the world's oil supply passes through it. Each

² Nuclear power generation emits only 3-24 grams of carbon dioxide per kilowatt-hour, as compared to fossil fuels for which the figure is in the hundreds.

year 90,000 vessels pass through the Straits of Singapore of which more than 7300 are Very Large Crude Carriers (VLCC). At its narrowest width, the Straits of Singapore measures a mere 1106 metres, about twenty times narrower than the narrowest point of the Straits of Malacca. The installation of offshore wind turbines in the Straits of Singapore would obstruct the safe passage of vessels and curtail the flow of international trade.

12 Solar energy is thus far the only renewable energy source available to Singapore. Even here the severe restriction of physical size limits its use. Preliminary studies indicate that even with current technologies, compact solar photovoltaic panels installed on all suitable rooftop space, only a small proportion of Singapore's total energy needs will be met by 2020. Further research and development of solar technology will be required before small countries can exploit solar energy in a significant way. In this regard, Singapore has invested considerable resources into solar development, and has also offered itself as a site for test-bedding solar technologies.

Limitations in Other Efforts to Reduce Emissions

13 The Association of Southeast Asian Nations (ASEAN) has been seriously considering the possibility of an ASEAN Power Grid. This initiative was first mooted in 1997 and has not been completed. The viability of a common power grid will depend on the ability of ASEAN countries to generate electricity in excess of their own domestic needs. Care must however be taken that the power grid does not lead to an overall increase in carbon emissions in the region due to an increased combustion of fossil fuels to produce surplus electricity for distribution to the grid.

14 Carbon capture and sequestration (CCS) is another option for reducing GHG emissions which is still at the experimental stage. However, even if it becomes commercially viable on a large scale in the future, it will be of limited utility for Singapore as it lacks the geological structure³ necessary to serve as reservoirs for the sequestration of carbon dioxide.

Conclusion

15 Despite its “alternative energy-disadvantaged” status, the Prime Minister of Singapore had announced previously that Singapore will play its part in a realistic, workable global solution, if there is international consensus for all countries to do so.

16 In arriving at a globally effective and equitable solution to address the effects of climate change, the relative capabilities of individual countries to reduce emissions must be considered in apportioning responsibility. Every country must be encouraged to do as much as they are individually able to, taking into account their own unique circumstances. To this end, countries should be permitted to make voluntary but binding commitments that reflect their own abilities and circumstances. This will accord countries the flexibility to implement practical and effective measures to reduce emissions without curbing growth. Only such a realistic solution will command global consensus and encourage all countries to play a constructive role in the common effort to confront climate change.

³ These include depleted oil or gas fields, coal seams and specific basalt formations.

PAPER NO. 15A: SOUTH AFRICA

Proposal by South Africa

Means of Implementation

Responding to the call for submissions on all elements of the Bali Action Plan

30 September 2008

The Chair of the Adhoc Working Group on Longterm Co-operative Action (AWG LCA) has invited submissions, by 30 September, on all elements of the Bali Action Plan, to be accommodated in the Chair's document assembling the ideas and proposals. South Africa offers this submission on means of implementation.

At the outset, South Africa re-emphasises its full support for the G77 & China proposals on: (i) "A Financial Mechanism for Meeting Financial Commitments under the Convention" and (ii) A Technology Mechanism under the UNFCCC.

South Africa's starting point for the discussion on delivering on finance and technology is: (i) that there is a core balance in the Convention, set out in Article 4.7, confirming that the extent of developing country action is dependent on the provision of finance, technology and capacity building by developed countries; and (ii) that discussions on finance and technology must be seen in the broader context of the full means of implementation, which includes technology, finance and capacity building.

It is our view that a coherent architecture for delivering on the means of implementation should:

- Be flexible, and able to package finance, technology and capacity building support depending on the specific requirements of the nationally appropriate adaptation or mitigation action being taken, as well as the unique circumstances of developing countries and regions.
- Be able to mobilize all sources of finance, technology and capacity building, including from international, regional and domestic sources, both public and private.
- Be able to address the development, application and diffusion, including transfer of technologies through all the technology life stages. These life stages have different financial requirements, different risk profiles and different capacity building needs.
- Enable a shift from a project based approach to a programmatic approach in order to drastically scale up climate action and make optimal use of the full range of means of implementation available.
- Recognise, promote and strengthen the significance of engagement at the country level, in order to give effect to the principles of a country-driven approach, and direct access to funding, technology and capacity building, and enable the implementation of these principles

PAPER NO. 15B: SOUTH AFRICA

Proposal by South Africa

**Register of nationally-appropriate mitigation actions by developing countries
including Sustainable Development Policies and Measures**

Responding to the call for submissions on all elements of the Bali Action Plan

30 September 2008

The Convention affirms that responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, fully taking into account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty. The objective of the Convention encompasses both stabilisation of concentrations of GHGs in the atmosphere and sustainable development (FCCC Art 2). The right to promote sustainable development is a principle of the Convention (Art 3.4). These provisions of the Convention need to be fully implemented.

The Bali Action Plan provides for the enhanced implementation of **nationally-appropriate mitigation actions (NMA's) by developing country Parties in the context of sustainable development**, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner (decision 1/CP.13, para 1.b(ii)). The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology (Article 4.7).

In this context, South Africa proposes the establishment of a register of nationally-appropriate mitigation actions (NMAs) by developing countries. The register would enhance existing provisions of the Convention, in that Article 12.4 already provides that “developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits.”

This provision could be given further effect through a **register** of NMAs by developing countries, operationalised in several steps, including:

- a) The UNFCCC Secretariat would be requested to open a register for mitigation actions by developing countries.
- b) Developing countries would voluntarily register nationally-appropriate mitigation actions.
- c) Parties registering mitigation actions would pledge to implement these actions in the context of specified support to enable implementation. The register would therefore reflect the actions and not a list of countries. The actions could comprise individual mitigation actions, sets of actions (e.g. in national action plans) or programmes.
- d) The pledged action would be accepted by the international community for inclusion in the register, giving recognition both to its contribution to mitigation and sustainable development.
- e) A ‘toolbox’ of mitigation actions in developing countries from which developing countries could choose may include, inter alia:
 - i. Sustainable development policies and measures (SD-PAMs, this example is elaborated below)
 - ii. Reducing emissions from deforestation and degradation (REDD)

- iii. Programmatic CDM
 - iv. No-lose sectoral crediting baselines
 - v. ...
- f) Mitigation actions by developing countries must be supported and enabled by developed countries through the provision of the means of implementation (technology, financing and capacity-building) to developing countries in a measurable, reportable and verifiable manner, including:
- i. Financing and incentives for pledged mitigation actions by developing countries will be essential. Incentives could come from different categories of funding sources, including (1) public funding (e.g. grant finance, subsidies); (2) market-linked sources of funding (e.g. revenues from auctioning of allowances); (3) carbon market (e.g. CDM, ETS, no-lose sectoral crediting baselines); (4) market finance (e.g. loans on preferential terms, revolving credit, venture capital); and others.
 - ii. Technology development, application and diffusion, including transfer, should be supported across the technology life-cycle, including support in the form of different categories of costs (full, incremental) and support for the practices and processes to enhance the absorptive capacity for technologies in developing countries.
 - iii. Technical assistance and capacity building to ensure the widespread absorption and rollout of the mitigation measures, such as the need to build local production, installation, operation and maintenance capacity.
- g) The level of mitigation effort by developing countries is to be commensurate with the level of means of implementation received.
- i. For mechanisms linked to the carbon market, this relationship is mediated by the price of carbon;
 - ii. For public funding, the [proportion (quantum?)] provided should be proportional to the level of mitigation actions registered.
- h) In terms of the Bali Action Plan, pledging developing country Parties would agree to measure and report both the sustainable development benefits and climate co-benefits of the mitigation actions. In order to quantify the means required to implement these actions, developing countries would calculate the costs of actions prioritised by the Party concerned. Double counting of costs should be avoided.
- i) Verification could be done by national entities working to international guidelines. The developed country Parties including those in Annex II shall provide new and additional financial resources to meet the agreed full costs of verification. The details of verification will likely depend on whether the mitigation action is undertaken uni-laterally or with international support (for technology, finance and capacity-building).
- j) A facilitative mechanism should be considered to further develop in-country capacity in developing countries to implement mitigation and adaptation actions.

Sustainable development policies and measures

One form of nationally appropriate mitigation actions by developing countries in the context of sustainable development is the approach of Sustainable Development Policies and Measures (SD-PAMs). South Africa proposed SD-PAMs during the Convention Dialogue, as a strategic approach that could assist developing countries in identifying, registering and quantifying actions that can make countries' development path more sustainable and provide the climate co-benefits.

The SD-PAMs approach can be applied to reducing emissions from energy supply and use, but equally to reducing emissions from deforestation and degradation (REDD) in developing countries through incentives. Less explored is the concept of SD-PAMs for adaptation, which could assist in increasing developing countries' capacity to adapt.

The pledging of SD-PAMs should be incentivized by establishing expedited procedures for funding requests for programmes that implement SD-PAMs. Funding for SD-PAMs should focus on public funding and possibly market-linked sources. It would be distinct from other mechanisms that focus on creating incentives through the carbon market.

Other modalities for SD-PAMs that would require elaboration:

- The SBSTA may be requested to conduct work on methodologies for SD-PAMs / NMAs , quantifying both the local sustainable development benefits (in units like efficient houses built; MW of cleaner energy installed; hectares of forest protected) and the climate co-benefits. The input of experts, possibly through a particular expert group, would be important for this process.
- The SBI may be requested to undertake work on forms of reporting on implementation of SD-PAMs (related to national communications), reporting both the sustainable development benefits and the climate co-benefits in tons of CO₂-eq avoided.

The founding agreement to establish a register of SD-PAMs or NMAs in the context of sustainable development could take place at COP-15. The AWG-LCA should consider this proposal as one part of a 'toolbox' of mitigation actions available to developing countries.

PAPER NO. 16: SRI LANKA

Reference to your letter number ODES/AWGLCA3/AWGKP6.1/08 dated 5th of September 2008 on the above heading, I am pleased to submit the following comments and views of the Government of Sri Lanka on the decisions of COP, CMP and Subsidiary Bodies.

Early Submission of Information and Views

Enabling the full, effective and sustained implementation of the Convention through long term cooperative action now, up to and beyond 2012 (AWG-LCA).

Ideas and proposals and, where appropriate and to the extent possible, specific textual proposals on the elements contained in paragraph 1 of the Bali Action Plan, taking into account the inter linkages among the elements and the specific sub paragraphs under each of the elements.

Sri Lanka would like to join with parties to emphasise the importance of shared vision and the need for enhanced cooperation.

Mitigation is an important element. The extent of CO₂ emissions need not be an indicator of development. In this regard, Sri Lanka has drafted a Sustainable Human Development Index incorporating CO₂ emissions into the existing index. We are in the stage of finalizing it.

This indicator clearly shows the environmentally sound production and consumption need to be considered when determining the development targets of countries.

Sri Lanka also would like to support the concept of financial compensation for climate victims and the international insurance mechanism, which would support countries to face losses due to extreme events.

Sri Lanka would also like to support the proposal of the global carbon tax for countries with high annual per capita emission, which would flow to adaptation and insurance in low emitting countries.

PAPER NO. 17: SWITZERLAND

**Funding Scheme for Bali Action Plan
A Swiss Proposal for global solidarity in financing adaptation**

Switzerland would like to submit a proposal on a funding scheme for the Bali Action Plan, in particular for financing adaptation. Switzerland would like that this proposal be part of the discussion on the approaches for financing the implementation of the Bali Action Plan, in particular adaptation. Furthermore, Switzerland would like to make use of existing institutions such as the Adaptation Fund of the Kyoto Protocol and the Global Environment Facility for the management of the funding of the Bali Action Plan in order to avoid a proliferation of the institutions in this field. We remain open to the dialogue with the other Parties on their proposals.

Situation

Scientific evidence confirms that climate change will continue even if mitigation policies are successfully implemented as proposed by IPCC.¹ Therefore, adaptation measures must complement mitigation, if damages are to be kept from growing to truly catastrophic levels, especially in vulnerable countries of the developing world. According to UNFCCC and World Bank estimates, the global financing needs to adapt to climate change will lie between USD 10 and 40 bn. per year. Neither the adaptation fund under the CDM of the Kyoto Protocol nor other pledged funds can provide financing of such orders of magnitude. Thus, the issue of financing the necessary measures remains unresolved.

This is why the Swiss Delegation at the twelfth Conference of the Parties of the UNFCCC in Nairobi in 2006 and later at the Bali conference in December 2007 proposed a global carbon levy to cope with the adaptation financing chasm that became more and more apparent at the time. The proposed establishment of a funding scheme shall be based on the principle of common but differentiated responsibilities and on the polluter pays principle, with a low levy on CO₂ emissions, to cope with these financing bottlenecks. The proposal presented here develops this idea further and illustrates possible designs of a revenue and disbursement model. The proposal is herewith submitted to the AWG-LCA for international discussion and further development. Such a discussion shall also serve in the coordination with similar and complementary proposals made by other countries such as Japan, Mexico, Norway, etc.

Objectives and principles

The overall goal is to strengthen the capability of the Parties to UNFCCC to address the challenges of financing climate change policy programmes and measures . especially for adaptation in vulnerable developing countries.

In pursuit of this goal, a global burden sharing system, based on the principle of common but differentiated responsibilities, and legally binding to all nations, is established for overcoming barriers for financing implementation of effective climate policy measures in particular for adaptation to a warming climate. The revenue for this proposal is to be raised according to the polluter pays principle through a *uniform* global levy on carbon of 2 USD/t CO₂ on all fossil fuel emissions. This leads to a burden of about 0.5 US cents/litre of liquid fuel.

The funding scheme proposes a basic tax exemption of 1.5tCO₂-eq per inhabitant, to take into account the principle of common but differentiated responsibilities. This free emission allowance relieves the low-emission countries while countries with higher-emission levels make a higher contribution to the fund. Further, countries with high levels of per capita incomes contribute a larger share of the revenues of the CO₂ levy to the funding scheme than countries with lower incomes. Through these design parameters, the free emission level and the differentiated shares of payments to and revenues from the

¹ 50% reduction of year 1990/2000 global greenhouse gas (GHG) emissions by 2050.

fund, the proposed funding scheme leads to a considerable net transfer of resources from rich to poor countries.

The funding scheme also reflects the polluter pays principle as all countries assume a fair share of their responsibilities for addressing climate change issues in accordance with their share of responsibility for the problem of climate. A global and uniform CO₂ based levy reflects the need to address the climate change problem on a global scale.

The economic rationale for this initiative is as follows: Following the Stern Report on the Economics of Climate Change (2006), we have to acknowledge that climate change *is the greatest market failure the world has seen*.

From an economic point of view the best theoretical solution to correct for this market failure would be to introduce an optimal carbon price² in order to set adequate incentives to decarbonise the economy in the long run. Today we apply a variety of strategies and efforts to implement a carbon price (tax or trading system) in different regions and a number of countries. Nevertheless, on a global scale we are far away from an optimal carbon price. Therefore this proposal targets at a second best solution: The CO₂ based levy is designed as a low level financing tax. The revenues are assigned to finance the provision of a public good, i.e. efficient pro-active mitigation and adaptation activities. Climate change related social cost shall be reduced.

Furthermore, the architecture of the revenue and disbursement models shall be designed considering the different shares of responsibility between industrialised and developing countries for the problem of climate change and in terms of different economic capacities to contribute to the solution.

Overview of proposal

The proposed funding scheme is designed to support the Bali Action Plan, including financing, governance and allocation of revenues (Figure S-1). The revenues are to be raised through a uniform global levy on CO₂. Of the total revenue collection 18.4 bn USD shall be allocated to a multilateral regime. The share of revenues which are deposited to the multilateral regime depends on the economic situation of the countries. The share of contribution from the industrialized countries to this fund is 76%. The payments from the multilateral regime are used for financing of adaptation policies and measures. The proposal is complementary to other funding proposals made under the AWG-LCA such as the Mexican Proposal.

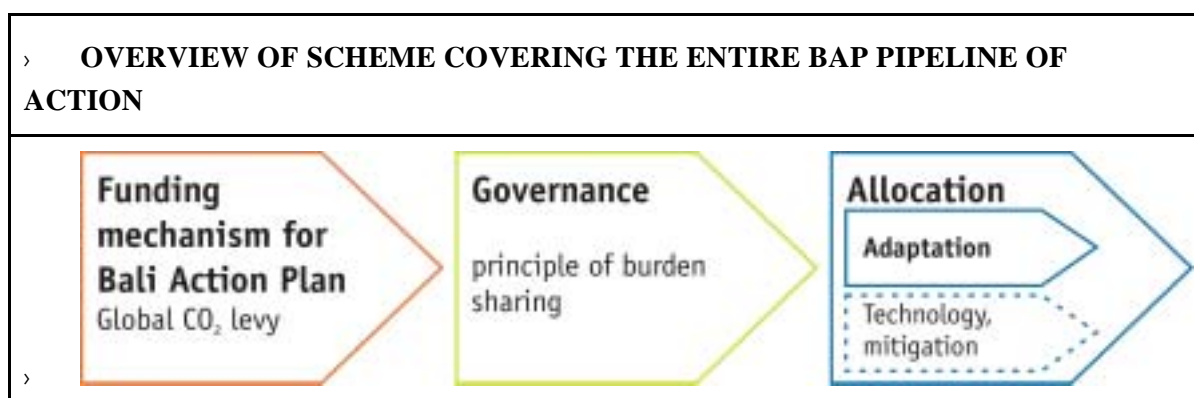


Figure S-1: BAP = Bali Action Plan.

² Through a carbon tax or a carbon emissions trading system.

The revenues generated under this proposal in each country are partly channeled into a National Climate Change Fund (NCCF) for financing national climate change policies according to the country's specific needs and legal frame covering adaptation, technology transfer or mitigation measures.

A share of revenues differentiated according to groups of countries formed on the basis of the per capita GDP shall flow into a global Multilateral Adaptation Fund (MAF). The MAF part of the funding is to be spent on two different themes (.Pillars.), namely³:

□(i) *Prevention Pillar*: Climate change impact (risk) reduction through appropriate policies and measures.

□(ii) *Insurance Pillar*: Climate impact response: relief, rehabilitation, recovery.

Industrialised countries deliver a significantly larger fraction of their tax revenues to the MAF than developing countries. In contrast, developing countries keep the largest share for their national policies and deliver only a small fraction to the MAF. Medium income countries (GDP USD 15-20.000/Cap) take an intermediate position. Figure S-2 shows the financial flows and shares contributed to the MAF and the NCCFs, respectively. The proposed parameters are illustrations for the purpose of discussion only.

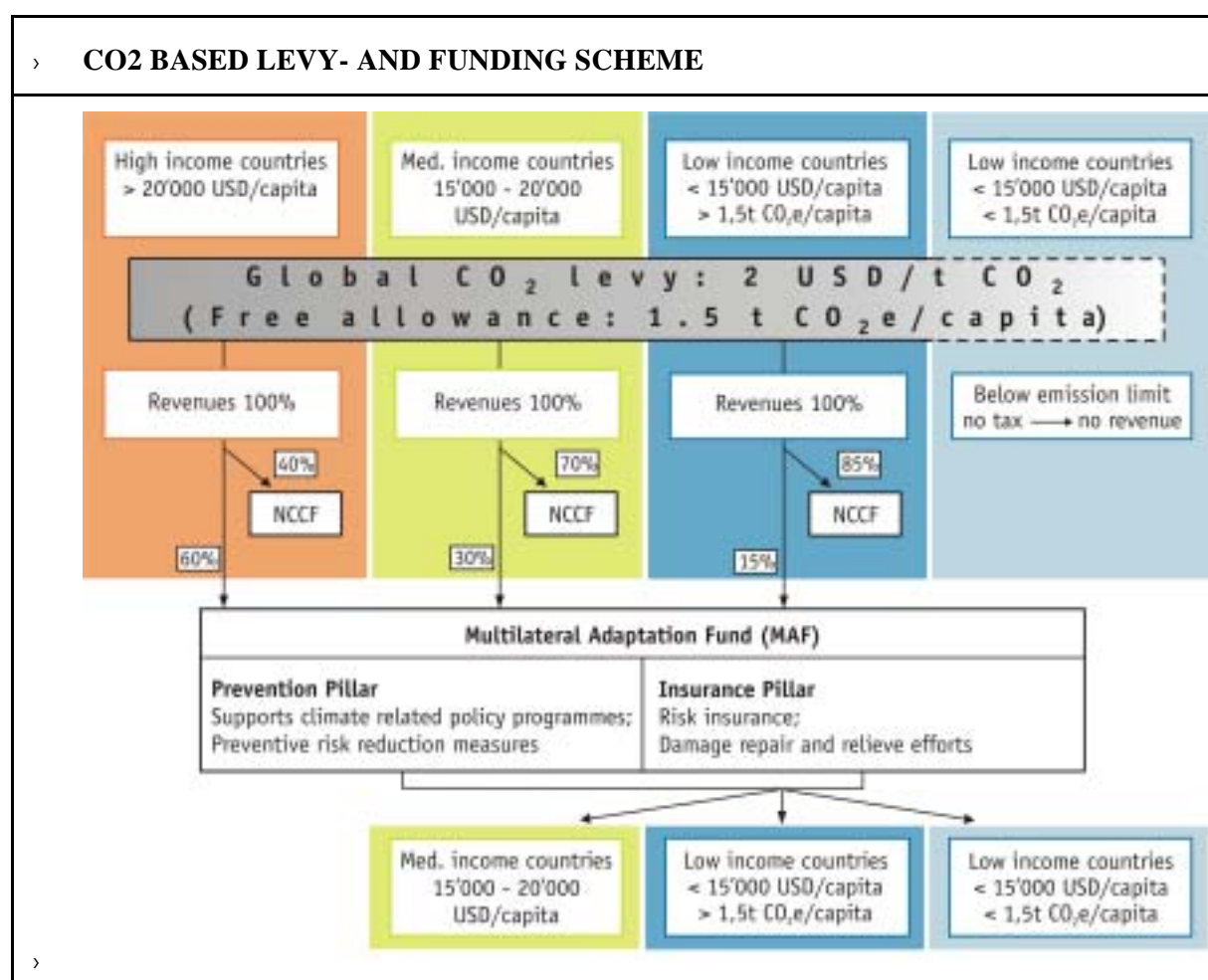


Figure S-2: This figure illustrates the leading idea of a CO₂ based levy- and funding scheme. Based on GHG emission projections and data from UNFCCC National Communications, the total revenues for funding the

³ In the context of this proposal the terms preventive adaptation and curative adaptation are used. But for reasons of terminological non-proliferation and comparability with the disaster management language, the following terms may be used: adaptation or impact reduction for the former, and impact response for the latter.

global MAF amount to USD 18.4 bn, of which USD 15.2 bn come from high income countries, and USD 3.2 bn come from medium/low income countries. These resources are proposed to be engaged in financing the implementation of adaptation policies and programmes in vulnerable medium and low income countries. High income countries feed their National Climate Change Funds (NCCF) with 12.2 bn USD/a, and medium and low income countries theirs with 17.8 bn USD/a. Total revenues worldwide amount to 48.5 bn USD/a (based on data of 2010).

National Climate Change Funds

Each country which decides to participate in the scheme shall autonomously operate its own NCCF. These national funds shall also operate as partner institutions to the Multilateral Adaptation Fund (MAF) and are encouraged to address the priorities of national climate change programmes and to closely coordinate with other national climate policy financing facilities depending on the national circumstances such as vulnerability to climate change and economic development.

These NCCFs are seen as complementary vehicles to the project based disbursement through implementing agencies as they are operating under the GEF or under the funds established under the Marrakesh Accord. NCCF funds can be used according to national priorities for adaptation as well as for mitigation measures such as improving the energy- and climate efficiency of buildings, cars, electrical equipment, or power plants and promotion of renewable energy.

Possible examples for existing national climate change funds or guidelines for designing such funds are the China CDM Fund and the Green Investment Schemes (GIS) developed between Russia and potential AAU buyers, respectively.

Multilateral Adaptation Fund (MAF)

The Multilateral Adaptation Fund is to assist low and medium income countries in financing their adaptation policies. It is proposed to become part of the financial architecture developed under the Bali Action Plan. While by far the largest contributions come from industrialized countries, adaptation policies/programmes and measures in vulnerable developing and medium income countries are funded only. This reflects the special overall responsibility of the ICs for the climate change problem.

The World Bank and UNFCCC estimate the financial needs for adaptation in nonindustrialised countries at 10 and 40 bn USD/year in 2030, while the financial flow under the Marrakech Accord merely provides some 0.1.0.2 bn USD/a. This illustrates the urgent need for further funding.

The MAF releases its funds of some 18.4 bn USD/a within a legally clearly defined governance framework. It shall be able to operate efficiently and complementarily to other similar facilities such as the GEF trust fund, the funds established under the Marrakech Accord, the World Bank's Climate Investment Funds or development assistance operating basically on a project by project basis.

Prevention Pillar

The MAF shall co-finance climate proof policies relevant from a climate change adaptation perspective including disaster risk reduction measures. The disbursement model operates in the form of contributions to the programme rather than funding individual projects. It is assumed that the operations of the MAF will create the capacities and institutions for the implementation of this disbursement model. This enhances efficiency in line with the OECD Paris declaration on aid effectiveness. The supported policies can include risk responsive planning and design of settlements, infrastructures and of land use.

Insurance Pillar

This pillar aims at investing financial resources into safeguarding public goods, which in particular comprises to insure climate related risks, which are not covered by private insurance companies because premiums are not affordable for local insurance takers (low probability, high consequences risks). The focus is on vulnerable institutions, enterprises and segments of population in medium and low income countries. Insuring the rehabilitation of core infrastructure of an affected area, or compensation of lost assets of the most vulnerable groups shall have priority.

Furthermore, the Insurance Pillar will develop pilot projects for weather risk insurances (e.g. for agriculture) at sub-regional levels. Also, a small amount of the budget can be used for developing the data basis required for such schemes (technical assistance). An optimal form of private public partnership

with the insurance sector must be developed, while guaranteeing the interests of affected groups in vulnerable developing countries. One possibility to be evaluated is assistance to the countries in the form of payment of special insurance premiums. This would correspond to the principles of subsidiarity and efficiency, and allow for a lean and efficient administration of the MAF.

Impacts and Implementation

Table S-1 shows an overview of the impacts in terms of financial flows between regions. The last column of table S-1 illustrates the total receipts from both the NCCF and the MAF in the different regions. The transfer of finances from industrialised to developing countries is shown in the second-to-last column, showing the positive net payments from the MAF for developing countries. This is additional to resources for technical cooperation and based on multilateral agreements.

INDICATIVE FINANCE FLOWS BETWEEN PARTICIPATING REGIONS						
	Total revenue of tax	Revenue going to MAF	Payments obtained from Prevention Pillar	Payments obtained from Insurance Pillar	Net payments to and from MAF	Net receipts from NCCF plus contributions from the MAF
United States	11551	6'930.69			-6930.7	4620
Canada	1224	734.48			-734.5	490
Australia, New Zealand	890	533.89			-533.9	356
Japan	2154	1'292.33			-1292.3	862
OECD Europe	7532	4'519.16			-4519.2	3013
Total High income group	23351	14011	0	0	-14011	9340
South Korea	907	272.07	96.3	268.0	92.2	999
Russia	3236	970.92	137.5	142.3	-691.1	2545
South Africa	962	144.34	74.2	85.3	15.1	977
Mexico	753	112.95	111.0	136.6	134.6	888
Non-OECD Europe & Eurasia	2019	302.80	293.2	319.2	309.7	2328
China	9571	1'435.68	1996.4	2800.3	3361.0	12932
Middle East	2711	406.63	212.2	181.9	-12.6	2698
Brazil	704	105.61	194.5	181.8	270.6	975
Other Central & South America	1282	192.32	281.9	260.2	349.8	1632
Non-OECD Asia	2143	321.39	1594.4	1858.8	3131.7	5274
India	315	47.19	2324.0	2045.6	4322.4	4637
Other Africa	0	0.00	1409.5	702.2	2111.7	2112
Indonesia	535	80.18	476.2	219.4	615.5	1150
Total Low and Medium income group	25137	4392	9201	9201	14011	39148
Total World	48488	18403	9201	9201	0	48488

Table S-1: Net annual financial flows of the MAF between participating regions; total receipts from MAF and NCCF (data basis year 2010). The first and last columns show the total tax revenues collected in, and the total resources flowing into a region, respectively.

A financial flow analysis as depicted in Figure S-3 shows that the average contributions of industrialised/high income countries are much higher than in medium- and low income countries

although their tax rate only differs on the basis of the application of the free emission level of 1.5 t CO₂eq/capita. The receipts from the MAF show the same pattern, so that the funding scheme leads to a considerable net transfer from high-income to low income countries of about 14 bn USD equivalent to 76% of the funding under the multilateral regime.

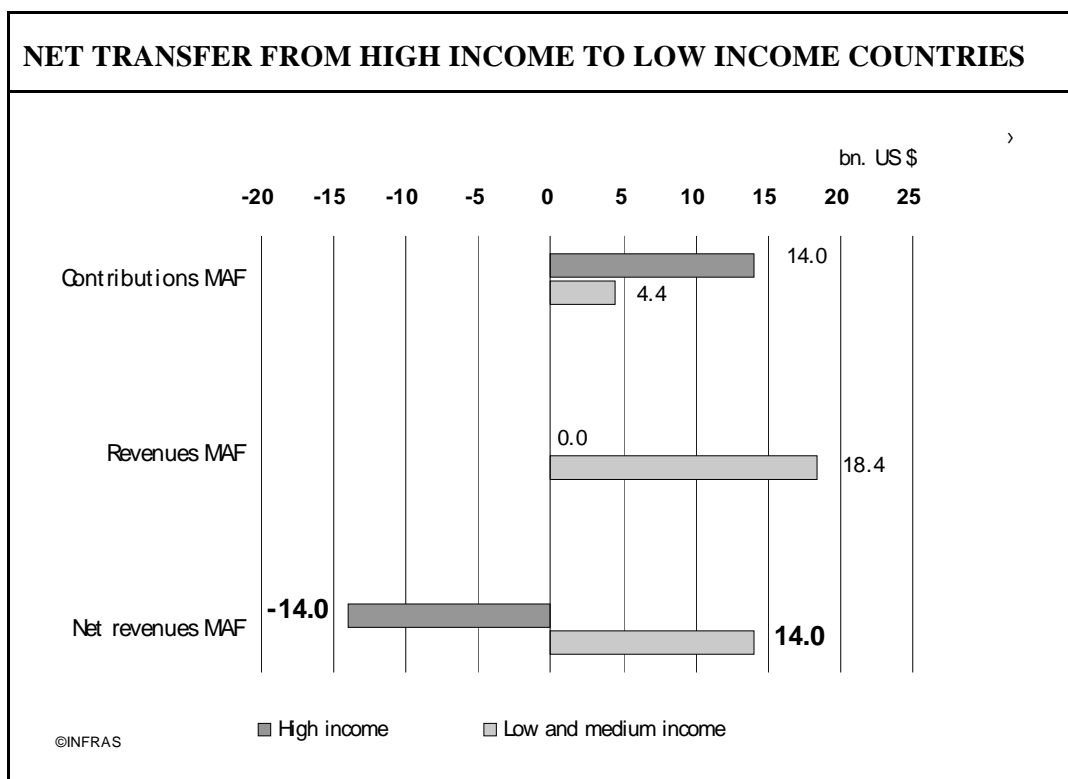


Figure S-3: How many USD per year does a country from the high income/medium income/low income group contribute to, and receive from the MAF? High income countries contribute 14 bn USD, but do not receive any funds. Medium and low income countries contribute 4.4 bn USD and receive 18.4 bn USD.

As only a low CO₂-based levy is introduced, it can be assumed that this will not have any noticeable negative effects on economic growth and GDP in industrialised countries. Also, in emerging and developing countries with low- and medium GDPs, negative economic impacts are not likely due to the tax free emission level of 1.5 t CO₂-eq/capita. Furthermore, the funding scheme can lead to positive economic impacts in developing (DC) and least developed countries (LDC), as adaptation measures are expected to reduce the potential GDP damages caused by climate change.

Implementation issues need to be studied carefully to meet the challenge of administrative efficiency. One issue is how to collect the CO₂-based levy. The tax free emission level of 1.5 t CO₂-eq/capita exempts a significant number of countries with low institutional capacity from establishing a system to collect the CO₂ levy. Furthermore, it alleviates the problem of lack of economic capacity of least developing countries (LDC) to contribute to the Multilateral Adaptation Fund. Experience in several countries suggests that an upstream approach is most feasible: Levies are charged at the points of import and production rather than at the consumer level. By applying an upstream approach only a small number of subjects needs to be levied.

Further steps

This proposal outlines cornerstones of a climate change financing scheme, primarily for adaptive policies in low and medium income countries. At this stage, the level of consultation and investigation is only limited. Hence this proposal presents a leading idea and a toolbox of instruments for refinement and discussion. Examples of open questions which do need further investigation and consultation are:

- How to ensure an effective governance taking into account the operation of the Kyoto-Adaptation Fund for CDM, and the World Bank Climate Investment Funds?
- How to best modify the proposed design parameters such as the levels of taxation?
- How to best design the Insurance Pillar, especially the form of public private partnerships?

A document presenting this proposal in detail can be found under:

<http://www.bafu.admin.ch/klima/index.html?lang=en&download=NHzLpZig7t,lnp6I0NTU042I2Z6ln1ad1IZn4Z2qZpnO2Yuq2Z6gpJCFeH15gGym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCVZ,s-.pdf>

PAPER NO. 18: TURKEY

**INFORMATION, VIEWS AND PROPOSALS BY TURKEY REGARDING
PARAGRAPH 1 OF THE BALI ACTION PLAN OF THE AD HOC WORKING GROUP ON
LONG TERM COOPERATIVE ACTION UNDER THE CONVENTION**

Turkey welcomes the opportunity to submit views, ideas and proposals on the elements in paragraph 1 of the Bali Action Plan (BAP).

Turkey supports international cooperative action for the future climate regime which should equitably distribute responsibilities, facilitate and motivate involvement of all Parties and take into account national circumstances of the Parties.

A shared vision for long-term cooperative action

The future steps of Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) should be guided by the shared vision for long term cooperative action. Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC) outlines the shared vision. The long term cooperative action should set a long term and realistic global goal, meeting the Convention's ultimate aim.

Turkey believes that differentiation and classification among Parties in terms of national capacity, economic development level and respective capabilities form a vital component of a successful post-2012 agreement and has to take into account the national capacities and special circumstances of the Parties and the principles of "common but differentiated responsibilities" and "equity".

Turkey, as a developing country, will make her contribution to the global efforts in combating climate change taking into account her national capacity and special circumstances. Turkey wishes to take actively part in the negotiations for the post-2012 regime with a proper status that should reflect her socio-economic development level.

Therefore, Turkey is looking forward to a discussion on defining differentiation criteria among Parties under AWG-LCA, which would facilitate a fair system on a future post-2012 agreement. The criteria for differentiation among Parties should be the basic element of the shared vision, thus addressing equity in line with the Convention's principles.

Turkey believes that the basis of the design of the post-2012 period needs to be fair, and to this end, the main elements of the BAP must be followed in a comprehensive manner. Turkey is ready to cooperate for the full implementation of the Convention through balanced and sustained implementation of the four building blocks of the BAP, namely mitigation, adaptation, technology transfer and financing, in her own capacity.

Enhanced national/international action on mitigation of climate change

A long term emission reduction goal to reach the ultimate objective of the Convention is the main element of the BAP, which still remains to be defined.

There is a need for the entire world to cut carbon emissions in a well-coordinated and concerted way with a view to achieving the ultimate objective of the Convention. Thus, all countries need to take some sort of (voluntary or obligatory) responsibility, in order to stabilize the greenhouse gas concentrations in

the atmosphere. Turkey is of the opinion that these responsibilities need to be defined in line with national capacities and special circumstances of the countries as well as the principles of "equity" and "common but differentiated responsibilities".

Turkey believes that differentiation among Parties is quite crucial in identifying the future mitigation commitments. Historical responsibilities, economic and social indicators and development levels of Parties should be taken into account in making differentiation and thereby defining fixture mitigation commitments. In this framework, AWG-LCA should establish a list of parameters and criteria to make differentiation among Parties with a view to identifying fixture commitments. Turkey considers that some of these parameters could be, but not limited to, GDP per capita, primary energy consumption per capita, R&D expenditure, emissions per capita, population growth and human development index.

Turkey considers that a key issue to explore under the BAP is what the principle of "common but differentiated responsibilities" and respective capabilities means for national appropriate mitigation action among Parties, with a view to enhancing fairness and effectiveness of the climate regime under changing national and international circumstances.

It is also crucial to establish comprehensive incentive mechanisms which can promote mitigation actions and enable capacity building, financing and technology transfer to the developing countries.

Enhanced action on adaptation

While mitigation is one of the major aspects of the fight to limit global temperature increase, the adaptation to climate change is equally important and constitutes a demanding agenda for developing and vulnerable countries like Turkey.

Adaptation actions need to be implemented urgently by all countries. "Vulnerability assessments" and "adaptation action plans" must be prepared and integrated into national and sectoral development plans. Addressing adaptation needs will require responses that are tailored to the particular circumstances of the countries or regions affected. Effective adaptation is thus the responsibility of every country and should be addressed at the local, national or regional level and complemented by international support.

Developing countries, which have the least responsibility in creating the problem, will unfortunately be the most vulnerable and affected by its adverse effects. For this reason, adaptation to climate change in these countries is of paramount importance.

As a developing country, Turkey considers adaptation to climate change as a challenge clearly beyond the capacity of the developing and least developed countries to address on their own. In this framework, industrialized developed country Parties should continue to support the developing and most vulnerable countries' efforts to fight against climate change by enabling technology transfer, technical and financial assistance to these countries.

Turkey, which is situated in the Mediterranean basin, will be severely affected by climate change, according to the latest reports of the Intergovernmental Panel on Climate Change. As a matter of fact, Turkey has been experiencing impacts of climate change, such as infrequency of rainfall, decreasing trend in precipitation, scarcity of water and desertification. Turkey pays utmost importance to her adaptation in combating climate change.

Turkey also believes that the Adaptation Fund should be utilized by the developing countries on the basis of conditions including vulnerability to the adverse effects of climate change, level of associated risks and the financial capacity of the Parties to the Convention to cover adaptation costs.

Enhanced action on technology development and transfer to support action on mitigation and adaptation

Turkey strongly believes that developed industrialized countries should facilitate the efforts of developing countries to make their own contribution in addressing the challenge of climate change. In this context, technology transfer should be provided to the developing countries like Turkey, who lack capacity in this field. It is the only way to enable the participation of developing countries in the global fight.

The mitigation and adaptation potentials of the technologies are needed to be identified and a cooperation mechanism should be established between developed and developing countries to facilitate technology development and transfer. Developing countries not only need transfer of technology but also diffusion of related know-how through cooperative actions. It is necessary to identify the obstacles are remove them to promote and accelerate the transfer of environmentally sound technologies.

Turkey believes that a technology transfer fund will be very supportive for developing country Parties. The steps to utilize this fund should be constructed in a way to enable easy access to all developing countries regardless of their status in the Annexes of the Convention. Therefore, Turkey supports the development of a multilateral fund under the Convention, enabling technology transfer to developing countries at higher pace, in a transparent way.

Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation

Developing countries that are in need of financial assistance should be supported by the developed countries in order to effectively combat climate change. It is essential for developing countries to make effective use of funds under the financial mechanisms of UNFCCC directed towards mitigation, adaptation and technology transfer. Developing country Parties need positive incentives for enhanced implementation of national mitigation strategies and adaptation action plans, and need resources to meet the cost of adaptation.

There is a great need for attracting private sector investment through a common approach among Parties in addition to the public sector with a view to mobilizing and promoting investment and providing funding needed for meeting the costs of mitigation, adaptation and technology transfer. Thus, Parties to the UNFCCC are compelled to cooperate with one another and with international organizations, particularly with the Multilateral Development Banks.

Turkey expects that in the prospective arrangements within the framework of financial mechanisms of UNFCCC, there should be a more enhanced scope of financial mechanism to enable rapidly developing countries and most vulnerable countries to reduce the impacts of climate change.

Turkey would like to continue her efforts to contribute to the global fight against climate change at her own capacity. However, Turkey needs support in contributing to this fight and achieving her sustainable development.

As a developing country located in the Mediterranean basin that is highly vulnerable to the impacts of climate change, Turkey attaches great importance for its access to financial mechanisms in enhancing its national capacity to address adaptation needs. It is evident that Turkey's sustainable development will depend on its adaptive capacity to climate change and financial support is needed to make the necessary investment for adaptation.

To this end, Turkey is going to favor the support initiatives to enable developing countries to benefit more effectively from international investment and financial mechanisms for adaptation, mitigation, deployment and transfer of the new climate-friendly technologies.

Sectoral Approach

Turkey supports sectoral approach and considers this approach as promising for moving towards achieving sustainable development of Parties, particularly the developing ones. Turkey believes that there is high potential for voluntary contribution from developing countries as long as enough financial and technical support is provided.

The idea of voluntary global sectoral agreements in energy intensive industries should be supported to achieve Convention's ultimate goal and the sustainable development goals of the Parties provided that there is sufficient financial resources and also technology transfer for the countries in need of support, including Turkey.

AWG-LCA Work Programme for 2009

Turkey believes that fair differentiation among the Parties forms the vital component of a successful future agreement and one of the workshops of AWG-LCA in 2009 should be dedicated to this subject.

PAPER NO. 19A: UNITED STATES OF AMERICA

**Finance and Technology
Ad Hoc Working Group on Long-term Cooperative Action under the Convention
September 30, 2008**

The United States is committed to continuing to meet its finance- and technology-related obligations under the Convention.

We are working to enhance our partnerships with countries around the world to increase trade and investment in clean energy technologies, including through the Asia-Pacific Partnership and the Clean Technology Fund. These and like partnerships are consistent with Article 11.5 of the Convention.

The United States holds no assumption that enhancing financial and technology promotion tools necessarily means creating new institutions under the UNFCCC. We are keenly interested in how any new efforts under the Convention would relate to the substantial and growing level of activity beyond the Convention.

It is important to place our efforts in context. Mobilizing funds and promoting technologies are not end goals. They are means to an end – the achievement of the ultimate objective of the Convention to mitigate climate change.

In considering new finance and technology proposals from Parties, we ask several questions:

To what extent would any agreed outcome with respect to finance help Parties to achieve the ultimate objective of the Convention?

Donor countries will have an ongoing need to be sure that resources continue to go to the highest priority actions and that there is effective performance for our investments.

With scaling up there will be additional attention to the effectiveness of such efforts, and whether investments from donor countries are matched by requisite efforts in developing countries.

Would these new efforts be effective in mobilizing investments from the private sector?

The critical role of the public sector is in creating the legal, regulatory and governance structures that will mobilize these funds from private sources.

In evaluating any new finance and technology proposals, we would consider what they would do to boost those national institutions and enabling environments, consistent with national plans.

Would these new tools recognize and build on the financial and technological capacity of the recipient country?

Many non-Annex I Parties, and in particular the major emerging economies, have a level of financial and technical capacity far greater than two decades ago.

It is important to carefully consider what national governments can be reasonably expected to do through their own policies and resources, consistent with their obligations under the Convention.

We appreciate that several non-Annex I Parties have focused on low-or no-cost mitigation options known as Sustainable Development Policies and Measures. We agree that this is an especially important area for consideration. We look forward to a thoughtful and constructive discussion on these issues in Poznan.

PAPER NO. 19B: UNITED STATES OF AMERICA

Mitigation and its Associated Means of Implementation
Ad Hoc Working Group on Long-term Cooperative Action under the Convention
September 30, 2008

The United States is committed to achieving an agreed outcome in Copenhagen that puts us on a path to effective global action on climate change. These actions should be nationally appropriate, meaning that the type and level of actions will span a broad range, as countries' circumstances are very different. Actions should respect the development imperative of developing countries, just as all of our actions should increase the welfare of current and future generations.

In Accra, we were encouraged by Parties' interest in reducing emissions from deforestation—and reporting these actions in a measurable and verifiable manner. We anticipate this may constitute, for some countries, an important component of their nationally appropriate mitigation actions.

The United States has made several submissions and interventions on the subject of mitigation. We have set forth certain desirable characteristics of an agreed outcome (such as being simple, environmentally effective, and likely to attract participation). We have also commented on other aspects of the mitigation aspects of the agreed outcome, such as the ways in which the world has changed since 1992 and the need for the Convention to remain relevant. Please refer to those statements for an elaboration of our views.

As we look forward, we would like to focus on a few other aspects of mitigation, specifically noting issues/questions that call for further discussion in the coming months.

We believe the consideration of the following issues/questions would be illuminating:

What is common? Much attention has been paid by Parties to the word “differentiation” in the principle of common but differentiated responsibilities and respective capabilities (“CBDR”). Less time has been spent on the word “common” and how it should be applied in the mitigation context of the agreed outcome. We propose that time be spent setting forth views on which elements of the agreed outcome on mitigation will be “common” for all Parties.

What are Parties' existing mitigation commitments under the Convention? Some have commented that developing countries do not have any mitigation commitments under the Convention. In fact, Article 4.1 does contain mitigation commitments for all Parties. While the chapeau of that Article makes clear that not every Party is expected to implement such commitments identically, there nonetheless clearly are mitigation commitments for all.

What are “developed” and “developing” countries? Another issue for further consideration, picking up on the idea that the Convention needs to remain relevant not just in terms of scientific advances but in terms of economic and emissions trends, is how best to apply the concepts of “developed” and “developing” countries in subparagraphs 1(b)(i) and 1(b)(ii) of the Bali Action Plan.

How do we make nationally appropriate mitigation actions “measurable,” “reportable,” and “verifiable”? In the U.S. view, these are among the areas where the “common” in CBDR would be very relevant. We currently lack basic information on greenhouse gas emissions. For the Convention to be effective, it will be essential that Parties, whether developed or developing, have a common basis for understanding the nature of Party contributions and gauging progress toward achieving them. This will require more frequent reporting. We should look at the experience under the Convention with measurement, reporting and verification as relates to specific mitigation actions, and consider how it might be strengthened so as to provide accurate and timely information.

How do we reflect “national actions” in an agreed outcome? The concept of “nationally appropriate” national actions has a clear linkage with countries’ respective capabilities. We tend to agree with those who believe that the UNFCCC should provide a means of recognizing the actions they are taking or will take pursuant to the Bali Action Plan and encouraging more such action in a manner that will enable Parties to meet the Convention’s ultimate objective. We believe that all countries should put forward their nationally appropriate mitigation actions in a manner that is measurable, reportable, and internationally verifiable. We would expect that extent and stringency of these actions would be consistent with the circumstances and capability of each country.

The Bali Action Plan leaves open the legal character of mitigation efforts. Countries have taken differing positions on whether efforts should be reflected in legally-binding form, whether the binding aspect of efforts should relate to substantive content or to more procedural elements, whether all Parties’ efforts should be reflected in the same manner, etc. It is difficult to assess whether the discussion of “character” should precede the question of “content” or vice versa. In either event, the U.S. considers that, while the content of various countries’ efforts may differ, the character needs to be the same.

What are countries’ views on comparability? The issue of “comparability” in subparagraph 1(b)(i) of the Bali Action Plan—to be taken into account by developed Parties when assessing each other’s efforts—will involve a variety of relevant factors. They will involve questions of:

- Who? — e.g., which are “all developed country Parties;” the fact that each and every developed country Party is to be individually evaluated in terms of its efforts;
- What? — one would presumably need to consider a variety of aspects, e.g., which actions are relevant; how efforts are to be assessed; what the domestic character/status of the efforts is; what the national circumstances are; what the purpose of efforts are and have been; actual implementation;
- Where? — it will need to be considered whether “efforts” include domestic actions, actions abroad, efforts undertaken by another country where Parties have been operating jointly, assistance to developing countries to mitigate climate change, etc.
- When? — there will be issues of the relevant time period(s), the question whether efforts need to be evaluated based on actual implementation vs. ex ante promises; etc.

What is the role of sectoral approaches? How do we strengthen the catalytic role of the Convention? There are a range of sectoral actions being undertaken, and many suggestions on how to broaden and deepen these actions through sectoral approaches. Sectoral approaches can help analyze countries’ mitigation potential in key sectors. The Convention should catalyze and encourage sectoral cooperation. It should also provide a means of recognizing the benefits of these actions.

PAPER NO. 19C: UNITED STATES OF AMERICA

**Shared Vision
Ad Hoc Working Group on Long-term Cooperative Action under the Convention
September 30, 2008**

Unlike other elements of the Bali Action Plan (e.g., mitigation, financing), there is less clarity when it comes to determining the meaning/purpose of the “long-term vision.”

How the negotiating Parties treat this Bali element has not only substantive implications but procedural ones. For example, certain approaches would tend to require convergence toward the beginning of the negotiating process, while others would indicate discussions toward the end.

There appear to be numerous options for how to treat the “shared vision,” each with advantages and disadvantages. We think some discussion of the basic options is warranted.

One option is to treat the shared vision as the sum total of the other Bali elements once they are discussed and finalized. It would, in essence, be the “ribbon” with which the other elements are tied up. By definition, it would depend upon elaboration of the other elements and would be determined at the end of the process.

Another option is to treat the shared vision as a prelude to the elaboration of the other elements of the Bali Action Plan. In other words, it would constitute an approach as to the manner in which the other elements would be discussed or elaborated. For example, it might be considered that, as other elements are discussed, it is vital to ensure that the Convention remains relevant in the face of rapidly changing global circumstances.

A third option is to treat the shared vision as related in particular to the identification of a long-term global goal. The vision might, for example, elaborate the technological conditions that would need to exist for long-term global goal for emissions reductions to be achievable.

Yet another option would be for Parties to “share” views on their respective “visions,” without necessarily coming to complete agreement on such a vision or having to reduce one common view to writing. One advantage of such an approach would be that time is arguably better spent on the concrete elements of the Bali Action Plan than on seeking to converge various “visions” that may be more divisive and self-serving than unifying.

PAPER NO. 19D: UNITED STATES OF AMERICA

Adaptation
Ad Hoc Working Group on Long Term Cooperative Action

The United States was pleased to hear Parties in Bonn and Accra point to the value of a common framework for characterizing our actions on adaptation. In our view, the purpose of a framework for adaptation would be to lay out the range of actions needed to promote country-driven adaptation strategies, with a view to leveraging the substantial capability that already exists in many institutions at all levels for promoting resilience in climate sensitive sectors and issue areas.

Such a framework should be designed to catalyze greater attention to adaptation at all levels and to help Parties build a robust approach in their respective efforts. It should galvanize national and international support for adaptation priorities in a range of sectors, and promote climate resilient development in a manner that is practical, informed by the best science, environmentally sound, and economically efficient, and that promotes on-the-ground results.

Such a framework should also focus on “who” should be involved, by engaging the full range of actors at all levels. At national and sub-national levels, we need to encourage the engagement of planning and sectoral institutions with key responsibilities for the most vulnerable; at the international level, we see an essential role for relevant UN Technical Agencies, overseas development agencies and NGOs. At all levels, we need to leverage existing institutions, networks, and resources already engaged in enhancing climate resilience, including for sharing of information and expertise, financing, and facilitating planning and implementation of adaptation activities.

Adaptation is a shared challenge. We can enhance our efforts by working in partnership to adapt effectively to climate change, including through knowledge sharing and exchange of practical experience, so that we build on the good work that already exists.

With respect to resources, we look forward to discussions on ideas that will lead to practical and effective outcomes in Copenhagen and beyond. In discussions about scaling up funding, it is critical to understand how such funding would be used and how its effectiveness would be evaluated. We must consider national enabling environments and absorptive capacity for receipt and use of adaptation-relating funds. Ultimately, it will be necessary to prioritize action, just as we prioritize our actions in development assistance activities generally. In this regard, we note the importance of focusing on the poorest and most vulnerable. We also note the importance of engaging the private sector in adaptation activities. Lastly, we cannot discount the role of ODA and the importance of incorporating adaptation into development assistance, in addition to the value of making use of the wealth of accumulated expertise and capacity that currently exists for addressing climate risks.

There are a number of ways to approach prioritization of adaptation actions under the Bali Action Plan. The United States sees merit in priority consideration for actions that:

- Are guided by the Convention’s definitions, its objective, and provisions;
- Have clear co-benefits or multi-benefits;
- Address responses to projected near-term climate impacts above longer-term impacts, which may be best addressed by mitigation;
- Are identified in national communications and national adaptation plans of action;

- Link to poverty reduction strategies, and so on.

In terms of details for a framework, included should be a portfolio of possible areas of action and international cooperation on adaptation. These areas of action would facilitate integration of adaptation into development planning and projects at national and international levels. The framework should also include:

- Processes for identification and assessment of adaptation needs, establishment of priorities, evaluation and implementation of strategies, and program support; and,
- A list of voluntary priority actions that various actors might take to adapt to climate change.

There are a number of ways to structure such a framework. Possible organizational structures could be the following or some combination thereof:

- *A Sectoral Approach* – organizing by economic or resource sectors (e.g., agriculture, coastal zones, forests, water).
- *A Functional Approach* – organizing by information/methods/tools, policy and planning, and implementation (e.g., Earth observations and modeling; vulnerability and adaptation assessments; adaptation planning; adaptation actions).
- *Organizing by Level and Type of Actor* – by local, national, regional, and international actors.

Elements within any of the above approaches could be organized around a basis for action, objectives, and priorities for actions. The key in our discussions should be to focus on “what” it is we looking to accomplish. This, in turn, will enable us to better determine the “how” to accomplish it.

Adaptation should be consistent with national development priorities and strategies. That is in part what we mean by the term “country-driven”. If a country does not consider adaptation a priority in their development planning, it is not something that the UNFCCC can determine to be a priority for them; although the UNFCCC can provide information and tools to facilitate such prioritization and enhance capacity. The UNFCCC can catalyze actions by others, but is not structured to implement on-the-ground adaptation projects or create necessary domestic-level enabling environments to facilitate adaptation.

Because of the local, regional, and national scales at which adaptation takes place, responsibility for adaptation lies with each Party, assisted by action taken under the UNFCCC. It is important that adaptation be treated coherently under the UNFCCC and consistently with UNFCCC mandates and build on the work already ongoing under the Convention. It is important to link adaptation with mitigation, in that enhanced action on mitigation will limit the need for adaptation.

There may be standalone actions – that is, actions that are purely for climate change adaptation – but we do not believe that there are effective adaptation strategies independent of development strategies in relevant climate-sensitive sectors and contexts.

In terms of financing adaptation, we think that a diversity of funding sources is appropriate, for several reasons:

- First, adaptation actions and actors are diverse, which will require different sources and types of funding.

- Second, we have an interest in ensuring our funding is used effectively, and we are convinced that this can best be done if adaptation funding is integrated into broader development assistance.
- Third, the funding obligation in the UNFCCC with respect to adaptation is different from mitigation. Under Article 4.4 of the Convention, the obligation is to “assist” developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects – and assistance can and should take many different forms.

We have heard concerns from expert communities at UN bodies, for example the disaster community, that UNFCCC adaptation funding could take place in a vacuum and may not build on the considerable expertise and infrastructure that already exists. We see funding as integrated into developing planning as well. This ensures that adaptation-specific funding is leveraged with funding for climate-sensitive development, and also ensures that resources are channeled to real priorities.

On the issue of insurance, the United States sees value in exploring ways the UNFCCC might catalyze development of private insurance mechanisms, micro-insurance and or indexed insurance mechanisms, and, particularly, risk reduction/risk prevention activities. However, the United States does not support calls for an additional fund or for intergovernmental insurance mechanisms.
