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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION UNDER THE CONVENTION
Sixth session
Bonn, 1–12 June 2009

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

Part II

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PAPER NO. 23: LESOTHO ON BEHALF OF THE LEAST DEVELOPED COUNTRIES

Subject: Fulfillment of the Bali Action Plan and the components of the agreed outcome to be adopted by the Conference of the Parties at its fifteenth session (AWG-LCA)

A. Adaptation and Means of Implementation

Climate change is impacting on both developed and developing countries is putting a huge stress on development budgets, especially in least developed countries. Indeed it is threatening to frustrate development efforts, including the millennium development goals. The losses arising out of impacts of climate are high and huge and therefore substantial resources largely public funds will be required and must be under the control of the COP. Both developed and developing countries must adapt to impacts of climate change. The Convention commits Parties to integrate climate change issues into development planning. Sharing of experience, including integration of climate change into development process, can enhance implementation of adaptation activities/programmes.

Adaptation actions must therefore focus on enhancing resilience of developing countries at various levels, including communities, local and central governments and national economy. The actions will include:

- implementing immediate and urgent concrete and integrated adaptation activities/programmes, including NAPAs;
- development and implementation of medium and long-term national integrated adaptation activities/programmes;
- Strengthening institutional and technical capacity, including data collection, analysis and interpretation of scientific and social-economic information to support and inform adaptation activities/programmes;
- Strengthening or establishing national early warning systems;
- Wide dissemination and promotion of application of information, including weather and climate information at various levels, including communities, to support implementation of adaptation activities.; and
- Integration of climate change into development planning at local and national levels.

On the specific actions, especially taking from the NAPAs, and recognizing a huge interest and reference to the NAPAs under the adaptation discussions, LDCs would like to see greater involvement of the LEG / LEG Chair in the AWG meetings to provide experiences and information on results of the NAPA process to help inform discussions.

Given the interest in developing national adaptation plans, and the need to minimize creating new planning and reporting requirements that would require too long to set up and complete (the NAPAs took from 2001 to just about a year or two ago to really start to be implemented after completion!), the LDCs would like to propose that all developing countries prepare a NAPA, and that the new national adaptation plans be called NAPAs. In order to broaden coverage beyond urgent and immediate, and to scale up NAPAs, it is further proposed that the LEG, with inputs from others, revise the NAPA guidelines to incorporate the new requirements and ideas. This will ensure the process builds on existing expertise and systems, and that we do not create redundant and parallel processes.

Numerous evaluations have been conducted on the LDCF but no LDCF projects have in fact been completed. Therefore the LDCs would like urge the AWG/SBI/COP to take this into account in reflecting on the results on the evaluations, and to expect true and valid evaluations to be conducted only after the NAPA projects under the LDCF have in fact being implemented and completed. In view of this, it is proposed that the LEG start to plan an evaluation that will be under-seen by the SBI Chair, on the outcomes of the NAPA/LDCF programmes.

The LDCs would like to appeal to all relevant actors to ensure that NAPA implementation is given the priority that it deserves, and that delays are reduced significantly. Immediate implementation of NAPAs for is very important for building capacity of the LDCs to prepare National Adaptation Action Plan as next phase of addressing long adaptation. This can be achieved by:

- Implementation of NAPAs is not possible without adequate support in the order of 2 billion plus.

- Simplifying modalities to funds for adaptation such as revising the co-financing requirements for LDCs and direct budget support.
- Capacity building and institutional support for project development.
- Resources for funding must be allocated among countries based on the special preference and classification as stated in the Convention for LDCs and SIDs and also in the Bali Action Plan, which also gives special reference to LDCs, SIDS and African countries suffering from droughts and floods. These countries must be given priority to implement adaptation under LDCF, other adaptation funding mechanisms such as the AF and under future mechanisms.
- Simplifying and minimizing some of the steps required to be taken before implementation of identified adaptation options in the NAPAs.

LDCs would support MRV for adaptation in order to ensure mutual accountability especially given experiences under the NAPA and the LDCF, where there has been very little accountability in the agency support provided, leading to very slow progress since the inception of the NAPA programme almost a decade ago. A feedback mechanism and action to follow, such as through setting benchmarks for the financial mechanism to be established and its implementing agencies to ensure countries can switch and change when agencies do not deliver, without seriously disadvantaging the countries, as is the case now. It is very important to improve reporting modalities so that reporting back is not only through the COP by submissions and the GEF reporting simply.

The impacts of climate change are more felt by local communities and on national developments, therefore priority for supporting adaptation must be given to local and national level not so much at the regional level and global levels. There is need for very big efforts at training and education to develop the required human expertise to address adaptation across all the disciplines and socio-economic sectors at the national level. Every country has academic and research institutions such as universities that should be supported to develop solutions for adaptation. Therefore, establishment and enhancement of regional and national centers of excellence to address adaptation must be encouraged not global centers given the complexity adaptation.

B. Mitigation

Climate change is unequivocable and it is a global problem that requires global response in accordance with the principles and provisions of the United Nations Framework Convention on Climate Change (UNFCCC). The United Nations Framework Convention and the Kyoto Protocol provide the foundation and basis for tackling the climate change problem. Fortunately the climate change problem is manageable within the global economic resources; a mere 1% of global GDP if actions are taken now but such an action requires political will from all political leaders. The Climate Change Conference in Copenhagen is a test for political leaders in both developed and developing countries.

The UNFCCC commits all parties (paragraph 1 of Article 4) to take measures to mitigate greenhouse gas emissions and measures to facilitate adequate adaptation. Noting failures of Parties to implement their commitments under the UNFCCC, the Bali Action Plan launches a comprehensive process negotiate and reach an agreement to enable the full, effective and sustained implementation of the Convention through a long-term cooperative action, now, up to and beyond 2012 so as to attain the objective of the Convention. It is clear from the Bali Action Plan that all Parties to the UNFCCC will have to do their bit in accordance with its principles and provision.

Mitigation actions;

For Annex I Parties;

- The reference year shall be 1990 as already established in previous decisions and used in many national inventories;
- All Annex I Parties must take legally binding additional mitigation commitments or actions taking into account the principles of the Convention;
- Annex I reduction commitments under the Bali Action Plan must be comparable in magnitude, compliance and timeframe;

- Commitment reductions must be measureable, reportable and verifiable in accordance with a compliance mechanism to be adopted by the parties;
- The commitment reductions of non-Kyoto Parties must be comparable with total commitment reductions (under Kyoto and Bali Action Plan) of Kyoto Parties;
- Annex I Parties must reduce their emissions by at least 45% below 1990 by 2020 and 85% below the 1990 by 2050.

For Non-Annex I Parties;

- Non-annex I Parties shall take mitigation actions in accordance with the principles and provisions of the Convention;
- Nationally appropriate mitigation actions (NAMAs) of developing country parties are only different in the context of enabling mechanism provided by developed country Parties;
- NAMAs shall be measurable, reportable and verifiable to ensure maximum environmental benefits for investment;
- NAMAs must be differentiated among developing countries according to reductions per unit of investment costs;
- Developing countries, wishing to participate in implementation of NAMAs will have to determine/establish their reference point (business as usual);
- A mechanism shall be established for measurement, reporting and verification of greenhouse gas emission reductions;
- NAMAs, which promote sustainable development and local social, economic and environmental benefits or adaptation co-benefits may be proposed by developing countries, particularly by SIDs and LDCs; and
- Voluntary actions taken by developing countries and not enabled may be reported through national communication.
- Implementation of NAMAs of developing countries is contingent on provision of adequate financing and access to relevant technologies required to execute the activities. The urgency for undertaking NAMAs should be matched with urgency to provide support.

C. TECHNOLOGY

Implementation of commitments of developed country Parties has yielded very little results if any. The Bali Action Plan recognized the failure to adequate implement the Convention and noted the rapidly increasing greenhouse gas emission. Therefore the adoption of the Bali Action Plan is a response to address this failure and the rapidly build-up of greenhouse gases in the atmosphere;

The Convention recognizes the fact that poverty is a major and overarching problem in developing countries and notes that energy consumption will continue to growth consistent with developing countries aspirations and development goals. This growth in energy consumption may lead to increasing greenhouse gas emissions. Such unsustainable development could condemn present and future generation to serious and disastrous future. However, economic growth can be achieved without risking present and future generation to climate change catastrophic. Wide diffusion of existing clean technologies can yield significant greenhouse gas emission reductions.

It is important to recognize that technology needs vary with level of development for instance the needs and capacities of major developing countries are significantly different from those of LDCs and therefore these groups of countries cannot be treated similarly. While the major developing countries have capacity to adapt technologies the LDCs and others will simply use these technologies as Black Boxes and therefore issues of intellectual property rights are of less significance. It is therefore important to recognize the difference and therefore design a mechanism, which provides for each category.

Intellectual property rights should not and must not be an excuse fulfilling commitments under the Convention. Developed country Parties must address the issue of intellectual property rights in the context of complying with their commitments.

While mitigation technologies designed and produced in the north can be applied in the south with no or very little adoption, adaptation technologies may not be applicable. Adaptation technologies are geographic and climate specific and are therefore best develop in the south.

Technology actions;

A meaningful outcome of the Copenhagen Climate Change Conference and indeed implementation of the Bali Action Plan is contingent on progress of the negotiations on access and development of technology and financing. Clear and bold political signals are required to ignite the Copenhagen Climate Change Conference. Fire fighting must be the thing of the past (Kyoto and Bali).

Mitigation Technologies

- Promote wide diffusion of existing mitigation technologies including energy efficiency and renewable technologies at a scale similar to the information communication technologies (ICT). Strong and bold decisions are needed to realize this;
- Facilitate and support access to existing clean technologies to support development needs of major developing countries;
- Facilitate capacity building as an integral part of technology transfer through provision of financial resources;
- Stimulating research, development and production of future mitigation technologies, including appropriate REDD technologies, through cooperation with private sector, identified and selected through open and transparent competitive international bidding process;
- Encourage and promote south to south technology development and cooperation;
- Diffuse such emerging technologies at non-commercial rates;
- Stimulate research into future technologies through public funding; and
- Create conducive environment to promote partnership with the private sector to undertake the above actions.

Adaptation Technologies

- Undertake an inventory of existing adaptation technologies, including its state of current production;
- Promote wide dissemination of existing adaptation technologies within similar regions; and
- Strengthen institutional and technical capacity of research and academic institutions, including re-orienting research programmes.
- Stimulate and promote research, development and production of future adaptation technologies;
- Encourage and promote south to south technology development and cooperation;
- Promote wide diffusion of emerging adaptation technologies in similar climates; and
- Promote cooperation among research and development activities among developing countries.

Institutional Framework

The principle of learning by doing is noble and golden and must be used. We must avoid temptations of creating elaborate institutional framework to execute an activity that is less understood. Let the knowledge of required actions dictate the institutional framework. In this context therefore it is proposed that the technology institutional framework comprise of:

- Technology Committee to advise the COP and oversee implementation of development and transfer of technologies; and
- Financial mechanism to support development and transfer of technologies.

The elements of the institutional framework are elaborated in the subsequent sections.

Technology Committee

- Service by a strengthened professional secretariat and advised by a Technology Panel, comprise of technology and climate change policy experts nominated by Parties in accordance with the UN Rules. The key functions of the Technology Committee will include:
- Advice the COP on technology policy issues;

- Identifies areas of cooperation with private sector and makes recommendations to the COP for action;
- Reviews and decides on technology investments;
- Reviews and approves technology funding requests;
- Review progress of implementation of the Technology Action Programme;
- Approves procedures and modalities for technology cooperation with private sector; and
- Approves hiring of Technology Panel Experts

Technology Panel

The Technology Committee shall approve hiring of Technology Panel experts identified through the normal practice of the Secretariat – Call for Experts. Experts to the extent possible will come from the different UN regions. The functions of the Technology Panel will include:

- Advises the Technology Committee on development and transfer of technologies;
- Develops draft procedures and modalities for development and transfer of technologies
- Identifies and compiles emerging technologies, including their state of development and advise the Technology Committee on appropriate line of action; and
- Reviews request for funding technologies, including development of technologies from developing countries and advise the Technology Committee.

D. FINANCE

The financial mechanism shall support research, development, production and wide diffusion of technologies to developing countries. Details are contained in the financial mechanism.

Funding climate change is a commitment under the Convention for developed country Parties. It is not a donation to developing countries. It is payment for damage. Donations are under development agreements such as the ODA. Financing climate change will largely remain public with private sector and foundations complementing these efforts. Review of compliance of developed country Parties with their financing commitment under the Convention reveals relatively poor performance. Developed country Parties (governments) must take bold political decisions to clearly demonstrate their leadership role to the world and their people in Copenhagen.

Enhancement and reform, to the extent practicable, of existing institutions must be given serious considerations in the design of the financial architecture for financial mechanism(s). A consolidated financial mechanism with multiple windows could provide same level of service.

Sources of money

- New, additional, reliable and predictable financial resources through weighted assessed contribution of developed country Parties;
- Assessed contribution of developed country Parties, taking into account GDP, historical cumulative contribution to GHG concentrations in the atmosphere.
- Governments are the best mobilizers of funds as evidenced by their actions to solve the current economic crisis;
- Levies from market mechanism, included an expanded 2% on Kyoto Mechanisms;
- A levy on civil aviation and maritime transport except journeys originating and destiny to LDCs; and
- Contributions from private sector and foundations;

Financial mechanism

Guided by the principles of and provision of the Convention, including:

- equity, common but differentiated responsibility and respective capabilities;
- polluter pays principle;
- historical responsibility;
- direct and easy access to financial resources;
- efficiency and accountability;

- Needs of most vulnerable groups, particularly LDCs (consistent with paragraph 9 of Article 4 of the Convention); and
- Country driven eligible activities.

Governance

- The mechanism must be under the control of the COP;
- Equitable representation of regional and interest groups in accordance with the UN practice;
- Transparent and democratic governance;
- Accountability and efficiency; and
- An effective, responsive and easy to access mechanism.

Eligible activities

Mitigation

- Support NAMAs in accordance with the decision on NAMAs;
- Support mitigation actions, which are consistent with national development priorities and improve local environment; and
- Support implementation of REDD activities.

Adaptation

- Support implementation of concrete, immediate and urgent adaptation activities in developing countries, including the NAPAs;
- Strengthen institutional and technical capacity in LDCs to enable implementation of the Convention and its Kyoto Protocol;
- Support preparation and implementation of medium to long-term national adaptation plans;
- Strengthen national early warning systems;
- Support data collection, analysis, interpretation and promote application of information especially weather and climate information;
- Strengthen institutional and technical capacity of research institutions to enable them research and develop adaptation technologies;
- Promote south to south cooperation on adaptation technologies;
- Support other capacity building activities related to adaptation;

Technologies

- Wide diffusion of existing mitigation technologies including energy efficiency and renewable technologies at a scale similar to the information communication technologies (ICT);
- Capacity building as an integral part of technology transfer;
- Preparation of an inventory of existing adaptation technologies, including their state of development and production;
- Promotion of wide dissemination of existing adaptation technologies within similar regions;
- Encouraging and promoting south to south technology development and cooperation; and
- Strengthening institutional and technical capacity of research and academic institutions, including re-orienting research programmes.
- Stimulating, through provision of financial resources, research, development and production of future mitigation and adaptation technologies, including appropriate REDD technologies;
- Support public/private partnership, including research, development, production and wide diffusion of emerging technologies;
- Support licensing of privately own technologies;
- Encourage and promote south to south technology development and cooperation;
- Promote wide diffusion of emerging adaptation technologies in similar climates; and
- Promote cooperation among research and development activities among developing countries institutions.

PAPER NO. 24: MALDIVES

A shared vision and global goal

Maldives welcomes the opportunity to present its views on a shared vision for the Ad-hoc Working Group on Long-term Cooperative Action (AWG LCA).

The Maldives envisages an agreed outcome in Copenhagen in which all elements of the Bali Action Plan – shared vision, mitigation, adaptation, technology and finance – are given full and equal treatment, making possible the effective implementation of the Convention in a way that promotes the sustainable development, guarantees the means of subsistence, and ensures the long-term habitability and existence of the Maldives.

"Survival is non-negotiable; no poor or vulnerable community must be left behind".

It must be noted that anthropogenic climate change in the range of magnitude measured and predicted by IPCC-AR4 and other relevant sources represents an existential threat to the Maldives and other Small Island States, and to the wellbeing of vulnerable communities worldwide,

It must be further noted, pursuant the Human Rights Council resolutions 7/23 and 10/4, that anthropogenic climate change in the range of magnitude measured and predicted by IPCC-AR4 and other relevant sources, is already having and will increasingly have a range of negative implications, both direct and indirect, for the effective enjoyment of human rights including, *inter alia*, the right to life, the right to self-determination, the right to adequate food, the right to the highest attainable standard of health, the right to adequate housing, human rights obligations related to access to safe drinking water and sanitation, and the right of people not to be deprived of their own means of subsistence,

Moreover, while these implications affect individuals and communities around the world, the effects of climate change will be felt most acutely by those segments of the population who are already in vulnerable situations owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability.

Realizing rights: our common responsibilities

With this in mind, we must fashion an international response to climate change that protects and guarantees the territorial integrity, habitability and ultimately the existence of all States, while at the same time promoting the full enjoyment of all human rights, including economic, social and cultural rights, and the right to sustainable development.

It is apparent that international cooperation to effectively address climate change is not only expedient but is also a human rights obligation and that its central objective is the realization of human rights. All States Parties to the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights therefore have an obligation to reduce emissions in accordance with the provisions and principles of the UNFCCC and to levels consistent with the full enjoyment of human rights (i.e. safe-levels) in all other countries (especially vulnerable countries), to fund adaptation measures in vulnerable countries (depending on the availability of resources), and to ensure that the agreement reached at COP15 in Copenhagen is consistent with those human rights obligations and, at the very least, does not adversely impact upon human rights.

Consequently, it is clear that stabilization-levels must be ambitious and respect the sovereignty and territorial integrity of all countries, including Small Island States, and must be geared towards promoting and protecting the full enjoyment of human rights for all,

Realizing rights: our differentiated responsibilities

The UNFCCC emphasizes the centrality of common but differentiated responsibility and respective capabilities in the context of combating climate change and the adverse effects thereof, and recognizes that developed countries, which bear an historic responsibility for the problem, "should take the lead" in undertaking deep global emission reductions, in modifying longer-term trends in anthropogenic emissions consistent with the objectives of the Convention and in taking all practicable steps to comply with

commitments on financing and technology transfer. Full, effective and sustained implementation of these obligations, in accordance with the provisions and principles of the Convention, is an essential precondition to any successful response to climate change that guarantees the long-term viability of all States while also enabling the full enjoyment of all human rights.

A shared vision of cooperative action

In light of these factors, we believe that the Shared Vision must be aspirational in nature, consisting of an ambitious, concrete and measurable long-term target, and a framework for immediate and future action to implement the four pillars of the Bali Action Plan.

The Shared Vision must include a long-term global goal for emission reductions based on best available scientific information that uses impacts on Small Island States as a benchmark for effectiveness and justice, consistent with articles 3.2 and 3.3 of the Convention.

Additionally, the Shared Vision should be guided by Articles 3 and 4 of the Convention, and emphasize the following principles:

- Actions taken under the Convention must be urgent, practical, ambitious, and designed to protect the most vulnerable Parties, and to ensure their survival and development both in the short and in the long term.
- Actions, objectives, commitments and measures must reflect the fact that human beings are at the centre of concerns for sustainable development and that all human rights are universal, inalienable, indivisible, interdependent and interrelated; and be premised on the need to promote and protect the full enjoyment of human rights for all.
- Actions, objectives and commitments must promote climate justice and the full repayment by developed countries of their historical debt for their contribution to the causes of climate change and its adverse effects.
- The polluter-pays principle and the principle of common but differentiated responsibilities and respective capabilities must be used to determine the obligation of different Parties and Groups of Parties.
- Parties should use the precautionary principle in their efforts to anticipate, prevent the causes of and minimize the further adverse impacts of climate change.
- Actions should also reflect the principle of state responsibility - that States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of their national jurisdiction (Principle 2 of the Rio Declaration), and do not
- Actions should reflect the principle of inter-generational equity – the need to protect the global climate for both present and future generations.

In this regard, the ultimate vision of Maldives is that the Bali Roadmap must result in a climate change outcome that guarantees the future viability of the Maldives islands as the homeland of the Maldivian people and, moreover, that is consistent with the full enjoyment of all human rights by those people.

The Maldives thus calls for a global outcome that reflects:

- The latest science and the precautionary principle;
- That temperature should not exceed is 1.5°C above pre-industrial levels;
- That global atmospheric concentrations should peak by 2015 and reduce thereafter, stabilizing at below 350ppm;
- The importance of enhanced action on adaptation, including new, additional and predictable financial resources, to help vulnerable countries respond to the impacts that are already occurring and be sufficient to address the impacts that are expected to occur in the future;
- That a sufficient level of financing and technology be mobilized to support and enable mitigation and adaptation objectives in practice, including in developing countries in accordance with Article 4.7.

The Maldives notes that, in pursuit of these goals, human rights obligations and commitments have the potential to inform and strengthen international and national policy-making in the area of climate change, promoting policy coherence, legitimacy and sustainable outcomes,

Finally, the Maldives agrees with other Parties that a shared vision should reflect all elements of the Bali Action Plan to ensure the full, effective and sustained implementation of the Convention, as required by the Bali Action Plan and agreed by all Parties at COP 13 in Bali, Indonesia.

PAPER NO. 25: MICRONESIA (FEDERATED STATES OF)

Decision on a Programme of Work on

Opportunities for Rapid Climate Mitigation to

Complement Long-Term Climate Mitigation and Stabilization

The Conference of the Parties,

Noting that mitigation of climate change and its adverse effects is a high priority for all countries and that developing countries, especially the least developed countries and small island developing States, are particularly vulnerable;

Noting further that many countries are already experiencing the harmful impacts of climate change and that urgent measures are needed to minimize these and expected future impacts;

Reaffirming the ultimate objective of Article 2 of the Convention to prevent dangerous anthropogenic interference with the climate system in a timely manner;

Further reaffirming the Convention principle that Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects;

Reminding the Parties of their commitments under Article 4 of the Convention to adopt policies and to take measures to mitigate climate change, and of the commitments of developed countries to provide new and additional financial resources to developing countries;

Also reaffirming the Bali Action Plan mandate for action commencing now, up to and beyond 2012, as climate mitigation requires appropriate actions in the near, middle and long terms;

Recognizing that climate change is caused by a variety of anthropogenic emissions and that sufficient climate mitigation thus requires a variety of measures across numerous sectors;

Emphasizing the opportunities to achieve significant co-benefits to public health, development, and national security from climate mitigation measures;

Highlighting the need to achieve significant near-term results and benefits from climate mitigation efforts in order to avoid tipping points leading to abrupt climate change and otherwise minimize the adverse impacts on those countries already negatively affected by climate change and those countries vulnerable to worsening impacts in the near future:

1. *Adopts* a Programme of Work of the Subsidiary Body for Implementation ("SBI") on opportunities for rapid, near-term climate mitigation (as contained in the annex to this decision) to complement ongoing measures to mitigate climate change over the middle and long terms.
2. *Urges* all Parties to participate in and otherwise support the implementation of the Programme of Work, including wherever possible, to contribute financial resources and provide for the transfer of technology as appropriate for implementation of the Programme of Work.
3. *Suggests* that additional financial resources for the Programme could be provided by/sought from the Global Environmental Facility, the World Bank Climate Investment Funds, other international financial institutions or through bilateral or multilateral assistance plans.
4. *Requests* the SBI, under the guidance of its Chair and with the assistance of the secretariat, to coordinate the implementation of the Programme of Work.
5. *Requests* the SBI:
    (a) To start the implementation of the Programme of Work by undertaking the initial activities specified in the annex to this decision;
    (b) To identify further actions which could bring about rapid mitigation of climate change and its harmful impacts;

(c) To consider and further elaborate additional activities and modalities of the Programme of Work, including the timing of these activities and the possible need for and role of a group or groups of experts in implementing the Programme of Work;

(d) To consider further activities as well as appropriate timing and modalities for their inclusion in the Programme of Work based on the results of the initial activities, information presented in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change and other new scientific information, as well as relevant activities from international and regional institutions; and

(e) To review and report on the Programme of Work to the Conference of the Parties at its _____ session (December 2014).

ANNEX

Four-year Programme of Work of the SBI on Opportunities for Rapid Climate Mitigation to Complement Long-Term Climate Mitigation and Stabilization

I. Objective

1. The objective of this Programme of Work of the Subsidiary Body for Implementation is to assist all Parties, in particular developing countries, including the least developed countries and small island developing States, to minimize the adverse impacts of climate change in the near term through the implementation of measures taken to provide rapid mitigation of anthropogenic warming.

II. Expected outcome

2. The expected outcomes of the Programme of Work are:

(a) Reduced local, regional and global warming due to the implementation of measures targeting a variety of the anthropogenically emitted agents that cause such warming;

(b) Minimization of harm to the most imminently threatened climate elements, including sea-ice, snow pack, land-based ice sheets and glaciers, as well as minimization of the adverse impacts of such harm, including damage to ecosystems and food production, sea-level rise, and disruption of development;

(c) Identification and implementation of technologies that can bring about rapid climate mitigation;

(d) Identification and implementation of policy measures that can bring about rapid climate mitigation;

(e) Enhanced development, access to energy, public health and international security;

(f) Coordination, where possible, of climate change policy with other policies pertaining to anthropogenic emissions, including public health and air pollution policy; and

(g) Enhanced cooperation among Parties, relevant organizations, business, civil society and decision makers.

III. Scope of work

3. The Programme of Work comprises two thematic areas, each with several action-oriented sub-themes:

(a) Mitigation of warming and its impacts through reductions of emissions of specified substances that cause warming, particularly those that are short-lived in the atmosphere, such that warming would begin to cease, and the climate benefits as well as co-benefits would begin to accrue, in less than two decades after reductions:

i. Promoting development, dissemination and utilization of technologies and policies to reduce emissions of black carbon (soot), including from all diesel-powered sources, biomass burning, industrial equipment, and heating and cooking processes and other sources;

ii. Promoting development, dissemination and utilization of technologies and policies to reduce emissions of methane from mining operations, landfills, livestock, food cultivation and other sources;

iii. Promoting development, dissemination and utilization of technologies and policies to reduce emissions of tropospheric ozone and its precursors from automobiles; and

iv. Promoting the phase down of hydrofluorocarbons (“HFCs”) to essential uses and otherwise strengthen regulations of f-gasses.

(b) Mitigation of warming and its impacts by reductions of atmospheric concentrations of substances that cause warming:

i. Promoting development and implementation of technologies and policies to use biosequestration, including sustainable biochar, to draw down concentrations of carbon dioxide from the atmosphere, while avoiding negative impacts on land use, food production, forests, biodiversity and the rights of indigenous people and local communities.

IV. Modalities

4. The modalities for implementation of the Programme of Work, depending on the nature of the specific activities may include:

(a) Workshops and meetings;

(b) The utilization of knowledge, expertise and input from experts, practitioners and relevant organizations, including preparing reports and other materials for considerations by Parties and the SBI;

(c) The building on and/or updating of relevant existing compendiums and web-based resources;

(d) Targeted submissions, including those based on questionnaires, from Parties and organizations;

(e) Reports and technical papers, assessments prepared by the secretariat, Convention expert groups or experts from other organizations; and

(f) Other modalities, such as a group or groups of experts, upon agreement by the SBI.

PAPER NO. 26A: NEW ZEALAND

Ad hoc Working Group on Long-term Cooperative Action under the Framework Convention

24 April 2009

Introduction

1. Parties are asked to submit their ideas and proposals on elements of paragraph 1 of the Bali Action Plan (Decision 1/CP.13), including on the form of the agreed outcome. These ideas and proposals are to be taken into account in a negotiating text to be prepared by the Chair for consideration at the sixth session of the AWG-LCA.

2. This submission summarises New Zealand's preliminary views on the form of a post-2012 legal framework and on the following elements of the agreement: a long-term global goal for emissions reductions; nationally appropriate mitigation action by developing countries, including use of market mechanisms; finance; measurement, reporting and verification; and adaptation.

3. Separate submissions to the AWG-LCA have been made on REDD and a NAMA market mechanism.

4. New Zealand reserves its right to submit further proposals, including for legal text.

Form of a post-2012 legal framework

5. Discussions during the most recent negotiations in Bonn highlighted the interrelationship between the AWG-LCA and AWG-KP negotiating tracks. For example, new commitments for Annex I Parties under the Kyoto Protocol form an integral part of fulfilling the Bali Action Plan, and proposals for new market mechanisms in this working group will impact on the work underway in the Kyoto Protocol.

6. New Zealand considers that it would enhance coherency and consistency, and avoid duplication of effort, if the two tracks combined to form an integrated post-2012 outcome within the United Nations Framework Convention on Climate Change (UNFCCC) framework. This integrated outcome must include mitigation actions and commitments by developed and developing country Parties as mandated under the Bali Action Plan.

7. New Zealand favours a single Protocol or other treaty instrument under the UNFCCC to combine the outcomes of both negotiating tracks. The advantages of this approach include common Parties, institutions and entry into force provisions; internally consistent application of mechanisms and interpretation of terms; and coherence between the provision of funding/technology transfer and the modalities for their use.

8. Should the immediate Copenhagen outcome be less than fully integrated, there would need to be a pathway to full integration including via appropriate entry into force provisions. This is an important means of ensuring the environmental integrity of the overall climate change framework, and further ensures reciprocity of action, thereby encouraging Parties to make new commitments.

9. New Zealand is also interested in exploring the idea of national schedules to express the commitments and undertakings of individual country Parties. Such an approach could provide flexibility for the content and form of Parties' commitments and actions within an overarching framework of rules determining how those commitments and actions will be interpreted and applied.

10. We note further the importance of achieving the most comprehensive outcome possible at Copenhagen. The principal elements of rules and mechanisms which will affect how Parties' commitments are quantified need to be clearly elaborated to enable Parties to assess and agree to new commitments.

A long-term global goal for emissions reductions

Description

11. We propose a stabilisation level for greenhouse gas concentrations in the atmosphere that is able to be reviewed in light of the latest scientific information and in conjunction with the assessment of the level of commitments made by all Parties.

Rationale

12. 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.

13. The long-term goal will only have utility if current and future greenhouse gas emissions and trends are accurately measured, reported, and verified. We therefore propose text in relation to inventories under the measurement, reporting and verification section.

14. As this goal will need to be updated periodically in light of intergovernmental scientific assessments, New Zealand considers that it is preferable to express the goal in a decision of the Conference of the Parties.

Proposed legal text: COP decision

"The Conference of the Parties,

Reaffirming the importance of the ultimate objective of the Convention as set out in its Article 2,

Decides that the global goal guiding the commitments and actions of all Parties under the Convention towards the achievement of its ultimate objective shall be the stabilization of greenhouse gas concentrations in the atmosphere at not more than 450 parts per million of carbon dioxide equivalent;

Decides that this level should be kept under review in the light of intergovernmental scientific assessments.

Nationally Appropriate Mitigation Actions (NAMAs) by developing countries and Measurement, Reporting and Verification

Description

15. The current Annex I list of the Framework Convention is not an accurate reflection of responsibility or capability. Parties in a position to do so should either join Annex I or take on commitments comparable to those of Annex I Parties.

16. For non-Annex I countries, improved reporting and information on their emissions will be required in order to understand the effect of their nationally appropriate mitigation actions at the national and global levels, and to assess financing needs.

17. New Zealand therefore proposes to improve the frequency of national communications from Parties not included in Annex I to the Convention through the mandatory and annual submission of national greenhouse gas inventories for major emitting and advanced developing countries.

18. New Zealand is also interested in exploring the idea of national schedules to express the commitments and undertakings of individual country Parties. Such an approach could provide flexibility for the content and form of Parties' commitments and actions within an overarching framework of rules determining how those commitments and actions will be interpreted and applied. To facilitate the transparency and comparability of nationally appropriate mitigation actions, New Zealand proposes a reporting template (see Annex A) We suggest that 'types' of actions are explicitly categorised according to a range of

national circumstances and levels of development e.g. quantified targets, price-based measures, regulations, and other policies and measures.

19. In separate submissions we also propose new market mechanisms established under the Copenhagen Agreement for nationally appropriate mitigation actions and REDD, for those developing country Parties that wish to access carbon market finance. We elaborate on the structure of these mechanisms, and how they fit within the broader framework of emissions trading and other climate change actions.

Rationale

20. While the principles of the Convention remain valid over time, the circumstances of Parties and the scientific understanding of the problem of climate change are dynamic. As individual country circumstances change over time so too do capability and responsibility. All Parties' commitments under Article 4 of the Convention should be assessed periodically through reviews linked to the commitment periods under the Kyoto Protocol or any successor agreement.

21. For non-Annex I Parties who will be undertaking NAMAs, it will be useful to describe or categorise 'types' of actions according to a range of national circumstances and levels of development e.g. quantified targets, price-based measures, regulations, and other policies and measures. This continuum of actions reflects different levels of capability. This principle also necessitates periodic review of a party's election of actions to assess appropriateness, as responsibilities and capabilities change according to development.

22. The NAMAs of developing countries must be measurable, reportable, and verifiable. Information on national and sectoral baseline emissions will be essential for enabling financial support, as envisaged by the Bali Action Plan. Article 12 of the Convention provides the basis for the information requirements for proposals put forward by developing countries for support. Proposals for support should estimate all incremental costs, the reductions of emissions and increments of removals of greenhouse gases, as well as estimate the consequent benefits.

23. The concept of measurable, reportable and verifiable actions is important for many reasons, including to:

    - facilitate assessment by the Subsidiary Body for Implementation of the overall aggregated effect of the steps taken by parties as envisaged by Article 10(2)(a) of the Convention;
    - facilitate assessment by the Conference of the Parties of the progress towards the ultimate objective of the Convention (Article 7(2)(e) of the Convention); and
    - facilitate the calculation of global emissions trends (Article 12(1)(c) of the Convention) relative to the agreed long-term global goal for emissions reductions (Bali Action Plan, paragraph 1(a)).

24. National communications (under Article 12 of the Framework Convention) are at the heart of the Convention process – providing the vehicle for all Parties to communicate progress with implementation of the Convention. 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 long-term global goal. Once national greenhouse gas emissions and removals are better understood, and have been quantified and reported, mitigation opportunities are more readily identified. We do not envisage the same frequency and level of reporting for LDCs or other Parties with limited capacity.

25. Estimating the effectiveness of emissions reductions requires business-as-usual baseline projections, "with measures" projections and mitigation cost estimates. Annual national greenhouse gas inventories are an essential reference point for action and should be mandatory for all major emitting and advanced developing countries, and for where support is required from other Parties or is to be accessed through carbon markets.

26. Estimating business-as-usual emissions and estimating costs of actions to limit or reduce these emissions is a useful way to determine where cost-effective mitigation opportunities lie. Article 3(3) of the Framework Convention states that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. The best starting point for this assessment is through national planning that identifies these opportunities. This is envisaged by Article 4(1)(b) of the Framework Convention where all parties are asked to formulate, implement, publish and regularly update national measures to mitigate climate change.

Concluding remarks

27. Accountability for the provision of support for NAMAs will require a business-as-usual reference scenario and quantified baseline for emission and removals to measure against, and an assessment of the opportunities and their associated costs. Governments, taxpayers and shareholders must have the full knowledge that their support is delivering real emissions reductions beyond what would occur otherwise.

28. Without a national greenhouse gas inventory, including the information above, the expected and actual results of the nationally appropriate mitigation are impossible to assess for the purpose of calculating "full incremental costs" in accordance with Article 4(3) of the Framework Convention. The proposed template thus aims to facilitate an appropriate level of support for NAMAs according to a Party's national circumstances.

29. The text proposed below builds on Article 12 of the Convention. This could be a used in a new legal instrument, as an amendment to the Convention or adapted to be used as a COP decision. Whichever option is used, a COP decision will also be required in order to detail the modalities around the use of the reporting template.

Proposed legal text: COP Decision or amendment text

"*Each Party*, except as specifically exempted by the COP for reasons of capacity, shall communicate to the Conference of the Parties, through the secretariat, the following elements of information:

(a) An annual national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties;

(b) A general description of steps taken or envisaged by the Party to implement the Convention; and

(c) Any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including material relevant for calculations of global emission trends.

Each Party shall incorporate in its communication the following elements of information:

(a) A detailed description of the policies and measures that it has adopted to implement its commitment under Article [4]; and

(b) A specific estimate of the effects that the policies and measures referred to in subparagraph (a) immediately above will have on anthropogenic emissions by its sources and removals by its sinks of greenhouse gases."

Proposed legal text: COP Decision *(refer Annex A of this submission for guidance on the provision of information on measurable, reportable and verifiable nationally appropriate mitigation action by developing countries)*

"The Conference of the Parties,

Recalling Article 12 of the Convention,

Adopts the reporting template for nationally appropriate mitigation actions by developing countries as contained in the annex to the present decision;

[…]

Finance

Description

30. We propose to increase the number of countries with financial obligations under the Convention beyond the current Annex II list to the Framework Convention. Eligibility could be assessed periodically through reviews linked to the commitment periods under the Kyoto Protocol or any successor agreement, or according to an agreed mechanism, such as GDP per capita.

31. We seek to reaffirm that support for developing country Parties may come from a variety of sources, including other developing country Parties in a position to provide support, private sector sources, and through carbon market finance.

Rationale

32. While the principles of the Convention remain valid over time, circumstances, scientific understanding and technological capability evolve, and therefore so do Parties' capabilities and responsibilities. All Parties' commitments under Article 4 of the Convention should be assessed periodically through reviews linked to the commitment periods under the Kyoto Protocol or any successor agreement.

33. Noting that the various reports on financing requirements for mitigation, adaptation and technology conclude (albeit with large variances) that the levels of finance required is an order of magnitude greater than current levels, leveraging the private sector through carbon markets and/or other measures is essential to achieve the outcomes sought under the Bali Action Plan. 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 polices and proposed new financing options and carbon market mechanisms.

34. The legal text proposed below builds on Article 4 paragraph (2)(f) and Article 11 paragraph (5) of the Convention. The first set of text below would most appropriately be used as an amendment to the Convention so that the Annex I and II classifications applied consistently throughout the UNFCCC framework. However, it could also be used in a new legal instrument with the necessary changes.[1]

Proposal legal text: Amendment to the Convention

"The Conference of the Parties shall review, every [x] years, available information with a view to taking decisions regarding such amendments to the lists in Annexes I and II as may be appropriate, with the approval of the Party concerned. Such information shall include the gross domestic product per capita of all Parties, including as a comparison with the Parties listed in Annexes I and II."

[1] See for example the definition of "Party included in Annex I" in Article 1 of the Kyoto Protocol, whereby Parties which have made notifications under Article 4, paragraph 2(g) of the Convention are treated as Annex I Parties under the Kyoto Protocol despite not being Annex I Parties for the purposes of the Convention.

Proposed legal text

"The developed country Parties and other Parties in a position to do so may also provide and developing country Parties avail themselves of, financial resources related to the implementation of the Convention including through bilateral, regional and multilateral channels."

Adaptation

Description

35. We use the outline provided by the co-chairs of the AWG-LCA contact group at its last meeting during the AWG-LCA 5 held in Bonn, Germany from 28 March – 8 April 2009. This should be read in conjunction with the section on finance above. New Zealand is not providing a complete proposal for what might be called a *UNFCCC Framework on Adaptation*, but we are highlighting items that should be included.

UNFCCC Framework on Adaptation

36. A COP decision on adaptation under the Bali Action Plan would incorporate the following in the **preamble**:

Proposed legal text: Preamble

Recalling the provisions of Article 4 paragraph 1 subparagraphs (b), (e), (f), (g), (h), (i), (j), Article 4 paragraph 4, Article 4 paragraph 8, Article 5, Article 6, Article 11 paragraph 5, and Article 12 paragraph 1 subparagraphs (b) and (c) of the Convention,

Bearing in mind that all countries are vulnerable to the impacts of climate change, and that developing country Parties, especially those listed in Article 4 paragraph 8, have specific needs and concerns arising from the adverse effects of climate change in the adaptation context,

Recognising the role of the Nairobi work programme on impacts, vulnerability and adaptation to climate change,

37. It is important for the *Framework on Adaptation* to be clear about the role of the Convention regarding adaptation. Given that adaptation to climate change is a country driven process, the Convention's role is one of coordination and facilitation, and of catalysing activity e.g. by providing access to a range of tools and information sources including on availability of adaptation finance and technologies. The Convention's role is **not** that of an implementing agency. Critically, a framework that addresses adaptation to the adverse effects of climate change is **not** a framework to address the impacts of response measures to climate change. This issue is more than adequately covered elsewhere in the negotiations and it does not belong in the *Framework on Adaptation*.

38. The following language would be incorporated in **General provisions** (Objectives, guiding principles[2] and Scope).

[2] These guiding principles draw heavily on the guiding principles in the UN International Strategy for Disaster Reduction (UNISDR) Words into Action: a Guide for Implementing the Hyogo Framework. Hyogo Framework for Action: Building resilience of nations and communities to disasters 2005 -2015 http://www.unisdr.org/eng/hfa/docs/Words-into-action/Words-Into-Action.pdf

Proposed legal text

Decides that the operation of the Framework on Adaptation shall be guided by the following objectives:

(a) To assist all Parties, in particular developing countries, including the least developed countries and small island developing States, to improve their understanding and assessment of impacts, vulnerability and adaptation, and to make informed decisions on practical adaptation actions and measures;

(b) To create enabling environments through knowledge sharing, capacity building and the strengthening of regional centres of expertise; and

(c) To facilitate and promote an integrated best practice approach to adaptation to the adverse effects of climate change;

Decides that the following guiding principles govern the Framework on Adaptation:

(a) States have the primary responsibility for implementing measures to reduce climate change risk and to adapt to the adverse effects of climate change;

(b) Climate change risk reduction and adaptation must be integrated into development activities;

(c) Capacity-development is a central strategy for reducing climate change risk and adapting to climate change;

(d) Effective climate change risk reduction and adaptation to climate change requires community participation. The involvement of communities in the design and implementation of activities helps to ensure that they are well tailored to the actual vulnerabilities and to the needs of the affected people;

(e) Climate change risk reduction and adaptation responses need to be customized to particular settings;

(f) Priority for adaptation actions through this Framework shall be given to the most vulnerable countries

Institutional arrangements

39. Institutional arrangements for adaptation should build on and enhance what already exists under the Convention (e.g. the Nairobi work programme), in existing regional centres, and in other international fora such as the UN International Strategy for Disaster Reduction (UNISDR) Hyogo Framework for Action. The *Framework on Adaptation* should avoid duplication of effort and institutions, and instead aim to increase coherency amongst them.

Means of implementation

40. New Zealand recognises that more resources will be needed to ensure the most vulnerable countries are able to reduce climate change risk and adapt to the adverse effects of climate change. Resources will by necessity need to continue to come from a range of sources, including existing centralised funds under the Convention and its Kyoto Protocol, as well as through bilateral, regional and other multilateral channels (as per Article 11 paragraph 5 of the Convention). Already accepted principles of mutual accountability and robust governance regarding funding for development should be incorporated into financing for adaptation to the adverse effects of climate change.

41. The following language would be incorporated under **Means of implementation.**

Proposed legal text

Affirms that Parties may provide financial resources for adaptation to the adverse effects of climate change through bilateral, regional and other multilateral channels;

Decides that widely accepted principles of mutual accountability and robust governance shall apply to mechanisms established under the Convention to deliver financial support to developing countries to assist them adapt to the adverse effects of climate change;

Implementation

42. The focus of this part of the *Framework on Adaptation* should be on creating enabling environments, building capacity and strengthening regional centres of expertise. It should be non-prescriptive, and should aim to strengthen mechanisms under the Convention to mange and reduce risk, and for adaptation planning (including integration into sectoral and national planning to make it more effective) while avoiding duplication of effort.

Monitoring and feedback

43. New Zealand believes there is a need for accountability in both directions where finance has been provided for adaptation (see "Means of implementation" above). This means that Parties who receive such financing must be accountable for how it is spent.

44. Feedback is also important in an environment that is encouraging "learning by doing" – we need to know what works well, and what doesn't. Monitoring, feedback and evaluation will contribute to the understanding of what constitutes *best practice for adaptation*.

Annex A – COP Decision on a Template for Reporting Nationally Appropriate Mitigation Actions

Party	**National Circumstances**	**Date of latest reported National GHG Inventory and** **Date of inventory review**	**Sector**	**Agreed projected business as usual emissions/removals**	**Nationally Appropriate Mitigation Action**	**Emission reduction or limitation**	**Emission budget**	**Agreed full incremental cost of achieving emission reduction or limitation**
Party A	GDP per capita GHG per capita Mitigation potential		Stationary Energy	XMT	List NAMAS according to: ▪ Quantified targets ▪ Price based measures ▪ Regulations ▪ Other policies and measures	YMT	XMT – (YMT + ZMT)	a$m
						ZMT		b$m
			Mobile Energy					
			Agriculture					
			LULUCF					
			Industrial Processes					
			Solvents					
			Waste					
			Multiple sectors					
TOTAL				**TOTAL Business As Usual Projection**		**UGT**	**TOTAL BUDGET**	**e$m**

Annex A – Explanation of Reporting Template for Nationally Appropriate Mitigation Actions (by column)

Party

45. This column would name the developing country Party to the Protocol. It is envisaged that each developing country Party would have a separate national template, although flexibility would be shown to least developed countries in accordance with Article 4 paragraph 9 of the Convention as to whether they had a template and, if so, what it contained.

National Circumstances

46. This column would list issues relevant to a Party's national circumstances. Metrics such as Gross Domestic Product on a per capita basis and mitigation potential are relevant factors.

Date of latest reported National GHG Inventory and Date of inventory review

47. Self explanatory.

Sector

48. This column would list the different sectors in which a Party might have NAMAs. New Zealand considers that these sectors should reflect the sectors contained in national inventories to facilitate progress assessments, transparency and ease of reporting. All inventory sectors should be listed for each Party although in some cases, for example least developed countries, there may not be NAMA entries for each sector.

Agreed projected emissions/removals

49. This column would list the agreed projected emissions or removals for the commitment period. The commitment period would be specified in the body of the overarching agreement, and if a two-track approach is maintained, should be consistent with the commitment periods under the Kyoto Protocol.

50. Estimations of the impact of NAMAs require baseline projections as measurement and verification requires a reference point to measure against. Annual national greenhouse gas inventories are therefore essential and would be mandatory for all major emitting countries and advanced developing countries.

51. A COP decision would be required to determine the methodology for calculating projected emissions removals. It will be essential to have up to date and robust inventory information in order to determine these values.

Nationally Appropriate Mitigation Action

52. This column would list the nationally appropriate mitigation actions to be undertaken by the Party during the commitment period. These NAMAs must be measurable, reportable and verifiable, as specified in paragraph 1(b)(ii) of the Bali Action Plan. Development of NAMAs is also consistent with Article 4(1)(b) of the Framework Convention where all parties are asked to formulate, implement and regularly update national measures to mitigate climate change.

53. We suggest describing or categorising 'types' of actions according to a range of national circumstances and levels of development e.g. quantified targets, price based measures, regulations, and other policies and measures. This continuum of actions reflects the differentiated capabilities. This principle also necessitates periodic review of a party's election of actions to assess appropriateness, as capabilities change according to development.

Emission limitation or reduction

54. This column would list the amount of net emissions limitation or reduction that are expected to be achieved in the sector, relative to the business-as-usual projected emissions by carrying out the NAMAs listed in the previous column.

Emission budget

55. This column would contain the total amount of emissions expected from a Party if the NAMAs are achieved. These figures may be growth emission figures compared to the base year (but not to the business as usual projected emissions) in order to take into account economic development.

Agreed full incremental costs of implementing nationally appropriate mitigation action

56. Where a Party is seeking financial support, an agreed assessment of the incremental costs incurred by the NAMA will be required and this should be entered in this column. This is consistent with Article 12(4) of the Framework Convention which states that proposals put forward by developing countries for support should estimate all incremental costs of the reductions of emissions and increments of removals of greenhouse gases, as well as estimate the consequent benefits.

57. It is expected that some Parties will be able to self-finance a number of NAMAs. In such instances, no entry would be required in this column for that specific NAMA although Parties would remain free to make entries if preferred.

58. The finance requirements in this column will be met through both public and private sector sources, including in some instances self-financing by the Party in question or by other developing country Parties in a position to do so. For that reason, any figures in this column will not equate to the financing obligations of Parties.

59. To the extent that NAMAs are supported by external parties, as envisaged by the Bali Action Plan, information on these actions and national baseline greenhouse emissions will be an essential prerequisite to facilitate that support. Estimating costs of limiting or reducing these emissions is also a useful way to determine where opportunities lie. Article 3(3) of the Framework Convention speaks to the importance of identifying costs when it says that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

PAPER NO. 26B: NEW ZEALAND

Submission to the Ad-Hoc Working Group on Long-Term Cooperative Action Under the Convention

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

24 April 2009

1. Responding to the Chair's request for draft legal text, New Zealand proposes that the Copenhagen agreement establish a "REDD mechanism" under a specific Article of that agreement.

Context

2. There is overwhelming support within the international community to take effective action on reducing emissions from forest-related activities in developing countries.

3. Almost all Parties, non-government organisations and academics agree that significant financial support will be needed.

4. Many Parties consider that the most robust and reliable source of ongoing financial support will be access to carbon markets. Many also note that funds will also play an important role, either as an interim measure or - in the case of a smaller number of Parties – as a long term source of financial support.

5. At the same time, the potential sources of financial support are becoming more diverse and complex.

6. At present, the principal carbon markets of significant global scale are those related to Kyoto Protocol compliance mechanisms.

7. However, there is now a strong possibility that formal (that is, legislated) emission reduction compliance markets will, over time, extend well beyond the Kyoto Protocol commitments of ratified Annex I Parties.

8. Further, many countries, institutions and non-governmental organisations are taking significant voluntary steps to help reduce emissions from this major global source.

9. Finally, there are a number of proposals currently under active consideration – both within and outside the UNFCCC process - that may lead to major sources of ongoing funding for forestry related activities in developing countries.

10. There is still a great deal of uncertainty as to which and to what extent the above measures will ultimately be put in place.

Establishing a new REDD Mechanism

11. Given the situation described above, New Zealand considers that the international community, via the UNFCCC, should develop a comprehensive, transparent and robust framework to encourage reductions of emissions from deforestation and forest degradation in developing countries (REDD).

12. Emission reductions generated and verified under such a framework may then be used for:

    - Kyoto Protocol compliance (if/as agreed by the Parties to the Protocol)
    - Compliance with other regimes (if/as agreed by those countries establishing such regimes)
    - Compliance with any funding arrangements (if/as agreed by the Parties to the Convention)
    - Voluntary actions (if/as agreed by the organisations undertaking such actions)
    - Any or all of the above

13. New Zealand considers this framework could be by way of a new REDD mechanism established under a specific Article of any agreement reached in Copenhagen.

14. The REDD mechanism should:

- respect the sovereignty of the host countries participating in it;
- ensure that emission reductions are real and equivalent regardless of the source of financial support being accessed by the host country;
- be flexible enough to allow interaction with a range of compliance markets, funds, and voluntary activities;
- be pragmatic, efficient, and accessible, including to the private sector if appropriate;
- ensure that emission reductions over a given period are counted only once;
- ensure that entities providing financial support can be assured that their funding is for additional abatement that has not already been funded through some other source for a given period;
- provide for other requirements and standards as deemed appropriate by the international community.

15. Further consideration should be given to how such a mechanism interacts with and/or provides for the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+). Its interaction with relevant CDM provisions would also need to be considered.

Form of a REDD Mechanism

16. Such a mechanism should be established under a specific Article of the new agreement reached in Copenhagen.

17. The major elements of a mechanism should, to the greatest extent possible, be established under the new Article. The Article should also establish processes and timelines for agreeing the necessary methodologies, rules, and guidance to implement the mechanism.

What should a REDD Article specify?

18. New Zealand considers the major elements that should be agreed in a REDD Article include:

- That a REDD mechanism be defined;
- The purpose of the mechanism;
- Eligibility to participate;
- Voluntary participation approved by each Party involved;
- Scope of the mechanism: in particular: that it should be a national-level mechanism; and whether it shall apply to REDD, REDD+, or only some elements of REDD+;
- Its relationship with Kyoto Protocol compliance markets (noting that a consequential amendment to Article 3 of the Kyoto Protocol may be necessary); and/or its relationship to any other compliance or compulsory regimes established under a Copenhagen agreement;
- A phased approach so as to build capacity for implementation of the mechanism and any funding expectations to support such capacity building;
- Principles to be considered when establishing reference emission levels for each participating host country and a process for how those levels will be confirmed by the international community;
- A mechanism to address circumstances where emissions are greater than reference emission levels;
- A mandate and timeline for the COP to agree an approach to address non-permanence;

- A mandate and timeline for the COP to agree other modalities, rules, guidelines and verification/review procedures as necessary;
- A mandate and timeline for the COP to agree other requirements and standards as appropriate.

19. Each of the elements described above might be contained in separate paragraphs of the new Article. Some of these paragraphs could read as follows:

Proposed legal text: New Article

1. A mechanism to reduce emissions from deforestation and forest degradation in developing countries is hereby defined.

2. The purpose of the mechanism shall be to assist developing country Parties to maintain forest carbon stocks while promoting their sustainable development and to assist all Parties in contributing to the ultimate objective of the Convention by reducing emissions from deforestation and forest degradation and in meeting their commitments under the Convention and any related legal instruments.

3. Emission reductions resulting from activities under this mechanism shall be certified by operational entities to be designated by the Conference of the Parties, on the basis of:

(a) Voluntary participation approved by each Party involved;

(b) Real, measurable and long-term benefits related to the mitigation of climate change;

(c) Reductions in emissions that are additional to any that would occur in the absence of the mechanism.

4. Participation under this mechanism, including the provision of incentives for emissions reductions and the acquisition of any such emissions reductions generated, may involve private and/or public entities, and is subject to whatever guidance may be provided by [the operational entity designated by the Conference of the Parties].

5. [...]

PAPER NO. 26C: NEW ZEALAND

A Submission to the Ad-Hoc Working Group on Long-Term Cooperative Action under the Framework Convention

Impact of Response Measures

4 May 2009

New Zealand welcomes the opportunity to comment on item 1(b)(vi) of the Bali Action Plan "economic and social consequences of response measures". We recognise and share the concern that some climate mitigation policies may have unintended consequences for other countries and regions. It is appropriate that that the issue be discussed under the UNFCCC. However, the degree of duplication caused by the item being on several agendas detracts from the clear focus that should be given to the topic. New Zealand considers that all discussions on potential consequences/impacts of response measures etc should be consolidated under a single agenda item. As is explained below, we consider the Subsidiary Body for Implementation (SBI) agenda is most suitable for taking the issue forward, and avoiding duplication in the two current Ad-hoc Working Groups.

2 All Parties can expect that climate change will bring significant environmental, social and economic changes to which they will need to adjust. Many Parties, and not just those in Annex 1, have sufficient resources to adjust to changing circumstances. But it is essential that in this agenda item as in others, that most concern is had for vulnerable countries with the fewest resources to assist them in such changes.

3 The Convention appropriately recognises that all Parties may be impacted by climate change response measures. As a distant island nation, New Zealand has concerns about potential impacts, including for example from unilaterally imposed border taxes and restrictions, and carbon leakage. Unilateral measures and incomplete coverage of mitigation disciplines carry the potential to distort and undermine the multilateral rules-based trading and financial systems by discriminating against or unevenly impacting some countries: we note the specific reference to minimizing adverse effects on international trade in Article 3 paragraph 5. That's why New Zealand considers it so important that the Copenhagen outcome is comprehensive, covering all major emitters, and that there is a global solution to mitigation in the international aviation and maritime sectors.

4 The complex interaction of climate change, regulatory, fiscal and other policies does not easily allow simple/linear analysis. Experience has shown that attempts to predict impacts, particularly second-order impacts, of economic and regulatory policies have a low degree of accuracy. Some lessons may be drawn from experience with trade policy - there is a substantial body of evidence about the impact of agricultural subsidies and non-tariff barriers on third country producers and exporters, for example - but quantification of impacts would be complex and would need to take into account not only the co-benefit that mitigation policies will lead to avoiding dangerous climate change, but also more direct co-benefits (for example, establishment of an emissions trading scheme may decrease demand for fossil fuel but will also spur investment in technology development and lead to greater demand for Clean Development Mechanism CDM credits which assists developing countries move to a low carbon development pathway).

5 It may still be the case, however, that Parties consider that the implementation of certain mitigation policies by all or certain other Parties has an undue impact on them. Where this has a bilateral nature – a border tax adjustment targeting certain countries could be an example – Parties have in the first instance the channel of ordinary diplomatic relations through which to raise concerns. Some concerns may be in fields that are already subject to international rules, such as in the WTO, and Parties should avail themselves of appropriate existing channels in the first instance. The UNFCCC should not become a forum to relitigate disputes from another forum.

6 This channel already exists: Annex 1 Parties are required to report on implementation of commitments in their national communications. Annex 1 Parties are now preparing their 5th national communications, which will be the first since the beginning of the commitment period. They will be

reporting on implementation of commitments and undertakings, and there will be discussion on this along with other issues raised in national communications in the SBI. We would strongly encourage all Parties, but especially the most vulnerable countries, to contribute to the discussion on this point in SBI so that it can be full and fruitful. This can be done by either written or oral submission and is likely to be the most simple and direct route by which concerns can be raised. If the SBI considers action is warranted, it has the option of seeking the assistance of the SBSTA to delve further into technical aspects of issues raised. If there are concerns about Annex 1 Parties' implementation of commitments, the SBI is the most appropriate place to raise them. This is a channel which has yet to be tested but there is no reason to assume it will not be effective. New Zealand sees no reason to consider establishing a separate channel.

7 All Parties may also raise their concerns about the impacts of implementation of commitments through their own national communications. New Zealand strongly encourages Parties to do this. If national communications are felt to be too infrequent, we consider that Article 12 of the Convention also enables such issues to be raised in annual inventories (also leading to discussion in SBI). Besides the fact that this channel provides a permanent forum for discussion (SBI) and leads to the possibility of technical work (SBSTA), another advantage for developing countries is that assistance is available for preparing national communications (UNFCCC Article 4.3). New Zealand considers that the two routes to raise information at SBI, along with the available assistance, are fully adequate for the purposes of this agenda item.

Proposed COP Decision

The Conference of the Parties

1. *Invites* all Parties to provide information on any impacts arising from the implementation of their commitments under the Convention and any related instruments as part of their national communications, for consideration by the Subsidiary Body for Implementation.

PAPER NO. 27A: NICARAGUA ON BEHALF OF GUATEMALA, DOMINICAN REPUBLIC, HONDURAS, PANAMA AND NICARAGUA

Adaptation

Proposal on the long-term agreement

within the framework of the Bali Action Plan

The present proposal expresses the current criteria and positions of the referred Parties regarding the evolution of the current climate change problem and negotiations under the UN Framework Convention on Climate Change, further referred to as the Convention, within the multi-lateral process on the issues addressed under paragraph 1, sub-sections (a), (b), (c), (d) and (e) of the Bali Action Plan (BAP).

The aspects addressed are focused on providing elements that increase areas of convergence among Parties related to the components to be incorporated in the international agreement, and that are oriented at strengthening the full, effective and sustained implementation of the Convention through a long-term cooperative action, now, up to and beyond 2012.

Adaptation strategies and measures should be adopted to prevent, reduce or minimize the adverse effects of climate change, particularly on the most vulnerable developing countries, namely: the least developed countries (LDCs), the small island developing states (SIDS) and the African countries affected by drought; as well as the poorest and most vulnerable populations in other developing countries, such as those in Central America.

As per Articles 4.3 and 4.5 of the Convention, developed country parties shall provide new and additional financial resources to meet the agreed full costs incurred by developing country parties as a result from the implementation of national adaptation programmes of action (NAPAs). Financial resources should be adequate, predictable, sustained and additional, thus different from the overseas development assistance (ODA).

The costs associated with sustainable development are being assumed through national efforts complemented by the ODA. However, the agreed full incremental costs associated to the adverse impacts of climate change among the most vulnerable developing countries and most vulnerable and poorest populations in developing countries, should be met by the Convention's financial mechanism.

The agreed full additional costs for adaptation should include the additional financial resources that are in addition to those incurred by developing countries within their national sustainable development plans. Thus the full incremental costs resulting from reducing vulnerability as a consequence of climate change impacts, as well as the full costs for compensatory actions to meet damage and loss due to climate change.

The planning and implementation of adaptation strategies, policies and measures should be defined by developing countries on the basis of existing and relevant processes, such as the NAPAs or the national communications (NC), according to the national circumstances of each developing country. Poverty being the main cause of vulnerability, adaptation measures should be addressed within the framework of national development policies and as part of poverty reduction strategies, and integrating them into local economic development with the participation of local actors. The content and goals of the NAPAs are as important as the process through which they are implemented.

The new post-2012 institutional arrangement under the Convention, ruled by the COP, should include a new subsidiary body on adaptation and an Executive Board, accountable to the COP. The Executive Board will be responsible for the management of a new Adaptation Fund under the Convention (within its financial mechanism) as well as a facilitating mechanism responsible for the design and implementation of a new work programme on adaptation. The Convention's Adaptation Fund would be linked to the Adaptation Fund under the Kyoto Protocol to ensure the financial flows between both funds. However, it is necessary to increase the volume of available resources and guarantee access to these financial mechanisms for adaptation, adopting simple and expeditious criteria and modalities based on the particular national circumstances of developing countries, especially in the case of the small island

developing states (SIDS), the least developing countries (LDCs), the African countries affected by drought, and the poorest and most vulnerable populations of other developing countries such as those in Central America.

The poorest and most vulnerable populations, such as women, children and indigenous peoples, should be the first to benefit from the Adaptation Fund, and the levels of vulnerability, poverty and climate change exposure should be the main criteria to be considered.

The objective of the Adaptation Fund, as part of the Convention's financial mechanism, will be to facilitate financing for the implementation of adaptation policies and measures envisaged in the NAPAs, in the NC and as per the commitments on adaptation under the Convention. The Adaptation Fund will be fed by contributions from developed countries and other sources compatible with the Convention's principles and stipulations. This Fund should have at least two windows, one of which will support compliance with adaptation commitments under the Convention, and the other will compensate damages and losses that results from the impacts of climate change.

The new work programme on adaptation will be of a permanent and international nature, the scope of which will include various components such as: (a) establishment of baseline scenarios and knowledge of the vulnerabilities and impacts of climate change; (b) development of legal frameworks and public adaptation policies; (c) development of NAPAs; (d) institutional capacity building on adaptation and local risk management on the part of communities and vulnerable groups; (e) protection of fragile and vulnerable species and natural systems threatened by climate change; (f) exchange of knowledge on adaptation, including the rescue, practice and diffusion of traditional knowledge of indigenous peoples and local communities; (g) cooperative research and development (R&D) in adaptation technologies, including regional centers of excellence; (h) dissemination and transfer of adaptation technologies; (i) establishment of a compensatory mechanism for losses and damages resulting from the impacts of climate change; and (k) definition of cultural and social criteria to measure impacts, especially for indigenous peoples, local communities, women and children.

Adaptation measures should be developed considering: (a) the dynamics of natural systems, proposing a range of strategies aimed at increasing resilience and maintaining ecosystems' essential environmental functions and at reducing vulnerability of human populations, their livelihoods and environment, in the face of climate change; (b) the strengthening of land-use planning and risk management at the local and national levels; (c) the synergy between adaptation and mitigation, and within which REDD options are particularly relevant; and (d) the necessary coherence and consistency between adaptation policies and national development strategies and policies.

PAPER NO. 27B: NICARAGUA ON BEHALF OF GUATEMALA, DOMINICAN REPUBLIC, HONDURAS, PANAMA AND NICARAGUA

Financing

Proposal on the long-term agreement

within the framework of the Bali Action Plan

The present proposal expresses the current criteria and positions of the referred Parties regarding the evolution of the current climate change problem and negotiations under the UN Framework Convention on Climate Change, further referred to as the Convention, within the multi-lateral process on the issues addressed under paragraph 1, sub-sections (a), (b), (c), (d) and (e) of the Bali Action Plan (BAP).

The aspects addressed are focused on providing elements that increase areas of convergence among Parties related to the components to be incorporated in the international agreement, and that are oriented at strengthening the full, effective and sustained implementation of the Convention through a long-term cooperative action, now, up to and beyond 2012.

As per Article 4.3 of the Convention developed country parties shall provide **new and additional financial resources to meet the agreed full costs incurred by developing country Parties** to satisfy all additional costs incurred by developing countries resulting from the application of mitigation and adaptation measures; and the flow of funds should also take into consideration their adequacy, predictability and additional nature.

The financial mechanism under the Convention and the ODA should contribute to the strengthening of **public policies aimed at building low-carbon societies and economies,** with greater adaptive capacity to climate change and related variability, thus being more sustainable and contributing to improving local environmental quality and livelihoods while mitigating global climate change.

New, additional and large-scale financial resources should be needed to ensure the required levels of investment to appropriately adapt to climate change, and current mechanisms (e.g.: carbon markets, ODA, GEF and others) would not be in a position to ensure the levels of investment required for mitigation and adaptation.

The Convention's financial mechanism should include different funds to be established under the new post-2012 global regime, namely: the Multilateral Climate Technology Fund (MCTF), the Convention's Adaptation Fund, the Mitigation Fund, including a forest reserve fund; as well as the relevant existing funds, such as the Least Developing Country Fund (LDCF) and the Special Climate Change Fund (SCCF).

The financial mechanism, as in the case of the facilitative mechanism should be under the authority and guidance of the COP and its subsidiary bodies, including a new subsidiary body on adaptation. An Executive Board accountable to the COP will be responsible for the operation of the relevant bodies and processes within both mechanisms. All parties should have an equitable and balanced representation within the Executive Board, which will have support from the existing secretariat under the Convention and from one or various regional trust funds for appropriate fund management.

There are different sources for funding to feed the two main funds to support mitigation (including REDD options), adaptation and technology within the new post-2012 financial arrangement under the Convention, namely:

(1) Convention´s Adaptation Fund:

- The transfer of financial resources from the Adaptation Fund under the Kyoto Protocol up to 2% of current clean development mechanism (CDM) needs to be guaranteed, as well as a share of proceeds from the sale of emission reduction units from joint implementation projects and from the auctioning of assigned amount units from the emissions trading.
- A new burden sharing mechanism or solidarity fund based on a levy on international airfares and maritime transport freight.

- A global carbon tax based on a levy on fossil fuel consumption.
- Innovative financial instruments such as capital risk or climate safety funds.

(2) Mitigation Fund and the MCTF:

- Contributions up to 0.5-1% of annual GDP of developed countries through public grants.
- Financial resources from the LDCF and the SCCF
- Contributions from corporate donors, NGOs and international financial institutions in contact with regional institutions.

PAPER NO. 27C: NICARAGUA ON BEHALF OF GUATEMALA, DOMINICAN REPUBLIC, HONDURAS, PANAMA AND NICARAGUA

Mitigation

Proposal on the long-term agreement

within the framework of the Bali Action Plan

The present proposal expresses the current criteria and positions of the referred Parties regarding the evolution of the current climate change problem and negotiations under the UN Framework Convention on Climate Change, further referred to as the Convention, within the multi-lateral process on the issues addressed under paragraph 1, sub-sections (a), (b), (c), (d) and (e) of the Bali Action Plan (BAP).

The issues addressed are focused on providing elements that increase areas of convergence among Parties related to the components to be incorporated in the new international agreement, and that are oriented at strengthening the full, effective and sustained implementation of the Convention through a long-term cooperative action, now, up to and beyond 2012.

- **Quantified emission limitation or reduction objectives by developed country Parties**

According to the global post-2012 agreement, developed countries should adopt their quantified, absolute emission reduction targets, focussing on reductions on sources and gases within those sectors that are responsible for the highest levels of global emissions and that facilitate the transition towards low-carbon economies.

An international system should be established for the monitoring, reporting and verification of the emission reduction commitments, including a unique international registry under a facilitative mechanism of the new post-2012 regime under the Convention.

The agreed quantified global goal of greenhouse gas emissions reductions will be 81-71% of 1990 emissions by 2050 for all countries, so that there is a very low or low level of risk that the global mean temperature rise will be 2ºC or less since 1750. The previous will allow achieving stabilization of atmospheric greenhouse gas concentrations levels at a maximum of 400 ppm of carbon dioxide equivalent.

Developed countries should contribute to the agreed quantified global goal with a reduction of their 1990 absolute emission levels by at least 40% by 2020 and by at least 90% by 2050. The maximum peak of global emissions should be set between 2010 and 2013 and the annual maximum reduction rate should be up to 4-5% between 2015 and 2020.[1]

Details of the quantified emission limitation or reduction objectives for 2020 and 2050 of each developed country should be included in an annex to the relevant COP decision, ensuring consistency with the agreed global emission reduction goal by the group of developed countries, as expressed in the shared vision, with 1990 as the baseline year.

- **Nationally appropriate mitigation actions by developing country Parties**

According to the Convention, developing countries can voluntarily implement nationally appropriate mitigation actions (NAMAs) in the context of sustainable development, and follow a clean development path now, up to and beyond 2012 to allow them to reduce their rate of emissions growth with regard to 1990 levels, Developed countries should comply with their commitments regarding the transfer of technical and financial resources to developing countries, in a measurable, reportable and verifiable manner to enable developing countries to identify, prioritize and implement their own NAMAs, as part of the new financial mechanism under the Convention.

[1] Baer P 2006 “The worth of an ice sheet¨. Baer P 2006 ¨High stakes: designing emission pathways to reduce the risk of dangerous climate change¨. Meinshausen M 2006 “On the risk of Overshooting 2oC”.

A Mitigation Fund and a Mitigation Programme of Work will be established within the new post-2012 institutional framework under the Convention. The previous, together with the Multilateral Climate Technology Fund (MCTF) and the facilitative processes and bodies on the issues of mitigation and technology under the new regime, will provide the appropriate international platform for the effective implementation of the NAMAs.

- **Policy approaches and positive incentives on the issues relating to reducing emissions from deforestation and forest degradation in developing countries (REDD)**

In order to meet the ultimate objective of the Convention it is important that under the post-2012 regime, enabling environments should be established at the national levels to assure the reduction and reversion of emissions from deforestation and forest degradation within the next 10-20 years, through timely actions related to REDD. The previous to assure that the maximum emissions peak by 2015. Actions under REDD schemes must be additional and not directly linked to the quantified absolute emission limitation or reduction objectives by developed country parties.

The REDD options should be included under the NAMAs in synergy with the national adaptation measures, thus subject to a monitoring, reporting and verifying system. The REDD actions should be of national scope, with the possibility of adopting sub-national scopes as a transitional phase, addressing appropriately issues related to leakage and non-permanence.

In order to assure global results that are substantial, transparent and predictable, and based on long-term financial flows for developing countries, within the Mitigation Work Programme, a long-term process will be established including the following two-steps:

(a) Up to 2012: Technical and financial resources for capacity building to develop national inventories of forest carbon stocks, adopt appropriate methodologies to define baseline emissions levels and rates of deforestation, explore a range of pilot activities for REDD, identify options and make efforts to overcome the complex and diverse causes of deforestation in line with national circumstances.

(b) Post-2012: Technical and financial resources for the design and implementation of policies and incentives for REDD options within the framework of the NAMAs.

Different types of positive incentives for the REDD actions could be established under the financial mechanism of the Convention, such as trust funds for community forestry accounts or a forest reserve fund.

Policies and measures linked to REDD options should promote and assure the participation of indigenous peoples or communities and other relevant stakeholders along the whole cycle of the REDD activities, through their own types of organization and representation.

The role of conservation, sustainable forest management and the strengthening of carbon stocks in developing countries could be addressed in the following manner:

(a) Conservation and sustainable forest management constitute good practices under the implementation of REDD measures, thus could be included within the NAMAs to obtain financing through an appropriate forest incentive scheme, such as a forest reserve fund under the new Mitigation Fund,

(b) Conservation of forest ecosystems and sustainable forest management could be addressed as adaptation measures within adaptation strategies, thus benefit from technical and financial support within the national adaptation plans of action (NAPAs) through a new Adaptation Fund under the Convention.

- **Cooperative sectoral approaches and actions by specific sectors to strengthen the implementation of Art. 4, paragraph 1(c) of the Convention**

The sectoral approach should be aimed at strengthening cooperative actions within any phase of the technological cycle and facilitate the management of technical and financial resources for the implementation of the NAMAs. Such an approach should not lead to global standards, parameters or trans-national or national sectoral emission reduction targets, nor generate additional charges of national or sectoral quantified emission limitation or reduction objectives by developing countries.

- **Economic and social consequences of response measures**

Both developed and developing countries should assess the economic, cultural, environmental and social effects that result from mitigation strategies and measures. The previous to support the selection and implementation of strategies and policies that enhance the dynamics of labour markets resulting from environmentally friendly production models. Likewise, to develop individual and institutional capacity building programmes, to prevent unforeseen negative consequences of mitigation and facilitate the transition towards a low-carbon society. The impacts related to inaction should be assessed.

Mitigation measures should be in synergy with adaptation policies to ensure there are no negative impacts on the agricultural sector, food security, access to and use of land, biodiversity, among others, such as in the case of agro-fuels.

Financial resources to be transferred from developed countries to developing ones should be provided for governments, mainly from developing country parties, to adopt a leading role in the design and implementation of mitigation policies and measures, incorporating human and institutional capacity building programmes, as well as public awareness raising, education and training, so as to enable the required changes in production, consumption and transport patterns within economies transitioning to low-carbon societies.

PAPER NO. 27D: NICARAGUA ON BEHALF OF GUATEMALA, DOMINICAN REPUBLIC, HONDURAS, PANAMA AND NICARAGUA

Technology Development and Transfer

Proposal on the long-term agreement

within the framework of the Bali Action Plan

The present proposal expresses the current criteria and positions of the referred Parties regarding the evolution of the current climate change problem and negotiations under the UN Framework Convention on Climate Change, further referred to as the Convention, within the multi-lateral process on the issues addressed under paragraph 1, sub-sections (a), (b), (c), (d) and (e) of the Bali Action Plan (BAP).

The issues addressed are focused on providing elements that increase areas of convergence among Parties related to the components to be incorporated in the new international agreement, and that are oriented at strengthening the full, effective and sustained implementation of the Convention through a long-term cooperative action, now, up to and beyond 2012.

Enhanced national and international action on adaptation and mitigation under the Convention requires support for innovation, development, diffusion and transfer of technologies that are appropriate to national circumstances; including the rescue, dissemination and support for traditional and local technologies owned by indigenous peoples, ancestral ethnic groups and local communities.

The new post-2012 institutional arrangement under the Convention should include a technology facilitative mechanism to address all aspects related to cooperation on research and development (R&D), diffusion and transfer of technologies for adaptation and mitigation which might be suitable for local conditions; and the establishment of a Multilateral Climate Technology Fund (MCTF).

The technology facilitative mechanism should operate within the framework of a short-term plan of action, including a schedule, responsibilities and sources of finance, and will cover a wide range of activities associated with the three-steps technological cycle, namely: R&D, diffusion – including pilot projects – and transfer of technologies. This mechanism should have an expert panel on technologies for adaptation and mitigation to facilitate technology cooperation, which should be organized by sectors, systems, sources, functions or types of actors, as appropriate. Technology cooperation should include: (a) capacity building and enabling environments for all the technological cycle phases, and (b) support for technology acquisition, including the purchase of or the access to the use of patents through flexibility options.

The MCTF shall cover all sectors and systems relevant to adaptation and mitigation, and all the technological cycle phases, including support for the removal of barriers, enabling environments, training and the acquisition of technologies, systems and tools.

Technology transfer should be enhanced with technical and financial support for capacity building at the national level, including enabling environments. In this area measures to strengthen governments, companies and workers should be included. Capacity building should include regulatory frameworks as well as public awareness raising and training, access to information and finance for small and medium-sized companies, which represent more than 90% of all companies and are responsible for a high percentage of employment in the majority of developing countries. The lack of national or local capacities is a serious barrier to the effective adoption and sustainability of advanced technologies.

Therefore, the creation of regional centres for technological innovation for mitigation and adaptation should be supported so as to: (a) promote the rescue, diffusion and transfer of traditional and local knowledge relevant and appropriate for adaptation, and (b) develop cooperative R&D agreements on adaptation and mitigation technologies, systems and practices.

Technology needs assessments (TNA) should be carried out within the framework of the national adaptation programmes of action (NAPAs) and the nationally appropriate mitigation actions (NAMAs) in the national context of sustainable development in developing countries. The previous to assure

consistency and coherence among the various efforts, and should not constitute a barrier for a short-term technology transfer.

It is important to recognize the fundamental role played by private investments in the technology transfer phase, requiring national policies that promote enabling environments and relevant human and institutional capacities for the whole technological cycle, especially during the R&D phase, both as far as mitigation and adaptation in developing countries are concerned.

PAPER NO. 27E: NICARAGUA ON BEHALF OF GUATEMALA, DOMINICAN REPUBLIC, HONDURAS, PANAMA AND NICARAGUA

Shared vision

Proposal on the long-term agreement

within the framework of the Bali Action Plan

The present proposal expresses the current criteria and positions of the referred Parties regarding the evolution of the current climate change problem and negotiations under the UN Framework Convention on Climate Change, further referred to as the Convention, within the multi-lateral process on the issues addressed under paragraph 1, sub-sections (a), (b), (c), (d) and (e) of the Bali Action Plan (BAP).

The aspects addressed are focused on providing elements that increase areas of convergence among Parties related to the components to be incorporated in the international agreement, and that are oriented at strengthening the full, effective and sustained implementation of the Convention through a long-term cooperative action, now, up to and beyond 2012.

The agreement on the shared vision for long-term cooperative action should address all aspects of the BAP and form the basis of a framework decision by the Conference of Parties (COP), the scope of which should include:

(1) The guiding principles and objective of the agreed outcome, including the scientific basis for decision making.

(2) The quantified global goal of greenhouse gas emissions reductions agreed upon, for the short (2020) and the long (2050) terms, with the associated stabilization levels of greenhouse gases and global mean temperature rises. As well, the year of maximum global emissions and the differentiated contribution to the goal of all the groups of countries, parties to the Convention and lead by developed countries.

(3) The institutional framework and the contribution of the different groups of countries to the integration, implementation, monitoring and evaluation of the cooperative action on mitigation, adaptation, technology and financing.

The guiding principles of the Convention should support items (2) and (3) of the previous paragraph, in terms of common but differentiated responsibilities and respective capabilities; historical responsibilities in greenhouse gas emissions and the related historical ecological debt generated by the cumulative greenhouse gas emissions since 1750 and the most recent scientific information.

The objective of the shared vision should be expressed as guidance to integrate the global cooperative action to enable the full, effective and sustained implementation of the Convention, from now, up to and beyond 2012. The previous should be linked to a series of more specific and mutually coherent agreements on the mitigation, adaptation, technology and financing issues, which should be respectively included in a series of COP decisions so as to complement the framework decision on the shared vision.

The global goal for the reduction of greenhouse gas emissions should be based on the most recent scientific knowledge, incorporating the ecological rationality of natural systems as its guiding principle, as this ultimately affects the dynamics of planet Earth and his climate, and to which the economic rationality should be subordinate.

The agreed quantified global goal of greenhouse gas emissions reductions will be 81-71% of 1990 emissions by 2050 for all countries, so that there is a very low or low level of risk that the global mean temperature rise will be 2ºC or less since 1750. The previous will allow achieving stabilization of atmospheric greenhouse gas concentrations levels at a maximum of 400 ppm of carbon dioxide equivalent.

Developed countries should contribute to the agreed quantified global goal with a reduction of their 1990 absolute emission levels by at least 40% by 2020 and by at least 90% by 2050. The maximum peak of

global emissions should be set between 2010 and 2013, and the annual maximum reduction rate should be up to 4-5% between 2015 and 2020.[1]

The new agreed post-2012 institutional arrangement and legal framework to be established for the implementation, monitoring, reporting and verification of the global cooperative action for mitigation, adaptation, technology and financing, should be set under the Convention. It should include a financial and a facilitative mechanism drawn up to facilitate the design, adoption and carrying out of public policies, as the prevailing instrument, to which the market rules and related dynamics should be subordinate, to assure the full, effective and sustained implementation of the Convention.

The new institutional arrangement will provide technical and financial support for developing countries in the following areas: (a) preparation, implementation and followup through monitoring, reporting and verification of nationally appropriate mitigation actions (NAMAs) by developing countries. These activities could include options to reduce emissions from deforestation and forest degradation (REDD); (b) preparation, implementation and follow-up of national adaptation programmes of action (NAPAs) or national communications (NC) in developing countries; (c) technology needs assessments (TNAs) for adaptation and mitigation under the NAMAs and the NAPAs or NC of developing countries; (d) capacity building and enabling environments for adaptation and mitigation in developing countries; (e) education, awareness raising and public participation, focused on youth, women and indigenous peoples; (f) design and implementation of adaptation programmes and projects; (g) support for all technological cycle phases: research and development (R&D), diffusion and transfer, including acquisition of technologies for adaptation and mitigation, including the purchase or flexibility of patents.

The scheme for the new institutional arrangement under the Convention will be based on three basic pillars: government, facilitative mechanism and financial mechanism, and the basic organization of which will include the following:

(1) The government will be ruled by the COP with the support of a new subsidiary body on adaptation, and of an Executive Board responsible for the management of the new funds and the related facilitative processes and bodies. The current Convention secretariat will operate as such, as appropriate.

(2) The Convention's financial mechanism will include three new funds: (a) an Adaptation Fund under the Convention, including a window to address loss and damage from climate change impacts, including insurance, rehabilitation and compensatory components, and a window for risk reduction and management related to climate change; (b) a Multilateral Climate Technology Fund (MCTF); and (c) a Mitigation Fund, including a scheme for positive forest incentives relating to REDD options.

(3) The Convention's facilitative mechanism will include: (a) work programmes for adaptation and mitigation; (b) a long-term REDD process; (c) a short-term technology action plan; (d) an expert group on adaptation established by the subsidiary body on adaptation, and expert groups on mitigation, technologies and on monitoring, reporting and verification; and (e) an international registry for the monitoring, reporting and verification of compliance of emission reduction commitments, and the transfer of technical and financial resources from developed countries to developing ones. The secretariat will provide technical and administrative support, including a new centre for information exchange.

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[1] Baer P 2006 "The worth of an ice sheet¨. Baer P 2006 ¨High stakes: designing emission pathways to reduce the risk of dangerous climate change¨. Meinshausen M 2006 "On the risk of Overshooting 2oC".

PAPER NO. 28A: NORWAY

Norwegian Submission on Climate Change Adaptation

1. Norway welcomes the conclusion in the 2009 Work programme for the Ad hoc Working Group on long term cooperative action under the Convention (AWGLCA), where the Parties are invited to submit further views to be taken into account in chair's preparation of a negotiation text before the sixth session in June. Norway would like to take this opportunity to provide further considerations on enhanced action on adaptation now, up to and beyond 2012.

Framing climate change adaptation

2. A framework of enhanced action on climate change adaptation should be based on a common goal embedded in the Convention and refer to the strengthening of resilience and reduced vulnerability towards adverse effects of climate change. Further, our actions must aim at strengthening communities' capacity to adapt to a changing climate, both extreme events and gradual changes.

3. A framework that embodies guiding principles for our actions on adaptation across all nations should assist informed and effective adaptation processes. The guiding principles for climate change adaptation should be clear and simple and apply to all countries.

    - *Country-ownership* - adaptation to climate change is a national responsibility
    - *Integration* – adaptation must be addressed in a comprehensive manner and integrated into existing and future planning- and decision-making structures, tools and budgets
    - *Subsidiarity* - adaptation must respond to local needs and decisions should be taken at lowest appropriate level
    - *Flexibility* - adaptation must be supported through many different means and methods, with different timing, and through a learning by doing process
    - *Accountability* – effectiveness, efficiency and transparency should guide all adaptation actions

4. Adaptation will require actions across many sectors and levels, and could include a broad range of activities. Planning for climate change adaptation should be based on and a part of national, sub-national and local priorities, and aim at integrating climate change consideration into policy, planning and budget frameworks. Adaptation processes must involve local communities and civil society, taking into consideration the needs of the poorest and most vulnerable people.

5. Adaptation actions must be results based, meaning that actions taken, from planning to implementation and finalisation, should be guided by goals and objectives and lead to results on the ground. Actions must be effective, efficient and accountable.

Support to enhanced actions on adaptation through the UNFCCC

6. To some extent we are adapting to the unknown, at least we have to plan and decide with a higher degree of risk and uncertainty. In our view this does not imply reallocation of responsibilities, but new considerations and actions within the different fields of competence. Hence, a key challenge is to identify the actions that enable different sectors and stakeholders to adapt to climate change. Also, the nature of climate change impacts calls for cross-sectorial actions. Such actions should aim at increased coherence and facilitate coordination between sectors and stakeholders and involve a variety of institutions, agencies, private sector and civil society.

7. A common knowledge base, enhanced cooperation on research and development and sharing of information and good practices are important factors to promote succesful adaptation processes. Creating arenas for sharing of information and good practices, and fora where different public and private stakeholders can discuss concrete challenges, are key actions that need to be addressed on a cross-sectorial basis.

8. UNFCCCs catalytic role should be shaped so as to respond to cross cutting challenges at international and regional level, providing an arena for capacity building and coherence in international support for adaptation.

9. Norway considers the above mentioned goals to be best facilitated through, and by reinforcing existing structures, such as enhancing the scope of the Nairobi Work Programme and establishing this programme as a hub for knowledge- and information sharing and capacity building at regional and national level.

10. Further, an enhanced Nairobi Work Programme could include the strengthening of regional, and if appropriate national centres, functioning as resource bases for adaptation. Such centres should facilitate knowledge and information sharing and capacity building such as training and technical assistance. The centres should reinforce existing bodies and may include competence within climate modelling and downscaling, disaster risk reduction and climate change adaptation.

Funding adaptation actions

11. Adaptation is a central feature of all sustainable development efforts. Development programs in general may reduce climate change vulnerability by providing buffers of financial and physical capital to adjust to climate shocks and to long-term climate change. At the same time, all development programs need to take into account the future prospects for climate changes and extreme events. There is no clear cut line between "standard" development programs and climate change adaptation actions. Hence, official development assistance (ODA) will continue to play a crucial role for funding enhanced action under a strengthened, international framework for adaptation.

12. Bearing in mind the above, we recognise that climate change adaptation will require scaled up and additional financing. Considering the comprehensive nature of adaptation and level of funding required, a range of sources and mechanisms need to be mobilised.

13. The multi-sectorial nature of adaptation means that our support mechanisms must be tailored to address different purposes. An integrated approach to adaptation requires that adaptation actions must be enhanced across sectors and institutions. No one single institution or mechanism can deal with adaptation in all areas. Hence, we have to base our enhanced efforts on existing structures and create separate adaptation entities only where functions are not and cannot be fulfilled by the existing (gap filling). Also, support structures for adaptation action at international level need to be flexible and based on national priorities – a "one-size-fits-all" support modality will in our opinion not be a sustainable solution.

14. Support for adaptation should be differentiated, giving priority to the most vulnerable countries and people. Strengthening capabilities of women and children, should be given particular consideration.

15. Norway recognises that scaling up support to adaptation under a new climate regime will require time. However, enhanced action on adaptation can not wait. Enhanced support to early actions needs to be addressed urgently, so that lessons can be learnt from good practices. Hence, we support the establishment of a short-term work programme up to 2012, utilising existing multilateral mechanisms and maximising bilateral support in order to support the preparation and implementation of National Adaptation Programmes of Action (NAPA), focusing on the immediate needs identified through these plans. Further, a work programme up to 2012 may prioritise activities such as the strengthening of observation systems, creation of databases for climate data, targeted capacity building for long term planning. A work program should be a stepping stone for long term enhances support for adaptation and include a review process by 2012 on progress made in addressing these priorities.

Monitoring progress

16. Funding for adaptation made available under a new agreement, must adhere to principles of accountability and transparency. We need to achieve results and results need to be reported. This

is important for accountability, but it is equally important for ensuring that the most effective means and measures are being put in place. This issue can not be seen separately from processes outside of the UNFCCC. It is important that the international community establish a reporting system for all parties and adaptation actions. For this purpose, one could look beyond the UNFCCC process and utilise reporting systems such as the one being envisaged by the OECD/DAC on “tracking adaptation”. However, results based reporting systems will require a system for reviewing results and this should be considered as a part of the overall reporting system under a new climate regime.

PAPER NO. 28B: NORWAY

Submission from Norway on international shipping

1. Norway welcomes the invitation to Parties to submit further views to be taken into account in chair's preparation of a negotiation text before the sixth session of the AWG-LCA in June. In a previous submission, Norway has outlined a process where a decision at COP 15 is made regarding the overall target for emission reductions in international shipping, and where the International Maritime Organization, IMO, is invited to develop the appropriate regulatory regime. In this document, Norway elaborates on the strategy we will follow in our work towards the IMO and the importance of a decision at COP15 in addressing emissions from international shipping, including a draft of such a COP decision.

2. Reaching a comprehensive and ambitious agreement in Copenhagen is necessary to achieve a two degree scenario. Global greenhouse gas emissions will have to be reduced by 50-85 percent from 2000 to 2050, and to peak no later than 2015. An effective global response to climate change must include all sectors and sources of greenhouse gas emissions. Greenhouse gas emissions from international aviation and shipping are growing faster than emissions from any other industry, and they are currently not regulated. The efforts to reduce emissions from international shipping and aviation must start without further delay and be addressed in the Copenhagen agreement.

Addressing international shipping as part of the Copenhagen agreement

3. A firm and coordinated global response to greenhouse gas emissions from international shipping should build upon the well established role of the IMO as the global regulator for international shipping. Several global conventions on environmental protection are established by the IMO, and almost all relevant environmental issues are covered in these conventions. The global co-operation between states on enhanced environmental protection regarding shipping has been intensified in recent years, leading to more strict environmental requirements and more robust mandatory mechanisms.

4. The IMO is currently discussing several options for reducing greenhouse gas emissions from international shipping. A decision in Copenhagen is needed to signal to the IMO the urgency in finalizing their work on instruments to reduce greenhouse gas emissions from international shipping, without further delay.

The ambition level for greenhouse gas emission reductions in international shipping and views on a future climate regime for the sector

5. An IMO regime to reduce GHG emissions from international shipping should be based on a defined pathway towards low emission maritime transport. Such a pathway should include a target year for early stabilization of emissions as well as ambitious targets for future emission reductions. Norway believes that stabilization of emissions from international shipping should be consistent with the IPPC's two degree scenario. A global emissions trading system for shipping is in our view the appropriate mechanism to achieve ambitious emission reductions, as it sets an emission cap while ensuring cost-efficiency.

6. Norway notes the concern of developing countries with respect to the consequences of a global regime for the regulation of emissions from international shipping. Small island developing states are particularly dependent on international shipping for the transport of necessary goods, and often have no alternative to shipping. Hence, the establishment of an instrument that can generate revenues in the form of an emission trading system, and that this revenue can be used for support to developing countries, e.g. through technical support or for adaptation purposes.

7. The IMO should consider options for allowing international shipping to participate in global carbon market mechanisms. Participation in the global carbon market will facilitate overall cost efficiency in combating climate change, and could possibly allow growth in the shipping sector while ensuring overall emission reductions.

Background and outline of a COP decision

8. Without prejudice to the outcome with respect to the choice of regulatory regime in the IMO, the COP decision must address the need for emission reductions in the maritime sector, and the urgency of starting the transformation to a low carbon economy. A COP decision in Copenhagen regarding the reduction of greenhouse gas emissions from international shipping should have the same ambition level as the overall Copenhagen agreement with respect to overall emission reductions. The COP decision should also acknowledge the need for developing near-term operational targets, guided by a long term goal. Furthermore, the decision should put emphasis on the need to establish a consistent, predictable long-term regime for reducing emissions from the maritime sector. On the basis of such a framework, operational targets for reducing greenhouse gas emissions from international shipping can be determined.

9. To facilitate the future process, regular contact between the UNFCCC and the IMO on this issue should be promoted. The COP 15 decision could therefore include an invitation to the IMO to regularly report to the UNFCCC on the activities and progress achieved, as well as asking for cooperation between the secretariats of the UNFCCC and the IMO.

Proposal

xx The AWG-LCA is requested to consider the draft COP 15 decision in the Annex and decide as appropriate

Annex

Decision x/CP.15

Reduction of greenhouse gas emissions from international shipping

The Conference of the Parties,

[*Being aware* of the role of the IMO established in the IMO Convention, the UN Charter and UNCLOS….]

Recognizing that in order to achieve a necessary two degree scenario, global greenhouse gas emissions should follow a pathway that includes a peak year no later than 2015 and results in emission reductions of 50- 85% by 2050, in accordance with findings in the 4th Assessment Report of the IPCC,

Welcomes the report presented by the Secretary General of the International Maritime Organization (IMO) on policies and activities related to reduction of Greenhouse Gas Emissions from international shipping,

Recognizing the role of the International Maritime Organization in developing global actions to limit or reduce greenhouse gas (GHG) emissions from international shipping,

Recognizing further that the IMO has undertaken a comprehensive assessment of the total greenhouse gas emissions from international shipping, and that these emissions constitutes a significant share of the global anthropogenic emissions,

Recognizing the need to develop a long term goal as well as intermediate targets for emission reductions from the maritime sector, in order to facilitate transformation to a low carbon economy,

Being aware that the IMO activity has identified technical and operational measures which can contribute significantly to emission reductions,

Encourages the IMO to continue without delay the ongoing activities to develop policies and measures to reduce GHG emissions, and in doing so invites the IMO to:

1. achieve, through the use of its policies and mechanisms, total GHG emission reductions which are at least as ambitious as the total GHG reductions to be achieved by the UNFCCC Copenhagen agreement,
2. report regularly to COP [and its subsidiary bodies as appropriate] on relevant activities, emission estimates and achievements in this respect, and especially
3. report to COP [17] on IMO policies, established measures, measures under development, and expected emission reductions resulting from these measures, and

Requests the Secretariat of the UNFCCC to continue co-operating with the

Secretariat of the International Maritime Organization.

Xxth plenary meeting

Xx December 2009

PAPER NO. 28C: NORWAY

Norwegian submission on NAMAs

1. Norway welcomes the conclusions in the 2009 Work programme for the Ad hoc Working Group on long term cooperative action under the Convention (AWGLCA), where Parties are invited to submit further views to be taken into account in chair's preparation of a negotiating text before the sixth session in June. Norway would like to further elaborate our views on some aspects of the concept of National Appropriate Mitigation Actions (NAMAs) by developing countries. Our views address in particular the contribution of NAMAs to enhanced action on mitigation in accordance with developing countries' capabilities and national circumstances, and include views on matching such actions with support from developed countries.

2. NAMAs should be integrated into a national mitigation strategy, in the form of a national low emission development strategy. A first step is to develop plans for national appropriate mitigation actions for all sectors. Such plans should build on existing plans and implemented actions that many developing countries are already undertaking. This should include, as a priority, establishment and development of the necessary institutional framework for systematic national inventories for emissions and removals. On the importance of national inventories we would like to make reference to our February submission on MRV. Comprehensive capacity building support should be provided as soon as possible by developed countries to enable developing countries to prepare such plans and inventories, taking into account differences in national circumstances and capacities.

3. Norway proposes to establish a process, without delay, with predefined deadlines, where developing countries, to be eligible for support, is invited to submit economy-wide National Appropriate Mitigation Actions Plans. In order to facilitate determination of necessary support for mitigation actions in developing countries, countries concerned should in their plans identify needed support for implementing NAMAs. Being in a process of establishing and submitting economy-wide plans should be a prerequisite for international support. The purpose of preparing such economy-wide plans is to ensure a transparent process where developing countries aim at a holistic approach in implementing measures, not to prejudge the legal form of NAMAs, independent of support. These plans could be submitted through a registry, established as proposed by some parties in the negotiations. The process should ensure that economy-wide plans for NAMAs can be steadily improved, elaborating on existing requirements for preparing national communications. Norway believes it is better to start submitting the simplest form of economy-wide plans and steadily improve rather than wait until a more advanced level is reached.

4. In the process on preparing economy-wide plans for mitigation actions in developing countries, the principle of national sovereignty should be ensured. Well-designed policies and good institutional frameworks are key to attracting investment, facilitate technology transfer and facilitating a low emission development pathway. A diverse range of policies are available to enable countries to move to low greenhouse gas emitting development pathways. Each country needs to adapt or design policies to suit its own institutions and circumstances. Many policies have strong sustainable development benefits, in addition to their greenhouse gas reduction benefits, such as improving energy efficiency, supporting governance objectives and creating important legal frameworks.

5. There are different approaches to how actions in developing countries could be matched with support from developed countries. The establishment of mechanisms for matching support and actions has to be based on ensuring environmental integrity of NAMAs and aim at achieving cost efficient emission reductions. NAMAs can cover a wide range of activities and actions, and support should be differentiated between different kinds of actions. The scope and function of mechanisms to support the implementation of REDD strategies, activities on research and development of technology and other greenhouse gas reduction measures need to address the special features of such different types of NAMAs.

6. Norway would encourage discussions on different ways to support NAMAs. In these discussions we find it helpful to distinguish between measures setting a price on carbon and other measures where the market is not ensuring implementation of low-emission technologies (e.g. building codes etc). Norway proposes in this submission a mechanism for matching marked based mechanisms such as emission trading and taxes in developing countries with carbon credits. At the same time we would like to engage in discussions on the elaboration of support mechanisms for the implementation of other measures.

7. In adapting national mitigation strategies in developing countries, experiences gained in different countries can give valuable input. In Norway, 70 percent of our emissions are covered by marked based mechanisms such as emission trading and carbon taxes. In the majority of sectors, we truly believe that this is the most cost efficient way of implementing emission reductions technologies at a large scale. In our view, one of the core objectives of the Copenhagen Agreement should be to establish a global price on carbon that would lead to and guide implementation of activities in a cost- efficient manner.

8. Support for national mitigation strategies that aim at establishing necessary institutional and regulatory framework to introduce such cost- efficient policies and measures should be given priority. How to facilitate technology development and transfer, through the same measures, should be taken into consideration. Longer-term capacity building will also be necessary, to build institutional capacity and enhance the capacity to adopt, implement and maintain better technologies. It should be further elaborated whether there is a need for an international capacity building entity to facilitate the introduction of such cost- efficient policies.

9. Norway sees the need to establish a robust mechanism for crediting developing countries that introduce cost-efficient policies and measures. In the Norwegian proposal on auctioning, a share of allowances issued is held back from distribution. Norway would like to propose that a share of allowances is kept in a set aside reserve. This set aside reserve could be accessed by developing country parties, given that they implement cost efficient measures nationally that establish an incentive structure for reducing emissions.

10. To get access to allowances from such a set aside, parties would have to introduce a cap and trade system or a carbon tax by an agreed date with agreed specified sector coverage. This might be done in combination with relevant proposals under AWGKP to introduce emissions trading based on sectoral targets or on the basis of NAMAs. The system can be introduced at any price level and should get access to allowances up front. The amount of credits transferred to developing countries and the necessary capacity building for introducing such measures should be scaled up with system coverage, high price and early implementation, and scaled down with GDP/ capita. MRV, enforceability and review of proper implementation of such measures would constitute an essential part of any such mechanism.

11. Such a set aside mechanism for supporting cap and trade systems or carbon taxes moves beyond project based mechanisms by actively involving the receiving developing countries in setting policies as a minimum at a sectoral level. The introduction of measures at such a minimum level should be pursued also when implementing other mitigation actions. Hence, project based mechanisms should be limited to mitigation actions where the introduction of measures at a sectoral level is not feasible due to lack of institutional capacity in the country concerned, or to specific mitigation actions where a project based mechanism is in particular adequate (e.g. projects for storing CO2 or other greenhouse gases in geological formations).

PAPER NO. 28D: NORWAY

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

Norway welcomes the opportunity to submit views on the architecture of a mechanism for reducing emissions from deforestation and forest degradation in developing countries.

1. Introduction

The increase in global mean temperature has to be limited to a maximum of 2 °C compared to pre-industrial level in order to achieve the ultimate objective of the UNFCCC. Today emissions from deforestation and forest degradation in developing countries according to the IPCC constitute about 17% of global greenhouse gas emissions. Without agreement on an effective REDD regime for developing countries in Copenhagen we believe it will be impossible to reach the 2 °C stabilization goal. REDD, moreover, has considerable biodiversity and sustainable development benefits, and has great opportunity to be a cost effective mitigation lever.

In order to reach the ultimate objective of the Convention, it is important to keep in mind that mitigation actions need to be carried out in all sectors and all countries. It is therefore essential that REDD activities in developing countries are additional to, and not a substitute for, deep cuts in developed countries' emissions, or other mitigation actions in developing countries.

Mitigation efforts to reduce emissions from deforestation and forest degradation, and efforts to conserve and enhance carbon stocks in forests, should be regarded as an important and integrated part of a worldwide low-emission development path. Hence, a REDD regime should be related to the overall national appropriate mitigation actions (NAMAs) by developing countries (with reference to paragraph 1(b) in BAP). In order to establish effective national REDD strategies developing countries need to implement national mitigation actions for all sectors, including an institutional framework for the establishment of systematic national inventories for emissions and removals. However, several elements of a mechanism for REDD have quite distinct features that call for separate deliberation, such as how to address carbon leakages and permanence, determine standards for measuring, reporting and verification and for setting reference levels, and the involvement of indigenous peoples and local communities.

In this submission we have outlined what we believe are the core elements of a REDD regime. Not all aspects of these elements need to be agreed upon at COP 15 in Copenhagen. Much of the technical guidelines, definitions, eligibility criteria etc will have to be developed and implemented after COP 15. In Annex 1 to this submission we have outlined issues that we believe should be agreed upon in Copenhagen.

2. Phased approach

An effective REDD regime should be results-based and incentives driven. To achieve this, it must include a reliable framework and capacity for monitoring, reporting and verification (MRV) of forest related emissions and removals, as well as a robust, predictable and sustainable system for mobilizing adequate financial resources from developed countries.

Due to the diverse capabilities of developing countries and expected speed of development, it is proposed that the REDD regime for organisational reasons should be structured into three different phases. It should begin with a readiness planning phase, followed by a phase focused on the implementation of policies and measures while also establishing and being rewarded for results based on proxies for emissions reductions. It should end up with a phase where quantified emission reductions and enhanced removals are credited in a solely performance based mechanism.

For each phase, the commitments of the participating developing countries would grow, financial incentives would increase, and the sources of finance would evolve, while pre specified eligibility criteria, including requirements for measuring, reporting and verification, would become more demanding.

The timing of transition between phases would vary with a country's readiness, and REDD countries could be able to skip a given phase, provided they meet the eligibility criteria for the next phase. However, MRV for greenhouse gas inventories should advance progressively with phase transfers, and

should be upwardly compatible with a future framework that could encompass all elements of forestry, as well as agriculture and other land uses.

In order for REDD countries to be properly incentivized and the rules of the mechanism to be clear from the start, it would be crucial to agree on the key elements of all three phases up front. This should include agreement on the incentive structure, eligibility criteria, MRV requirements, institutional framework, and the basis for results based compensation.

The first phase would include the development of a national REDD strategy and institutional strengthening – including the establishment of an initial capability to monitor forest cover and changes in carbon stocks – as well as demonstration activities. These activities could be supported by voluntary contributions, such as those administrated through the World Bank hosted FCPF, the UN REDD Programme and bilateral arrangements. For this first phase of a REDD regime the need for funding is limited compared to the following phases. Hence, voluntary contributions may be sufficient and the international bodies selected could be authorized under a REDD mechanism to function as trusts for available funding until tailored national or international financing facilities are in place. Norway will actively contribute to prepare a detailed proposal aiming to ensure cooperation and sufficiency of resources.

Developing countries that have demonstrated national commitment to REDD strategy development should be entitled to phase one funding. The threshold for being eligible in this first phase should be set low in order to promote broad participation. The incentives for countries to enter the first phase would mainly be the potential rewards in later phases, both as regards future financial compensation for REDD results and domestic benefits like sustainable development, biodiversity conservation, ecosystem services, and adaptation benefits.

The second phase, requires implementation of national policies and measures for REDD. This should include, *inter alia*, institution- and capability building, development of legal frameworks and law enforcement capabilities, land tenure and forest governance reforms, investments in alternative livelihoods, and the further development of required MRV institutions and capabilities.

The funding for these activities must be results based, sufficient and predictable over time, and based on an internationally binding finance instrument, for instance through a financial mechanism as proposed by Norway on auctions of allowances.

Eligibility for funding under this second phase should be based on a demonstrated national commitment to REDD strategy implementation. Such REDD strategies should include a demonstrated commitment to transparent, rules based forest governance, as well as inclusive, transparent, multistakeholder REDD consultations, including indigenous peoples and local communities, in overall strategy development and implementation.

The access to funding should be based on performances, including measurable, reportable and verifiable (MRV) indicators on for example the implementation of policies and measures and institution- and capability building. In order to stimulate early action, some funding would need to be disbursed up-front, based on countries´ spending plans and stated commitments, with delivery being verified *post hoc*.

As countries' phase two efforts are intensified, the main portion of their funding could be based on results derived from proxy data on reduced emission and enhanced removals from forest activities, as well as conservation of forests (e.g. reduction in area deforested). There is a need to further develop the details of such indicators – including satisfactory provisions for MRV – as the basis for this kind of result-based funding. The basis should, however, be the most recent IPCC guidelines for greenhouse gas inventories.

It is difficult to assess the level of compensation for REDD activities required under the second phase. One analysis suggests 2 billion USD annually, increasing to 10 billion USD annually over the next 5-6 years. Whatever level of funding agreed upon, it will be essential to ensure sufficient funding to enable maximum progress up-front, and predictability regarding longer term financing. Both are key to properly incentivize fast and determined action on the part of REDD countries.

In *the third phase* of the REDD regime developing countries should be compensated solely based on reduced emissions and enhanced removals relative to an agreed reference level for future emissions.

Phase three REDD compensation should not be earned for emission reductions or enhanced removals achieved during phase two, but crediting for the results of the continuations of policies and measures initiated in the second phase should be allowed.

In order to be eligible to participate under the third phase developing countries must have implemented an operational national forest GHG inventory based on measured, reported and verified data according to agreed rules, see section four below. Further, an agreed global reference level as well as country specific reference levels, both endorsed by parties under the UNFCCC, has to be established, see section five below.

To be effective the compensation for measured, reported and verified, reduced emissions and enhanced removals would need to equal at least the sum of countries' opportunity-, transaction-, and implementation-related costs.

It is difficult to determine the amount of finance needed for the third phase, as it would depend both on costs, pricing, and the quantity of mitigation potential realized. According to McKinsey & Company (2009) a mitigation potential of 4 billion tones of CO_2 from REDD activities could be realized by 2020, most of it at an opportunity cost of below 5 USD per ton, and about 1,5 billion tones from afforestation, reforestation and sustainable forest management, at opportunity costs of under 15 USD per ton. Actual costs would depend on the magnitude of transaction and mitigation costs, and the prices paid would depend on the pricing mechanism.

In order to ensure up-scaled and sustainable financial resources, the financial mechanism in the third phase must mobilize financial resources both from private and public sectors. Hence, linkages to the carbon-marked would be necessary. However, Norway believes it is required to design the financial mechanism for the third phase in such a way that the risk of market flooding and price volatility is reduced.

The compensations for reduced emissions and enhanced removals under the third phase should be adjusted as the host countries gradually take greater responsibility for the carbon stored in their forests. The sunset closure for the third phase would occur individually when the participating countries are ready to accept quantified emission reduction commitments under the Convention.

3. Scope

A post 2012 REDD regime should be broad in order to include all forest countries, regardless of where they are on the so-called forest transition curve. This regime should include reduced emissions from deforestation and forest degradation as well as the promotion of forest conservation, stock enhancement and sustainable management of existing forests. Such a broad scope will incentivize the optimal utilization of all mitigation levers, and reduce the risk of carbon leakage at national level.

Furthermore, Norway believes that a future REDD regime should encompass afforestation and reforestation, currently included as eligible activities under the CDM in the Kyoto Protocol for the first commitment period. Such an extension of the scope of the REDD regime could reduce the risk of carbon leakage and contribute to the protection of natural forests, while realising added mitigation potential. It is, however, important to establish means to avoid adverse impacts of alien invasive species on afforestated land similar to the existing rules for afforestation and reforestation under the CDM. It is also crucial to include safeguards against the conversion of natural forests to plantation forests. The existing safeguards concerning potential environmental and social impacts of afforestation and reforestation under the CDM could form the basis for integration of A/R in an expanded REDD-mechanism.

We believe, moreover, that managed non-forested peatland, and over time the entire AFOLU sector, should be included in a future REDD regime, provided that reference levels can be agreed by Parties and that countries can establish greenhouse gas inventories based on agreed rules for monitoring, reporting and verification.

4. Monitoring, reporting and verification

A robust system for monitoring, reporting and verification of emissions and removals from forest activities must be included for all participating developing countries. Such a stringent MRV system for

GHG inventories is a key criteria for the long term viability of REDD as a climate change mitigation measure and should be similar to the existing requirements for Annex I countries.

Norway recognizes that such precision will require time to develop and significant investments in methodology development and capacity building. In this regard it is essential that adequate financial resources are made available both for developing countries and at the international level.

The level of ambition and an incentive structure for gradual improvements of MRV-systems over time must be established from the outset. MRV standards should be based on the most recent IPCC guidelines for greenhouse gas inventories. These guidelines allow countries to gradually improve their inventories following the so-called tiered approach. Hence, the quality of any given country's MRV capabilities would be expected to improve over time. Financial compensation should reward increased scope and precision of MRV: The better and more comprehensive the MRV, the higher the financial compensation received for a given result.

Norway believes a monitoring system for REDD should be based on the same broad and flexible definition of forests as in the Marrakesh Accord. Concerns have been raised over the inclusion of industrial plantations in the definition of forests, as this could lead to the conversion of natural forest into plantations. In our view, this concern is not best addressed by excluding plantations from the forest definition. A well designed monitoring system should reduce or eliminate any incentives for such conversions for carbon purposes, This should be specified in the treaty text.

Similarly, Norway finds it unnecessary to establish specific definitions of forest degradation and activities that lead to enhancement of carbon stocks in forests as long as countries have established a nation-wide forest GHG inventory. In such a comprehensive inventory system all these activities would be covered by monitoring requirements established for "*forests remaining as forests*" in the IPCC good practice guidance. However, during the development phase of such a holistic inventory, interim rules and modalities may be needed to avoid perverse incentives, inter alia for converting natural forests to plantations.

In Norway's view, reporting on results under a REDD mechanism should be an annual exercise. Annual reporting will allow annual results-based payments, thereby creating a close link between performance and incentive. Furthermore, annual reporting will require permanent monitoring and reporting capacity, which would facilitate the maintenance of stable and gradually evolving institutions in the participating countries.

A verification mechanism for GHG inventories under REDD should be as rigorous as the existing regime used in reviewing annual GHG inventories of Annex I countries. Using this regime as model has an important capacity building aspect too, by bringing experts from both developed and developing countries together through the review process. Furthermore, we believe the review process should be facilitated by a REDD MRV technical panel operating under the auspices of the UNFCCC-secretariat. This will require additional financial resources and a concerted effort to expand the roster of experts and approved verifiers for REDD-activities.

5. Reference levels

Setting reference levels is among the most crucial elements of a REDD mechanism. If the reference level is set too high, one may risk paying for 'hot air', i.e. emissions that would not have happened even in the absence of incentives. If the reference level is set too low, the incentives for action could be reduced. Hence, there is a need to establish a robust methodology for setting reference levels that ensures additionality both at national and global level compared to business as usual conditions, and at the same time properly incentivizes developing countries to participate in the REDD mechanism.

The methodology should be simple and flexible, and take into account the differences between countries with high deforestation rates, and countries with high forest cover and low deforestation rate. It should also allow for inclusion of other country specific conditions. Methodology for setting reference levels should be employed for degradation and stock enhancement, as well as for afforestation and reforestation. Procedures and regulations for the latter, however, would need to include explicit assurances against the conversion of natural forests to forest plantations being compensated through the regime.

National reference levels could be determined through a process taking as its starting point a formula based on objective, measurable and verifiable inputs, such as historical emission and removal rates, forest cover, and measures of GNP/capita. An expert body so mandated could propose final reference levels based on the outcome of such a standardized process, appropriately adjusted to reflect national circumstances and other relevant input such as expected future emission and removal trends for the Parties considered. Recommendations from the expert body could then be submitted to the COP or an appropriately mandated representative body for final determination.

The reference levels should be updated at regular intervals.

A global reference level should be established. This would serve two purposes: first, it would ensure global additionality, i.e., that 'hot air' is avoided on a global as well as on a national level; second, it would help induce collective discipline into country specific reference level negotiations, in the sense that increases in baseline given to one country, would necessarily lead to decreases for one or more other countries. A global reference level would thus both facilitate the environmental integrity of the mechanism, and incentivize a collaborative approach to global REDD efforts.

6. Permanence and leakages

A performance-based REDD regime must focus on the national level in order to reduce the risk of leakage of emissions within the country, as well as the risk for non-permanence. Such a national approach would necessitate a monitoring system that covers all forests in the country. However, some countries may have difficulties in achieving such a comprehensive geographical coverage overnight. Explicitly time-limited transitional solutions during the first phase of the REDD mechanism may be needed to help such countries in developing national approaches. Such transitional solutions must, however, address the risk for intra-national leakages.

International leakages, however, could only be satisfactorily addressed through global participation in the regime. The REDD regime should address this problem, even if it may be difficult. By aiming at a REDD regime that will incentivize participation from all developing countries, the risk for international leakages would be minimized. In the initial phase of a post-2012 REDD regime, still with a limited number of developing countries taking part, it may be necessary to consider other approaches to address international leakages, for example through introducing an 'international leakage discount factor'.

The permanence issue could only be fully addressed when the forest sector in all countries, both in developing and developed countries, is subject to quantified emission reduction commitments. Norway believes, however, that it will be necessary to look into possible interim solutions to reduce the consequences of non-permanence, due to both man-made and natural disturbances. Such solutions could include insurance arrangements, as well as a temporary setting aside of REDD revenues.

7. Biodiversity

According to the Millenium Ecosystem Assessment, forests, particularly those in the tropics, provide habitat for half or more of the world´s plant and animal species. This biodiversity is essential for the continued health and functioning of forest ecosystems, and it underlies the many ecosystem services that forests provide. Extensive biodiversity loss has been one result of the shrinking of the world´s forests. It is Norway´s view that a REDD regime should be recognized as a potential breakthrough for the conservation of tropical forest biodiversity.

By expanding the scope of REDD to include conservation and enhancement of carbon stock, the potential benefits for biodiversity may be further enhanced, inter alia by promoting restoration of degraded forest habitats. If afforestation and reforestation (A/R) activities are also included in a future REDD-mechanism, biodiversity benefits could arise from incentives to regenerate forests in previously deforested areas and increased connectivity between forest habitats.

It must be recognized however, that certain safeguards are needed to avoid or reduce the risk of adverse impacts on biodiversity resulting from a broad REDD mechanism including enhancement and A/R. Such concerns are mainly linked to the conversion of natural forests to plantation forests and the potential use of alien invasive species in plantations. Given the importance of tropical forests for the maintenance of biodiversity and critical ecosystem services, Norway will support the establishment of safeguards and

procedures to facilitate synergies between REDD and biodiversity conservation. In this regard, the findings of the Ad Hoc Technical Expert Group on Biodiversity and Climate Change (AHTEG, convened under the Convention on Biological Diversity (CBD) may provide valuable information and guidance.

8. Indigenous peoples and local communities

An effective participation of indigenous peoples and local communities in a future REDD mechanism is of utmost importance for successful REDD-implementation. Whilst indigenous peoples and local communities are potentially significant beneficiaries of a REDD mechanism, it might also have adverse effects such as loss of access to land and other natural resources. Examples of opportunities include potentially increased resource flows to poor rural areas and improved forest governance.

A REDD mechanism should recognize the role and contribution of indigenous peoples and local communities and establish an effective procedure to secure free, prior and informed consultation for those effected by national REDD actions. This procedure should include an analysis of the socio-economic impacts on indigenous people. Adequate funding and other provisions necessary to enable their effective participation should be ensured.

The participation of indigenous peoples and local communities should also be secured through the eligibility criteria for funding under the second phase of the REDD mechanism, see section two above. Participating countries should demonstrate national commitments to implement REDD strategies, including transparent and rules based forest governance and the involvement of multiple stakeholders, including indigenous peoples and local communities.

9. Institutional framework

In Copenhagen we should aim at establishing an institutional framework related to the different functions of a REDD mechanism. The institutional framework should be related to existing institutions under the UNFCCC as well as new institutional framework established as part of the Copenhagen agreement.

The institutional arrangement for REDD should be flexible in order to effectively serve all the different phases of the REDD regime. For both the general and the REDD-specific institutions, it would be crucial to make distinction between those institutions that are permanent (for example those filling MRV-related functions) and those that are designed to handle time-limited tasks.

Based on these principles an institutional framework for REDD could include the following elements:

- *A political function* including:
    - eligibility for transition between phases.
    - countries´ eligibility for funding based on expert advice;
    - countries' compensation based on agreed criteria and expert advice;
- *A financial trustee function*, both to collect funds, maintain them, and disburse them, according to appropriate safeguards.
- *An MRV review and verification function*
- *An expert advice function,* to give objective and facts based expert advice to various processes, including, but not necessarily limited to, the issues of reference level setting, countries' progress in meeting commitments and corresponding advice on levels of compensation.

Not all functions require new organizations. Use of existing structures with new mandates should remain an option.

10. Further process

Close to the next meeting of AWG-LCA in June, Norway will send a concrete proposal with elements to a Copenhagen agreement on REDD. This text will be based on the substantive elements of this April submission.

ANNEX 1

Elements for a REDD mechanism which should be addressed in the Copenhagen agreement

The timeframe up to COP 15 in Copenhagen do not allow for the elaboration on and development of all the detailed rules and modalities related to a post-2012 REDD mechanism. Hence, the agreement in Copenhagen should focus on the overall framework. The technical details, including e.g. MRV guidelines as well as the details of designing eligibility criteria and reference setting methodology should be adopted through separate COP decisions after COP 15.

The following elements must be addressed in the Copenhagen agreement:

- The main principles for the REDD mechanism
- The overall scope of the REDD mechanism, including the definition of which forest and land-use activities that are eligible to be covered by the mechanism
- The establishment of a phased approach, including the overall eligibility criteria for the three phases.
- A mandate for the Conference of the Parties to develop the details of designing eligibility criteria for adoption at COP 17.
- The establishment of a funding mechanism. The first phase should be operative from 2010.
- A mandate for the Conference of the Parties to develop guidelines for the MRV of emissions and removals from the AFOLU sector, based on the most recent IPCC guideline for GHG inventories, for adoption at COP 17.
- The main principles for establishing national and global reference levels, as well as a mandate for the Conference of the Parties to supplement and expand methodologies and procedures for the establishment of reference levels, for adoption at COP 17.
- The main principles and guidelines for the involvement of indigenous peoples and local communities
- Safeguard to protect biodiversity
- The overall institutional framework for a REDD mechanism.

PAPER NO. 29: PANAMA, PARAGUAY AND EL SALVADOR

This submission fulfills the call for proposals by the Chair of AWG-LCA regarding to a possible negotiating text. We are proposing text for six different sections: Preamble, Shared vision, Mitigation, Adaptation, Technology, Finance, REDD.

"The Chair of the AWG-LCA wishes to remind Parties that his work on the negotiating text, according to the mandate agreed by the AWG-LCA at its fourth session (see

FCCC/AWGLCA/2008/17, paragraph 26 (b)), will be based on proposals by Parties and take account of the proceedings of the AWG-LCA at its fifth session and of submissions received from Parties by close of business on 24 April 2009.

The Chair reiterates his invitation to Parties to make their submissions in a form that avoids the need for reformulation or abbreviation in the process of incorporation into the negotiating text. In view of the interest expressed in relating proposals by Parties to specific elements of the Bali Action Plan (decision 1/CP.13) and/or specific provisions of the Convention, the Chair invites Parties to consider indicating such relationships in their submissions, as otherwise he would not be able to interpret their intentions in this respect".

Preamble text:

Noting that the ultimate objective of the Convention should guide the international community's shared long-term vision of actions on climate change,

Recalling that the IPCCC fourth Assessment Report indicate that a warming of more than 2^{o}C would could lead to discontinuous or irreversible climatic events,

Concerned by the consequences of such climatic disruption,

Recognizing that poor countries are the least capable of adapting to climate disruption and are likely to suffer disproportionately from the consequences of irreversible climatic change,

Recalling that the preamble of the UNFCCC recognizes the special vulnerability of Latin American countries in the face of climate change,

Reiterating that the principle of shared but differentiated responsibilities,

Agreeing that the principle of historical responsibilities should guide the actions to be taken by the global community to face climate disruption,

Concerned that the current quantified emissions reductions commitments of developed countries have not stabilized greenhouse gas concentrations in the atmosphere,

Noting that adaptation has taken the backseat to mitigation in the discussion around technology, and that this trend needs to be fundamentally reversed,

Article A - Shared vision

1- The objective of long-term cooperative action for climate is to:

(a) prevent atmospheric greenhouse gas concentrations to rise above 450 ppm,

(b) reduce atmospheric greenhouse concentrations to 350ppm,

(c)implement a global long-term, low carbon society in both developed and developing countries.

2- Stabilising and reducing atmospheric GHG concentrations implies a substantial shift in long term pattern of growth and development, shift that needs to start promptly. This transformation needed to make the change form a high to a low carbon economy shall go beyond efficiency-driven transformations within sectors. Parties must modify the relations between key sectors and thus affecting the way societies interact as a whole.

3- Developed country Parties shall jointly reduce their GHG emissions level to at least 45% based on their 1990 levels by 2020, with a mid-term goal of at least 95% based on their1990 levels by 2050. This will be done through quantified emissions reduction targets for each Annex I Party.

Article B - NAMAs

1- Developing countries, aware of the imminent and extremely severe danger that climate change represents, agree to make non-offsetting contributions towards achieving a resilient and low carbon development. The full contribution of already developed mitigation policies, regulations, measures and implemented specific mitigation projects shall be recognized as National Appropriate Mitigation Actions (NAMAs).

2- NAMAs shall be further developed to scale up low carbon actions by aggregating mitigation policies, programs and measures carried out at different levels, on a voluntary basis. Reductions resulting from non-offsetting NAMAs shall then be recognized as a net contribution of the country to the global mitigation effort. Developing countries shall engage in new, non-offsetting NAMAs in keeping with the financing and technology support provided by developed countries.

3- Emissions reductions under NAMAs could also be used in a crediting mechanism on the carbon market to help developed country Parties to meet their emissions reduction targets.

(a) NAMAS serving to offset developed country Parties quantified emissions reduction shall be subject to MRV.

(b) The implementation of new offsetting NAMAs in developing countries will be proportional to the new quantified emissions reduction targets of developed countries through the continuous use and participation of the existing flexible mechanisms, particularly the CDM in the future climate regime. Existing institutional arrangements under the CDM should be built upon for this new agreement on climate.

(c) Project activities that demonstrate specific co-benefits, as defined and confirmed by the Designated National Authorities -including energy efficiency, technology transfer, environmental services such as biodiversity conservation, water resources management, improvements in air quality, poverty alleviation, economic growth, and social benefits shall be entitled to preferential treatment (e.g. fast track registration processes or fees reduction), in order to reduce barriers for their implementation, and expand their role in the creation of viable low carbon economies.

4- Whether used as offsetting or not, NAMAs and the associated emissions reduction shall be voluntary and based on national capacities and circumstances. Each developing country shall decide whether or not it will participate and, when applicable, what form will the NAMAs take.

Article E –Adaptation

1- Developing countries shall design NAPAs as instruments that could:

(a) catalyze actions in different sectors,

(b) efficiently and effectively use the financial resources provided under UNFCCC for adaptation,

(c) promote the link between adaptation and mitigation since impacts of climate disruption are likely to affect the resource base and infrastructure upon which the economies work and grow and it is often the case that mitigation actions could serve for adaptation.

2- The share of proceeds to finance the Adaptation Fund is extended to Joint Implementation and Emissions Trading Schemes to ensure that financial needs for adaptation be covered. The share of proceeds shall represent at least 2% of the ERUs and AAUs issued. This extension applies in addition to a predictable, sufficient and long-term financial mechanism for adaptation.

Article F –REDD

1- A REDD^{+} mechanism is hereby established.

2- The objective of this mechanism is to help:

(a) developing country Parties to re-organize the land-use sector taking into account the new paradigm of low-carbon economies and take part in the global effort to stabilize and reduce GHG concentration in the atmosphere,

(b) developed country Parties to reach ambitious quantified emissions reduction targets.

3- The REDD$^+$ mechanism should be two-tracks with an offsetting track funded by markets and a non-offsetting track paid for by funds.

4- A flexible two-track REDD$^+$ mechanism will accommodate the multiple activities contemplated under REDD$^+$. Funds will be used to support capacity building and to fund conservation efforts and sustainable forest management. Activities to reduce emissions from deforestation and forest degradation could be financed either through funds or market depending on host countries preferences.

5- The financial guidelines of the REDD$^+$ mechanisms shall provide the necessary resources to REDD$^+$ activities under a range of positive incentives including market mechanisms, funds, and other innovative mechanisms and policy options. The significant emission reduction potential of REDD$^+$ depends on adequate support from developed country Parties.

6- Developed countries Parties shall pledge a percentage of auctioned national emissions trading allowances or a percentage of AAUs auctioned on the international market to generate stable and sufficient source of replenishment for a REDD$^+$ fund.

7- A market for REDD shall be developed learning from the CDM and ensuring the integrity of the carbon market in other sectors.

8- The REDD$^+$ mechanism shall be subject to the authority and guidance of the Conference of the Parties.

9- The Conference of the Parties shall elaborate modalities and procedures with the objective of ensuring that REDD$^+$ ensures a real benefit to climate.

Article F- Technology

1- The technology pathway for adaptation is different from that of mitigation. While the contribution of adaptation technologies and practices to the GDP might be relatively small, they frequently employ a large percentage of the economically active population, and are crucial for their long term prosperity and survival in the face of climate change. The challenge of developing and deploying adaptation technologies and the need for research, diffusion and scaling up of adaptation technologies should receive as much attention as mitigation.

2- Developing countries shall consider and encourage the development of NAPA-like and TNA-like assessments. The secretariat could compile regional technological needs, as defined by countries within a region, suggesting areas where technologies could be aggregated to deliver economies of scale, and addressing the issues of scale and urgency, for both mitigation and adaptation. Such compilation would help to assess regional needs for research, development, and capacity building. The information submitted to the Secretariat should be periodically updated by the EGTT with support from the secretariat and guidance from Parties.

3- Regional centers addressing technologies on a regional basis should be created to help improve capacity, practices and processes as well as the technologies themselves thus fulfilling the need to enhance the capacity of developing countries to stimulate and expand endogenous technologies. Test platforms for specific technologies can help to adapt equipment, practices and technologies for their operation in DCs, and for their continuous improvement, as well as for the creation of new endogenous technologies.

4- National and international programs shall be developed to address technology cooperation and the needs at the required scale. They shall combine both national and international actions, and link domestic policies and incentives with carbon finance and other innovative financial mechanisms. Programs will operate under NAMAs and/or NAPAs, and be identified through coordinated TNAs by regions. They will help in developing, deploying and transferring technologies adequate to regional needs. These programs shall operate hand in hand with regional centers and support and provide incentive

for the creation of technology research entities in key sectors. These should consider how different policies, measures and actions can help creating a environment where intermediate and other adequate technologies help avoid emissions and facilitate adaptation capacity.

Article G – Finance

1- Parties agree that financing for enhancing mitigation and adaptation actions in developing countries should be predictable in the long term, equitable and sufficient.

2- Historical climate responsibility dictates that new adaptation and mitigation activities in developing countries shall be covered by novel sources of money and not by reallocating existing ODAs.

3- Developed country Parties shall agree individually to a quota/target of financial transfer to sustain developing country NAMAs in an equitable manner. In keeping with the principle of historical responsibility, this quota will be determined in function of the cumulative emissions of each developed country. The financial support pledged by the developed countries should be verified by an independent body to ensure that countries meet this new commitment.

4- A low carbon economy shall also imply a significant expansion of carbon markets, to better reflect the opportunities of reducing emissions in all sectors, avoiding high carbon pathways. Financial instruments and funds that facilitate the blending of public, private, bilateral and multilateral resources for the deployment of technologies at the scale required shall be encouraged within domestic, regional and international contexts.

PAPER NO. 30: PHILIPPINES

1 The Philippines welcomes the invitation from the Chair to submit ideas and proposals on the elements of paragraph 1 of the Bali Action Plan to be taken into account in the negotiating text for consideration on long-term cooperative action.

2 The Philippines strongly emphasizes that its perspective comes from being one of the developing countries most vulnerable to the immediate impacts of creeping climate change which have been concealed as climate variability. As an archipelagic country within the most active region in the world in terms of intensifying tropical cyclones and precipitation,[1] it can ill-afford to wait for global emissions to peak while it suffers from the clear and present danger of climate impacts.

On Shared Vision

3 The Philippines reiterates its call for deep and early cuts by Annex I Parties. It is not enough that climate change is averted. Its immediate destructive consequences must also be moderated, if not averted, through deep, early and significant emission cuts.

4 We cite Article 4 of the Convention recognizing economic and social development and poverty eradication as overriding priorities of developing countries in implementing the balance of obligations under the Convention. Any attempt by developed countries that effectively spreads out, averages or defers reduction targets over a long period of time would be unacceptable given that the early impacts of creeping climate change in the form of extreme weather events shall have rendered extremely vulnerable countries wasted and impoverished.

On Adaptation

5 The Cooperative Framework of Action on Adaptation should be guided by the following principles:

a. Equity and common but differentiated responsibilities and respective capabilities under the Convention;
b. Gender sensitivity and responsiveness to the specific needs of women, children and the elderly;
c. Comprehensive scope;
d. Enabled by adequate, predictable and timely flow of financial resources and appropriate technology in order to overcome new challenges posed by creeping climate change; and

[1] See Annex

e. Consistent with the principles under the Convention on Biological Diversity (CBD), UN Convention in Combating Desertification (UNCCD), as well as the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).

6 Policies, programmes and actions should recognize that vulnerabilities and resilience are location- and period-specific. At the moment, the ability of local communities to withstand further climatic aggravations is seriously undermined by the current global economic crisis. Hence, policies, programmes and actions that further weakens community resilience or worsen local vulnerabilities should be avoided.

7 The Adaptation Fund under the Convention should be utilized to build resilience and adaptive capacities at both national and local levels. It should cover the full incremental costs of resilience-building activities based on vulnerability assessment, *inter alia*, sustainable livelihood, sustainable agriculture, building community capacity and infrastructures, access to technology and innovations, etc.

On Mitigation

8 Consistent with its submission to the Ad Hoc Working Group on the Second Commitment Period of the Kyoto Protocol (AWG-KP), the Philippines strongly proposes that Annex I countries must commit to the following targets in GHG emission reductions in the subsequent commitment periods:

a. Reduction to at least 70% of their 1990 levels by 2017
b. Reduction to at least 50% of their 1990 levels by 2022

9 At least 90% of the quantified emission reduction commitments of Annex I countries should come exclusively from domestic actions. Only a maximum of 10% should come from flexibility mechanisms, including offsets.

10 On mitigation by developing countries, the Philippines subscribes to the voluntary nature of nationally appropriate mitigation actions (NAMAs) and the cross-cutting principle of paragraph 7, Article 4 of the Convention that economic and social development and poverty eradication remain the paramount concerns of developing countries and that adequate, timely and effective financial resources and technology transfer by Annex I countries are necessary for NAMAs to take-off.

11 Moreover, NAMAs should promote, not undermine, food and water security, indigenous peoples and community rights, result in actual reduction of GHGs, biodiversity conservation, and promote and remove financial, legal and technical barriers to the use and development of renewable energy.

12 Mitigation actions in the agriculture sector should be recognized, i.e., incentives should be provided to practices and systems that reduce GHG emissions through reduced reliance on synthetic fertilizers, use of renewable energy technologies in the farm; promotion of organic farming; and watershed management and protection.

On Financing

13 While the Philippines believes that financial resources to be generated should be new and additional, adequate, predictable and sustainable, these should not come from revenue streams that will be passed on ultimately to developing countries. Moreover, it subscribes to the polluter pays principle and principle of historical responsibility.

14 The Philippines supports the following potential sources of financial resources to support the implementation of the activities under the Convention:

a. Auctioning of AAUs/Emission Allowances (based on the proposal of Norway) – the portion of Assigned Amount Units (AAUs) to be auctioned annually, as proposed by Norway. The Philippines further proposes a ban on the issuance of free carbon permits starting from the second commitment period under the Kyoto Protocol to ensure a stable source for the Financial Mechanism under the Convention.

b. Assessed Contributions of Annex I Parties (based on the proposal of Mexico) - this source shall complement the auction of emission allowances

c. Global tax/levy on CO_2 (based on the proposal of Switzerland) - this source shall mainly provide for the proposed Adaptation Fund. The basis for the application of taxation shall be the per capita emission of countries, which shall be limited to countries with more than 2 tons per capita emission.

d. Share of Proceeds from market-based Flexibility Mechanisms under the Kyoto Protocol - The Philippines proposes that at least 10% of the proceeds from Joint Implementation (JI) and Emissions Trading (ET) be allocated to fund the Adaptation Fund under the Convention.

On Technology Transfer

15 Priorities for technological cooperation should be:

a. Technologies for mitigation to achieve low-carbon development pathways;
b. Technologies for adaptation, with focus on local needs and capacity to make use of these technologies, and scaling up of such technologies.

c. Sharing, exchange and diffusion of climate-friendly technologies, especially those that are already available and adopted by local communities
d. Ensure adequate funding from Annex I Parties
e. Promote and diffuse indigenous and community-based technologies and innovations

16 Technology transfer and cooperation should be based on the needs and conditions of developing countries; be country-driven; not be considered part of ODA; given access to developing countries, with least transaction costs; technology costs be on a preferential basis for developing countries; provide for compulsory licensing and government use on patented technologies necessary for adaptation and to respond to climate-related emergency situations in developing countries. For intellectual property rights not to be a barrier to technology transfer, cooperation and diffusion, the COP shall work for the exclusion from patent protection of environmentally-sound technologies (ESTs) in view of the emergency nature of the impacts of climate change; and encourage countries to exercise and strengthen the flexibilities in the Agreement on Trade-Related Intellectual Property Rights (TRIPS) under the World Trade Organization (WTO), such as compulsory licensing.

Legal Form of the Agreed Outcome

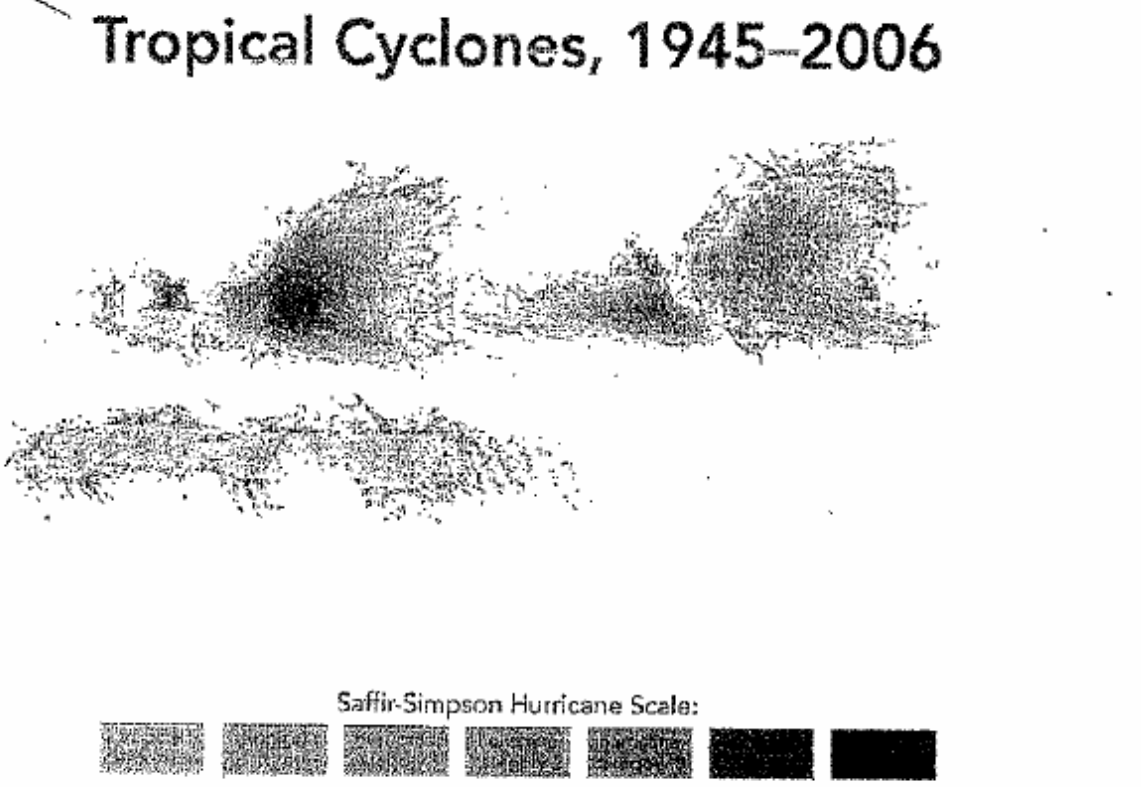
17 The Philippines envisions that the agreed outcome will come in the form of a set of Decisions by the COP which are legally-binding by nature, emanating from the obligations and commitments of countries under the Convention. The outcome from Copenhagen should not involve any revision or result in the derogation of the principles and provisions of the Convention.

Annex to the Philippine Submission to the AWG-LCA

The Philippines and its neighbours in the Western Pacific: most vulnerable to increasing tropical cyclone intensities and precipitation caused by global warming and climate change

The Philippines is a low-lying archipelagic country located in the typhoon belt and the Pacific ring of fire and is especially vulnerable to the effects of climate change such as rising sea levels, tropical cyclones and storms, heavy precipitation and extreme weather. A map of all tropical cyclone tracks from 1945 to 2006 show that the Pacific Ocean west of the International Date Line sees more tropical cyclones than any of the other five ocean basins. Figures 1 and 2 show that not only does the Western Pacific see more typhoons, the basin experiences the most number of the most intense storms and tropical cyclones. Numerous scientific studies have also shown that the average intensity, and therefore destructiveness, of tropical cyclones is increasing due to climate change. The Intergovernmental Panel on Climate Change made the same conclusions in its Fourth Assessment Report. The IPCC Report also mentions that heavy precipitation events are also expected. Further, the frequency (or proportion of total rainfall from heavy falls) increases over most areas. Intense tropical cyclone activity increases are also expected.[2]

Figure 1 Map of all tropical cyclone tracks from 1945 to 2006



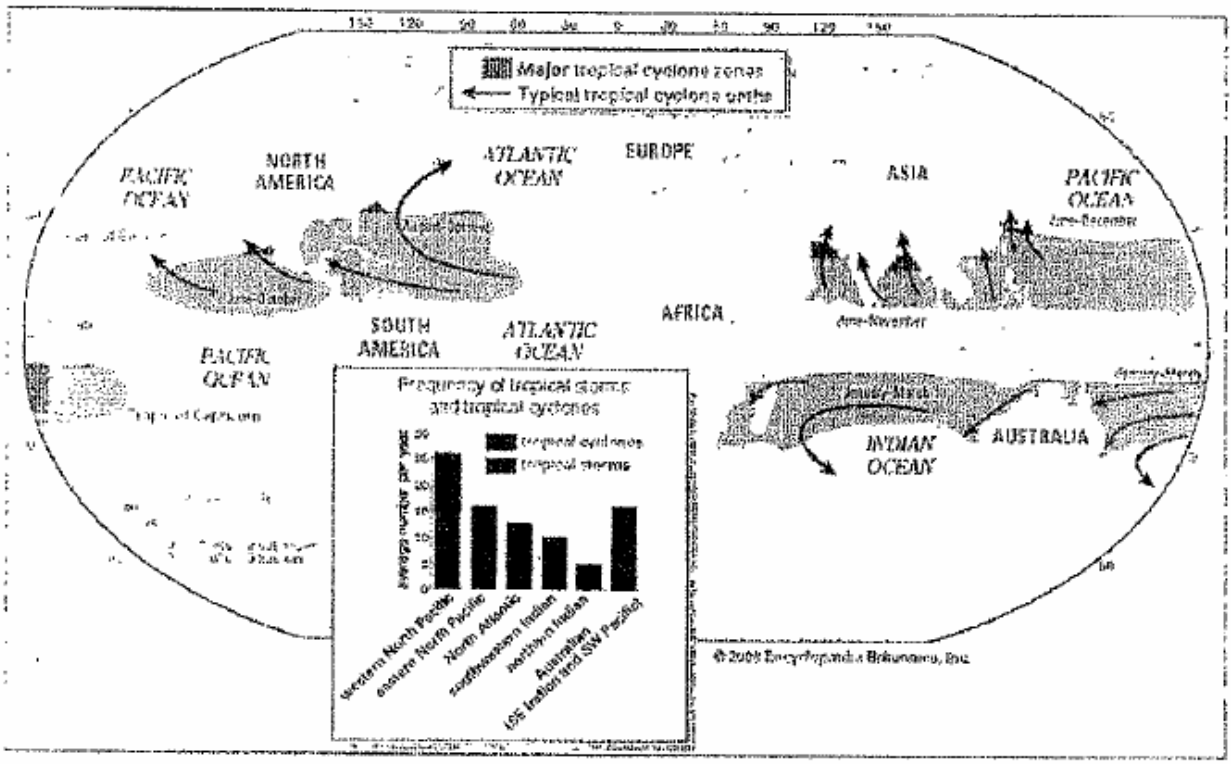
Source:www.wmo.int/pages/prog/rp/documents/3-2Hasegawa.pdf; http://en.wikipedia.org/wiki/Tropical_cyclone http://www.britannica.com/EBchecked/topic/606551/tropical-cyclone

[2] IPCC, 2007

The **Saffir-Simpson Hurricane Scale** is a classification used for most Western Hemisphere tropical cyclones that exceed the intensities of tropical depressions and tropical storms. The scale divides hurricanes into five categories distinguished by the intensities of their sustained winds. The classifications are intended primarily for use in measuring the potential damage and flooding a hurricane will cause upon landfall.

Saffir-Simpson hurricane scale*					
category	wind speed		storm surge		Damage
	mph	km/hr	feet	metres	
1	74-95	119-154	4-5	1.2-1.5	damage primarily to shrubs, trees, and unanchored mobile homes; inundation of low-lying coastal roads
2	96-110	155-178	6-8	1.8-2.4	considerable damage to shrubs, trees, and exposed mobile homes; coastal roads flooded; piers damaged
3	111-130	179-210	9-12	2.7-3.7	large trees uprooted; mobile homes destroyed; structural damage to small buildings; serious flooding at coast
4	131-155	211-250	13-18	3.9-5.5	shrubs, trees, signs blown down; major damage to roofs and windows and to lower floors of structures near shores
5	>155	>250	>18	>5.5	small buildings blown down; many structures completely unroofed; evacuations necessary 5-10 miles (8-16 km) from coast
Additional Classifications					
Tropical Depression	0-38	0-62	0	0	
Tropical Storm	39-73	63-117	0-3	0-0.9	
*Used to rank tropical cyclones in the North Atlantic Ocean (including the Gulf of Mexico and Caribbean Sea) and the eastern North Pacific Ocean. Published by permission of Herbert Saffir, consulting engineer, and Robert Simpson, meteorologist.					

Figure 2 Major Tracks and Frequency of Tropical Cyclones (Hurricanes and Typhoons) and Tropical Storms



Source: http://www.britannica.com/EBchecked/topic/606551/tropical-cyclone

Webster et al[3] (2005) examined the number of tropical cyclones and cyclone days as well as tropical cyclone intensity over the past 35 years, in an environment of increasing sea surface temperature, and found a substantial change in the intensity distribution of hurricanes globally. The number of categories 1, 2 and 3 hurricanes have remained small in both number and percentage. In contrast, hurricanes in the strongest categories (4 + 5) have almost doubled in number and in proportion (from around 20% in the 70s to 80s to around 35% in the 1990-2004 timeframe. These changes occur in all of the ocean basins. The authors concluded that global data indicate a 30-year trend toward more frequent and intense hurricanes and is not inconsistent with recent climate model simulations that a doubling of CO_2 may increase the frequency of the most intense cyclones

Elsner et al[4] (2008) showed that the increasing average intensity of Atlantic tropical cyclones for the past 30 years is related to the increasing ocean temperatures over the Atlantic Ocean and elsewhere and not merely caused by natural ocean warming and cooling cycles. This corroborated the findings of Emmanuel (2005)[5], who found that the record of net hurricane power dissipation is highly correlated with tropical sea surface temperature. and global warming. His results suggest that future warming may lead to an upward trend in tropical cyclone destructive potential, and—taking into account an increasing coastal population—a substantial increase in hurricane-related losses in the twenty-first century. The works of Christopher W. Landsea[6], Vecchi et al[7] and Knutson et al[8] concur with the above findings. Stowasser et al[9] studied the Western Pacific basin specifically and found that while the basinwide total number of storms remains nearly unchanged in the warm climate, there is a statistically significant increase in the average strength of the cyclones and in the number of the storms in the strongest wind categories. The above results are but a few of the numerous scientific studies that provide evidence and support the position of low-lying, archipelagic, highly vulnerable countries such as the Philippines to call for deeper and early GHG emissions reductions from Annex I countries to avert creeping climate change. Below are some more statistical evidence to support this claim.

The top ten of the most intense storms on record occurred in the Western Pacific, mostly during the late 1990s, which places the Philippines right in the middle of the destruction.

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[3] Webster, P.J.; Holland, G. J.; Curry, J. A.; Chang, H.-R. *"Changes in tropical cyclone number, duration, and intensity in a warming environment."* American Association for the Advancement of Science (AAAS), *Science*: Vol. 309. no. 5742, pp. 1844 - 1846 (6 September 2005)

[4] James B. Elsner[1], James P. Kossin[2] & Thomas H. Jagger[1]. *"The increasing intensity of the strongest tropical cyclones"*, *Nature* 455, 92-95 (4 September 2008); http://www.nature.com/nature/journal/v455/n7209/full/nature07234.html#B1

[5] Kerry Emanuel. *"Increasing destructiveness of tropical cyclones over the past 30 years "*, Nature 436, 686–688 (2005); http://www.nature.com/nature/journal/v436/n7051/full/nature03906.html

[6] Christopher W. Landsea. *"Meteorology: Hurricanes and global warming"*, *Nature* 438, E11-E12 (22 December 2005) http://www.nature.com/nature/journal/v438/n7071/full/nature04477.html

[7] Gabriel A. Vecchi[1] & Brian J. Soden, Effect *of remote sea surface temperature change on tropical cyclone potential intensity*, *Nature* 450, 1066-1070 (13 December 2007) http://www.nature.com/nature/journal/v450/n7172/full/nature06423.html

[8] Thomas R. Knutson, Joseph J. Sirutis, Stephen T. Garner, Gabriel A. Vecchi & Isaac M. Held *"Simulated reduction in Atlantic hurricane frequency under twenty-first-century warming conditions"*, *Nature Geoscience* 1, 359 - 364 (2008) 18 May 2008 | http://www.nature.com/ngeo/journal/v1/n6/abs/ngeo202.html

[9] *Markus Stowasser, Yuqing Wang, and Kevin Hamilton. "Tropical Cyclone Changes in the Western North Pacific in a Global Warming Scenario, Journal of Climate", Article: pp. 2378–2396 (2006) http://ams.allenpress.com/perlserv/?request=get-pdf&file=i1520-0442-20-11-2378.pdf*

Table 1 Most Intense Storms on Record[10]

Rank	Name	Pressure	Location	Year
1	Typhoon Tip	870 mbar	Western Pacific	1979
2	Typhoon Gay	872 mbar	Western Pacific	1992*
2	Typhoon Ivan	872 mbar	Western Pacific	1997*
2	Typhoon Joan	872 mbar	Western Pacific	1997*
2	Typhoon Keith	872 mbar	Western Pacific	1997*
2	Typhoon Zeb	872 mbar	Western Pacific	1998*
2	Typhoon Angela	872 mbar	Western Pacific	1995*
7	Typhoon June	876 mbar	Western Pacific	1975
8	Typhoon Ida	877 mbar	Western Pacific	1958
8	Typhoon Nora	877 mbar	Western Pacific	1973
10	Typhoon Rita	878 mbar	Western Pacific	1978
10	Typhoon Yvette	878 mbar	Western Pacific	1992*
10	Typhoon Damrey	878 mbar	Western Pacific	2000*

The names of exceptionally destructive typhoons are retired and this is being done by the Japan Meteorological Society since 2000, before that by the Joint Typhoon Warning Center. Notably, 16 of the 26 retired Pacific Typhoons hit the Philippines directly causing serious damage to life and property. The typhoons of the years 2005 and 2006 have been exceptionally destructive (Table 2).

Finally, most of the deadliest and exceptionally damaging typhoons that hit the Philippines occurred in the last two decades (Table 3). These typhoons caused over US$2 Billion in damages and causing the deaths of over 25,000 Filipinos in the last two decades alone. Notably, a number of these exceptionally damaging typhoons were not high in the intensity scale, but the deaths and damages were due to flooding from excessive rainfall. The correlation between climate change and increasing intensity of precipitation has also been shown by various scientific studies including those of the World Meteorological Organization (WMO)[11]. In the WMO's Statement on Tropical

[10] http://en.wikipedia.org/wiki/List_of_tropical_cyclones#Most_intense_storms_on_record

[11] Statement on Tropical Cyclones and Climate Change. WMO International Workshop on Tropical Cyclones, IWTC-6, San Jose, Costa Rica, November 2006

Cyclones and Climate Change, the authors mentioned that a robust result in model simulations of tropical cyclones in a warmer climate is that there will be an increase in precipitation associated with these systems (Knutson and Tuleya, 2004; Hasegawa and Emori, 2005; Chauvin et al., 2006; Yoshimura et al.,2006).[12] [13] [14] [15]

Hasegawa and Emori (2005) used a relatively high resolution (T106) atmospheric general circulation model to simulate precipitation along the tracks of tropical cyclones (TCs) within the western North Pacific basin under present-day and doubled CO_2 climates. The simulated mean precipitation associated with tropical cyclones is in agreement with observational data. The simulation predicts that a doubling of atmospheric CO_2 will result in an increase in Tropical Cyclone precipitation. The authors attributed the predicted increase in precipitation to increased atmospheric moisture content.[16]

The above scientific studies, and many more not cited in this annex, show agreement that increases in tropical cyclone intensities and precipitation is caused by climate change. The country and its neighboring countries, have suffered the brunt of these extreme and destructive effects of global warming and climate change. The devastation and loss of life will continue, and will escalate with further increases in sea surface temperature, sea level, and tropical cyclone intensity and precipitation. The Philippines, like all low-lying archipelagic nations, is especially susceptible to the effects of climate change cutting across all categories of key vulnerabilities as defined by the IPCC. The impacts and costs of climate change to vulnerable nations must not be ignored.

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[12] Hasegawa, A. and S. Emori, 2006: Tropical cyclones and associated precipitation over the Western North Pacific: T106 atmospheric GCM simulation for present-day and doubled CO2 climates. *SOLA*, 1, 145-148, SOI:10.2151/sola.2005-038

[13] Chauvin, F., J.-F. Royer and M. Déqué, 2006: Response of hurricane-type vortices to global warming as simulated by ARPEGE-Climat at high resolution. *Clim. Dyn.*, 27, 377-399.

[14] Knutson, T.R. and R.E. Tuleya, 2004: Impact of CO2-Induced Warming on Simulated Hurricane Intensity and Precipitation: Sensitivity to the Choice of Climate Model and Convective Parameterization. *J. Climate ., 17*, 3477–3495.

[15] Yoshimura, J., M. Sugi and A. Noda, 2006: Influence of greenhouse warming on tropical cyclone frequency. *J. Meteor. Soc. Japan*, 84, 405-428.

[16] A. Hasegawa and Emori, S,. (2005) *Tropical Cyclones and Associated Precipitation over the Western North Pacific: T106 Atmospheric GCM Simulation for Present-day and Doubled CO_2 Climates.*
http://www.jstage.jst.go.jp/article/sola/1/0/1_145/_article

Table 2 List of Retired Pacific Typhoons[17,18]

Name and Intensity	Year	Location	Deaths	Damage(in million$US as of the year of damage)
Lucille	1960	Philippines	300	Unknown
Ophelia	1960	Caroline Islands	2	Unknown
Karen	1962	Pacific Islands, Japan	11	250
Bess	1974	Philippines	26-29	7.2
Bess	1982	Japan	59	Unknown
Ike	1984	Philippines, southern China	1363-3000	75.4
Mike	1990	Philippines, Vietnam, southern China	250+	14
Mireille	1991	Ryukyu Islands, southern Japan	52	3000
Thelma	1991	Philippines	6000	19
Omar	1992	Guam, Taiwan	2	457
Vamei	2001	Singapore, Malaysia, and Sumatra	0	None
Chataan	2002	Chuuk, Japan	31	59.8
Rusa	2002	Korea	113	6000
Pongsona	2002	Guam, Marianas Islands	3	700
Imbudo	2003	Philippines	21	37
Maemi	2003	Ryukyu Islands and South Korea	115	4100
Sudal	2004	Yap	1	Unknown
Rananim	2004	Eastern China	115	4000
Matsa	2005	Taiwan, Okinawa, Northeastern China	25	2230
Nabi	2005	Mariana Islands, Japan, South Korea	75	Unknown
Longwang	2005	Taiwan, southeast China	148	150+
Chanchu	2006	The Philippines, Taiwan, southeast China and Japan	104	1200
Bilis	2006	The Philippines, Taiwan, southeast China	672	4400
Saomai	2006	Mariana Islands, The Philippines, Taiwan, southeast China	458	2500
Xangsane	2006	Philippines, Hainan, Vietnam, Cambodia, Thailand	279	747
Durian	2006	Philippines, Vietnam, Thailand	819+	508+

[17] Japan Meteorological Agency (2008). "Western North Pacific Typhoon Best Track File 1951-2007". http://www.jma.go.jp/jma/jma-eng/jma-center/rsmc-hp-pub-eg/besttrack.html. Retrieved on 2008-03-05.

[18] http://en.wikipedia.org/wiki/List_of_retired_Pacific_typhoon_names_(JMA)#cite_note-jmabesttrack-6

Table 3 Deadliest and Exceptionally Damaging Typhoons in the Philippines[19]

Storm	Year	Highest Winds Speed (mph)	Equivalent Category using Saffir-Simpson Scale	Deaths	Damage (Billion Pesos)
Caloy	2006	145	4	41	9.8
Florita	2006	110	2	14	2.34
Milenyo	2006	112	3	197	6.6
Reming	2006	199	5	734	5.086
Yoyong/Nanmadol	2004	81	1	35	2.036
Harurot	2003	150	4	21	3.24
Feria/Utor	2001	93	1	188	3.586
Nanang/Lingling	2001	56	TS	236	3.2
Babs/Loleng	1998	155	5	303	6.787
Iliang/Zeb	1998	162	5	75	5.375
Angela/Rosing	1995	162	5	936	10.829
Mameng/Sybil	1995	87	1	116	3.17
Flo/Kadiang	1993	81	1	576	8.752
Monang/Lola	1993	106	2	363	2.463
Thelma/Uring	1991	50	TS	5,101	1.045
Trining/Ruth	1991	127	3	82	3.072
Mike/Ruping	1990	137	4	748	10.846
Unsang/Ruby	1988	137	4	157	5.636
Yoning/Skip	1988	143	4	217	2.767
Nina/Sisang	1987	149	4	979	1.119
Herming/Betty	1987	149	4	200	2.066
Gading/Peggy	1986	137	4	8,000	2.133
Saling/Dot	1985	149	4	118	2.133
Agnes/Undang	1984	143	4	895	1.9
Nitang	1984	137	4	1,492	4.1
Anding/Irma	1981	162	5	409	0.65
Dinang/Lee	1981	109	2	2764	0.64
Kading/Rita	1978	115	3	444	1.9
Totals		Average: 126.5357143	Average: 3.384615385	25,441	113.271

[19] http://www.typhoon2000.ph/stats/11WorstPhilippineTyphoons.htm

PAPER NO. 31: QATAR

23 April 2009

INPUTS TO THE NEGOTIATING TEXT ON THE FULFILLMENT OF THE BALI ACTION PLAN (BAP) AWG-LCA

1. The State of Qatar welcomes the invitation by the AWG-LCA at its 4th session to submit to the secretariat by 24 April 2009 parties views on the fulfillment of the Bali Action Plan (BAP) and the component of the agreed outcome to be adopted by the COP at its 15th session in Copenhagen.
2. Also, State of Qatar stresses on the importance of its previous submission to the Secretariat on 1b(ii) and 1b(iv) of BAP.
3. The State of Qatar emphasizes that the agreed UNFCCC is and will continue to be the sole guiding framework for all climate change actions for now and into the future. Therefore, any outcome in Copenhagen (COP15) must be based on the convention principles and the following:
    a. The principle of common but differentiated responsibility as outlined in the Annexes to the conventions.
    b. The historical responsibility by developed countries
    c. The principle of comprehensives on equal treatment of all GHGs and all sources.
4. Efforts to differentiate between developing countries are totally not acceptable and in particular, on basis of GDP or GHG per capita are which are detrimental to Qatar,
5. State of Qatar rejects efforts to impose trade-related regulations and standards in the AWG-LCA under the disguise of sectoral approaches. They contravene the principle of common but differentiated responsibilities and other provisions of the Convention. Also, the idea of adapting the sectoral approach in setting targets is totally unacceptable.

I .Shared vision:

The concept of a shared vision for long-term cooperative action to enable the full and sustained implementation of the Convention is stipulated in paragraph 1(a) of BAP. The shared vision must:

- Address the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012.
- Address all the building blocks of the Bali Action Plan
- Reflect the need for new and predictable means of implementation including, in particular, support for financing, capacity building and technology for developing countries.
- The global goal of enhanced implementation of the convention does not necessarily have to include a numerical figure.
- Any numerical assessments must be based on best available scientific studies by the IPCC.

II. Adaptation and means of implementation

- Qatar is one of the countries that are covered under 4.8 and 4.9 of the Convention. Being a small country with a fragile ecosystem and limited resources and heavily dependent on the exportation of crude oil, it is found to be the most vulnerable to climate change. Our vulnerability is extreme (i.e., desertification, water scarcity, and most importantly, low-lying coastal areas (less than 7 meters above sea level in most areas)).
- The implementation of adaptation action in developing countries including Qatar is urgent
- Any new adaptation work program must take into consideration the need to adapt to the impact of mitigation policies and measures.
- There is a need to promote Technology Development and Transfer to address the adverse impacts of climate change and adverse impacts of response measures.

III. Mitigation and means of implementation

- A clear distinction must be maintained between mitigation commitments by developed countries and mitigation actions by developing countries taking fully into account the principle of common but differentiated responsibilities.
- Mitigation commitments by developed countries must take into consideration the potential adverse environmental, economic and social consequences, including spillover effects on developing countries.
- developed countries are required to provide support (technical and financial) to non developing countries particularly those specified in Articles 4.8 and 4.9 of the Convention, in order to tackle issues related to economic diversification, risk assessment, modeling and insurance to prevent the adverse effect resulting from the spillover.
- The State of Qatar believes that mitigation commitments for all developed countries according to Paragraph 1b (i) should be:

    a) comprehensive in addressing all greenhouse gas sources in all sectors, including greenhouse gas sinks
    b) unconditional according to paragraph 1b (i) of BAP, and
    c) need to follow the principle of measurable, reportable and verifiable (MRV) and include quantified emission limitation and reduction objectives (QELROs).

- The State of Qatar view on the nationally appropriate mitigation actions by developing countries (NAMAs) in accordance with Paragraph 1b (ii) are as follows:

    a) NAMAs need to be inline with special national circumstances and sustainable development needs.
    b) Contribution by developing country Parties are to be voluntary, country driven and contingent on the effective implementation by developed country Parties of their commitments under Articles 4.7 and 12.4 of the convention.
    c) Significant increase in the level of commitments by developed countries and support, in terms of finance, technology transfer and capacity building can be gauged through the concept of MRV.

IV. Finance, Technology & Capacity Building:

- The State of Qatar supports the proposal by the G77 & China on the establishment of a new financial mechanism under the COP.
- The State of Qatar supports the proposal by the G77 & China for an executive body for Technology.

PAPER NO. 32A: REPUBLIC OF KOREA

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

Agenda item 3 (a)
A shared vision for long-term cooperative action

Low carbon development roadmap

Proposal of Draft Text by the Republic of Korea

The Conference of the Parties to the Convention recognizes that it is inevitable for all the Parties to the Convention to change their development paradigm to turn the vicious cycle of carbon-intensive economic activities and climate change into a virtuous one of low carbon development and actions to fight climate change, creating jobs and stimulating and providing new impetus for future economic growth.

The Conference of the Parties to the Convention also recognizes that developed country Parties need to provide developing country Parties with a roadmap for low carbon development which includes appropriate policy tools and necessary support to enable them to pursue greenhouse gas emission reduction and economic development at the same time.

PAPER NO. 32B: REPUBLIC OF KOREA

24 April 2009

AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION

UNDER THE CONVENTION

Agenda item 3 (b)

Enhanced national/international action on mitigation of climate change

Establishment of a Registry for Nationally Appropriate Mitigation Actions for Developing Country Parties to the United Nations Framework Convention on Climate Change

Proposal of Draft Text by the Republic of Korea

The Conference of the Parties to the Convention,

Recognizing the Commitments of all Parties in Article 4.1 of the Convention and building on Article 12 on national communications of the Convention,

Recognizing also the importance of the full and effective implementation of paragraph 1 (b) (ii) of the Bali Action Plan, and

Noting that some developing country Parties have announced their Nationally Appropriate Mitigation Actions (NAMAs) including economy-wide emission reduction targets,

1. *decides* to establish a Registry for Nationally Appropriate Mitigation Actions (NAMAs) by developing country Parties with the aim of recognizing the actions as part of the global efforts to combat climate change and providing a platform for matching those actions, if needed, with the support by developed country Parties;

2. *invites* developing country Parties to register their NAMAs in the Registry and implement them so that their actions can be recognized as climate actions at the international level and supported and enabled by technology, financing, and capacity-building, in a measurable, reportable and verifiable manner;

3. *invites* also the developing country Parties to register in the Registry and implement, on a voluntary basis, their unilateral NAMAs taken without technology, financing and capacity-building support, which can be measured, reported and verified according to the guidance of the Conference of the Parties to the Convention; and

4. *agrees* to work out the details necessary for the operation of the Registry and adopt a decision at the Sixteenth Conference of the Parties to the Convention, which will include, inter alia, the scope and timeframe of NAMAs that are to be registered, expected impact of NAMAs on mitigation, modalities to match technology, financing and capacity-building support with NAMAs registered, modalities to measure, report and verify the actions implemented and the support provided, and *modus operandi* of the Registry.

PAPER NO. 32C: REPUBLIC OF KOREA

AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION

UNDER THE CONVENTION

Agenda item 3 (e)

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

AD HOC WORKING GROUP ON FURTHER COMMITMENTS FOR ANNEX I PARTIES UNDER THE KYOTO PROTOCOL

Agenda item 5 (a)

Emissions trading and the project-based mechanism

Crediting Mechanism for Nationally Appropriate Mitigation Actions by the Parties Not Included in Annex I of the United Nations Framework Convention on Climate Change

Proposal of Draft Text by the Republic of Korea

(For AWG-LCA)

The Conference of the Parties to the Convention,

Recalling the Commitments of all Parties in Article 4.1 of the Convention and the Commitments in Articles 4.3 and 4.5 of the developed country Parties and other developed Parties included in Annex II of the Convention,

Recognizing the importance of incentivizing the Nationally Appropriate Mitigation Actions (NAMAs) of developing country Parties for the full and effective implementation of paragraph 1 (b) (ii) of the Bali Action Plan, and

Taking into account paragraph 1 (b) (v) of the Bali Action Plan and noting the necessity of engaging the private sector and carbon market to ensure sustainable source of financial flows and technology transfer to enable and support the NAMAs of developing country Parties in view of the limited capacity of the public funds,

1. *decides* to set up a crediting mechanism, where appropriate, in which carbon credits for the verifiable emission reductions from the NAMAs of the developing country Parties not included in Annex I of the Convention (NAMA credits) can be issued in order to assist them in achieving sustainable development and contributing to the global efforts to combat climate change (NAMA crediting mechanism);

2. *decides* that the NAMA crediting mechanism shall be subject to the authority and guidance of the Conference of the Parties to the Convention and be supervised by a dedicated body constituted by the Conference of the Parties to the Convention or by the Clean Development Mechanism Executive Board whose function is to be expanded appropriately; and

3. *agrees* that appropriate criteria and standards by which the NAMA credits should be provided need to be established and that it will work out the details necessary for the operation of the NAMA crediting mechanism and adopt a decision at the Sixteenth Conference of the Parties to the Convention, which will include, inter alia, the scope of the NAMAs that are to be eligible for credits, methodologies to measure and verify them, and *modus operandi* of the NAMA crediting mechanism.

(For AWG-KP)

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling the Commitments of all Parties in Article 4.1 of the Convention and the Commitments in Articles 4.3 and 4.5 of the developed country Parties and other developed Parties included in Annex II of the Convention,

Recognizing the importance of incentivizing the Nationally Appropriate Mitigation Actions (NAMAs) of developing country Parties for the full and effective implementation of paragraph 1 (b) (ii) of the Bali Action Plan,

Taking into account paragraph 1 (b) (v) of the Bali Action Plan and noting the necessity of engaging the private sector and carbon market to ensure sustainable source of financial flows and technology transfer to enable and support the NAMAs of developing country Parties in view of the limited capacity of the public funds, and

Acknowledging the need to build on the past experiences in the operation of Article 12 of the Protocol on the Clean Development Mechanism and to further strengthen the mechanism,

1. *decides* to set up a crediting mechanism under the Kyoto Protocol, in which carbon credits for the verifiable NAMAs of the developing country Parties not included in Annex I of the Convention (NAMA credits) can be issued in order to assist them in achieving sustainable development and contributing to the global efforts to combat climate change (NAMA crediting mechanism);

2. *decides* that the NAMA crediting mechanism shall be subject to the authority and guidance of the Conference of the Parties to the Convention and be supervised by a dedicated body constituted by the Conference of the Parties serving as the meeting of the Parties to the Protocol or by the Clean Development Mechanism Executive Board whose function is to be expanded appropriately; and

3. *agrees* that the criteria and standards by which the NAMA credits should be provided need to be established building on the current methodology for the Clean Development Mechanism under the Kyoto Protocol and that it will work out the details necessary for the operation of the NAMA crediting mechanism and adopt a decision at the Sixth Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, which will include, inter alia, the scope of the NAMAs that are to be eligible for credits, methodologies to measure and verify them, and *modus operandi* of the NAMA crediting mechanism.

PAPER NO. 33: SAUDI ARABIA

April 21, 2009

INPUT TO THE NEGOTIATING TEXT ON

FULFILLMENT OF THE BALI ACTION PLAN

(AWG-LCA)

REFERENCE

The AWGLCA, at its 4th session, invited Parties to submit to the secretariat, by 24 April 2009, their views on the fulfillment of the Bali Action Plan and the component of the agreed out come to be adapted by the Conference of the Parties at its fifteenth session. FCCC/AWGLCA/2008/L.10 Para. 2(a) Work programme for 2009 - Draft conclusions proposed by the Chair. Also FCCC/AWGLCA/2008/8, Para 25 Report of the AWGLCA second meeting held in Bonn. The 17 April 2009 note from the Chairman of the AWGLCA further explains the parameters of this submission.

GUIDING FRAMEWORK

Saudi Arabia emphasizes that the UNFCCC is and will continue to be the main guiding framework for all climate change actions for now and into the future. Therefore, all its principles, rights and obligations, as well as existing annexes shall remain valid for any agreed outcome at Copenhagen. In particular,

- Based on the principle of common but differentiated responsibility (as outlined in the Annexes to the Convention):
  - Attempts by developed countries to amend the UNFCCC to impose new obligations (emission reduction commitments and/or financial obligations) on developing countries are counter-productive and will only delay achieving a positive outcome by the end of 2009 or thereafter;
  - Saudi Arabia is very concerned about the ideas that started surfacing lately regarding differentiations among developing countries. This is not within the scope of the convention nor the Bali Action Plan, nor will it help in building confidence among Parties.
- Based on the principle of comprehensiveness:
  - Dealing with climate change should include equal treatment of all GHGs and all sources;
  - The idea of adopting the sectoral approach in setting targets is totally unacceptable.

FULFILLMENT OF THE BALI ACTION PLAN.

SHARED VISION

- The enhanced implementation should be for the present, as well as up-to, and beyond 2012.
- Shared vision is based on the objective of the convention and must allow for economic development to proceed in a sustainable manner and ensure that food production is not threatened.
- The Shared vision is for the enhancement of implementation of the convention. A shared vision on the four building blocks (Mitigation, Adaptation, Finance, and Technology) will construct the shared vision for the enhanced implementation.
- The shared vision should enhance the promotion of economic growth
- Shared vision must incorporate all pillars of sustainable development (economic, social and environmental)

Global Goal

- The shared vision should not include a binding global goal.
- The global goal of enhanced implementation of the convention does not necessarily have to include a numerical figure.
- If numerical figures are considered, the figure must be based on the long term target of developed countries under the AWG-KP.

- A global goal should also include the aspiration goal for enhanced financial support and technology transfer and what figures that can be associated with the targeted level of support. Other figures include the planned long term variations from existing consumption patterns in developed countries.
- Any numerical assessments should have a strong scientific foundation and must be based on best available scientific studies by the IPCC.
- Other statistical indicators for developed countries may be used as necessary.

ADAPTATION

- Adaptation is more urgent for all developing countries including Saudi Arabia.
- Adaptation is about building resilience, Saudi Arabia views adaptation as encompassing two components:
  - Adaptation to the adverse impact of climate change, to which our vulnerability is high, resulting from desertification, water scarcity, low-lying coastal areas, among others.
  - Adaptation to the impact of response measures, and the need to build resilience to the expected fluctuations in government revenue, through measures such as adaptation planning and economic diversification.

Saudi Arabia's revenue is heavily dependent on the exportation of crude oil; other developing countries have different dependencies and economic vulnerability. Any new adaptation work program must take into consideration the need to adapt to the impact of mitigation policies and measures.

- There is a pressing need to promote development and transfer of technologies that address the adverse impacts of climate change and the adverse impacts of response measures, as well as finance the removal of barriers to the large-scale transfer of technologies for reducing these impacts and how to adapt to such adverse impacts, including through economic diversification.
- There is a need to establish and enhance grounds to provide financial and technical support, to share experiences, and to take up opportunities, in order to incorporate and integrate adaptation within sustainable development, in both areas of adaptation to the impact of climate change and the adverse impact of response measures.

MITIGATION

- A clear separation and distinction must be maintained between mitigation commitments for developed countries and nationally appropriate voluntary mitigation actions for developing countries, taking fully into account the principle of common but differentiated responsibilities
- All mitigation commitments and mitigation actions must take into account the adverse impacts and spillover effects on developing countries including countries that are highly dependent on the export of fossil fuels.
- A Forum is required to address the issue of the economic and social consequences of response measures. More elaboration on the Forum is included in an attached Annex.

Developed Countries' Mitigation Commitments in Accordance with 1b(i):

- Industrialized countries have mitigation commitments that are subject to specific targets, timetables, and compliance review.
- Mitigation commitments for developed countries should be comprehensive in addressing all greenhouse gas sources in all sectors, including greenhouse gas sinks.
- All developed country parties must adopt economy-side quantified emission reduction commitments that are comparable
- The concept of "nationally appropriate" of Annex I parties must be compatible with economy-wide emission reduction commitments for all Annex I parties.
- Comparability between Annex I parties must be expressed in terms of magnitude, form, and compliance requirements
- MRV applies to compliance with an economy-wide reduction commitment.
- Sectoral approach can only be applied at national level keeping in mind the objective and content of article 4.1(C), and article 3.3 of the UNFCCC.

Developing countries' mitigation actions in accordance with 1b(ii):

- Nationally appropriate mitigation actions (NAMAs) on voluntary basis and in line with sustainable development objectives of developing countries, and are totally distinct from mitigation commitments of 1bi. (No specific commitments or targets to be imposed on developing countries).
- Developing countries can take NAMAs on voluntary basis.
- Developing countries participate by NAMAs in a non-differentiated manner.
- NAMAs respect the right to development and the priority of poverty eradication.
- These mitigation actions are contingent upon providing the financial support and technology transfer. Article 4.7 of the UNFCCC.
- The mitigation actions are nationally appropriate but should also seek to be balanced in addressing all greenhouse gas sources in all sectors, including all greenhouse gas emissions and sinks.

Finance

- The need for new and additional finances to address the challenges of climate change must be emphasized
- There is an apparent need for a new financial mechanism under the COP to provide direct supervision, focus the efforts, channel all the resources, avoid fragmentation, and facilitate the flow of finances in a balanced and fair manner.
- The mechanism should be underlined by the principle of equity and have an equitable geographically balanced representation from all parties
- The mechanism should provide for direct access to funding without the layers of conditionality and barriers.
- Saudi Arabia support the proposal by the G77 & China in this regard

Technology

- There is a need for a new institutional body under the COP to address all issues related to technology research, development, transfer, and diffusion, as well as capacity building for the different technologies.
- There is s need to provide access to technologies for adaptation and mitigation enabled by capacity building and know-how.
- Barriers to technology transfer (such as high costs and intellectual property rights) must be addressed through various measures (such as compulsory licensing and preferential pricing). This needs to be incorporated in the new technology body.
- The right for development will always be an overriding priority which will require ample energy resources that can only be met by growth in fossil fuel consumption. Technologies such as carbon capture and storage (CCS) are key to maintaining development and growth needs with the aim of mitigating emissions. Promotion of CCS for the wide spread and diffusion of commercial scale project is a necessity. Incentives for CCS projects through accreditation under CDM and other mechanisms are essential. This would help speed up the further development and the transfer of CCS technology and support its diffusion and wider application to greatly reduce GHG emissions from fossil fuels. It will also be beneficial for the carbon market and opens up opportunities for fossil fuels producers and many other developing countries to contribute to the global effort in combating climate change.
- Promotion of cooperation in the technological development of clean fossil fuels, and non-energy uses of fossil fuels (such as petrochemicals).
- A Technology Action Plan that provides a kick start for all the efforts, identifying key technologies and specifying means to facilitate their transfer within an agreed timeframe is crucial for the success of enhanced technology transfer efforts.
- Saudi Arabia supports the proposal by the G77 & China for an Executive Body for Technology.

ANNEX

FORUM TO ADDRESS THE IMPACT OF RESPONSE MEASURES

Saudi Arabia remains concerned with the adverse impacts of the policies and measures taken by Annex I parties to achieve their emission reduction targets. Higher targets will only compound that concern. In addition, developing countries are going to be undertaking nationally appropriate mitigation actions (NAMAs). These NAMAs may also have different social and economic impacts on other Parties, as well as on the implementing Party.

Any agreed outcome must enhance the implementation of the provisions on the impact of response measures through the inclusion of a comprehensive framework and a new system to address these impacts. In addition, any agreed outcome shall not involve the introduction of any trade barriers, explicit or implicit, on fossil fuel exports from developing countries under the pretext of achieving energy security or energy independence.

Most developing countries lack the capacity to assess the scope and magnitude of the impacts of response measures on their own. The UNFCCC should, therefore, promote the exchange of information and sharing of experiences and views, to improve and enhance efforts towards:

- Understanding of the scientific, technical and socio-economic impact of the impact of response measures;
- Identify innovative and efficient adaptation technologies for the impact of response measure.

A Forum needs to be established to provide a proper venue for the continuous exchange on the issue of response measures. The Forum should be open to participation from all Parties and intergovernmental organizations, as well as experts from the scientific and modeling community. Professional from the private sector with expertise in the fields of finance, insurance, risk management and risk transfer systems. Social and economic scientists also provide great assistance to the work of the Forum.

The Forum will provide an appropriate platform to help all parties understand the impact of the various policies and measures and provide different rankings for policies and measures in terms of their different impacts on particular regions, industries, or sectors. Such information will help all parties in their efforts to select appropriate policies that achieve the desired mitigation results and at the same time avoid or reduce the adverse impact of these policies and measures on other parties, particularly developing country parties with specific vulnerabilities, like Saudi Arabia whose economy is dependent on the processing and export of oil.

The Forum should:

- Include a strong mechanism to understand these impacts and help all Parties in selecting effective policies and measures that do not hinder the sustainable development process.
- Strengthen resilience and adaptive capabilities in developing countries to the unavoidable adverse effects of policies and measures.
- For developed countries, there is an urgent need to conduct gap analysis and enhance implementation through inclusion of agreed methodologies, reporting, review, assessment and compliance.

The agreed outcome should be establish as semi-annual Forum, under the COP and guidance of the SBI Chair, to be held in conjunction with SB meetings. As part of its work, the Forum should implement a Work Program on the impact of response measures, which include, but not be limited to, the following components:

A. Insurance and Financial Risk Management:

1. Possible collaboration between the climate change community, government programmes and private insurance sectors;

2. Private-public partnerships linking insurance mechanisms and risk-reduction mechanisms;

3. Ways in which to build capacity at the national level for risk management, risk financing and risk transfer,

4. Means by which to engage the private sector in the development of alternative risk transfer mechanisms;

B. Modelling

1. Dissemination of modelling tools and models to non-Annex I Parties, and ensuring increased collaboration on modelling activities on an ongoing basis;

2. Development of methodologies to assist developing countries to examine vulnerability to the impact of the implementation of response measures;

3. Development of draft guidance documents on how to undertake socio-economic assessments of the impact of response measures to be piloted in selected countries as a basis for detailed and comprehensive guidance;

4. Development, in collaboration with international organizations, of methodologies to assess the impacts on developing countries of policies already implemented by Annex I Parties,

5. Coordination with the scientific research community, including the IPCC, to improve the quality of models, in particular those that assess the impact of response measures on developing countries, with a view to fully addressing this issue in the future work of the IPCC;

6. Capacity Building at the national level on modelling the impacts of response measures

C. Economic Diversification

1. Providing support for the integration of economic diversification into sustainable development strategies;

2. Exchanging experience in economic diversification and lessons learned, with a view to identifying what technical assistance may be needed to develop structural and institutional capacity, and/or to establishing a mechanism for facilitating efforts to achieve economic diversification;

3. Coordination by the secretariat with relevant international organizations and the private sector in developed countries on matters relating to economic diversification;

4. Building capacity, at the national level, in the areas of economic diversification;

5. Promoting private-public partnerships in various areas to support economic diversification;

6. Providing recommendations for encouraging direct investment by and technology transfer from developed countries to assist in the economic diversification of developing countries;

7. Addressing the extent to which trade and export barriers affect economic diversification in developing countries.

The Forum can agree a work plan for addressing the Work Program on the impact of response measures. The Forum should also provide regular reports on its activities and make recommendations for further decisions as needed.

PAPER NO. 34: SENEGAL

Object: Submission of Senegal for inclusion in the negotiating text of the Long-Term Cooperative Action under the Convention

To be submitted for Decision by the Parties to the UNFCCC

All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, recognize the magnitude and urgency of the challenges to achieve the ultimate objective of the Convention will require an unprecedented level of collaboration and cooperation among all levels of government around the world. As such the Parties shall:

(a) Take into account the need to accelerate capacity building and to mobilize financial resources to scale up investment in areas that are uniquely suited for state and regional government implementation, particularly in developing countries, such as energy efficiency, renewable energy, clean transport, sustainable land use, low carbon technology deployment, reduced emissions from deforestation, and climate adaptation.

(b) Recognize the important contribution of states and regional governments in pioneering polices and taking early action in the aforementioned areas and the need to continue this critical role for developing and putting into practice the general measures established by the national governments.

(c) Support and encourage further development of subnational partnerships and networks of the regions to promote capacity building and information sharing, including best practices in land-use planning, forest and agricultural land management, intermodal transport, green public procurement, renewable energy, energy efficiency, joint research and deployment of climate friendly technologies.

BACKGROUND: Up to 80% of mitigation and adaption policies will happen at the regional and local levels. Subnational governments are primarily responsible for implementing policy, programs, legislation and fiscal mechanisms in many areas of energy, environment, transport and land-use but also for developing adequate policy with regard to specific characteristics of their region. Worldwide, subnational governments have implemented measures including regional emission reduction targets, green building codes, vehicle efficiency and/or emissions standards, low-carbon fuel standards, renewable portfolio standards, feed-in tariffs, and land-use policies that support sustainable forest and agriculture practices. As such, the Parties to the UNFCCC are asked to recognize the role of this level of government in implementing actions consistent with the Bali Action Plan and the importance of the role of state and regional governments in the implementation of the long-term agreement on cooperative action amongst nations.

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AER (Assembly of European Regions), **AIRF** (International Association of Francophones Regions), **CRPM** (Conference of Peripheral Maritime Regions), **nrg4SD** (Network or Regional Government for Sustainable Development), **IT4ALL** (Network of regions for the Information Society for all), **OLAGI** (Organizacion Latino Americana de Gobiernos Intermedios), **FOGAR** (Global Forum of associations of regions), **Northern Forum** (Circume north polar Regions), **The Climate Group**

PAPER NO. 35A: SINGAPORE

RECOGNITION OF NATIONALLY APPROPRIATE MITIGATION ACTIONS BY DEVELOPING COUNTRIES UNDER THE BALI ACTION PLAN

1 The Bali Action Plan (BAP) initiated a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012. In the BAP, mitigation actions by developing countries are covered in paragraph 1(b) (ii). This sub-paragraph reads: "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".

2 Currently, developing countries have already been undertaking mitigation actions in the context of sustainable development. There is no provision to systematically track and report these actions regularly. It is important to fully recognise these and future mitigation actions by developing countries.

3 In this regard, Singapore supports the establishment of a registry of nationally appropriate mitigation actions (NAMAs) by developing countries. Such a registry could be set-up by the UNFCCC Secretariat. This registry will facilitate the implementation of paragraph 1(b) (ii) of the BAP. Developing countries should list their NAMAs in the registry to indicate and attest to the mitigation actions which they intend to implement. The list should include both unilateral NAMAs and those enabled by financial and technology support. These NAMAs should be recognised as the contributions of each developing country in support of Article 2 of the Convention.

NAMAs

4 NAMAs by developing countries are voluntary actions. NAMAs include sustainable development policies and measures (SD-PAMs) such as energy efficiency programmes, policies in the transport sector, standards in the building sector and minimum energy performance standards for household appliances. They can be placed into two broad categories:

(a) Unilateral mitigation actions by developing countries using their own resources (e.g. public funds) and not supported by technology and finance from developed countries.

(b) Voluntary actions taken by developing countries which require support from developed countries in the form of finance and technology. These are mitigation actions which developing countries will undertake, with financial and/or technology support. The inclusion of such NAMAs can serve to highlight the necessary finance and technology required by developing countries to carry out this type of actions, as well as provide recognition to developed countries for the finance and technology support provided.

5 To recognise all efforts by developing countries to mitigate climate change, the registry should also include a listing of projects under the CDM, and other crediting programmes which could be set-up in the future. These would be subject to international verification consistent with the guidelines for CDM.

MRV

6 Unilateral NAMAs as elaborated in paragraph 4(a) above would be reported through the registry as well as the individual country's national communications. Verification of such NAMAs would be done nationally and conducted according to internationally agreed standards. The methodologies of the national verification process should be open to international auditing. If necessary and subject to agreement by the developing country undertaking the NAMA, the verification can be confirmed by an international verification process, with due respect for the protection of confidential information.

7 NAMAs that are enabled by finance and technology support, as elaborated in 4(b) above, would likewise be reported through the registry as well as the individual country's national communications. They should be subject to international verification, which should encompass both the action by the developing country as well as the finance and technology support provided by developed countries.

Conclusion

8 The proposal to set-up a registry would help advance the process to enhance the implementation of the Convention under the BAP. Singapore is prepared to work with other Parties to further develop and implement the registry and its MRV guidelines.

PAPER NO. 35B: SINGAPORE

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

1 This submission supplements Singapore's earlier submissions of 22 July 2008 (on Mitigation) (at **pp 54** of **FCCC/AWGLCA/2008/MISC.2**) and 8 October 2008 (at **pp 86** of **FCCC/AWGLCA/2008/MISC.5**) and should be read in conjunction with those two earlier submissions.

2 At the 4th Session of AWG-LCA in December 2008, the AWG-LCA Chair was invited to prepare a negotiating text for the consideration of the Parties at the 6th Session of the AWG-LCA in June 2009, taking into account the proceedings of the AWG-LCA at its 5th session and of further submissions from Parties by 24 April 2009. The Chair of the AWG-LCA, in his Note of 17 April 2009, had reiterated his earlier invitation to Parties to make their submissions in a form that avoids the need for reformulation or abbreviation in the process of incorporation into the negotiating text.

3 In this regard, the following paragraphs are proposed for inclusion in the context of Nationally Appropriate Mitigation Actions under Para 1(b) of the Bali Action Plan

> "In accordance with Article 4, paragraph 1, of the Convention, measures by Parties to mitigate climate change shall reflect their relative ability to reduce greenhouse gas emissions, taking into account their common but differentiated responsibilities as well as respective capabilities and national circumstances.
>
> Parties' ability to reduce greenhouse gas emissions is affected by their access to alternative energy options. To this effect, pursuant to Article 4, paragraph 10 of the Convention, the difficulties, where present, faced by Parties in switching from fossil fuels to alternative energy sources shall be quantified and taken into account to reflect their alternative-energy disadvantage."

Potential to Switch to Alternative Energies

4 Singapore reaffirms our commitment to play our part, if there is consensus by all countries to do so. For the international community to arrive at such a consensus, a country's common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, as enshrined in Article 4, paragraph 1 of the Convention, must be taken into account. Mitigation commitments and actions must be informed by Parties' respective capabilities, as indicated by their ability to reduce the growth of greenhouse gas emissions through switching to alternative energies. Such ability is partially affected by their own actions, but is also significantly predetermined by natural and geographical circumstances.

Early Actions

5 At the pre-sessional workshop on the Scale of Emission Reductions ahead of the 5th Session of the AWG-LCA in March-April 2009, some Parties had highlighted that countries that have already taken early mitigation actions would have diminished ability to reduce greenhouse gas emissions further, all other things being equal. As these early mitigation actions have contributed towards the ultimate objective of the Convention as stated in its Article 2, these actions should be recognised. If Parties are disadvantaged by undertaking early actions (such as switching to cleaner alternative energies) because such actions are not recognised, Parties will have perverse incentives to delay action instead. To enhance the implementation of the Convention, early actions by Parties should be given due recognition and taken into account in Parties' mitigation efforts.

Access to Alternative Energy Sources

6 Besides early action, a key factor determining a country's ability to reduce its greenhouse gas emissions is its ability to switch to renewables and other non-fossil alternatives such as nuclear power. However, alternative energy endowments are not evenly distributed amongst countries. Some countries face greater and more serious constraints in switching to alternative energy sources. In particular, small countries face limited domestic flexibility in reducing their emissions, partly because their small size often precludes effective recourse to alternative energy sources. In this regard, and in accordance with Articles 4.8(h) and 4.10 of the UNFCCC, the unique circumstances of "alternative energy-disadvantaged" countries with serious difficulties in switching to alternatives should be given full consideration.

Renewable Energy

7 A study conducted by the Tropical Marine Science Institute has quantified Parties' physical access to the major sources of renewable energy. The initial phase of the study has focussed on supply-side issues (i.e. to determine the "renewable energy potential" of Parties) concerning four main resources – solar, on-shore wind, geothermal and hydroelectric power (details of the methodology employed are at Annex A).

8 The preliminary results, as summarised in the attached map and graph, show that there are large disparities in access to renewable energy sources by different countries. Such access is not a direct function of land area alone (Figure 1), and this creates an especially adverse situation for countries with limited surface area for harvesting energy and a relatively poor location with respect to alternative energy distribution. The study finds that there is a special group of smaller countries distinct from the majority in their recourse to alternative energy relative to land area (Figure 2).

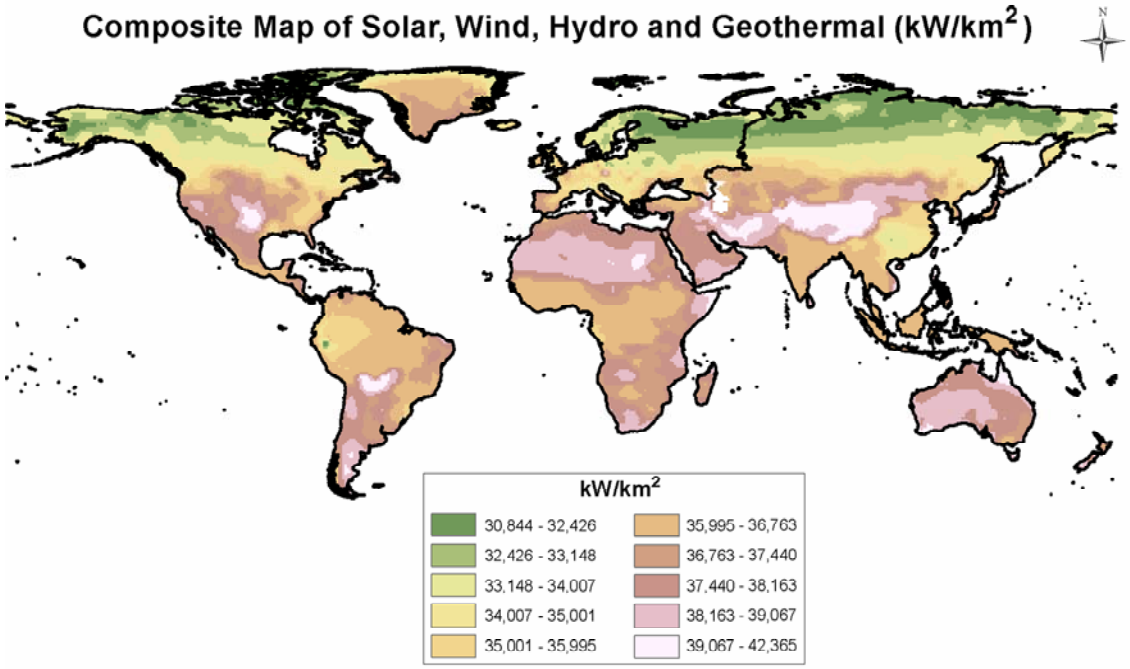

Figure 1: Map of global alternative energy distribution (solar, wind, geothermal and hydropower resources). Source: TMSI based on NASA, IHFC and WEC data.

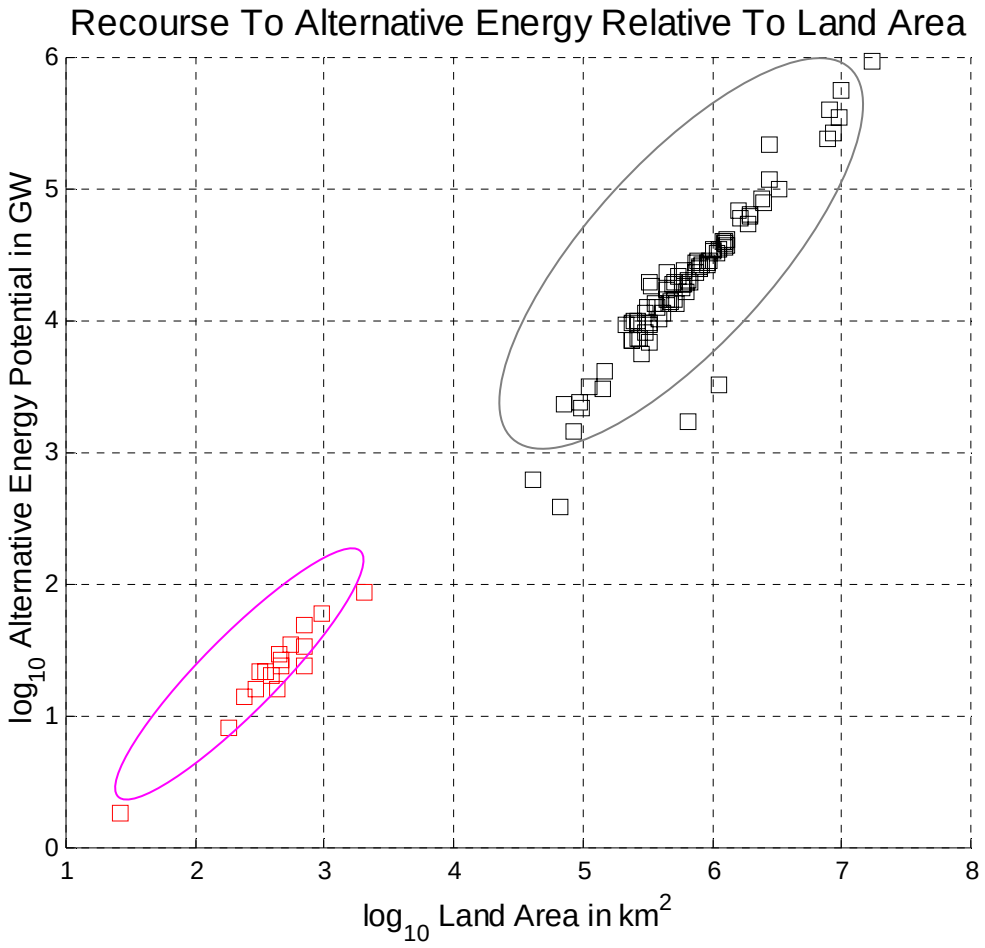

Figure 2: Clustering of 101 countries in relation to their land area and recourse to alternative energy.

9 Moving forward, Singapore notes that further work will be required to refine these preliminary results, to consider other alternative energies such as off-shore wind, tidal energies etc.

Non-Renewable Alternative Energy Sources

10 Nuclear energy is utilised as a significant alternative to fossil fuels[1]. However, some scientists have highlighted that there is a risk that increased nuclear power usage could heighten threats to public safety and national security.[2] Apart from proliferation risks, a severe incident could release large amounts of radiation into the atmosphere. Such an incident leading to release of materials would be dangerous for any country. While there is no agreed international standard for nuclear power plant "safety buffer zones", open sources indicate that countries frequently design evacuation and emergency relief plans for inhabitants within a 10 to 16 mile radius (i.e. 314 to 803 square miles) around a nuclear power plant. For small countries with high population densities and lack of land to evacuate residents, a severe nuclear incident could have catastrophic consequences for the population. Improvements in technology could make nuclear power safer and more feasible for a wider range of countries. However, small and densely populated countries will nonetheless face disproportionate risks from a nuclear safety incident. Hence, nuclear energy is currently not an option for small countries given today's technology.

Conclusion

[1] See for instance IPCC Fourth Assessment Report (2007) Working Group III 4.3 and 4.4 and Synthesis Report Table 4.2; International Energy Agency (IEA) World Energy Outlook (2008); and the International Atomic Energy Agency (IAEA) Nuclear Technology Review 2008, Annex VII.

[2] See for instance US Union of Concerned Scientists, "Nuclear Power in a Warming World" (Dec 2007)

11 In light of the above considerations, and in conformity with the Convention, Singapore proposes that the agreed outcome of the AWG-LCA must give full consideration to the national circumstances of Parties. A key factor determining Parties' ability to reduce their greenhouse gas emissions is their access to renewables and other non-fossil alternatives. Based on the preliminary study, detailed further in Annex A, such access is a function of size and location, with smaller countries facing greater limitations in accessing alternative energy. In this regard, the serious difficulties faced by Parties, particularly small countries, in switching from fossil fuels to alternatives must be quantified and taken into account in their efforts to reduce emissions[3].

[3] In subsequent submissions to the AWG-LCA, Singapore will propose how the quantified alternative-energy disadvantage of such Parties can be reflected.

Annex A

Technical Annex – Methodology of the Study[4]

Overview

1. The aim of the study is to derive a global distribution of alternative energy resources, and to develop a tool for visualisation of the data and further analysis. Meteorological and geophysical data were converted into thematic layers on a Geographic Information Systems (GIS) platform. Power densities for various energy types were assessed from best-in-class technology, and the data values harmonised to common units of potential power capacity. A composite map based on all thematic layers thus enables objective and rapid identification of regions with high / low potential for exploiting alternative energy.

2. The GIS platform allows diverse forms of alternative energy to be considered, with the world's main alternatives of hydropower, solar, wind and geothermal potential included in this analysis[5]. The study starkly illustrates that alternative energy resources are unevenly distributed throughout geographical regions, and thus total energy endowment for countries varies significantly.

Geographic Information Systems platform

3. Geographic Information Systems (GIS) provide a powerful and versatile tool for the visualisation and analysis of spatial datasets. In the case of alternative energy, most forms require generation of energy *in situ*. The energy endowment of a region is therefore likely to be underpinned by two factors:

i. the region's position coincident with favourable meteorological and geological conditions; and

ii. the area of the region available for the harvesting of those resources.

4. Global meteorological and geophysical data, available in the public domain, form the starting point of this study. These datasets are of sufficient spatial resolution to allow assessment of individual regions. There is the added benefit of global consistency, which poses a problem when merely collating bottom-up energy assessments from many different observers.

Resource-to-Energy Conversion

5. The fundamental unit of energy endowment is based on energy potentially exploitable per unit area. For each energy type, a scan of best-in-class and/or near-term developments was conducted. These are not intended to be prescriptive, nor do our results assume that all countries would have ready access to such technologies. The data were harmonised to kW/km^2 units across all layers. Standardisation of technologies thus allows us to calculate the potential output and footprint of hypothetical power plants.

6. Solar and wind power are particularly sensitive to temporal fluctuations. This study takes such variations into account by utilising data averaged over decadal time scales, such that power output can be seen as the average output over these periods.

Solar Energy (Photovoltaics)

7. NASA's Global Horizontal Radiation dataset takes monthly and annual averaged values over a 22-year period from July 1983 – June 2005, with base units of $kWh/m^2/day$.

8. Photovoltaics have been selected as indicative of near-term solar potential, as the technology is established across several subclasses. Photovoltaics can operate under a wider array of conditions than concentrating solar power, which requires direct sunlight. The world's solar photovoltaic plants coming online between 2007 and 2012 have power 'densities' of 18 – 36.5 MW/km^2. The maximum value was taken as best-in-class. The conversion from radiation to power density takes into account the behaviour of PV modules, which taper towards their peak rating as irradiance increases (Fig. A1).

[4] Tropical Marine Science Institute, 14 Kent Ridge Road, S(119223).
[5] Further studies are pending, which will include further sources of energy.

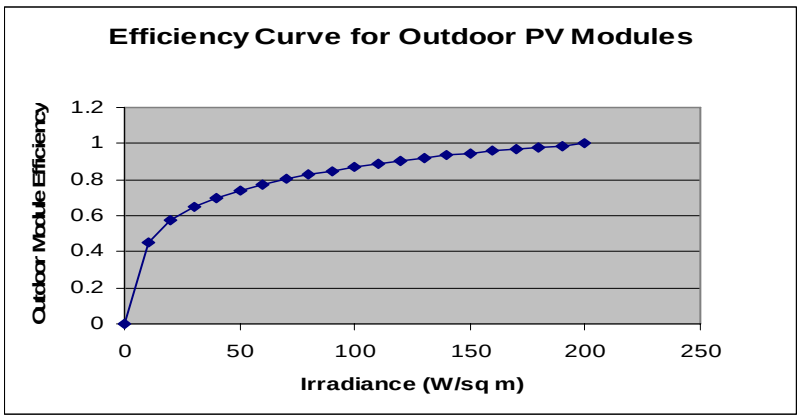

Figure A1

Wind Energy (Horizontal Axis Turbines)

9. NASA's Wind Speed (50 m above the surface of the Earth) dataset takes monthly and annual averaged values over a 10-year period from July 1983 – June 1993, with base units of m/s.

10. Horizontal axis wind turbines have been selected as indicative of near-term wind potential, as the technology is well-established. The upper end of the technology range is represented by a 3 MW three-bladed turbine. Recommended layouts are defined by rotor diameters and vary by location. However, a square packing layout with 6 rotor-diameter interspacing gives a ceiling power density of 10.3MW/km^2. The conversion from wind speed to power density takes into account the cut-off points for turbines, with a ramp-up of power between cut-offs (Fig. A2).

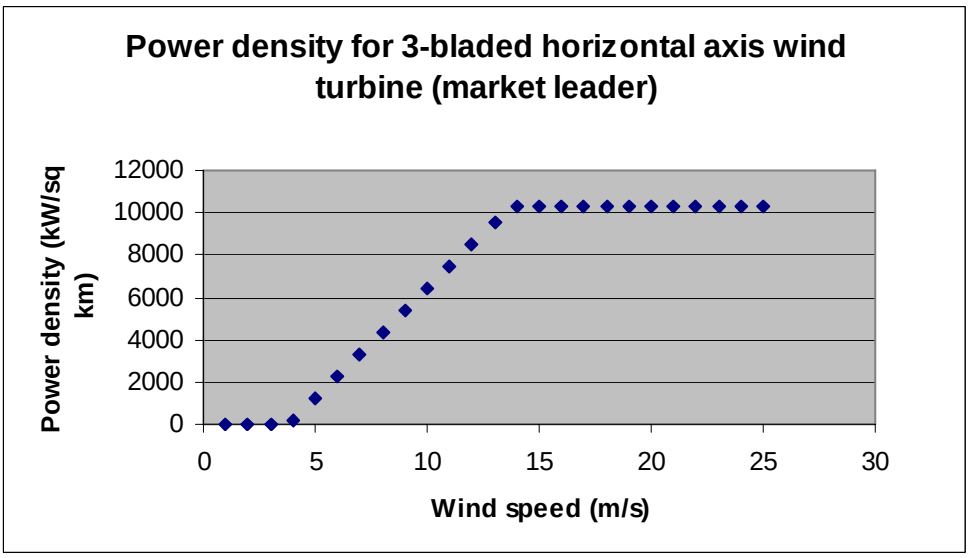

Figure A2

Geothermal Energy (Enhanced Geothermal Systems)

11. Thermophysical values, derived from crustal temperature measurements collated by the International Heat Flow Commission, were used as the base dataset. Heat flow is here defined in W/m^2, and describes the distribution of heat conducted from Earth's interior to its surface.

12. Geothermal energy has hitherto been seen as confined to regions of active tectonism. However, pilot plants for enhanced geothermal systems (EGS) are already in existence, and a 2006 MIT report assesses that 100GW of geothermal plant capacity are possible within the US by 2050. Taking a conservative estimate of 50GW in the near-term would lead to conversion factors of 7.6% (for surface heat flow converted to useful energy).

Hydropower

13. Estimates of hydropower have been drawn directly from the World Energy Council's 2007 Survey of Energy Resources. Here, hydropower is defined as the form of hydraulic energy that results in the production of electrical energy as a result of the natural accumulation of water in streams or reservoirs being channelled through water turbines.

14. In line with the assessments of solar, wind and geothermal energy, this study takes note of exploitable resources under best current and near-term technology.

Total Alternative Energy Resource Potential and Regional Endowments

15. After data units were harmonised through resource-to-energy conversion, the four thematic layers were combined into a composite map of total alternative energy resource potential. Regional boundaries (vector format) were superimposed and the sum energy potential lying within each regional boundary was derived.

16. The resource potentials were then plotted in log-log space. This revealed that the greatest density of datapoints occurs in the upper right region. However, there is a distinct group of datapoints, representing smaller countries, lying away from the main cluster.

Further Work and Augmentation of the Platform

17. This study covers the main sources of renewable energy. However, the versatility of the platform allows further energy types to be added, and the quality of datasets to be augmented. While there is a trajectory for technology improvement across all forms of energy, there remain clear physical limits to the ability of discrete regions to exploit them.

Nuclear Energy

18. Nuclear energy is a commercially proven source of low carbon base-load power. The International Atomic Energy Agency (IAEA) estimates that emissions from the complete nuclear power chain - from uranium mining to waste disposal - are in the range of 3.6g to 22g of CO_{2eq} /kWh, compared with emissions from coal, oil and natural gas, which range from 220g to 1,687g CO_{2eq}/kWh. According to the World Nuclear Association (WNA), an industry association, approximately 16 percent of the world's electricity is generated using nuclear energy, resulting in avoided CO_2 emissions of about 2 billion tonnes annually. In 2008, the International Energy Agency (IEA) projected that for global CO_{2eq} concentrations to stabilize at 450ppm, nuclear energy can provide about 9 percent of the required emissions reductions by 2030. This would require worldwide nuclear power generation capacity to increase by 1.8 times.

19. The appropriate methodology for nuclear energy "potential" requires further work.

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PAPER NO. 36: SOUTH AFRICA

Elements of a negotiating text for consideration by the Ad Hoc Working Group on Long-term Cooperative Action under the Convention at its sixth session in June 2009

24 April 2009

1. South Africa supports the submission by Algeria on behalf of the African Group, on 14 April 2009, on key elements of a negotiation text under paragraphs 1(a), (b), (c), (d) and (e) of the Bali Action Plan. These include, inter alia:

- **Adaptation**: a comprehensive and action-oriented international programme on adaptation implementation is established, aimed at reducing vulnerability and building resilience of developing countries to impacts that are already occurring, and impacts that are expected to occur in the future. This programme provides access to means of implementation, including finance, technology and capacity building, with massively scaled up funding, in the order of $67 billion per year.
- **Mitigation:**
  - a legal framework for quantified emission reduction commitments (QERCs) by all developed countries is agreed, with a mechanism to ensure comparability if some commitments are adopted under the Kyoto Protocol and others under the Convention, ensuring that mitigation commitments for Annex I countries as a group are at least at the top of the IPCC range;
  - a framework for mitigation actions by developing countries is agreed, that (i) provides for measurable, reportable and verifiable (MRV) mitigation actions conditional on the provision of measurable, reportable and verifiable (MRV) means of implementation; and (ii) ensures scaled-up, predictable and binding funding to meet a specified target, linking a variety of financial instruments and sources with democratic multi-lateral governance of climate funding.
- **Means of implementation, including technology, finance and capacity building:** A mechanism is established to address all aspects of the means of implementation for developing countries, for both adaptation and mitigation, and including access to technology, finance and capacity building.

This submission focuses on 4 key elements, namely:

- Mitigation commitments by developed countries (Bali Action Plan paragraph 1(b)(i)) - **see Section 2 below**
- Register for recognition of developing countries mitigation actions (Bali Action Plan paragraph 1(b) **(ii)) - see Section 3 below**
- A national coordinating body to address all aspects of the means of implementation, strengthening the institutional capacity of national focal points and the capacity of all stakeholders; (paragraph 1b, 1c, 1d and 1e of the BAP) -**see section 4 below**
- The design, architecture and legal form of the agreed outcome of the negotiations under the Bali Action Plan - **see Section 5 below.**

2. Mitigation commitments by developed countries (Bali Action Plan paragraph 1(b)(i))

This section should be read with the section on mitigation in the submission made by Algeria on behalf of the Africa Group.

2.1 Mitigation commitments by developed countries

Quantified emission reduction commitments (QERCS) are established for all developed country parties included in Annex I. QERCs as established under the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol shall be the reference for QERCs established under the Convention.

Mitigation commitments by developed country Parties as a group must be at least at the top of the range indicated by the IPCC in order to achieve the lowest stabilisation levels assessed by the Intergovernmental Panel on Climate Change in its Fourth Assessment Report (IPCC AR4). The aggregate commitment applies for all developed country parties, regardless of whether they have ratified the Kyoto Protocol or not.

In numerical terms: Annex I Parties shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A to the Kyoto Protocol are reduced by at least 40% below 1990 levels by 2020 and at least 80% to 95% below 1990 levels by 2050, to make a meaningful contribution to achieving the lowest level of stabilisation assessed by the IPCC's Fourth Assessment Report. At less ambitious stabilisation levels, the additional climate impacts are unacceptable to Africa.

Comparability of effort shall be established through (i) comparability of targets (QERCs); and (ii) comparable compliance. The unit of measurement of comparability shall be tons of CO2-eq.

Each developed country Party included in Annex I, in achieving its quantified emission reduction commitments, in order to promote sustainable development, shall implement and/or further elaborate policies and measures in accordance with its national circumstances, as specified under Article 2, paragraph 1 of the Kyoto Protocol. Domestic action, including domestic emission trading by developed country Parties included in Annex I, may make a contribution to the achievement of the QERC of the Party concerned.

Domestic cap-and-trade legislation shall not in itself constitute a commitment under the Convention or its instruments.

For the commitment period (or periods) beyond 2012, 1990 shall be the baseline year for the greenhouse gases listed in Annex A to the Kyoto Protocol.

2.2 Institutional arrangements for compliance and comparability

The mitigation commitments by developed country Parties shall be measurable, reportable and verifiable. "Measurable, reportable and verifiable" in this context means legally-binding quantified emissions reduction commitments (QERCs) that are absolute, and that are verified for compliance.

The unit of comparability shall be tons of CO2-eq of QERCs relative to a 1990 base year, to enable assessment that Annex I Parties as a group to remain within the range indicated by the lowest stabilisation level assessed by the IPCC AR4.

An objective, consistent, transparent, thorough and comprehensive technical assessment of the comparability of efforts amongst Parties included in Annex I shall be made by the Technical Panel on Comparability using inter alia the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* as elaborated by the IPCC report entitled *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* and any good practice guidance adopted by the COP/MOP.

Such an assessment shall be facilitated by the Technical Panel on Comparability. The Panel shall assess the information provided by Annex I Parties in their annual national communications and report its findings to the COP and CMP for further action. The report containing the assessment of comparability shall be presented to the COP If the report indicates questions relating to comparability, the COP shall refer this matter to the Compliance Committee for attention. For the purpose of MRV for developed countries, the procedures in Articles 5, 7 and 8 of the Kyoto Protocol shall be strengthened to apply to the quantified emission reduction commitments of all developed country Parties included in Annex I, in order to ensure comparability of commitments.

The process of applying MRV shall be supported by a robust compliance system, which shall address issues of non-compliance flowing from the MRV process. Such a compliance system shall be built on the existing mechanism, but enhanced and broadened. The compliance system shall be strengthened by allowing the application of legally binding consequences for non-compliance with commitments by all developed countries, such as monetary penalties to be paid in the Adaptation Fund for non-compliance.

3. Register of developing countries nationally appropriate mitigation actions (para 1b(ii) of BAP)

South Africa recalls its submission of 30 September 2008, in which we proposed a register of nationally-appropriate mitigation actions by developing countries, including Sustainable Development Policies and Measures (SD-PAMs). We would see a register as a core element of any negotiating text addressing paragraph 1(b) (ii) of the Bali Action Plan.

The register is a mechanism to enhance the implementation of the relevant provisions of Article 4 paragraph 1 of the Convention related to mitigation action to be taken by developing countries, in the context of their over riding poverty alleviation and sustainable development priorities and in accordance with the principles specified in Article 3 of the Convention, particularly, their common but differentiated responsibilities and respective capabilities.

In terms of Article 4 paragraph 7 of the Convention, the register enhances the implementation of Article 4, paragraphs 3 and 5 of the Convention by facilitating the identification, mobilization and matching of the financial, technology, capacity and other support required to implement nationally appropriate mitigations actions (NAMA's) which are submitted by developing countries in terms of Article 12, paragraph 4 of the Convention.

As such, the register provides a practical mechanism to enable the international recognition of developing country mitigation action and enhance its communication in terms of the relevant provisions of Article 12 of the Convention.

South Africa proposes the following key elements of a developing country NAMA register and its operation:

- Developing countries may voluntarily register NAMAs. Eligibility to register NAMAs is limited to developing countries.
- The level of mitigation effort by developing countries shall be commensurate with the level of support received. South Africa would expect the level of support for mitigation actions by developing countries to reach $200 billion annually by 2020.
- The UNFCCC Secretariat shall open and maintain the register of NAMAs, which shall include, but not be limited to:
    - the actions developing countries would want to submit
    - the identified support required
    - the emissions that would be avoided, relative to baseline
- NAMAs may comprise individual mitigation actions, sets of actions or programmes. Developing countries may choose from a variety of forms of action, including SD PAMS, REDD, programmatic CDM, no lose sectoral crediting baselines and others:
- The register shall initially contain a list of *indicative* mitigation actions proposed and support needed to implement and will include information related to the assumptions and methodology underpinning the proposed action, the emissions that would be avoided, relative to baseline and the required support for the indicative mitigation actions
- The assumptions and methodology underpinning the proposed action and the required support for the indicative mitigation actions will be assessed by a Technical Panel established under the Convention.
    - Once the Technical Panel reports that the action and support have been established using good practice, a request to the Financial and Technology Mechanism(s) of the Convention is triggered.
    - The Financial and Technology Mechanisms shall be responsible for matching support to actions.
    - The developing country concerned will implement the proposed action. Implementation shall be enhanced through support for building the institutional capacity in developing

countries, specifically through the proposed national coordination mechanism (see section 4 below).

- After implementation of the actions, both the action and the support will be measured, reported and verified (MRV).
- On an annual basis, the register shall be updated to reflect the status of implementation of action and its support. Following the first MRV report, the NAMA shall be considered *registered* (and no longer indicative).
- International financial and technology support for NAMAs will come from the range of sources mobilized by the Financial and Technology Mechanism(s).

Measurement

- The emission reductions relative to baseline shall be measured by the Party implementing the mitigation action in tons of carbon dioxide equivalent, according to multi-laterally agreed guidelines and methodologies.
- To assist with measurement, developing countries shall submit GHG inventories every two years
- The support provided shall be measured by developed countries and shall;
    - Indicate the allocation and transfer of finance for means of implementation granted over and above Official Development Assistance in units of an agreed common currency.
    - Measure the technology transfer, including development, application and diffusion, in units established according to indicators being developed under the SBI and SBSTA, and the agreed full incremental costs for technology transferred to developing countries shall be reported in units of an agreed common currency.
    - Measure the support for capacity-building according to indicators and in units to be established in the review of the capacity-building framework.

Reporting

- Mitigation actions implemented by developing countries with their own resources shall be reported in national communications, enhancing the implementation of Article 12.1 of the Convention. In addition, developing countries may voluntarily choose to register actions undertaken with their own resources, but for which they are not seeking multi-lateral support. Such actions are registered for recognition purposes only.
- Mitigation actions receiving support shall be reported in the registry. Reporting on the status of implementation to the registry shall be annual with an update based on measured outcomes every two years, alternating with reporting on GHG inventories.
- Developed countries shall report on the measurement of support in their national communications under Article 12.3 and support shall be updated in the registry on an annual basis.

Verification

- NAMAs supported with public funding from developed countries and not resulting in the transfer of carbon credits, shall be verified, together with the support as measured and reported, through modalities and procedures to be established under Convention and according to multi-laterally agreed guidelines;
- NAMAs financed through the carbon market and market finance shall be verified together with the support as measured and reported, by institutions accredited by the COP and according to the same multi-laterally agreed guidelines. Independent third-party verification may be used, but must result in a verification report considered by a body under the authority and guidance of the COP and in accordance with multi-laterally agreed guidelines.
- NAMAs undertaken with own resources may be verified by national entities working to multi-laterally agreed guidelines and reported in National Communications..
- For supported actions, developed country Parties including those in Annex II shall provide new and additional financial resources to meet the agreed full costs of verification undertaken by developing countries.

4. A national coordinating body to address all aspects of the means of implementation, strengthening the institutional capacity of national focal points and all stakeholders; (paragraphs 1b, 1c,1d and 1e of the BAP)

This coordinating body will be the national "focal" point to support the implementation of climate change projects and programmes that have received technology, finance and capacity building assistance from developed countries in line with their commitments under Article 4 of the Convention.

The national co-ordinating body will be established to build institutional capacity in developing countries and to:

- Provide support and facilitate co-ordination in the registration of nationally appropriate mitigation actions (NAMAs) that will be submitted to the international register, to enhance the implementation of Article 12, paragraph 4 of the Convention. This body also facilitates co-ordination of mitigation actions undertaken without assistance from developed countries to ensure the international recognition of all mitigation action taken, be it through the register or through the national communication mechanism.
- Provide support and facilitate co-ordination of all national adaptation measures which qualify for international assistance via the means of implementation, which includes finance, technology transfer, capacity building and massively scaled up funding for adaptation.

The national coordinating body should ensure

- A country driven, coordinated and multi sector approach involving all national stakeholders, private and public,
- An equitable, efficient and effective use of funding
- Transparent and inclusive involvement of all stakeholders
- A programmatic approach to funding rather than a project based approach

The administration costs of national coordinating bodies established for this purpose shall be covered through international financial resources made available specifically for this purpose. A separate pool of funding to finance national coordinating bodies through a direct line item in the Secretariat's budget shall be established.

In achieving its objectives, the national coordinating body shall:

- Ensure national ownership of and commitment to NAMAs to be registered internationally
- Ensure proper assessment of the financial, technological and capacity needs of such NAMAs
- Mobilise, coordinate and involve with existing in-country mechanisms
- Facilitate development and establishment of national expertise
- Coordinate climate change funding, technology transfer, and capacity building requirements, including identifying and prioritising needs and guiding the preparation of proposals
- Harness synergies across thematic activities and facilitate exchange of experience and good practice
- Identify stakeholders for direct access for financial assistance

A degree of flexibility in the establishment of national support and coordinating bodies, will be necessary due to diverse national circumstances, and national support for coordinating bodies may be extended to regional focal points if this is desirable or necessary

5. Design, architecture and legal form of the agreed outcome of the negotiations under the Bali Action Plan

The legal form of the agreed outcome of the negotiations under the Bali Action Plan should be separate from the Kyoto Protocol and be a legally binding instrument as part of the framework approach that has been established under the UNFCCC. What type of legal document it should be is a matter for negotiations, but the content should be legally binding on all parties.

The separate legally binding instrument shall be interpreted together with the UNFCCC and its Kyoto Protocol and be guided by the already agreed principles and objectives. Existing structures established

within the UNFCCC and its Kyoto Protocol must be built upon and utilised as far as possible. We are of the view that simple procedures for entry into force would be desirable.

A legally binding instrument is required for several reasons, some of which are as follows:

- to establish a legal framework for the mitigation commitments for all developed countries, in particular those that have not ratified the Kyoto Protocol, pursuant to paragraph 1(b)(i) of decision 1/CP.13, more specifically to establish a clear legal linkage between the amendment of the Annexe B of the Kyoto Protocol (for Annex I Party commitments for the 2nd and/or subsequent commitment period(s)), and the separate legally binding instrument, in order to address the fact that the USA has not ratified the Kyoto Protocol, and must take on legally-binding quantified emission reduction commitments through the process of multi-lateral negotiation. Such commitments must be comparable with those to be taken by Annex I Parties under the Kyoto Protocol;
- to ensure legally-binding commitments by developed country to provide the means of implementation to support and enable developing country action through technology, financing and capacity-building, pursuant to paragraph 1(b)(ii) of decision 1/CP.13;
- to provide a mechanism for international recognition of developing country voluntary action, as outlined in this submission above;
- to consolidate the provisions on adaptation under the Convention and its Kyoto Protocol in a coherent and comprehensive form in a legally binding instrument.

As part of the outcome of the Bali Road Map it is forseen that the Amendment to the KP should take place as well as the adoption of the new legal instrument. Both of these should be adopted at the same time, in one decision under the COP that will contain the shared vision referred to in both the decisions 1/CMP.11 and 1/CP.13.

A shared vision for an inclusive, fair and effective climate regime must be based on sound science, a balance between climate and development imperatives, and a balance between adaptation and mitigation. The shared vision combines all the above elements in order to achieve the full, effective and sustained implementation of the convention through long-term co-operative action, now, up to and beyond 2012. The shared vision could include a long term goal, which, in order to be credible, must be underpinned by ambitious mid-term targets for all Annex 1 Parties and actions by non-Annex 1 Parties and an equitable burden-sharing paradigm in accordance with the principle of common but differentiated responsibilities and respective capabilities.

PAPER NO. 37: SURINAME

Submission of Views

to the

Ad-Hoc Working Group on Long Term Cooperative Action

Paramaribo, Suriname

April 2009

Bali Action Plan, Paragraph 1 (b) (iii): Reducing Emissions from Deforestation, Forest Degradation and the role of Conservation, Sustainable Forest Management and Enhancement of Forest Carbon Stocks (REDD+)

Submitted by the Government of Suriname

The Fifth 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 to provide additional information, views and proposals on Paragraph 1 of the 'Bali Action Plan' by 24 April 2009. For this purpose, the Government of Suriname offers its considerations related to paragraph 1b (iii) of the Bali Action Plan and requests that the AWG-LCA chair reflect our views in the negotiation text by the Sixth session of the AWG-LCA.

Suriname has a long tradition of sound environmental stewardship. With more then 90% primary forest cover Suriname presents a unique country case in a world where deforestation is commonplace. Countries of high forest cover and low historical deforestation (HFLD), like Suriname, must be included in a REDD+ mechanism to ensure that this tradition of responsible forest management is maintained and the risk of emissions from forest conversion averted. Suriname is at the early stage of the forest transition curve. REDD+ should contribute to early bridging of Suriname's development and therefore its ability to retain its valuable pristine forest cover. A REDD+ process, is a critical component of the investment strategy that Suriname needs, to diversify its economy and meet aspirations for a low carbon development path.

Comprehensive Mitigation Action under a REDD+ mechanism

Forests are both a critical carbon store and an active carbon sequestration asset. The role of conservation is clearly acknowledged in Article 4(1)(d) of the Convention. A REDD+ mechanism should specifically recognize the importance of conservation as a means of preventing emissions and maintaining and enhancing carbon stocks. A REDD+ mechanism must provide effective policies and incentives for forest conservation to meet these goals and thereby contribute to aggressive atmospheric GHG stabilization targets. Early action in this regard must be recognized.

Different national circumstances and respective capabilities

A REDD+ mechanism should maximize global emissions reductions, removals and avoidance by providing incentives for broad participation by countries of all natural forest types, accommodating different national circumstances and respective capabilities. Broad participation would promote equity between countries and enable greater contribution of natural forests in climate change mitigation and adaptation. Broad participation is also necessary to address the potential for displacement of pressures which could result in international leakage.

High Forest Cover and Low Rates of Deforestation

Primary tropical wet forests contain more carbon in biomass per unit area than any other forest type. Policies and positive incentives for conservation of this high forest cover and mitigation of forest-based emissions in HFLD countries like Suriname should be provided by a comprehensive REDD+ mechanism. A REDD+ design should provide flexible options for parties with low historical emissions to meet goals of conservation, emissions avoidance and low carbon development. Adequate, predictable, sustainable, and transparent financing should be provided so that these goals can be met. HFLD Parties may, for instance, benefit from a targeted conservation fund additional to ODA, as well as, international levies

and/or market-linked mechanisms. Ex ante funding should be considered to avoid early pressures that could result in International leakage.

Key elements for the negotiation text:
REDD+ should be broad based and equitable, accommodating different national circumstances and respective capabilities.
REDD+ should include conservation as a key component of effective policies and positive incentives to maintain and enhance carbon stocks, and avoid emissions.

PAPER NO. 38: TURKEY

24 April 2009

TURKEY'S VIEWS
ON THE FULFILLMENT OF THE BALI ACTION PLAN
AND
THE COMPONENTS OF THE AGREED OUTCOME

General Considerations:

Turkey strongly believes that there is a need for coherence, consistency and coordination between the works of the AWG-LCA and AWG-KP in order to establish a fair, comprehensive and effective post-2012 climate change framework.

1. A shared vision for long-term cooperative action

Turkey is of the view that the shared vision should encompass all aspects of the Bali Action Plan. Therefore, the shared vision should be a comprehensive one, meeting the expectations of every Party to the UNFCCC.

The shared vision for long-term cooperative action should lead to full, effective and sustained implementation of the Convention. The shared vision should seek balance, coherence and fairness among the four building blocks of the Bali Action Plan, namely mitigation, adaptation, finance and technology.

The shared vision should provide a clear statement of political will and emphasize the urgency of the challenge as outlined by the IPCC 4th Assessment Report. It should be simple in form.

The shared vision should be a vision of sustainable development for all countries. It should be designed in a way that will not prejudice Parties' economic and social development rights.

The shared vision should be realistic in terms of long-term global goal. It should set an achievable, economically and politically feasible long-term global goal that would be acceptable by all Parties.

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

- The world of today is different from the one in the early 1990's, when the international community negotiated the UNFCCC and composed clusters of countries with varying responsibilities in the fight against climate change. In the current climate change regime, there are a number of non-Annex-I Parties, the development levels of which are higher than many Annex-I Parties, there are non-Annex-I Parties who are expected to have the highest greenhouse gas emission levels in the years to come.

The current classification of countries fails to reflect the changing economic circumstances. Turkey strongly holds the opinion that the new agreement should reflect today's circumstances.

Turkey is of the view that the Bali Action Plan is unclear in terms of "developed countries" and "developing countries". Suitable criteria, agreeable to every Party, should be used in re-grouping the Parties with a view to reaching a fair "agreed outcome" in COP 15 in Copenhagen. Any such criteria will have to include historical responsibility, economic capability, per capita energy consumption, mitigation capacity, technological capacity, human development index and vulnerability.

- The post-2012 outcome will need to reflect a wide range of differentiated mitigation commitments and actions, based on the principles of "common but differentiated responsibilities", "respective capabilities" as well as differences in national circumstances. Turkey believes that flexibility encourages participation by allowing countries greater latitude in the pace and focus of their commitments.

To achieve broad participation in the post-2012 climate change regime, Turkey holds the opinion that the post-2012 climate change regime must be a flexible one, enabling every Party to undertake a kind

of commitment suitable for her respective capacity. In another words, each country should decide on the suitable commitment for itself.

- Turkey strongly emphasizes that there should not be any imposition upon the Parties regarding to the type of the commitment that the Parties willing to take. The mitigation provisions of the new regime should be designed in a way that some Parties can take quantified emission reduction and limitation commitments, some can take nationally appropriate mitigation actions (NAMAs), some can do it voluntarily, some can do it in a binding context at the international level, and some can do it in a binding context at domestic level.

- Turkey has outlined her case in the "Workshop on subparagraphs 1 (b) (i) and 1 (b) (ii) of the Bali Action Plan" held during the Bonn Climate Change Talks, on April 1st, 2009.

Turkey is a *sui generis* case vis-à-vis the Annex-I Parties. The Decision adopted in Marrakesh in the 7th Conference of the Parties to the UNFCCC, deleted Turkey's name from Annex-II and placed her in a situation different than the other Annex-I Parties. Turkey has a negligible historical responsibility. Turkey has a particular situation under the Convention, as there are many similarities with developing country Parties. According to the UNCTAD category of developing countries, Turkey falls into the category of middle-income developing countries. Similarly, the World Bank categorizes Turkey as upper middle-income developing country.

Under these circumstances, Turkey plans to take NAMAs for emission limitation and adopt "no-lose target" strategy.

Turkey has already been taking many important steps and actions to fulfill her responsibilities under the UNFCCC in conformity with her economic and social development objectives and priorities, and to the extent allowed by her national capacity.

Turkey has been successful in fulfilling her responsibilities under the Montreal Protocol on Substances That Deplete the Ozone Layer due to her just legal status under the Vienna Convention for the Protection of the Ozone Layer.

Turkey would like to place itself to a rightful legal status in the new climate change agreement. Once Turkey is placed in a just legal status in the post-2012 climate change regime, Turkey can offer the same success.

Turkey's success in future climate change regime will be proportional to the international financial and technological support, the level of access to flexibility mechanisms and new technologies such as carbon capture and storage.

3. Enhanced action on adaptation

Adaptation is a priority issue for Turkey. Being situated in the Mediterranean basin, Turkey will be severely affected by climate change, according to the 4th Assessment Report of the IPCC. In accordance with the Convention, Turkey is a country defined as "vulnerable" to the adverse impact of 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, placing high priority to increase the adaptive capacity of the country, has shown serious efforts in recent years to introduce and implement adaptive measures ranging from effective water management, irrigation to afforestation with its own national resources.

Turkey is of the view that the funds for adaptation should be provided to Parties on the basis of certain criteria including vulnerability to the adverse effects of climate change, level of associated risks and the technical and financial capacity of the Parties to adapt to climate change. Generation of new, adequate, predictable and sustainable financial resources should be based on the principles of "equity" and "common but differentiated responsibilities" and respective capabilities.

Turkey is of the opinion that there is a need for an international, multi-optional insurance mechanism in compensating losses and damages that arise from climate induced extreme events such as droughts, desertification, floods, frost and landslides, as indicated in the Bali Action Plan.

4. Enhanced action on technology development and transfer

Developed countries that bear historical responsibility in climate change need to play a leading role in developing and transferring technology. In this context, Turkey recommends the establishment of a new Technology Transfer Mechanism (TTM) under the Convention with the contribution of developed countries that have historical responsibilities. This mechanism should include investment incentives, such as privileged credits and export credits for the development and diffusion of new technology.

Assistance received from TTM should be given according to the criteria of Parties' level of development as well as their emissions reduction, limitation and adaptation potentials and their absorption capacities (human capital, depth of domestic market, establishing an externality potential) and should be established as a reduction credits system in order to make technology transfer bilateral.

Cooperation in the field of technology should not only be limited to technology transfer, but also should ensure the spread of technological information, experience and know-how by guaranteeing relevant costs and Intellectual and Industrial Property Rights. In this context, apart from a TTM, Turkey also recommends a type of "Technological Information Transfer Agreement/Multiple Agreements". Such an agreement or multiple agreements will be able to introduce a structure that will facilitate the spread of environment-friendly products and healthy and reliable agricultural production systems.

As a complementary to the Technological Information Transfer Agreement, a global database including "green production" techniques and the best environmental practices could be established through the already used TT: CLEAR technological information system. This database should be up-to-date on a sectoral basis and should include information such as availability, licensing, applicable costs and greenhouse gas reduction potentials.

Cooperation between the UNFCCC and the World Trade Organization would be beneficial in benefiting from scale economies and liberalizing the trade of climate-friendly goods and services (or environmental goods and services).

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

Turkey believes that the financing structures to combat climate change should be designed taking into consideration the historical responsibilities, current emission levels and financial capacities of the Parties. The contribution to and the use of the financial mechanism should be determined in accordance with these criteria.

Flexible mechanisms need to be given a more functional structure. The implementation principles of the Clean Development Mechanism – for benefiting from the opportunities where reduction costs can be lowered more effectively – need to be adjusted in a way that will enable Annex-1 Parties to host such projects. In this way, the potential of countries such as Turkey whose capability for technological innovations is high, infrastructure is ready, but who cannot efficiently use its emissions limitation potential due to financial constraints, can be deployed.

PAPER NO. 39: UNITED STATES OF AMERICA

U.S. Submission on Copenhagen Agreed Outcome

Introductory Comments

- The United States supports a Copenhagen agreed outcome that recognizes the magnitude and seriousness of what science demands, reflects both common and differentiated elements, is pragmatic, and recognizes the diversity of countries' circumstances and opportunities so as to invite a variety of approaches and encourage participation.
- The United States is committed to reaching a strong international agreement in Copenhagen based on both the robust targets and ambitious actions that will be embodied in U.S. domestic law and on the premise that the agreement will reflect the important national actions of all countries with significant emissions profiles to contain their respective emissions.
- Attached is a notional agreed outcome that reflects a structural approach and includes content where appropriate at this stage:
    - It takes the form of an "implementing agreement" under the Framework Convention, in order to allow for legally binding approaches and to reflect the Bali Action Plan's mandate to further the implementation of the Convention.
    - Relevant provisions in the Convention are identified with respect to the corresponding implementing provisions.
    - We address only the Convention outcome, not its relationship, if any, to the next step under the Kyoto Protocol.
- The United States will be submitting additional proposals as the negotiations progress.
- It should also be noted that several U.S. proposals could co-exist with the proposals of other countries.

United States Input to the Negotiating Text for Consideration at the

6th Session of the AWG-LCA

Copenhagen Decision Adopting the Implementing Agreement

The Conference of the Parties,

Seeking to further implement the Convention, in light of evolving science and mindful of evolving economic development and emissions trends,

Recognizing, in light of Article 2 (objective) of the Convention, the importance of identifying one or more reference points in the mid-century timeframe that can guide the efforts of the Parties and the international community and against which aggregate global efforts can be continually assessed,

Considering, in that regard, that [ ] is/are desirable global indicator(s),

Having a shared vision of [summary that ties together the elements of the agreement],

Hereby adopt the attached implementing agreement.

Copenhagen Implementing Agreement under the Framework Convention on Climate Change

Section 1 – Mitigation

Article 1

Recalling Article 4.1(b) of the Convention, under which all Parties shall "[f]ormulate, implement, publish and regularly update…programmes containing measures to mitigate climate change…,"

1. Parties shall implement their respective nationally appropriate mitigation action(s) reflected in Appendix 1.
2. In addition, Parties shall formulate and submit low-carbon strategies that articulate an emissions pathway to 2050, as specified in Article 2 below.
3. Mitigation action is subject to measurement, reporting, and verification, as reflected in Appendix 2.

Article 2

Recalling Article 4.1(b) of the Convention and recognizing that the levels of ambition expected of Parties will necessarily evolve over time as their respective national circumstances and respective capabilities change:

1. With respect to developed country Parties:
    a. For each such Party, Appendix 1 includes quantitative emissions reductions/removals in the 2020/[ ] timeframe, in conformity with domestic law.
    b. Each such Party shall formulate and submit a low-carbon strategy for long-term net emissions reductions of at least [ ] by 2050.
2. Recognizing that the circumstances of countries naturally evolve over time, Paragraph 1 above shall apply, when Appendix 1 is next updated, to other Parties in accordance with objective criteria of economic development.
3. With respect to developing country Parties whose national circumstances reflect greater responsibility or capability:
    a. For each such Party, Appendix 1 includes nationally appropriate mitigation actions in the 2020/[ ] timeframe that are quantified (e.g., reduction from business-as-usual) and are consistent with the levels of ambition needed to contribute to meeting the objective of the Convention.
    b. Each such Party shall formulate and submit a low-carbon strategy for long-term net emissions reductions by 2050, consistent with the levels of ambition needed to contribute to meeting the objective of the Convention.

c. Appendix 1 shall include date(s) by which the Party will commit to the type of action referred to in paragraph 1(a) above.

4. Other developing country Parties should implement nationally appropriate mitigation actions and develop low-carbon strategies, consistent with their capacity.

5. Recalling Article 4.1(a) and Article 12.1 of the Convention, developing country Parties, except the least developed country Parties, shall provide the inventories referred to in Article 12.1 on an annual basis.

6. The Conference of the Parties shall establish the terms under which developing country Parties may elect to offer emissions/removals credits under the Agreement (e.g., sectoral crediting, project-based crediting).

7. The development of low-carbon strategies and the implementation of mitigation actions of developing country Parties will, as appropriate, be supported by financing, technology, and capacity-building, as set forth in Section 4 and Appendix 3.

8. This Agreement does not affect the ability of Parties to establish emissions trading linkages between or among themselves.

Article 3 – REDD-plus

1. Recalling Article 4.1(b) of the Convention, as part of their mitigation actions under Articles 1 and 2 above, Parties may elect to participate in "REDD-plus." REDD-plus refers to actions that reduce emissions by sources or increase removals by sinks in the land use sector in developing countries. The purpose of REDD-plus is to assist developing countries in achieving sustainable development and contributing to the objective in Article 2 of the Convention.

2. The Conference of the Parties shall develop [or Appendix 5 contains, if possible to complete] a framework for REDD-plus that, taking into account Article 2(5) above, includes the elements set forth in Appendix 5.

Section 2 – Adaptation

Article 4

1. Recognizing the need for greater efforts to adapt to climate change:

   a. the Parties agree to further enhance the implementation of their common obligations under Article 4.1(e) of the Convention; and

   b. the Parties adopt the robust adaptation framework set forth in Appendix 4, which includes an overarching policy strategy designed to stimulate actions to support domestic adaptation.

2. The objectives of the framework set forth in Appendix 4 are:

   a. to catalyze greater attention to adaptation at all levels and to help Parties build a robust approach in their respective efforts;

   b. to galvanize national and international support for adaptation priorities in a range of sectors; and

   c. to 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.

3. Developing country adaptation actions will be supported by financing, technology, and capacity-building, as set forth in Section 4 and Appendix 3.

Section 3 – Technology

[provisions on national actions to promote the development, deployment, and diffusion of environmentally sound technologies, including actions to promote favorable legal and policy frameworks]

[provisions on cooperative action to promote the development, deployment, and diffusion of environmentally sound technologies]

[provisions to promote greater public and private sector investments in technology research, development, and deployment]

Section 4 - Financing

With respect to funding, the U.S. is keenly aware of the need for a dramatic increase in the flow of resources available to developing countries to catalyze both mitigation and adaptation actions at a scale that will be necessary to address the climate challenge. Resources will need to flow from a wide variety of sources, including, for example, public sources in developed and developing countries, private investment, and – in the case of mitigation – the carbon market. The private sector is expected to be a much larger source of funding than the public sector, making it critical that policies in both developed and developing countries promote the flow of such funding. The text below suggests certain funding-related elements to be included but leaves to future negotiation, taking into account mitigation efforts and other related issues, the questions of whether there is a need for a new funding-related mechanism(s) and, if so, where such mechanism(s) would be referenced.

[provision reaffirming Annex II Parties' obligations under Article 4.3 and 4.4 of the Convention]

[provision regarding assigning a new function to either the existing or another operating entity, namely to provide technical assistance for building developing countries' capacity to "ready" themselves for accessing larger pools of domestic and international financing by e.g., creating low-carbon development strategies and establishing national systems for measurement, reporting, and verification]

[provisions to establish a means to, inter alia, draw on public/private sector expertise; recommend steps intended to mobilize domestic and international financing from a variety of domestic, bilateral, regional, and multilateral sources, including carbon markets; consider ways of linking qualifying actions with support; recommend how to improve the effectiveness and efficiency of the Parties' aggregated efforts to mobilize investment; and address concerns of competition, targeting and overlap of such efforts]

[provisions to enable transparency and appropriate participation of the Parties]

Section 5 – Other Provisions, Including Final Clauses

Article 6

In accordance with Article 7 of the Convention, the Conference of the Parties shall keep under review the implementation and progressive development of this Agreement.

Article 7

The functions of the Secretariat under the Convention shall include those related to this Agreement.

Article 8

[provisions regarding amendment of the Agreement, including its Appendices.]

Article 9

[provisions regarding signature and ratification/acceptable/approval/accession]

Article 10

[provisions regarding entry into force that are neither over-inclusive (in terms of number of Parties) nor under-inclusive (in terms of the types of Parties whose participation is necessary for the Agreement to enter into force)]

Appendix 1 – Mitigation

[to be filled in per Section 1]

ALPHABETICAL LIST OF UNFCCC PARTIES

Appendix 2 – Measurement, Reporting, and Verification

[provisions on MRV of mitigation actions generally]

[provisions on MRV of mitigation actions that are externally funded]

[provisions on MRV of financial, technological, and capacity-building support]

[provisions on MRV of various aspects of enabling environments in recipient country Parties to promote external financial, technological, and capacity-building support]

Appendix 3 – Financing

[to be filled in]

Appendix 4 - Adaptation Framework

Recognizing that climate change poses a profound threat to sustainable development, that poor developing countries are particularly vulnerable to climate change and already suffering adverse impacts, the Parties agree on the need for an overarching policy framework that sets forth common goals and areas of action and identifies necessary resources for enabling actions.

General Provisions

The objectives of this Adaptation Framework are:

- to catalyze greater attention to adaptation at all levels and to promote coherence among the range of institutions and actors involved in the effort to adapt to climate change.

- to help Parties, in particular the most vulnerable, build a robust approach in their respective efforts;

- to galvanize national and international support for adaptation priorities in a range of sectors; and

- to promote climate resilient development in a manner that is practical, informed by the best science, is effective and efficient, and promotes on-the-ground results.

Key aspects of the approach to adaptation include:

- affirming the importance of adapting to the impacts of climate change, which is a challenge for all countries, especially for those particularly vulnerable to climate change, including the least developed countries, small island developing states and African countries prone to drought, desertification, and floods;

- reaffirming the relevant provisions of Article 4 of the Convention and decisions 5/CP.7 and 1/CP.10 and the Nairobi Work Programme;

- recognizing that adaptation will involve the independent efforts of a broad range of institutions and actors at the international, national and sub-national levels, including, inter alia, international technical agencies, governments, communities and non-governmental organizations;

- recognizing that adaptation is an integral part of development;

- recognizing that the alleviation of poverty is an essential factor in addressing the impacts of climate change;

- recognizing that adaptation occurs at local, regional, and national levels and is an inherent part of development planning and implementation;

- recalling existing undertakings concerning development responsibilities, including the Monterrey Consensus on financing for development and the Paris Declaration on Aid Effectiveness;

- noting that there are major differences among the different regions and States in terms of environmental, economic and social conditions and levels of development, which will lead to different judgments on priorities in addressing problems related to adaptation to climate change;

- acknowledging the need to involve major groups in national, regional and international activities to address adaptation to climate change;

- recognizing that adaptation is the process of building resilience to climate change, including reducing vulnerability and responding to impacts;

- recognizing that the Convention can serve as a catalyst for actions on adaptation and the value of taking advantage of the work of existing organizations and institutions already involved in addressing climate-related risks and opportunities;

- recognizing the link between adaptation and mitigation, in that enhanced action on mitigation will reduce the need for adaptation; and

- recognizing the value of promoting ecosystem-based adaptation strategies and approaches.

Implementation of Adaptation and Enabling Activities

Adaptation Actions

Parties should promote adaptation to climate change by:

- setting as their common goal sustained and effective action to address adaptation to the impacts of climate change;

- taking immediate adaptation actions, wherever possible, using existing knowledge, resources, plans and processes;

- integrating adaptation concerns into national development programs and priorities;

- developing, reviewing, and reporting on national action programs on adaptation within [X] years on the basis of national priorities and strategies; and

- cooperating to build capacities and mobilize resources for the development and implementation of such programs, in particular for the least developed countries.

Adaptation Planning

Parties should promote adaptation planning by:

- identifying major vulnerabilities to climate change;

- implementing planning that is multi-sectoral, includes prioritization of adaptation actions, gives priority to the most vulnerable, and makes use of the best available scientific information and analytical tools;

- integrating adaptation into development planning processes, strategies, and tools at multiple levels and across sectors, developing national adaptation plans as appropriate, and reviewing and reporting on these activities;

- undertaking assessment of impacts, vulnerability and adaptation (including costs and benefits), as well as of those areas that are expected to suffer the most severe impacts;

- promoting involvement, coordination and communication across a range of institutions, agencies, private sector, and civil society;

- enhancing or developing the needed information and knowledge base (both biophysical and socioeconomic), including improving scientific research, data systems and data collection, to support adaptation and catalyze adaptation investments. This includes enhancing observations and data required to inform assessment and planning for adaptation and provide inputs for approaches such as parameterized insurance; and

- integrating knowledge, experiences and lessons learned from existing activities, including those carried out at the community level as well as activities from ongoing initiatives such as the Nairobi Work Programme into adaptation planning.

Building Resilience and Creating Enabling Environments

Parties should build resilience and create enabling environments by:

- identifying major vulnerabilities to climate change;

- creating and enforcing legal and regulatory conditions that facilitate adaptation, including disaster resilience (for example, building codes, land use planning and regulation, risk sharing tools, and strengthening policy coherence among sectors);

- elaborating best practices that can guide immediate actions with an eye to building long-term resilience to extreme events and disasters, including through implementation of the Hyogo Framework for Action;

- undertaking activities to improve risk management and risk reduction through strategies that link development, climate adaptation and disaster risk reduction.

- encouraging pilot projects related to micro-insurance and risk pooling

- reducing perverse incentives that encourage mal-adaptation;

- educating stakeholders at all levels about adaptation options and the benefits of reducing vulnerability to climate-related risks;

- building resilience to climate variability and change into economic development activities and institutions; and

- using meteorological, Earth observations and socio-economic information to best coordinate disaster planning and response.

Finance and Technology

Parties should:

- promote the full range of available management tools and financing options in implementing local, national or regional program of action, including innovative managerial and financial techniques;

- provide financial support for the most vulnerable Parties and populations to build resilience and adapt to climate change, in particular the least developed countries and small island states; and

- promote access to appropriate technologies, knowledge and expertise to address adaptation, in particular for least developed countries, including by creating enabling environments for the successful adoption of such technologies.

Institutional Arrangements

The Conference of the Parties should consider whether there is a need for additional institutional arrangements, noting that any new arrangements should be consistent with:

- the need for effectiveness, efficiency, and transparency;

- cooperation, where appropriate, on a regional basis to coordinate efforts;

- making use of existing national platforms, such as those for the Hyogo Framework;

- flexibility in addressing adaptation and encourage a learning-by-doing approach; and

- encouragement of international organizations and institutions to support (through their programs on, inter alia, financial cooperation, capacity-building and institution-strengthening mechanisms) the integration of adaptation into development plans, programs, and priorities.

Appendix 5 – REDD Plus

The REDD-plus framework shall:

a. use the most recent IPCC guidelines as a basis for estimating and reporting greenhouse gas emissions and removals from the land-use sector;

b. respect Parties' respective goals for sustainable development;

c. while having as its ultimate goal comprehensive accounting of all sources and sinks from land use, provide the flexibility for Parties to implement a staged approach beginning with those categories appropriate to national circumstances and capacities, with incentives for

including additional land use categories commensurate with increased capacity, technologies, and methodologies;

d. allow for the evolution of national REDD-plus action plans, including: (1) self-financed actions; (2) actions eligible for capacity building, technical assistance and financial support; and (3) actions that result in emissions reductions or removals with sufficient integrity to become eligible for market-based approaches;

e. provide for reference levels (taking into account historic data and other relevant factors) that adjust over time and are guided by a long-term pathway that results in a sustainable level of standing carbon stock within a reasonable time period;

f. be consistent with overall approaches to measurement, reporting, and verification under this Agreement, recognizing the need for higher levels of MRV for market-based eligibility;

g. provide for further consideration of the economic, environmental, and social impacts of REDD-plus, including with respect to promoting biodiversity, the interests of relevant local and indigenous communities, and other benefits and risks of REDD-plus; and

h. encourage all Parties to find appropriate ways to relieve the pressure on forests and land that results in greenhouse gas emissions.

PAPER NO. 40A: URUGUAY

DRAFT TEXT for inclusion in the negotiating text of the Long-Term Cooperative Action under the Convention

To be submitted for Decision by the Parties to the UNFCCC
(Contribution of States and regional governments)

All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, recognize the magnitude and urgency of the challenges to achieve the ultimate objective of the Convention will require an unprecedented level of collaboration and cooperation among all levels of government around the world. As such the Parties shall:

(a) Take into account the need to accelerate capacity building and to mobilize financial resources to scale up investment in areas that are uniquely suited for state and regional government implementation, particularly in developing countries, such as energy efficiency, renewable energy, clean transport, sustainable land use, low carbon technology deployment, reduced emissions from deforestation, and climate adaptation.

(b) Recognize the important contribution of states and regional governments in pioneering polices and taking early action in the aforementioned areas and the need to continue this critical role for developing and putting into practice the general measures established by the national governments.

(c) Support and encourage further development of subnational partnerships and networks of the regions to promote capacity building and information sharing, including best practices in land-use planning, forest and agricultural land management, intermodal transport, green public procurement, renewable energy, energy efficiency, joint research and deployment of climate friendly technologies.

BACKGROUND: Up to 80% of mitigation and adaption policies will happen at the regional and local levels. Subnational governments are primarily responsible for implementing policy, programs, legislation and fiscal mechanisms in many areas of energy, environment, transport and land-use but also for developing adequate policy with regard to specific characteristics of their region. Worldwide, subnational governments have implemented measures including regional emission reduction targets, green building codes, vehicle efficiency and/or emissions standards, low-carbon fuel standards, renewable portfolio standards, feed-in tariffs, and land-use policies that support sustainable forest and agriculture practices. As such, the Parties to the UNFCCC are asked to recognize the role of this level of government in implementing actions consistent with the Bali Action Plan and the importance of the role of state and regional governments in the implementation of the long-term agreement on cooperative action amongst nations.

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PAPER NO. 40B: URUGUAY

Submission by URUGUAY for the AWG-LCA - Adaptation

Uruguay, as well as others countries of our region are extremely vulnerable to the adverse effects of climate change. It is very important to state that at the same time Uruguay emits very little of global greenhouse gases, and in spite of this, our population, each year is impacted by extreme weather events causing strong floods, severe droughts, land slides, ecosystem affectations and biodiversity loss among others. Uruguay also has coastal areas that will be seriously affected by sea level rise and its consequences.

All these facts signal that there are several parameters that need to be taken into account to define climate change vulnerability. For this reason, we believe that we must center the discussion on adaptation priorities as stated by paragraph 19 of the preamble of the Convention, which clearly states: "*Recognizing further, that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change*".

Uruguay also wants to emphasize that the provision of new and additional resources that are sufficient, predictable and sustained, must be raised according to common but differentiated responsibilities, respective responsibilities for cumulative, historical Green House Gas emissions and respective capabilities of the Parties. The provision of additional resources needs to be scaled up dramatically to be adequate, predictable, sustainable, measurable, reportable, verifiable, new and additional to Official Develop Assistance- ODA.

It is important to note that the Framework to be established for adaptation needs to be flexible enough to consider current and future impacts. This Framework needs to incorporate the latest scientific evidence and ensure support from AIl Parties that is sufficient and consistent with their mitigation commitments. If mitigation commitments from AIl Parties are not ambitious enough, the amount of support will have to increase as the impacts of adverse effects increase.

On concrete means of financing, Uruguay believes that developed countries should strengthen their support through different options, such as the share of proceeds from joint implementation and emissions trading and other assessed contributions from public resources.

We want to also highlight the fact that the ultimate objective of the Convention wisely addresses the importance of ecosystem resilience and we believe that adaptation strategies for the implications of climate change on ecosystems are an essential part of the adaptation framework. Climate resilient development should also include, where appropriate, the use of local knowledge to pursue the objective mentioned previously.

Additionally, we wish to highlight the role of ecosystems in adaptation strategies. Ecosystem Based Adaptation Strategies should be enhanced and engrained in the adaptation framework itself.

We would also like to emphasize the importance of the agricultural sector as it provides for basic human needs. We must ensure adaptive measures to reduce vulnerability of this sector and others important for our economies such as tourism.

Finally, and most importantly, we want to convey that adaptation is not an option for Uruguay. To face this challenge, we have been advancing our own measures with our own funds -postponing other development priorities-, but these resources are not, and definitively **will not** be nearly enough.

Financial and technological support is urgently needed for enhanced adaptation strategies to ensure the necessary actions. Adaptation to Climate Change is forced on developing Parties and we urge developed country Parties to fulfill and enhance their Commitments under the Convention on this matter.

PAPER NO. 40C: URUGUAY

Submission by URUGUAY for the AWG-LCA - Mitigation

At its fourth session the AWG-LCA agreed (FCCC/AWGLCA/2008/17, paragraph 26 (b)), that the negotiating text will be based on proposals by Parties and take account of the proceedings of the AWG-LCA at its fifth session and of submissions received from Parties by 24 April 2009. The following constitutes a submission specifically for the **Mitigation** part of the text.

Noting that agriculture is responsible for about 14 per cent of total global anthropogenicgreenhouse gas (GHG) emissions and is expected to have high emission growth rates, driven mainly by population and income increase, diet and technological changes,

Recognizing the technical potential for mitigation in the agriculture sector (depending on national and regional circumstances), and particularly about 70 per cent of the economic potential for mitigation is in developing countries,

Noting that developing countries with agricultural based economies are expected to grow their emissions from this sector, but at the same time noting that the emissions per unit product could be reduced resulting in producing food more efficiently,

Recognizing also that in many types of agricultural systems and source categories within the agriculture sector there are barriers to achieving this, such as the capacity for measure, report and verify emissions and mitigation efforts in a cost-effective manner, the low level of understanding of the complex systems that emit and sequester GHGs and technological barriers as well,

Considering that nationally appropriate mitigation actions (NAMAs) could be implemented in this sector in the context of national mitigation strategies and sustainable development, but depending on technology, financing and capacity building support received for identifying and implementing NAMAs,

The AWG-LCA recommends to the COP 15 to adopt a decision that addresses the following issues:

To promote global cooperation on research and development of mitigation technologies for the agriculture sector, recognizing the necessity for international cooperative action to enhance mitigation of GHG emissions from agriculture

To specifically establish mechanisms to enable the transfer and financing of these technologies to the developing countries in order to enable developing countries to implement nationally appropriate mitigation actions in the agriculture sector,

To continue including Agriculture in the Agenda, for example by including the Agriculture sector in the work programme of the SBSTA for the year.

PAPER NO. 40D: URUGUAY

Submission by URUGUAY for the AWG-LCA – Shared Vision

At its fourth session the AWG-LCA agreed (FCCC/AWGLCA/2008/17, paragraph 26 (b)), that the negotiating text will be based on proposals by Parties and take account of the proceedings of the AWG-LCA at its fifth session and of submissions received from Parties by 24 April 2009.

The following constitutes a submission specifically for the **Shared Vision** part of the text.

Views on Shared Vision

- The shared vision and long-term goal must address the four building blocks of the Bali Action Plan.

- Emission reductions by developed country Parties should be enough to reach a stabilization level of 350ppm by reaching as a group a reduction of at least 45% below 1990 levels by 2020, and a reduction of at least 95% by 2050, in a reportable and verifiable manner.

- Nationally appropriate mitigation actions (NAMAs) by developing country Parties could be implemented in the context of national mitigation strategies and sustainable development, but depending on technology, financing and capacity building support provided by developed Parties for identifying and implementing NAMAs.

- Effective mechanisms and institutional arrangements for the provision of adequate, predictable, additional and sustainable financial resources should be implemented to support mitigation and adaptation in developing country Parties, and access to affordable environmentally sound technologies.

- Uruguay already contributes to the mitigation efforts, and we are willing to enhance our actions, provided the enhancement of the means of implementation in terms of sustainable, predictable and adequate financial, technical and capacity building support, and the provision of the right mechanisms and incentives.

PAPER NO. 41: UZBEKISTAN

Further proposals related to the contents of the final resolution of 15th Session of Conference of Parties

Republic of Uzbekistan supports the activities of Secretariat of Convention and of Special Working Group on the long-term measures of cooperation in accordance with Convention.

By the opinion of the Republic of Uzbekistan the following basic elements of the Baltic Plan of Actions should be included to the contents of the final resolution of 15th Session of Conference of Parties:

- mitigation of the climate change consequences;
- adaptation to climate change;
- development and transfer of new technologies on mitigation and adaptation;
- financing and financial mechanisms for realization of adaptation measures and of the measures directed at the mitigation of the climate change consequences.

In the Republic of Uzbekistan a good deal of work is being performed for the preparation to 15th Session of Conference of Parties. On 28-29 April 2009 in Tashkent Uzbekistan together with UNEP has organized and held subregional workshop "Way to Copenhagen" where the issues and proposals related to the contents of the final resolution of 15th Session of Conference of Parties were discussed. Leading experts in negotiations in the field of climate change of Central Asian countries: Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan have taken part.

In the course of the workshop the participants were provided with presentations on basic elements of the Baltic Plan of Actions and following issues were discussed:

- general view of the measures of the long-term cooperation in accordance to Convention (AWG-LCA) on mitigation and adaptation;
- development and transfer of technologies including the review of the Expert Group on Information Transfer (EGTT) and of the issues which are on consideration by SBSTA and SBI and AWG-LCA;
- financing and financial mechanisms including the review of Strategic program of technology transfer prepared by Global Ecological Fund;
- reduction of emission from deforestation in developing countries (REDD), brief review of the related issues which are under consideration by SBSTA and SBI and AWG-LCA.

The following recommendations on all considered issues were proposed by the workshop participants:

On the general vision of the long-term cooperation:

- Central Asian countries emphasizing the importance of the observance of all principles of the Framework Convention, of the consideration of historical responsibility and need in the sustainable economical development, call upon the Annex I Parties to continue to encourage and promote the actions of developing countries and countries with the economy in transition which are Non-Annex I Parties in the field of adaptation and mitigation of the consequences of climate change.

On mitigation and adaptation:

- For the development and subsequent adaptation of NAMA and NAPA in developing countries and countries with the economy in transition which are Non-Annex I Parties it is necessary to establish the additional institutional frameworks, including training of experts, mastering the methods and tools of economical analysis of adaptation and mitigation

- The developed NAMA and NAPA should be passed through the procedure pf their approval at the national level.

On the development and transfer of technologies:

- Central Asian countries support the opinion of the countries of EC in regard that the agreement for the period after 2012 should include the mechanisms of encouragement related to the three different stages of the life-circle cycle of technologies:

  a) speeding-up of dissemination of the existing low-carbon technologies;

  b) speeding-up of development of technologies close to the stage of the commercial application, implementation of the large-scale pilot projects based on these technologies;

  c) enlargement of financing for the scientific-and-research works in the area of new technologies.

- For the promotion of ecologically sound technologies it is necessary to use program approach and to include the issues of technologies to the development of NAMA and NAPA.

On financing:

Central Asian countries expressed the opinions regarding that:

- Annex I Parties should continue allocation financing to the developing countries and countries with the economy in transition for the preparation of their national reports, of the regional and national plans on the mitigation and adaptation actions;
- funds of GEF for the preparation of National Reports of Non-Annex I Parties should be excluded from the resource allocation framework (RAF) as these funds are also used for the other priority projects and they will be insufficient for these purposes in future;
- new financial limits for the long-term joint actions should facilitate the increase of funds and improvement of the investments mechanisms;
- it is necessary to establish new funds for technologies transfer, risk insurance and adaptation in the Convention framework for coverage of the future costs for the actions on mitigation and adpatation.

On the reduction of emission from deforestation in the developing countries (REDD):

- it is necessary to strengthen the methodical capacity in the developing countries and countries with the economy in transition which are Non-Annex I parties on the issue of Reduction of emission from deforestation in developing countries (REDD).

Countries of Central Asia region recommend taking the above mentioned proposals into account in consideration of the assessment of the range of coverage and of the progress of negotiations at the 6th Session of Working Group on the long-term measures of cooperation in accordance to Convention in June 2009.

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