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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 I

1. The Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) at its second session, invited¹ Parties to submit to the secretariat ideas and proposals on the elements contained in paragraph 1 of the Bali Action Plan (decision 1/CP.13). At its fourth session it invited² Parties to make further submissions by 24 April 2009, in order to build upon a negotiating text for consideration at its sixth session in June 2009.

2. Up to 5 May 2009, the secretariat had received 74 such submissions from 41 Parties. As requested by the AWG-LCA, they have been posted on the UNFCCC website.³ In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced* in the language in which they were received and without formal editing. The secretariat will continue to post on the UNFCCC website any submissions received after the issuance of the present document. The secretariat will also issue an addendum to this document prior to the sixth session of the AWG-LCA to include submissions that are received from 5 May onwards.

¹ FCCC/AWGLCA/2008/8, paragraph 25.

² FCCC/AWGLCA/2008/17, paragraph 26 (b).

³ <http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4578.php>.

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

3. Submissions received from accredited intergovernmental organizations have been posted on the UNFCCC website⁴ and will be compiled in document FCCC/AWGLCA/2009/MISC.5. In line with established practice,⁵ submissions received from non-governmental organizations have been posted on the UNFCCC website.⁵

⁴ <http://unfccc.int/parties_observers/igo/submissions/items/3714.php>.

⁵ <http://unfccc.int/parties_and_observers/ngo/items/3689.php>.

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PAPER NO. 1: ALGERIA

Submission* related to Paragraphs 1 (a), 1 (b) (i), 1 (b) (ii), 1 (d) and 1 (e) of the Bali Action Plan, as well as Articles 3 and 4 of the Convention.

There must be consistency between the global goal, mitigation commitments and actions by all developed country Parties and the provision by developed country Parties of technology, financing and capacity building to support and enable nationally appropriate mitigation actions by developing country Parties. Should such enabling support be significant and consistent with needs, nationally appropriate mitigation actions by developing country Parties could achieve a substantial deviation from baseline and thus contribute to achieving the global goal. Should such enabling support remain insignificant, nationally appropriate mitigation actions by developing country Parties could not be implemented, their greenhouse gas emissions would therefore accordingly increase and mitigation commitments and actions by all developed country Parties should then be increased to achieve the global goal without the contribution of developing country Parties.

Submission* related to Paragraph 1 (b) (iv) of the Bali Action Plan, as well as Articles 4.1, 4.3 and 4.5 of the Convention.

Sectoral approaches and sector-specific actions should be cooperative and not imposed by some Parties on other Parties.

Cooperative sectoral approaches and sector-specific actions should not be used to circumvent or undermine the differentiation made in the Convention between Annex I and non-Annex I Parties or modify their respective commitments and obligations.

Actions by developing countries to control their greenhouse gas emissions in the framework of cooperative sectoral approaches or sector-specific actions represent modalities of their implementation of Article 4.1 of the Convention. Annex II Parties must therefore meet their commitments for the provision of financial support in accordance with Article 4.3 and for the transfer of environmentally sound technology and know-how in accordance with Article 4.5 of the Convention. Article 4.7 on the balance between the provision of support by developed country Parties and implementation by developing country Parties also applies to such cooperative sectoral approaches or sector-specific actions.

In particular, the recent Directive by the European Union including air transport into its ETS would impose significant constraints and incremental costs on a number of developing country airlines. Developing country airlines should be exempted from the provisions of the Directive or they should be given financial and technological support to enable them to comply with these provisions without incurring any incremental costs.

*Submission for reflection in the negotiating text to be prepared by the Chair of AWG-LCA

PAPER NO. 2: ALGERIA ON BEHALF OF THE AFRICAN GROUP

KEY ELEMENTS OF LCA NEGOTIATION TEXT
FINAL Version - 8 April 2009

1. Shared vision:

The shared vision must:

- Unite the countries of the world in further building an inclusive, fair and effective climate regime, recognizing that solving the climate problem will only be possible if it is undertaken in the context of developing countries need for development space.
- 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 urgent need for new and predictable means of implementation including, in particular, support for financing, capacity building and technology for developing countries.
- Include a long-term goal for global greenhouse gases (GHG) emissions reductions of at least halving global emissions relative to historical levels by mid-century, underpinned by ambitious mid-term targets, based on sound science
- Address gender equity, and must reflect the special needs and interests of the youth

2. Adaptation and means of implementation

- Africa is one of the most vulnerable continents to climate change, with major development and poverty eradication challenges and limited capacity for adaptation.
- International cooperation on implementation of adaptation action in Africa is urgent and must be accorded the same level of priority and emphasis as that given to mitigation

2.1 Objectives:

A comprehensive and action oriented programme on the implementation of adaptation actions must be established. This programme must implement, support and facilitate urgent and immediate adaptation action that reduces vulnerability and builds resilience of developing countries to impacts that are already occurring, including impacts of increasing numbers of extreme weather events, and impacts that are expected to occur in the future by:

- Providing access to means of implementation (finance, technology and capacity building) for implementing urgent and immediate adaptation action, at regional and country level
- Implementing urgent and immediate adaptation action at national, regional and global levels
- Promoting coherence and facilitating linkages with other international, regional and national programmes, bodies and stakeholders that are implementing adaptation and related activities, including the Nairobi Work Programme

2.2 Principles: The Adaptation Action Programme must:

- Be undertaken in the context of the principles and commitments of the Convention
- Be country driven
- Address the concerns of all vulnerable groups whose adaptive capacity is low, and in particular gender and youth concerns, recognizing that women and children are particularly affected by the impacts of climate change
- Reflect indigenous knowledge and practice

2.3 Provision of financial resources, technology and capacity building

- This Programme for Adaptation Action is complementary to, and consistent with the G77 and China proposals on financing and technology under the AWG LCA.
- The provision of financial and technical support by developed country Parties for adaptation programmes in developing countries is a commitment under the Convention that must be urgently fulfilled, recognizing that climate change is an additional burden to sustainable development, and a threat to achieving the Millennium Development Goals.
- The Adaptation Action Programme must provide scaled up new, additional, adequate, predictable and sustainable financial, technological and capacity building support to address all key areas of the Adaptation Action Programme in a manner that is holistic, and consistent with national and regional development objectives, programmes and plans.
- By 2020 the scale of financial flows to support adaptation in developing countries must be at least \$ 67 billion / year

3. MITIGATION AND MEANS OF IMPLEMENTATION

A firewall must be maintained between mitigation commitments by *all* developed countries and mitigation actions by developing countries.

3.1 Mitigation commitments by developed countries

- Quantified emission reduction commitments are established for all developed country parties
- “Measurable, reportable and verifiable” refers to legally-binding quantified emissions reduction commitments (QERCs) that are absolute, and that are verified for compliance.
- Mitigation commitments by developed country Parties *as a group* must be at the top of the range indicated by the IPCC in order to achieve the lowest stabilisation levels assessed by the IPCC in its 4th assessment report. The aggregate number is for all developed country parties, regardless of whether they have ratified the Kyoto Protocol or not.
- In numerical terms: Annex I Parties reduce their greenhouse gas emissions by at least 40% below 1990 levels by 2020 and at least 80% to 95% below 1990 levels by 2050, to make a meaningful and fair contribution to achieving the lowest level of stabilisation assessed by the IPCC’s Fourth Assessment Report. At lower stabilisation levels, the additional climate impacts are unacceptable to Africa.
- Comparability of effort is established through (i) comparability of targets (QERCs); and (ii) comparable compliance. The unit of measurement of comparability is tons of CO₂-eq.

3.2 Mitigation actions by developing countries

- “Measurable, reportable and verifiable” is applied to mitigation actions by developing countries, which are relative reductions, or ‘substantial deviations from baseline’.
- Developing countries choose from a toolbox of voluntarily registered, nationally appropriate mitigation actions (NAMA), including sustainable development policies and measures (SD-PAMS), programmatic CDM and others.

- A REDD-Plus mechanism should be designed in such a way as to accommodate different national circumstances and respective capabilities. Adequate, predictable and sustainable funds from a variety of sources, including global carbon markets, are vital for the provision of incentives at the kind of scale that is necessary for reducing emissions in Africa and globally
- Nationally appropriate mitigation actions by developing countries will be reportable through national communications (if done with own resources) or in a separate registry for those with multi-lateral, measurable, reportable and verifiable support.
- The application of “verifiable” to unilateral mitigation actions by developing countries, must be differentiated from those that are supported internationally
 - For actions with own resources, verification is by national entities working with international guidelines.
 - For multi-laterally supported actions, verification is through the UNFCCC.
- Developing country action is conditional on technology, financing and capacity-building, in a measurable, reportable and verifiable manner.

3.3 Supported and enabled by technology, financing and capacity-building

- The extent of developing countries’ mitigation efforts depends on support by developed countries. MRV applies to mitigation actions and the MRV support (finance, technology and capacity-building) must be made.
- A 2020 target for the scale of financial flows to support mitigation in developing countries is set at \$ 200 billion by 2020 (0.5% of GDP of Annex II Parties).
- In order to demonstrate measurable, reportable and verifiable progress towards the targets for support, each developed country Party reports financing and technology transfer in Annex I national communications
- A technology mechanism is established, as proposed by the G77&China
- Financing requirements are aligned to the maturity of the technology – its stage in the technology life-cycle.
- The performance indicators for technology transfer developed by the joint SBSTA/SBI contact group are used to further enhance the measurement, reporting and verification of technology.
- A learning-by-doing and learning by practice approach is established for capacity building to support the transfer of skills.

4. FINANCE, TECHNOLOGY AND CAPACITY BUILDING

- In accordance with the Convention, developed countries have a commitment to provide financial, technological and capacity building support, to enable developing country action.
- 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. The mechanism shall:
 - Be underpinned by the principle of equity and common but differentiated responsibilities
 - Operate under the authority and guidance, and be fully accountable, to the COP;
 - Have an equitable and geographically-balanced representation of all Parties within a transparent and efficient system of governance (Article 11.2);
 - Enable direct access to funding by the recipients; and
 - Strengthen developing country capacity to ensure recipient country involvement during the stages of identification, definition and implementation, rendering it truly demand driven.
- The mechanism assists in developing and supporting implementation of programmes or projects put forward by developing countries, and matches these with funding, technology and capacity building support.

- Provision of finance, technology and capacity-building must be legally binding, with consequences for non-compliance. Action by developing countries is dependant on the level support by developed countries

4.1 Finance

- Developed countries commit to a target of 0.5% of GDP for climate action in developing countries. .
- Developed countries commit to new and innovative sources of public and private sector finance, with the major source of funding coming from the public sector

4.2 Technology

- Developed countries commit to the deployment, diffusion and transfer of technology to developing countries, based on principles of accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on mitigation and adaptation;
- Developed countries commit to providing full costs and full incremental costs, in accordance with article 4.3 of the Convention
- The barriers to technology transfer are addressed.

4.3 Capacity-building

- Developed countries commit to strengthening the institutional capacity of developing countries to undertake climate action
- Developed countries commit to supporting other country specific capacity building needs of African countries, consistent with the commitment and provisions of the Convention

4.4 Compliance

- A compliance mechanism is put in place to ensure that commitments on delivery of these means of implementation (Finance, Technology and Capacity Building) are met.

PAPER NO. 3: ARGENTINA

Submission for the AWG-LCA

April 2009

In consideration of documents FCCC/AWGLCA/2008/8, paragraph 25 and FCCC/AWGLCA/2008/L.10, paragraph 2(b), the Argentina's government submits hereby ideas and proposals on the elements of paragraph 1 of the Bali Action Plan to be taken into account in the negotiating text to be prepared by the Chair of the AWG-LCA for consideration at the sixth session of the AWG-LCA.

The ideas and proposals included in this submission are stripped of any explanation or rationale that, in any case, were provided in previous submissions. We hope that this approach facilitates the work of the Chair in incorporating the main concepts provided in this document in the negotiating text.

a) On a shared vision for long-term cooperative action

Principles and provision of the Convention, in particular Art. 2, 3 and 4, are paramount in any future agreement to enhance its implementation.

The principle of common but differentiated responsibilities and respective capabilities should incorporate historical responsibilities, current social and economic conditions and other national circumstances.

Economic and social development, poverty eradication and adaptation to climate change are the top priorities for developing countries, as recognized by the Bali Action Plan.

The shared vision should include long-term goals that show the level of ambition of Parties for enhancing the implementation of the Convention and achieving its ultimate objective .

Long-term goals should be based on the scientific information gathered and processed by the IPCC.

Long-term goals should include keeping the global average temperature increment with respect to pre-industrial level below 2 degrees C with a probability higher than 50 %.

Long-term goals should be used to define the level of GHG emission reductions in developed countries.

Long-term goals should include not only emission reductions targets for developed country Parties but also the revision of consumption and production patterns in these countries.

Possible negative economical and social consequences for developing countries that arise from the application of mitigation policies and measures implemented by Annex I Parties should be thoroughly assessed. In particular, measures that are classified as domestic measures by developed countries and have distorting effects on international trade should be avoided.

In preventing negative economical and social consequences for developing countries, long-term goals should ensure a just transition of the workforce in developing countries towards a sustainable, low-carbon economy.

Long-term goals should help to define the level of support in terms of financing, technology transfer and capacity-building for developing countries to implement the necessary national appropriate mitigation and adaptation actions.

A global emission pathway, including mid-term quantified emission reductions commitments for developed countries are necessary not only to reduce risk of triggering non-return changes in the climate and ecosystems around the globe, but also to build confidence among Parties.

Stringent monitoring schemes for guiding the process towards the long-term goals are needed.

Provisions for updating and adapting the long-term goals on the basis of new scientific evidence should be established.

The choice of technologies and mechanisms available to Parties to reach the long-term global goal must take into account their contribution to the sustainable development of developing countries.

b) On enhanced action on mitigation

1.b.i

Quantified emission reductions commitments required from developed countries should include: aggregate emission reductions of at least 45% by 2020 and at least 95 % by 2050, both with respect to 1990 levels.

Quantified emission reductions commitments by developed countries shall be measurable, reportable and verifiable.

Comparability of efforts among developed countries should be based on undisputed scientific evidence regarding historically responsibilities, mitigation potential and respective capabilities.

Comparability of mitigation commitments must express itself in magnitude, form and compliance requirements.

1.b.ii

Elaboration of Nationally Appropriate Mitigation Actions (NAMAs) by developing countries on a voluntary basis should include, inter alia, descriptions of national circumstances and the needs for capacity building, mitigation technologies and financial support.

All developing countries are encouraged to elaborate their NAMAs and financial and technical support should be available upon request through the financing mechanism to be created under the UNFCCC.

Measurable, reportable and verifiable individual mitigations actions included in NAMAs should be only those enabled by measurable, reportable and verifiable support.

1.b.iii

Activities to reduce emissions from deforestation and forest degradation in developing countries offer an important contribution in dealing with climate change and these activities should receive appropriate financial and technological support from developed countries.

The form of the support as well as the scale of the activity within a country should be decided by the country that hosts the activity to reduce emissions from deforestation and forest degradation.

Financial and technological support for forest conservation, sustainable forest management and enhancement of forest carbon stocks in developing countries should also be provided by developed countries.

1.b.iv

Cooperative sectoral approaches should contribute to foster initiatives on research and development, capacity building and technological cooperation.

Cooperative sectoral approaches should be tailored to national sector-specific needs and priorities, and should be part of the NAMAs.

Cooperative sectoral approaches, in concert with public sector financing from developed countries, should assist in achieving the massive levels of financing and technology transfer necessary to address climate change in a measurable, reportable and verifiable manner.

1.b.v

Market mechanisms should be oriented by governments under the UNFCCC.

Carbon market mechanisms should introduce eligibility criteria for project activities in order to establish a fair, inter alia, regional distribution of project activities, distribution among types of mitigation technologies, financing schemes including through the advance payment of future carbon credits to cover the full incremental costs of project activities.

Carbon market mechanisms should introduce eligibility co-benefits as eligibility criteria for project activities, including, inter alia, technology transfer, capacity building, employment creation, other positive environmental impacts. These criteria should be defined by a new body to be created under the UNFCCC.

1.b.vi

All developing countries face economic and social consequences of response measures to climate change; therefore, an evaluation of the effectiveness of existing mechanisms to assist developing country Parties in addressing the economic and social consequences of response measures should be performed.

In particular, fair transition mechanisms should be developed to allow for mitigating the impact of the response measures on the productive workforces, promoting a gradual transition in the most impacted economic sectors and contributing to building new capacities for both production and service related jobs.

Social, economic and environmental consequences due to mitigation measures in the agricultural sector should also be addressed by considering special circumstances for each country and each agricultural system, taking into account that not all mitigation options and technologies are applicable in all countries.

1.b.vii

The UNFCCC constitutes the established foundation of the climate change regime and therefore, the negotiating process should be channelled under this framework.

c) On enhanced action on adaptation

Elaboration of national adaptation programs of actions in all developing countries on a voluntary basis should contribute to assessing, identifying and prioritizing adaptation actions among developing countries.

Adaptation planning should also address risk management and risk reduction strategies, including risk sharing and insurance mechanisms.

All developing countries are encouraged to elaborate their national adaptation programs of actions and financial and technical support should be available upon request through the financing mechanism to be created under the UNFCCC.

Funding for already identified adaptation projects, programmes or actions, such as those arising from national sustainable development strategies, poverty reduction strategies, national communications and national adaptation programmes of action and other relevant instruments should be urgently provided.

Recognition for providing urgent financial support for adaptation measures and actions should be given to highly vulnerable countries to the impacts of climate change along with recognition for providing financial support for adaptation of vulnerable populations and ecosystems in all developing countries.

d) On enhanced action on technology development and transfer and on the provision of financial resources and investment

A new body on technology transfer and financing under the Convention should be created to enhance the implementation of technology transfer mechanisms as well as the associated enabling activities such as capacity building, technical training, and research and development cooperation, including those activities identified in NAMAs and national adaptation programs of actions.

The scope of the new body on technology transfer and financing under the Convention should include the coordination of the financing mechanisms, either market or non-market, to be established.

The new body on technology transfer and financing should contribute to the measuring, reporting and verifying of both the actions and the support for the actions.

The provision of financial support by developed countries should be based on the guiding principles of common but differentiated responsibilities as well as their historical contribution and responsibility in relation to climate change, with an emphasis on transparency and efficiency, allowing non-Annex I Parties direct access to funding.

Financial flows for mitigation and adaptation technologies and associated enabling activities should be predictable and stable, in accordance to article 4.3, 4.4 and 4.5 of the Convention, and should cover the agreed full incremental costs for the implementation of developing countries' actions under Article 4.1, and agreed full costs for the preparation of national communications and the implementation of action programmes developed under the Convention.

The new body on technology transfer and financing under the Convention should facilitate links for accessing to funds and should reduce diversification among existing sources of funds within the Convention.

The new body on technology transfer and financing, with the assistance of technical panels to be created, should articulate technology transfer and financing mechanisms under the Convention with other UN organisms, with multilateral financial institutions established under bilateral or multilateral development programs and with other relevant international forums not directly related to climate change.

Activities that lead to the creation of enabling environments should be performed at all stages of the technology transfer cycle, i.e. research and development (R&D), human and institutional capacity building, and technology demonstration, deployment and diffusion.

R&D collaboration between national and regional research centres in a North-South and South-South cooperation scheme should be supported and implemented in the short-term under the coordination of the new body on technology transfer.

International cooperation on R&D of specific technologies and promoting join-ventures to accelerate deployment, diffusion and an effective transfer of technologies from developed to developing countries should contribute to effectively deal with intellectual property rights issues among parties involved.

PAPER NO. 4A: AUSTRALIA

Enhanced action on adaptation

Submission to the AWG-LCA

April 2009

This submission contains Australia's further views on enhanced action on adaptation, including on guiding principles, implementation of adaptation actions, institutional arrangements and monitoring and feedback. Australia has noted the importance of significantly increased finance to support adaptation actions in particularly vulnerable developing countries. The provision of increased support for adaptation as part of the post-2012 agreement is being addressed in the UNFCCC financing negotiation.

Context

Three key understandings underpin Australia's approach on how to enhance action on adaptation to climate change:

- climate change impacts are already being felt and impose an additional burden on development. As such, significantly increased international support is needed, prioritising those most vulnerable and least able to respond to these impacts;
- although the basis for adaptation is climate driven, the responses must be implemented by actors across a range of sectors;
- climate change impacts are location-specific and effective adaptation responses will vary significantly between locations.

Guiding principles

Given the local nature of adaptation actions, the UNFCCC's role should be to catalyse and support the implementation of nationally driven adaptation actions. Australia proposes the UNFCCC develop principles to guide adaptation approaches, as follows:

1. Adaptation strategies and implementation of adaptation actions should be country-driven, involving all relevant stakeholders.
2. Adaptation strategies and actions should be developed and implemented in the context of broader sustainable development, with the ultimate objective of integrating adaptation priorities throughout national and sub-national decision-making, planning and budgets.
3. Support should be prioritised for those most vulnerable to climate change impacts that are least able to respond.
4. Adaptation strategies and actions should be informed by continuous learning and evidence-based vulnerability assessment processes.

Implementation of adaptation actions

In accordance with the country-driven approach to adaptation, countries should take the lead in implementing adaptation actions appropriate to their local circumstances. Australia recognises the significant efforts of countries in developing National Adaptation Programmes of Action (NAPAs) to identify immediate and urgent adaptation needs.

It is important that support is provided for the implementation of immediate adaptation actions, particularly in the most vulnerable developing countries. Future efforts can build on existing work, such as the \$150 million International Climate Change Adaptation Initiative, through which Australia is funding high priority adaptation needs in vulnerable countries in the Asia-Pacific, with a focus on the Pacific and East Timor.

Parties have also acknowledged the need for a more integrated, longer-term approach to adaptation planning. Australia proposes two mechanisms through which the UNFCCC could support countries in developing and implementing these adaptation strategies:

(1) National Adaptation Strategies

Developing country Parties that are particularly vulnerable to the adverse effects of climate change (particularly vulnerable developing countries) which request assistance should receive support to develop National Adaptation Strategies. National Adaptation Strategies will inform domestic action and the provision of increased international financial support to particularly vulnerable countries. These Strategies could also form a component of a country's sustainable development plan. An Adaptation Advisory Panel (discussed below) could support countries in developing their Strategies.

The Strategies could:

- establish clear objectives for adaptation actions;
- go beyond urgent and immediate needs and ensure a more dynamic and long-term consideration of adaptation needs;
- emphasise programmatic approaches, while also recognising a place for adaptation projects under certain circumstances; and
- be aligned with, and where appropriate influence, national development plans and priorities.

To streamline existing reporting processes under the UNFCCC, National Adaptation Strategies could form part of a country's National Communication, subject to decisions regarding the reporting provisions in a post-2012 agreement. Australia proposes that National Adaptation Strategies be submitted regularly - for example, every three or four years.

As with all adaptation actions, approaches to risk reduction, risk management and risk transfer should be country-driven. Risk responses could be included in a National Adaptation Strategy, with the primary focus on disaster risk reduction and risk management. Australia recognises that insurance could be a useful option for some countries as part of their overall risk management approach. We note however, that insurance only transfers and does not reduce risk. Australia stresses the importance of avoiding any "one-size fits all" mechanisms for addressing adaptation needs. A generic global insurance mechanism would not be consistent with a country-driven approach to adaptation.

(2) Knowledge sharing and linking expertise

The UNFCCC can play a vital role in catalysing action at the national and local level by facilitating the provision of appropriate information on the scientific and technical aspects of adaptation, sharing of experiences and knowledge in implementing adaptation activities, and linking national entities and implementing agencies with necessary expertise.

The Nairobi Work Program has played a useful role in facilitating information sharing and linking expertise and it would be valuable to continue this work beyond the completion of current activities under the Nairobi Work Program in 2010. Any new program should enhance the role of regional centres as hubs for sharing information and expertise (the role of regional centres is discussed further below).

Institutional arrangements

The following criteria should guide institutional arrangements supporting the implementation of adaptation actions:

- institutional arrangements should be fair, effective and efficient;
- it is important to avoid unnecessarily creating new institutional arrangements; instead arrangements should draw on lessons learnt under existing mechanisms, building on what has worked and addressing deficiencies in existing arrangements;
- any institutional arrangements should seek coherence with, and not duplicate, expertise in relevant fields, such as disaster risk reduction;
- the transition to any new institutional arrangements should be planned and implemented to minimise disruption to ongoing efforts, including by building on existing mechanisms and expertise; and

- adaptation actions should be implemented at the national and local level, rather than at the multilateral level, given that adaptation actions are most effective when considered in a local context and undertaken across a range of sectors.

Australia proposes two institutional arrangements to support implementation of adaptation actions:

(1) UNFCCC Adaptation Advisory Panel

The Least Developed Countries Expert Group (LEG) has played a valuable role in supporting least developed countries (LDCs) to prepare NAPAs, including by developing appropriate guidelines. The LEG Chair has noted the willingness of the LEG to support non-LDC developing countries prepare NAPAs. Australia proposes the LEG be transformed into an Adaptation Advisory Panel, made up of relevant technical and policy adaptation specialists.

Building on the LEG's work, the Panel's primary role would be to develop broad guidance for developing National Adaptation Strategies and provide support for particularly vulnerable countries in developing these Strategies. This could include linking Parties to relevant expertise and, given the multidisciplinary nature of adaptation, promoting cross-sectoral understanding and integration of adaptation actions into development planning. The Adaptation Advisory Panel could operate as part of a transitioning phase until the capacity of regional centres is sufficient to undertake this role.

(2) Regional Centres

Adaptation needs and challenges will vary widely. Whilst adaptation actions should be country-driven, regional co-operation between countries facing similar challenges could enhance country-led action.

In some cases, regional centres in areas facing shared or similar adaptation challenges may be able to play a valuable role in harnessing existing expertise and in facilitating knowledge exchange. Enhanced existing or virtual regional centres could play a constructive role as hubs for information exchange, coordination between relevant sectoral agencies and stakeholders, and as a focal point for linking expertise with needs.

Many regional centres are already operating and have well-developed links with their regional communities. To capitalise on these links, the mandate of relevant existing regional institutions could be enhanced, where possible and necessary, rather than establishing new regional institutions to cater to adaptation needs. Virtual regional centres can also serve this purpose at lower costs and may be appropriate for some regions. Over time, enhanced or virtual regional centres could become a platform for activities, such as those under the Nairobi Work Program, and could encompass work undertaken by the Adaptation Advisory Panel.

Monitoring and feedback

Australia values and encourages transparency by all Parties in enhancing action on adaptation. In providing enhanced support for adaptation, it is important that the principle of mutual accountability is observed and practised. Mutual accountability entails monitoring the support provided for adaptation activities, as well as ensuring that effective outcomes are realised from that support.

The proposed National Adaptation Strategies could be used to report the effectiveness of adaptation actions towards stated objectives. A number of mechanisms also currently exist to monitor and evaluate the provision and effectiveness of adaptation support, such as through multilateral funding and Official Development Assistance channels, and these should continue to be utilised.

Recognising that adaptation strategies and actions should be informed by continuous learning, opportunities to review approaches undertaken by Parties are a useful way to share expertise and information and disseminate lessons learned from the practical implementation of adaptation actions.

PAPER NO. 4B: AUSTRALIA

Schedules in a Post-2012 Treaty

Submission to the AWG-LCA

April 2009

This submission addresses the use of schedules to register the mitigation commitments and actions of Parties as a foundation of the post-2012 outcome. The submission builds upon the earlier legal input that Australia provided to the AWG-LCA and AWG-KP in UNFCCC/KP/AWG/2009/Misc.6/Add.2.

A treaty outcome from the LCA negotiations could contain two types of provisions to address mitigation. The first would be general obligations (such as inventories), and the second would be schedules to register country specific mitigation commitments and actions. Individual national schedules would be attached to, and form an integral part of, the treaty outcome. The treaty outcome should contain principles guiding the content of national schedules.

The key benefit of a schedule approach is that it can capture the spectrum of mitigation efforts that countries can achieve according to their respective capabilities in a form that has the same overall legal character. This accounts for the principle of common but differentiated responsibilities and respective capabilities.

The use of national schedules is a well established approach in international law for reflecting differentiated treatment. A particular advantage is that national schedules could provide for both legally binding and non-legally binding commitments and actions within the same schedule¹.

National commitments and actions

In accordance with the Bali Action Plan, each developed country Party would use a national schedule to commit to comparable mitigation efforts, including quantified emission limitation and reduction objectives (QELROs). These should be legally binding.

Each developed country Party could also detail in its national schedule the goals, policies and measures that underpin its QELRO. This information might include details on (1) expected emission reduction pathways, including mid- and long-term emission reduction goals, and (2) enabling domestic measures, such as emission trading regimes and renewable energy targets.

Detailing developed country actions beyond the economy-wide reductions that are legally expected provides for greater transparency of relevant policies and measures. This facilitates comparative analysis of effort, as well as the establishment of norms relating to particular policies and measures.

Schedules are a particularly effective way to reflect the separate circumstances and capacities of individual non-Annex I Parties. A variety of mitigation policies and measures may be registered. This gives Parties substantial flexibility to craft commitments and actions in a manner appropriate to their national circumstances. For environmental integrity, a Party's package of commitments and actions should be broadly comparable in its effect to the efforts made by others at a comparable level of development.

In addition to actions, schedules could also allow more advanced non-Annex I Parties to register mitigation commitments that may differ from economy-wide QELROs without joining Annex I. Sectoral commitments may be one example.

The schedules should identify where specific mitigation actions were made possible through previously agreed international support. This could flow from support generated by a facilitative mechanism.

¹ By contrast schedules under the General Agreement on Trade in Services are a reflection of legally binding commitments only.

Aside from general obligations stipulated in the treaty itself, Least Developed Countries would not be expected to undertake commitments.² Schedules for LDCs could register intended actions, including those that might benefit from additional international support.

One area of useful commonality could be for all Parties to register their national pathways for transitioning to low emission economies. Such pathways could include projected peaking years and long-term emission limitation goals.

Operation of schedules

The national schedules would conform to a standard format to facilitate comparative analysis. To further allow comparison, there could also be summary schedules to reflect a particular commitment or action across all relevant Parties. For example, QELROs could be summarised in a single schedule. The commitment in the respective national schedules would be the legally binding obligation.

National schedules would provide for measurement, reporting and verification (MRV) of commitments and actions. The degree to which MRV is based on international or national approaches would largely reflect the nature of the commitment or action. Commitments and actions enabled through direct international financial support or support through market mechanisms would require a high degree of international confidence.

Schedules could be negotiated through a process to be established. This could involve a period of consideration, where all countries would make available their draft schedules to allow countries the opportunity to reflect on comparability of effort. There would be a set length of time for this consideration and assessment period. Each country would be required to submit a final schedule upon their signature to the treaty.

For environmental integrity, there would be regular, general review of all schedules at fixed intervals after the treaty enters into force. This would allow Parties to collectively work towards fulfilling the objective of the Convention through progressively deeper mitigation commitments and actions.

While legally binding obligations would remain fixed until the general review, Parties would be able to add or alter the detail of non-legally binding actions in their schedules at any time, according to procedures to be determined. These additions and alterations would be required to maintain or enhance the previous level of effort registered in the schedule.

Australia will continue to provide further input on the nature and scope of the post-2012 treaty in the coming months, including additional information on schedules.

² LDCs choosing to participate in REDD and market-based mechanisms would remain subject to relevant requirements.

PAPER NO. 5: AUSTRALIA, BELARUS, CANADA, THE EUROPEAN COMMUNITY AND ITS MEMBER STATES, ICELAND, JAPAN, NEW ZEALAND, NORWAY, RUSSIAN FEDERATION, SWITZERLAND AND UKRAINE

Information relating to possible quantified emissions limitation and reduction objectives as submitted by Parties

Submission to the AWG-LCA and AWG-KP

This paper contains information provided by Annex I Parties relating to their possible quantified emission limitation and reduction objectives (QELROs). It contains values or ranges of these pledges, the base year to which they refer, and information on their status.

This submission serves information purposes only and does not entail any collective political endorsement or acceptance by the submitting Parties of the information provided in the table below.

Party	Information relating to possible QELROs		Inclusion of LULUCF	Status
	Range or single value by 2020, percentage	Reference year		
Australia	-5% to -15%; or -25%	2000	Y	Officially announced
Belarus	-5% to -10%	1990	TBD	Under consideration
Canada	-20%	2006	TBD	Officially announced
European Union	-20 to -30%	1990	N for -20% Y for -30%	Adopted by legislation
Norway	-30%	1990	Y ¹	Officially announced
Switzerland	-20 to -30%	1990	Y	Consultations in progress
Ukraine	-20%	1990	TBD	Under consideration

**Abbreviations:* N = no; TBD = to be determined; Y = yes

Some Annex I Parties clarified the following matters in the context of possible QELROs and pledges:

Australia

On 4 May, Prime Minister Kevin Rudd committed the Australian Government to reduce Australia's emissions by 25 per cent on 2000 levels by 2020 if the world agrees to an ambitious global deal capable of stabilising levels of greenhouse gases in the atmosphere at 450 ppm CO₂-eq or lower. The Australian Government retains its previous policy commitment to unconditionally reduce Australia's emissions by 5 per cent on 2000 levels by 2020, and to reduce emissions by up to 15 per cent by 2020 if there is a global agreement which falls short of securing atmospheric stabilisation at 450 ppm CO₂-eq, and under which major developing economies commit to substantially restrain emissions and advanced economies take on commitments comparable to Australia's.

Belarus

Belarus informs that if the amendment adopted via decision 10/CMP.2 comes into effect before the end of the first commitment period, for the period after 2012 the Republic of Belarus will consider an option of assuming the commitment to meet the target of 90-95 per cent of 1990 emission level; and if the aforementioned amendment does not take effect, the Republic of Belarus will refrain from voluntary commitments for the post-Kyoto period that would establish the target lower than 100 per cent of 1990 emission level (FCCC/KP/AWG/2008/ MISC.4, page11).

¹ LULUCF is included in light of the present rules. If the rules are changed Norway's national goal will be changed accordingly.

Canada

In the medium-term, the Government of Canada is committed to reducing Canada's total GHG emissions by 20 per cent by 2020 relative to 2006 levels. This equals a reduction in annual emissions of approximately 145 Mt by 2020. This commitment has been developed as a domestic goal on Canada's long-term emission reduction pathway. It does not assume or provide for significant use of the Kyoto mechanisms, in particular emission trading under Article 17. In the long-term, the government is committed to reducing Canada's GHG emissions by 60-70 per cent below 2006 levels by 2050 (FCCC/KP/AWG/2007/MISC.4/Add.1, page 5 and further elaboration by Canada).

The European Community and its Member States

The European Union agreed in 2008 its "Energy and climate package". The package includes a unilateral commitment to reduce EU-27 GHG emissions by at least 20 per cent by 2020 compared to 1990 levels and by 30 per cent provided that other developed countries commit themselves to comparable emission reductions and that economically more advanced developing countries contribute adequately according to their responsibilities and respective capabilities consistent with staying below 2°C (FCCCC/KP/AWG/2009/MISC.1, page 20).

Iceland

Iceland is undertaking consultations at the national level on a mid-term ambition. In terms of long-term ambition, Iceland has set the target of 50-75 per cent emissions cuts as an aspirational goal for 2050.

Japan

Japan's mid-term target is now being considered with reference to the six options presented by the Mid-term Target Committee, established under the Council on Global Warming Issue chaired by the Prime Minister (FCCC/KP/AWG/2009/MISC.1/Add.2).

New Zealand

New Zealand is developing a range of possible medium-term targets consistent with a global goal of stabilisation at 450 ppm CO₂-eq and with New Zealand's long-term target of a 50 per cent reduction in net emissions from 1990 levels by 2050.

Norway

In the context of an ambitious global agreement, Norway intends to cut global emissions equivalent to 100 per cent of its own greenhouse gas emissions, becoming a carbon neutral nation within 2030. Norway will undertake to reduce total greenhouse gas emissions by 30 per cent by 2020 relative to 1990 levels. The aim is to reduce two thirds of emissions domestically bringing Norway on the path to become a low carbon society (FCCC/KP/AWG/2009/MISC.1, page 39).

Russia

Russia is currently considering establishing a national mid-term target.

Ukraine

Ukraine is ready to commit to the greenhouse gas emissions reduction by 20 per cent by 2020 and by 50 per cent by 2050. Imposing stricter obligations on Ukraine will not only render impossible the economy growth, but will also prevent social and economic recovery of the country (FCCC/KP/AWG/2009/MISC.1, page 48 and further elaboration by Ukraine).

PAPER NO. 6: BANGLADESH

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

Enhanced national/international action on mitigation

The following text refers to Decision 1/CP. 13, paragraph 1 b(ii):

Pursuant to Article 4, paragraph 7 of the Convention, NAMA may include any or all or any subset of the following depending on the submission of a developing country Party: actions targeting GHG mitigation directly (climate-specific) as well as actions undertaken or to be undertaken regardless of climate change (climate relevant) but which directly affect GHG mitigation (e.g., energy efficiency policy). NAMA may be a broad statement of policies and measures including national strategy on climate change to improve carbon and energy intensity of any sector or the national economy as a whole. The detailing of NAMA (at sector, programme or project levels) would be decided by the developing country Parties depending on national circumstances.

NAMAs may be reported as part of a Registry to be maintained by the UNFCCC but its measurement and verifiability (based on particular action under it) shall depend on technology, financing and capacity building support identified and requested by the Parties and subsequently provided by Annex-I Parties. The emission reduction or improvement shall be only a statement of intent and shall not be binding on a developing country Party unless necessary technical, financial and capacity building support by Annex 1 countries is not linked in a measurable, reportable and verifiable way.

Referring to Article 3 paragraph 1 of the Convention and taking into consideration the specific needs and special circumstance of Least Developed Countries, particularly their vulnerability to the adverse effects of climate change and to ensure their economic and social development including poverty eradication with their low capacity, LDC must be exempted from any future mitigation actions.

Enhanced Action on Adaptation

Recalling the decisions under Bali Action Plan under the Paragraph 1(C) and also recalling the provisions under Article 4.4 and 4.9 of Convention and decision 5/CP.7 Bangladesh proposes that the following elements should be considered for any future Framework for Action on Adaptation [in reference to Decision 1/CP. 13, paragraph 1(c)].

PRINCIPLES

- Any future framework for Action on Adaptation shall be legally binding and compliance by the Annex-I Parties (mainly their financial commitments) shall be incorporated in that framework, with a clear time frame for making in efficient. It must be supportive and enhance implementation of National Adaptation Plans (NAPs).
- Funding for adaptation activities should be integrated into normal national development plans and programmes as well as for stand-alone adaptation plans and programmes.
- Future funding should be based on the basis of "polluters pay principles".
- Any future Adaptation fund disbursement should first be directed to meet immediate needs ensuring the full implementation of NAP.
- Parties should recognize the extreme vulnerability of LDCs including low-lying coastal areas therein and SIDS and consider special allocation of funds for adaptation in such cases from all relevant financial windows under the UNFCCC.
- Build on existing experience from relevant processes and measures other than UNFCCC, including Nairobi Work Programme and Hyogo Framework of Action, when planning and implementing adaptation actions.

OBJECTIVES

- Should enable, support, facilitate, and implement adaptation actions by addressing the adequate, predictable and timely flow of new and additional financial resources and deployment, diffusion and transfer of technology to support urgent and immediate national, sub-regional and regional adaptation activities and programmes of all developing countries.
- Should ensure implementation of adaptation taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change.
- Must support, on an ongoing basis, efforts to enhance national capacity to incorporate adaptation considerations into the national development process and to implement stand-alone adaptation efforts.

INSTITUTIONAL MECHANISM

- Be under the authority, guidance, and be fully accountable to the Conference of the Parties.
- Be supportive of the National Institutional arrangements. Preferably adaptation activities and financial resources should be coordinated and managed by a single window/channel as appropriate under respective Parties National Plans and Programmes.
- Future Adaptation Framework should be supported by research and training conducted by an International Adaptation Centre and other regional centres to enable most vulnerable developing countries to better address their adaptation activities, in this respect Bangladesh proposed an outline of an International Adaptation Center before COP 14, which Bangladesh has attached with this submission as Annex-I.

PROVISION OF FINANCIAL RESOURCES

- Financial resources should be provided through the enhanced financial architecture and be under the authority, guidance, and be fully accountable to the COP. Capacity of Adaptation Fund Board may be enhanced for proper fund management.
- Mandatory contributions from Annex-I Parties should form the core stream for meeting the cost of adaptation, which may be supported by mechanisms such as International Air Passenger Adaptation Levy (IAPAL) or Green Levy on Air Fare and other new and innovative mechanisms.
- Provide new and additional resources, that is, additional to Overseas Development Assistance (ODA) financing as committed by developed countries (0.7 percent of GNI). With additional commitments, the ODA should be no less than 1.5% of the GNI contribution by the individual Annex-I Parties.
- The level of financing shall be adequate and predictable with direct, simplified and quicker access and shall cover different stages of adaptation from identification of actions to implementation;

ADAPTATION ACTIVITIES

Adaptation financing must be substantially scaled up and must be sufficient to:

- Meet the financial requirements for adaptation programmes at national, sub-regional and regional levels to meet the investment needs, technologies and capacity-building for the implementation of action on adaptation.
- Develop and implement measures including those related to national and international migration to address those impacts for which it is difficult to build resilience or planned relocation for climate refugees. In extreme circumstances, provision should be made in the immigration policies of Annex I countries to accept climate refugees.

- Development of a set of **vulnerability criteria** to assess the adaptation needs of LDCs and SIDS and countries with low-lying coastal areas for preferential treatment in accessing the funds in times of need.

Risk Management and Risk Reduction Strategies

Future Adaptation Activities should also;

- Provide various Insurance mechanisms for reducing risk to crop production; food security and livelihood.
- Set up a rapid financing window for addressing resource needs to cope with the aftermath of extreme climate events, including compensation mechanism.
- Promotion of ecosystem based approach in adaptation programmes to increase resilience to cope with adverse effects of global warming and climate change.
- Support establishment of appropriate institutional mechanism and infrastructures towards preparation and implementation of National Risk Management Plans and early warning systems.

Disaster Reduction Strategies and means to address loss and damage

- Developing countries that are particularly vulnerable to the adverse effects of climate change should prepare on a mandatory basis respective Disaster Risk Reduction Strategies, which should be adequately supported through the proposed Adaptation Framework.
- While developing the Disaster Reduction Strategies Parties should consider the existing experiences, including the outcomes from the Nairobi Work Programme and the Hyogo Framework for Disaster Risk Reduction.

MONITORING, REPORTING AND COMPLIANCE

- To ensure the full implementation of developed country Parties' commitments under the Convention a monitoring system should be put in place as part of a compliance mechanism through periodic review of the implementation of commitments by Annex-I Parties in a measurable, reportable and verifiable manner.

Enhanced Action on Technology Development and Transfer

The following text refers to Decision 1/CP.13, paragraph 1(d) for consideration by the chair to be included in the negotiation text:

1. The technology Needs Assessment (TNA) process already initiated by the UNFCCC should be the basis for cooperation in technology related matters for which funds should be provided to implement the findings. The TNA process must also identify the countries where the required technology exists and include consultation meeting to discuss the availability of the needed financial support and the technology on a bilateral and/or multilateral basis.
2. To facilitate technology transfer acquisition and application, Parties shall prepare national technology development action plan, establish national boards for technology cooperation and management with clearly defined terms of reference. A Multilateral Climate Technology Fund (MTCF) should be established and in this regard, the Parties support the work of EGTT as presented in the advance report submitted in Bonn Climate Change Talks, 2009. The establishment of the MTCF must not preclude bilateral cooperation in technology transfer and support. A mechanism should be developed to give credit to the partner developed country to fulfill its obligation to MTCF through bilateral cooperation.
3. Support is to be provided to the developing countries for upgrading indigenous technologies through innovation, creating markets for relevant technologies with the right kind of investment and enabling environment, as well as promoting private sector participation between the developed and developing countries.

4. LDCs should be exempted from the obligation of patent protection of climate related technologies for adaptation and mitigation, as required for capacity building and development needs.
5. Development of Climate Change Adaptation and Mitigation Technologies must be kept outside the present IPR regime.
6. Annex I Parties should support Innovative Climate Change Research and technology development and make it freely available to the developing country Parties.
7. Genetic resources, including Germplasms of plant and animal species and varieties that are essential for adaptation in agriculture, must not be patented by multinational or any other corporations.
8. Special technology for adaptation measures that will be needed for technology hardware may include:
 - Procurement of technologies needed for adaptation for immediate safeguard against the climate change impacts that will include software, hardware, inter alia:
 - cost of acquisition of equipment or upgrading existing equipment and endogenous capacity
 - cost for expert support and services for design, installation, stable operation, and possible improvement with local adaptation;
 - cost of fuel and operational cost
 - training and dissemination,
 - cost of monitoring and verification
9. Mitigation action through demand side management as well as to promote vigorous investment activities in new and renewable sources energy (NRSE) need to be supported fully by developed country Parties. The extent of this support should enable the LDCs to achieve at least 5% of the grid energy from NRSE by 2015.
10. Financial support is to be provided from MTCF for ISO 14000 environmental management system to be introduced in the concerned SME sector to minimize material consumption and better management of the enterprise that will ultimately reduce GHG emission.

Enhanced Action on Finance

The following text refers to Decision 1/CP. 13, paragraph 1 (e):

PRINCIPLES

- Be guided by the Convention commitment of "common but differentiated responsibilities"
- Be under the authority, guidance, and be fully accountable to the Conference of the Parties.
- Financing be based on the basis of "polluters pay principle".
 - Any future Adaptation fund disbursement to be first directed to meet immediate needs, ensuring the full implementation of National Action Plans (NAPs) on climate change.
 - Parties should recognize the extreme vulnerability of LDCs and SIDS including low lying coastal areas and consider special allocation of funds for adaptation as well as mitigation from all relevant financial windows under the UNFCCC.

INSTITUTIONAL MECHANISM

- Financial resources should be provided through the enhanced financial architecture and be under the authority, guidance, and be fully accountable to the COP.
- A similar mechanism to that of Adaptation Fund Board may be arranged for the management of funds under new financial architecture. The COP and Board shall establish specialized funds and funding windows under its governance and a mechanism to link these various funds.
- Prioritization of activities for funding and the principles for such prioritization should be firmed up as soon as possible in consultation with Parties.
- Fast track procedures for easy access of funding should be enhanced.
- Be supportive of the existing National institutional arrangements. Preferably adaptation activities and financial resources should be coordinated and managed by a single window/channel as appropriate under respective Parties' National Plans and Programmes.
- Arrangements should be made for cooperation between national banking and financial system and the flow of funds from the international and bilateral systems for refinancing, insurance and other means to help funding national activities.

SOURCES OF FUNDING

- Mandatory contributions from Annex-I Parties should form the core stream for additional future financial resources.
- Sources of funding including carbon tax, International Air Passenger Aviation Levy and Maritime tax should be mobilized to generate necessary level of finance.
- Financial resources should be over and above the existing Overseas Development Assistance (ODA).
- Public-sector financial resources should be mobilized to address the needs of the most vulnerable countries and where appropriate private investments should also be explored.

ACTIVITIES TO BE FUNDED

- Development of generic guidelines for financial needs assessment for addressing adaptation needs
- Development of generic guidelines for financial needs assessment for addressing mitigation needs
- The scale of necessary funding to assist developing countries in mitigation and adaptation to be based on the assessed needs.
- Support should be provided, on a continuous basis, to support and enhance national capacity to mainstream adaptation into planning and designing of adaptation activities.
- Research and development of adaptation and mitigation technologies
- Deployment and diffusion of adaptation technologies
- Deployment and diffusion of low-carbon technologies

MONITORING, REPORTING AND COMPLIANCE

- To ensure the full implementation of the commitments of Annex-I Parties under the Convention, a monitoring mechanism should be put in place as part of a compliance mechanism through periodic review of the implementation of commitments by Annex-I Parties, in a measurable, reportable and verifiable manner.

Outline of International Adaptation Centre

Adaptation and mitigation are the two major pillars to address climate change and they are complementary to each other: both need to be pursued together. But the spotlight is now on adaptation. Because people have realized that some climate change impacts are inevitable. Even if emissions of all greenhouse gases were to stop immediately, average temperatures would continue to rise for some time because of lags in the Earth's natural processes. Country level adaptation activities have been going on with varied perspectives. Presently, there is no single institution dealing with adaptation to climate change holistically as well as facilitating decision making at different level of the UNFCCC process through coordination with and facilitating implementation of adaptation activities, conducting research, providing inputs at times of international negotiations, etc.

Under the above backdrop, it is necessary to enhance capacity of the vulnerable countries for informed decision making in planning, designing, implementation, monitoring and evaluation of adaptation activities through a designated International Centre for Adaptation.

Bangladesh is regarded as one of the most vulnerable countries in the world due to climate change impacts and will become more so as a result of climate change. Floods, tropical cyclones, storm surges and droughts are likely to become more frequent and severe in the coming years. These changes will threaten the significant achievements Bangladesh has made over the last 20 years in increasing incomes and reducing poverty.

Bangladesh is often treated as a natural laboratory for Adaptation activities. Her frequent natural calamities have made the country and its people resilient to natural disasters. The people of Bangladesh have adapted over generations to the risks of floods, droughts and cyclones. The country is known as a world leader in the research, design and implementation of adaptation strategies. A comprehensive system of disaster preparedness and management, including, *Standing Orders on Disaster* which details the responsibilities of Government officials and others at times of disaster, has been put in place. The Government demonstrated its competence in dealing with disasters in 2007 when the country suffered two serious successive floods and a severe tropical cyclone (Cyclone SIDR) in the same year.

The combination of frequent disaster, high population density, low level of economic development along with rich experiences in adaptation to climate change have made Bangladesh a unique place to house International Adaptation Centre.

Bangladesh from time and again has urged international community to support Bangladesh in establishing such a centre since 22nd Session of IPCC at Valencia, Spain and COP13 at Bali, Indonesia. Recently, Bangladesh has made formal statement at 3rd AWG-LCA Meeting in Accra, Ghana clarifying the need for establishing an International Adaptation Centre.

Objectives

The main objective of the International Adaptation Centre is to support all the vulnerable developing countries in general and the LDCs & SIDS in particular through coordination and building synergies with other adaptation activities being taken place throughout the world. The specific objectives are;

- ▣ planning designing, implementation, monitoring and evaluation of adaptation activities;
- ▣ facilitate informed decision making at different levels;
- ▣ facilitate development, deployment and transfer of technologies in relevant sectors and ecosystem specific adaptation activities; and
- ▣ Support developing country parties in enhancing their capacity to undertake adaptation research and implementation of activities in their respective countries.

Scope of Work

- ▣ Carry out adaptation research, including impacts, vulnerabilities and adaptation assessment supported by appropriate modeling exercise;
- ▣ Support the development and dissemination of methodologies and tools for impacts, vulnerability and adaptation need assessment;
- ▣ Share data and information to facilitate the implementation of adaptation activities;
- ▣ Establish a Virtual Library and act as a knowledge hub on adaptation activities, through collection and compilation of existing adaptation and best available practices, including indigenous knowledge throughout the world;
- ▣ Establish partnership with other such institutions to deal with adaptation activities;

Institutional Framework

1. The International Adaptation Centre will be established under UNFCCC and will function under the guidance of Conference of the Parties (COP), which will be administered by a Board with equitable and balanced representation of all parties, including LDCs and SIDS.

Proposed Structure of the Governing Board

Serial	Representatives	Position
1	Africa	Member
2	Asia	Member
3	EU	Member
4	GRULAC	Member
5	Umbrella Group	Member
7	LDCs/SIDS	Member
8	UNFCCC Secretariat	Member
9	International Adaptation Centre	Member
10	Representative of the Host Government	Member

2. Chairman of the Governing Board will be selected on a rotational basis from the regional group members.
3. Activity of Regional Centres to be set up with the support of UN bodies may be coordinated through the proposed International Centre.
4. Term of office of the members of the International Adaptation Centre will be three years;
5. No country can represent the centre as a member for subsequent terms, until other regional country parties get the opportunity to represent their country as a member of the centre.

Funding Mechanism

1. Financial support to run the Center will be provided from the Adaptation Fund under the Kyoto protocol
2. Parties of UNFCCC may also contribute funds to operationalize the Centre.

Contribution of the Government of Bangladesh towards the establishment of the Centre

1. Initially Government of Bangladesh will provide office spaces to start with the virtual knowledge hub of the Centre.
2. Government of Bangladesh will also allocate suitable land to construct the own campus of Centre.
3. At initial stage, Government of Bangladesh is also willing to provide financial support to the Centre, if it needs so.

PAPER NO. 7: BELARUS

Министерство природных ресурсов и охраны окружающей среды
Республики Беларусь

**Идеи и предложения по элементам параграфа 1
Балийского плана действий**

в соответствии с пунктом 26 (b) документа FCCC/AWGLCA/2008/17
Специальной рабочей группы по долгосрочным мерам сотрудничества
согласно РКИК ООН

ВВЕДЕНИЕ

Республика Беларусь приветствует предложение Специальной рабочей группы по долгосрочным мерам сотрудничества согласно РКИК ООН предоставить свои дальнейшие соображения по элементам параграфа 1 Балийского плана действий, что позволит Сторонам определить, в каких сферах совпадают или различаются их мнения, и тем самым способствовать продвижению вперед переговоров в 2009 году для достижения конечной цели Конвенции. Считаем, что участие каждой Стороны в обмене мнениями по указанным вопросам является крайне важным для согласования переговорного текста в соответствии с пунктом 26 (b) документа FCCC/AWGLCA/2008/17.

ПРЕДЛОЖЕНИЯ ПО ПАРАГРАФУ 1 БАЛИЙСКОГО ПЛАНА ДЕЙСТВИЙ

Идеи и предложения по элементам параграфа 1 Балийского плана действий представлены в Приложении.

Элемент параграфа 1	Идеи и предложения
<p>а) общее видения долгосрочных мер сотрудничества, включая долгосрочную глобальную задачу по сокращению выбросов, для достижения конечной цели Конвенции в соответствии с положениями и принципами Конвенции, в частности с принципом общей, но дифференцированной ответственности и соответствующих возможностей, и с учетом социальных и экономических условий и других соответствующих факторов.</p>	<p>Принцип общей, но дифференцированной ответственности должен учитываться при оценках странового и общего потенциала смягчения воздействия на климат для пост-Киотского периода.</p> <p>Развитые страны, включенные в Приложение II, должны взять на себя лидерство в достижении коллективного сокращения Сторонами, включенными в Приложение I, выбросов парниковых газов в размере 25-40% к 2020 году по сравнению с уровнем выбросов 1990 года.</p> <p>Стороны, входящие в Приложение I, должны создать специальные условия и систему, которые позволят им достичь таких целей в совокупности и с учетом экономических, социальных и технологических возможностей каждой из них в отдельности.</p> <p>Страны с переходной экономикой, особенно не входящие в Евросоюз, имеют отличительные черты, которые не позволяют им реализовать их потенциал в должной мере. Следует ожидать, что в этих обстоятельствах и при отсутствии серьезных стимулов выбросы парниковых газов в этих странах будут продолжать существенно увеличиваться. Поэтому, условия и система, о которых говорилось выше, включая дальнейшее развитие углеродного рынка, должны основываться на решениях, стимулирующих энергетическую эффективность, энергосбережение и распространение новых технологий в странах с переходной экономикой.</p> <p>Необходимо разработать максимально благоприятный режим для участия в глобальных усилиях по смягчению воздействия на климат стран с переходной экономикой, по тем или иным причинам не входящих в Приложение I, особенно в случае, если они пожелают принять на себя добровольные обязательства.</p> <p>Для улучшения правовых основ долгосрочных мер сотрудничества в области изменения климата группирование стран (Стороны, включенные в приложение I, и Стороны, не включенные в приложение I) и, соответственно, дифференцирование их обязательств должно быть пересмотрено с учетом современных реалий.</p>
<p>b) активизация национальных / международных действий по предотвращению изменения климата, включая, в частности, рассмотрение следующих вопросов:</p>	<p>См. пункты (i) - (vi) ниже</p>
<p>i) поддающиеся оценке, отражению в отчетности и проверке обязательств или мер по предотвращению изменения климата, которые соответствуют национальным условиям, включая цели по</p>	<p>Принцип распределения усилий при достижении общих целей среди Сторон, входящих в Приложение I, должен основываться на взвешенном подходе, принимающем во внимание такие факторы, как потенциалы смягчения стран, их возможности в рамках национальных обстоятельств, доступ к механизмам гибкости и историческую ответственность. Предлагается учитывать различия между тремя реально существующими группами стран, включенными в Приложение I, а именно:</p> <ul style="list-style-type: none"> - Группа А: страны, включенные в приложение II, другие западноевропейские страны Евросоюза;

<p>количественному ограничению и сокращению выбросов, для всех Сторон, являющихся развитыми странами, при обеспечении сопоставимости их усилий и с учетом различий в их национальных условиях;</p>	<ul style="list-style-type: none"> - Группа В: новые члены Евросоюза страны Центральной и Восточной Европы, которые завершают переход к рыночной экономике при поддержке наиболее индустриально развитых стран Евросоюза; - Группа С: страны с переходной экономикой, не входящие в Евросоюз. <p>Страны Группы С уже внесли существенный вклад в смягчение воздействия на климат за период с 1990 по 2008 годы, их выбросы на душу населения наименьшие среди других стран Приложения I. Достижение такого показателя было связано с большими социальными потрясениями и экономическими издержками. В связи с существенными экономическими потерями в предыдущий период, страны Группы С все еще испытывают значительные сложности в снижении углеродоемкости своих экономик из-за недостатка знаний и опыта в области использования низкоуглеродных технологий и ресурсов для их разработки или приобретения. Эти страны имеют право рассчитывать на помощь других стран Приложения I в соответствии с решениями 3/CP.13 и 9/CP.13, принятыми на 13-й сессии Конференции Сторон.</p> <p>Система установления и наблюдения за выполнением обязательств, заложенная в РКИК и Киотском протоколе, на данном этапе показывает свою работоспособность и эффективность. Более того, критерии соблюдения и система учета обязательств интегрированы в систему обеих соглашений и на данный момент представляют собой целостную и прозрачную систему ответственности.</p> <p>Единственной областью, требующей существенных изменений, является сектор ЗИЗЛХ. Этот сектор отличается от других особенными консервативными показателями воздействия на климат, которые при выполнении мероприятий по восстановлению или консервации поглотителей в начале могут показать даже рост выбросов парниковых газов, но в последующие периоды – их значительное и устойчивое сокращение.</p>
<p>ii) соответствующие национальным условиям меры по предотвращению изменения климата для Сторон, являющихся развивающимися странами, в контексте устойчивого развития с опорой на технологии, финансирование и укрепление потенциала и с использованием обусловленных ими возможностей на поддающей оценке, отражению в отчетности и проверке основе;</p>	<p>Наиболее богатые промышленные страны имеют гораздо больше ресурсов, опыта и соответствующих условий что бы сосредоточиться на амбициозных показателях по сокращению выбросов, в то время как динамика экономик некоторых развивающихся стран, которые должны преодолеть разницу в жизненном уровне, не позволяет им внедрить дорогостоящие технологии по сокращению выбросов без серьезного социального ущерба. Поэтому, соответствующие национальным условиям меры по предотвращению изменения климата в развивающихся странах должны быть поддержаны Сторонами приложения I посредством укрепления устойчивых процессов передачи наилучших технологий и повышения странового потенциала.</p> <p>Соответствующая помощь представляется также необходимой для стран с переходной экономикой, чтобы преодолеть нехватку современных технологий и опыта.</p>
<p>iv) совместные секторальные подходы и меры в конкретных секторах в целях активизации осуществления пункта 1 с) статьи 4 Конвенции;</p>	<p>Необходимо включить в общий набор определений по сектору ЗИЗЛХ новые определения с тем, чтобы иметь возможность учитывать дополнительную деятельность по восстановлению и сохранению торфяников (аналогично определению «восстановление растительного покрова»). Необходимо разработать методологии, касающиеся восстановления и сохранения торфяников, для включения этой деятельности во второй период действия обязательств.</p> <p>Необходимо дать возможность на добровольной основе включать в Национальные инвентаризации оценки</p>

	<p>выбросов и поглощений парниковых газов на осушенных, деградированных торфяниках и естественных болотных экосистемах, особенно в тех странах, на территории которых имеются значительные площади таких земель.</p> <p>При формировании совместных подходов и мер в секторе ЗИЗЛХ необходимо учитывать, что в последние годы научно-методологическая база оценки выбросов и поглощений водно-болотными экосистемами, включая деградированные торфяники, существенно улучшилась. Необходимо найти компромисс между теоретически возможной и технически осуществимой глубиной инвентаризации парниковых газов в секторе ЗИЗЛХ и установить приемлемую степень неопределенности с тем, чтобы учесть максимальное количество видов деятельности в рамках этого сектора.</p> <p>Секторальные обязательства не должны заменять национальные обязательства. Секторальный подход может реализовываться параллельно с обязательствами по сокращению, принятыми страной в целом. Условия, правила и критерии для принятия и учета выполнения секторальных обязательств могут быть определены позже в новых «Марракешских соглашениях».</p>
<p>v) различные подходы, включая возможности использования рынков, в целях повышения затратноэффективности и поощрения мер по предотвращению изменения климата с учетом различий в условиях развитых и развивающихся стран;</p>	<p>Углеродный рынок и в дальнейшем должен развиваться, обеспечивая больше стимулирующих мотивов для смягчения воздействия на климат. Это предполагает расширение перечня ключевых принципов, с учетом уже имеющихся, посредством совершенствования рыночных механизмов и включения новых категорий проектов. Национальные планы приемлемых мер по смягчению воздействий на климат, проекты в секторе ЗИЗЛХ, добровольные сокращения выбросов, экологическая целостность и секторальный подход должны стать одними из наиболее приоритетных областей, где Сторонам следует работать над возможными дальнейшими усовершенствованиями.</p> <p>Целесообразно ввести принцип кредитования проектов стран, не входящих в Приложение I, через торговлю сокращениями выбросов на основе их Национальных планов приемлемых мер по смягчению воздействий на климат, представляющих собой определенные добровольные обязательства.</p> <p>В этой связи необходимо обратить внимание на возможность объединения всех имеющихся углеродных рынков, включая рынок добровольных сокращений выбросов. Такая «сопряженная» система международной торговли выбросами и сокращениями выбросов существенно расширит рамки потенциальных проектов, и повысит устойчивость глобального углеродного рынка. Необходимо определить требования к системам (стандартам), чтобы появилась возможность для трансформации углеродных единиц, включая единицы добровольных сокращений, из одной в другую.</p>
<p>vi) экономические и социальные последствия мер реагирования;</p>	<p>Одним из опасных последствий применения средств, политики и методологий в области смягчения воздействия на климат является увеличение социальной напряженности в условиях, когда в большом масштабе и ускоренно внедряются высокоэффективные низкоуглеродные технологии, приводящие к высвобождению значительного количества рабочей силы, переориентировать которую в других отраслях стране зачастую не хватает возможностей. Очень быстрая реализация мер по сокращению выбросов может привести к снижению конкурентоспособности, к повышению стоимости товаров и услуг.</p> <p>Подобные отрицательные последствия представляют собой существенные барьеры на пути реализации потенциала смягчения многих развивающихся стран и стран с переходной экономикой. В тоже время, страны с</p>

	<p>развитой социальной инфраструктурой и продвинутой экологической политикой смогут практически безболезненно осуществлять новый вид природоохранной деятельности.</p> <p>Необходимо проанализировать опыт внедрения мероприятий по смягчению воздействия на климат в различных странах. Важным результатом такого анализа должна стать методология оценки последствий и критерии приемлемости отрицательных эффектов при реализации мер по смягчению воздействия на климат.</p> <p>Любая национальная стратегия, направленная на смягчение последствий изменения климата, не должна оказывать отрицательное воздействие на другие Стороны. В частности, право Стороны на участие в механизмах гибкости не должно рассматриваться как ущемление в какой-либо степени прав других Сторон на реализацию этих механизмов.</p>
с) активизации деятельности в области адаптации, включая, в частности, рассмотрение следующих вопросов:	См. пункт (i) ниже
i) международное сотрудничество в деле оказания поддержки незамедлительному осуществлению мер в области адаптации и использования других путей создания возможностей для устойчивого к изменению климата развития и снижения степени уязвимости всех Сторон, с учетом безотлагательных и срочных потребностей развивающихся стран;	<p>Направление части доходов, полученных от сделок на углеродном рынке, на другие глобальные цели помимо целей сокращения выбросов (например, на цели адаптации) может иметь некоторые отрицательные последствия. Прежде всего, очевидно, что меры по смягчению воздействия на климат не менее важны и срочны, чем меры по адаптации, и требуют своевременных и соответствующих ресурсов. Откладывание реализации этих мер из-за недостатка средств приведет в последующем к неисчислимо большим расходам на адаптацию. Приемлемый для всех Сторон процент отчислений от СО и торговли выбросами не сможет решить проблемы наполнения адаптационного фонда, в тоже время, может снизить стимулирование проектной деятельности, дезориентировать владельцев проектов и покупателей сокращений, исказить рыночные цены.</p> <p>Данный вопрос требует дальнейшего изучения, в том числе, в части поиска возможных альтернативных вариантов.</p>
d) активизации деятельности по разработке и передаче технологий для оказания поддержки мерам по предотвращению изменения климата и адаптации, включая, в частности, рассмотрение следующих вопросов:	См. пункты (i) - (ii) ниже
i) эффективные механизмы и усовершенствованные инструменты для устранения препятствий и создания финансовых и других стимулов для активизации разработки технологий и их передачи	<p>Республика Беларусь представляет целесообразным рассмотреть возможность создания нового Вспомогательного органа РКИК ООН или расширить полномочия Экспертной группы по передаче технологий до уровня консультационного центра при Вспомогательных органах РКИК ООН по разработке и передаче технологий.</p> <p>Республика Беларусь считает, что такой орган являлся бы частью эффективной системы разработки, передачи и</p>

<p>Сторонам, являющимся развивающимися странами, в целях расширения доступа к приемлемым по цене экологически безопасным технологиям;</p>	<p>распространения технологий, которая должна выполнять, по крайней мере, следующие функции:</p> <ul style="list-style-type: none"> - подготовку специальных обзоров о существующих технологиях, включая сведения о предполагаемых расходах, рисках, выгодах, ограничениях, а также о необходимой инфраструктуре, персонале, потенциале распространения и т.д.; - оценку потребности принимающей стороны в данной технологии; - оценку возможности адаптации каждой определенной технологии к условиям принимающей стороны; - оценку риска и потенциальных негативных последствий распространения данной технологии в принимающей стороне; - повышение потенциала принимающей стороны для эффективного размещения и использования данной технологии, что включает в себя также создание и поддержание необходимых инфраструктурных элементов; - разработку предложений по реализации наиболее приемлемой схемы финансирования данной технологии в данной стране, включая оценку местных возможностей в производстве ее компонентов и обслуживании; - разработку регулирующих документов, условий и критериев, руководящих принципов и подготовку соответствующих решений Сторон.
<p>ii) пути ускорения развертывания, распространения и передачи приемлемых по цене экологически безопасных технологий;</p>	<p>Страны с переходной экономикой также как и некоторые развивающиеся страны нуждаются в привлечении инвестиционных ресурсов, обеспечении свободного доступа и освоении новых низкоуглеродных технологий. При этом для многих из этих стран не требуется безвозмездное субсидирование мероприятий и программ по смягчению воздействия на климат. Здесь необходимо ориентироваться на инвестиции в виде долгосрочных займов, кредитования и программ двухстороннего сотрудничества в научно-технологической сфере.</p>

[TRANSLATION AS SUBMITTED]

The Ministry of Natural Resources and Environmental Protection
of the Republic of Belarus

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

in accordance with documents FCCC/AWGLCA/2008/17 para 26 (b)
of the Ad Hoc Working Group on Long-term Cooperative Actions
under the UNFCCC

Introduction

The Republic of Belarus welcomes the proposal of Ad Hoc Working Group on Long-term Cooperative Action under the Convention to provide its ideas and proposals on the elements of paragraph 1 of the Bali Action Plan what enables the Parties to determine in which fields their opinions coincide and differ and therefore promote negotiations in year 2009 for achievement of the ultimate goal of the Convention. We suppose that participation of all Parties in exchange of experience in this field is very important for coordination of negotiating process in accordance with document FCCC/AWGLCA/2008/17 para 26(b).

Proposals on the elements of paragraph 1 of the Bali action plan

Ideas and proposals on the elements of paragraph 1 of the Bali Action Plan are presented in Appendix.

Paragraph 1 element	Ideas and proposals
<p>a) A shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention, in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, and taking into account social and economic conditions and other relevant factors.</p>	<p>Principle of common but differentiated responsibility should be taken into account when assessing country and aggregate climate change potential for post-Kyoto period.</p> <p>Developed Annex II Parties should take a lead in achievement of joint emission reduction of Annex I Parties at the level of 25-40 per cent up to 2020 compared to level of 1990.</p> <p>Annex I Parties should elaborate special conditions and a system allowing achievement of such targets in aggregate and with consideration of economic, social and technological capacities of every separate country.</p> <p>The countries with economy in transition, especially those that are not EU members, have distinctive peculiarities which do not allow implementing their potential to proper extent. It ought to expect under these circumstances and without serious incentives, the GHG emission of these countries will continue to grow substantially. Therefore, the conditions and system stated above should be based on decisions stimulating energy efficiency, energy saving and modern technologies transfer in the countries with economy in transition.</p> <p>It is necessary to elaborate maximum favorable treatment for participation in global climate change mitigation efforts for the countries with economy in transition, non Annex I Parties due to some reasons, in case if they wish to adopt voluntary emission reduction commitment.</p> <p>For improvement of a legal framework of long-term cooperation in the field of climate change countries grouping (Annex I and non-Annex I parties) and accordingly differentiating of their commitments should be reviewed based on modern reality.</p>
<p>b) Enhanced national/international action on mitigation of climate change, including, inter alia, consideration of:</p>	<p>see items (i) - (vi) below</p>
<p>i) Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties, while ensuring the comparability of efforts among them, taking into account differences in their national circumstances;</p>	<p>A principle of distribution of efforts in the field of GHG emission reduction among Annex I Parties should be based on a balanced approach taking into consideration such factors as country climate change mitigation potentials, their capabilities under national circumstances, access to flexible mechanisms and historic responsibility. It is suggested to take into account differences between three actually existing groups of Annex I Parties, namely:</p> <ul style="list-style-type: none"> -Group A: Annex II parties and other Western European EU members; -Group B: new EU members – the countries of Central and Eastern Europe, which are finishing their transition to market economy supported by the most industrially developed EU members; -Group C: countries with economy in transition, non-EU members. <p>Group C countries have already made a contribution to climate change mitigation during the period of 1990 to 2008; their emissions per capita are the lowest among other Annex I Parties. Achievement of such rate was connected to huge social commotion and economic expenses. Based on considerable economic losses in the previous period the countries from Group C still experience considerable problems in reduction of carbon intensity of their economies due to lack of knowledge and experience in the field of utilization of low-carbon technologies and shortage of resources for their development or purchase.</p>

	<p>These countries have right to look for support of other Annex I Parties in accordance with decisions 3/CP.13 and 9/CP.13 adopted by the Conference of the Parties at its 13-th Session.</p> <p>System of establishment and monitoring of commitment fulfillment, including methods of base year determination, established in the Kyoto protocol at the current stage shows its efficiency and workability. Moreover, the compliance criteria and system of accounting of quantified commitments has been integrated in UNFCCC system of commitments and accounting and nowadays represents integral and transparent liability system.</p> <p>The only area requiring considerable changes is LULUCF. This sector differs from the other in special conservative indicators of climate impact, which during activities in restoration and absorbers conservation can show even growth of GHG emission, but in following periods - their considerable and sustainable reduction.</p>
ii) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner;	<p>The richest industrial countries have much more resources, experience and capacity to focus on ambitious emission reduction targets, while the economy dynamic of some developing countries that have to eliminate a gap in standards of life does not allow them to introduce expensive emission reduction technologies without serious social threat. Therefore, NAMAs in developing countries should be supported by Annex I Parties through strengthening sustainability of the best available technology transfer and capacity building.</p> <p>The appropriate assistance is deemed necessary to overcome the lack of advanced technologies and experience in the countries with economy in transition.</p>
iv) Cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention;	<p>It is necessary to include in general set of definitions regarding LULUCF new definitions to have possibility to take into account additional activities in peatland restoration and conservation activities (identical to determination of “revegetation”). It is necessary to elaborate methodologies concerning restoration and conservation of peatlands for inclusion of these activities in second commitment period.</p> <p>It is necessary to include, on a voluntary bases, assessment of emission and absorption of GHG at the degraded peatlands and natural wetland ecosystems in National inventories particularly in countries in which large territories of such lands exist.</p> <p>Elaborating joint approach it is necessary to take into account that in the later decade, the scientific and methodological ground for evaluation of the rate of emission and absorption by wetland ecosystems, including degraded ones, has been improved substantially.</p> <p>It is necessary to find compromise between theoretically possible and technically achievable accounting of this balance and set uncertainty level acceptable for Parties to introduce accounting of maximum types of activities in the framework of this sector.</p> <p>Sectoral commitments should not in any case replace national commitment. We suggest that the sectoral approach could be implemented as an alternative in parallel to emission reduction commitments assumed by the country en masse. Condition, rules and criteria for adoption of accounting of fulfillment of sectoral commitments can be determined later in a “new Marrakesh Accords”.</p>
v) Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of	<p>The carbon market shall be further significantly increased while providing more incentives for climate change mitigation. This implies the need to increase the available list of core principles through new market mechanisms and project categories.</p> <p>Nationally appropriate mitigation actions (NAMAs), LULUCF projects, voluntary emission reduction, environmental integrity and sectoral approach should become one of the priority areas where Parties should elaborate possible further improvements.</p>

developed and developing countries;	<p>It deems appropriate to introduce a principle of crediting in non-Annex I Parties through emission reduction trade based on their NAMAs constituting certain voluntary commitments.</p> <p>Thereupon it is necessary to pay attention to possibility of integration of all available carbon markets including voluntary emission reduction. Such an “adjoint” international system of emission trading and emission reductions trading would considerably expand a potential project framework and enhance global carbon market sustainability. It is necessary to determine requirements to systems (standards) to enable possibility for conversion of carbon units, including voluntary reduction units, from one type to another.</p>
vi) Economic and social consequences of response measures;	<p>One of the dangerous consequences of application of tools, policies, measures and methodologies to the field of climate change mitigation is increase of social strain in the conditions when large scale and accelerated introduction of the highly efficient low-carbon technologies leads to release of significant human labor resources, which reorientation and employment in the other fields of activity is often difficult for a country due to limited capacity. Very fast implementation of emission reduction measures can lead to reduction of competitiveness and increase of cost of goods and services.</p> <p>Similar negative impacts are substantial barriers for implementation of climate change mitigation potential for many developing countries and countries with economy in transition. At the same time, the countries with developed social infrastructure and advanced system of environmental policy can almost painlessly implement the new type of environmental protection activity.</p> <p>It is necessary to analyze experience of implementation of climate change mitigation activities in different countries. The important result of such analysis would be a methodology of assessment of consequences and acceptance criteria for negative effects of implementation of climate change mitigation actions.</p> <p>Any national strategy directed to climate change mitigation should not render negative effect on other Parties. Particularly, the legal right of the Party to participate in flexible mechanisms should not be considered as impaction to some extend of the rights of other Parties on implementation of their policy of application of such mechanisms.</p>
c) Enhanced action on adaptation, including, inter alia, consideration of:	see item (i) below
i) International cooperation to support urgent implementation of adaptation actions, including through vulnerability assessments, prioritization of actions, financial needs assessments, capacity-building and response strategies, integration of adaptation actions into sectoral and national planning, specific projects and programmes, means to incentivize the implementation of adaptation actions, and other ways to enable climate-resilient development and reduce vulnerability of all Parties,	<p>Direction of share of proceeds from carbon deals to global goals other than emission reduction (for instance adaptation) can have some negative consequences. Foremost, obviously, climate change mitigation actions are less important and urgent than adaptation actions and require timely and adequate resources. Postponement of implementation of these measures due to lack of resources leads in future to innumerable higher adaptation expenses. Relatively acceptable for all Parties share of proceeds from JI and emission trade can not solve problems of adaptation fund filling and at the same time can reduce project activity stimulation, disorient project owners and deform market prices.</p> <p>This issue requires further study, including search of possible alternative possibilities.</p>

taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods;	
d) Enhanced action on technology development and transfer to support action on mitigation and adaptation, including, inter alia, consideration of:	See items (i) - (ii) below
i) Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;	<p>The Republic of Belarus considers being expedient to discuss possibility of establishing a new UNFCCC subsidiary body or expanding authorities of the Expert Group on Technology Transfer up to the level of the advisory center at UNFCCC subsidiary bodies for development and transfer of technologies.</p> <p>The Republic of Belarus considers that such the body would be a part of effective system of development, transfer and deployment of technologies, which should perform at least the following functions:</p> <ul style="list-style-type: none"> -Development of special reviews on existing technologies, including information on estimated cost, risks, benefits, limitations and also required infrastructure, human resources, diffusion potential, etc.; -Technology needs assessments for the host Party; -Adaptation potential of a given technology in conditions of the host Party; -Assessment of risk and potential negative consequences of deployment of a given technology for the host Party; -Enhancement of the host Party potential in effective accommodation and utilization of a given technology what includes establishment and maintenance of required infrastructural elements; -Elaboration of suggestions on implementation of the most appropriate financial scheme for a given technology deployment in a given country including assessment of local capability in production of its components and their servicing; -Elaboration of regulatory documents, terms and criteria and guidance, and preparation of the respective decisions of the Parties.
ii) Ways to accelerate deployment, diffusion and transfer of affordable environmentally sound technologies;	<p>The countries with economy in transition as well as some developing countries need in attracting investment resources, securing easy access to and assimilating new low-carbon technologies. At the same time, many of these countries do not require gratuitous subsidizing of their climate change mitigation activities and programs. Here it is necessary to focus upon such investments as long-term loans, crediting and programs of bilateral cooperation in the field of science and technology.</p>

PAPER NO. 8A: BOLIVIA

**Commitments for Annex I Parties under paragraph 1(b)(i) of the Bali Action Plan:
Evaluating developed countries' historical climate debt to developing countries**

Introduction

In the context of paragraph 1(b)(i) of the Bali Action Plan, we call on developed countries, including countries that are not Parties to the Kyoto Protocol, to commit to deep emission reductions that are consistent with the ultimate objective of the Convention, reflect their historical responsibility for the causes of climate change, and respect the principles of equity and common but differentiated responsibilities in accordance with the UNFCCC.

Mandate

Paragraph 1(b)(i) of the Bali Action Plan calls on developed countries to undertake:

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

Paragraph 1(b)(i) commits all developed country Parties to the Convention, whether or not they are also Parties to the Kyoto Protocol, to undertake binding obligations to reduce greenhouse gas emissions.

The scale of mitigation commitments for Annex I Parties

Annex I Parties to the Kyoto Protocol are committed to establish further mitigation commitments in accordance with Article 3.9 of the Kyoto Protocol. It is appropriate that these further commitments are quantified under the Kyoto Protocol.

As stated in our submission under the AWG-KP, these obligations must be for a commitment period from 2013 to 2017. They must be quantified on the basis of a clear and objective methodology addressing, inter alia:

- The historic responsibilities of developed countries for current atmospheric concentrations;
- The historic and current per-capita emissions of developed countries; and
- The share of global emissions required by developing countries in order to meet their first and overriding priorities, which are economic and social development and poverty eradication.

Comparability of efforts

Mitigation commitments under paragraph 1(b)(i) must be comparable in scale, timing and legal effect. To ensure comparability of efforts, Annex I Parties that are not Parties to the Kyoto Protocol are called on to undertake quantified emission reduction commitments that, inter alia:

- Are for the period 2013 to 2017;
- Are quantified in terms of the base year of 1990;
- Are subject to comparable provisions for monitoring, reporting and verification; and
- Are subject to comparable to provisions for compliance and enforcement.

Flexibility mechanisms under the Kyoto Protocol shall not be available to non-Parties to the Protocol.

Additional measures for compliance and enforcement

If, after measuring, reporting and verifying, the failure of a developed country to fulfill its reduction commitments is identified then penalties should be applied. This may include increased future reduction commitments by an amount calculated as a multiple of the shortfall in implementation. Financial

contributions may also be assessed as penalties or fines and paid into an enhanced financial mechanism under the Conference of Parties, as proposed by the G77 and China.

In the context of paragraph 1(b)(i) of the Bali Action Plan, we call for efforts by all developed country Parties to the Convention to undertake commitments that reflect their full contribution to the causes and consequences of climate change.

The scale and timing of emission reductions by Annex I countries must be sufficient to ensure that developed countries' historical debt for their excessive past consumption of environmental space, and their continuing excessive per-capita emissions, is fully repaid to developing countries, and this repayment must begin with the outcome to be agreed Copenhagen (see relevant aspects of Appendix for elaboration of the concept of developed countries' climate debt).

APPENDIX

Evaluating developed countries' historical climate debt to developing countries Submission by Bolivia

Introduction

We call on developed countries to commit to deep emission reductions in order to advance the objective of avoiding dangerous anthropogenic interference with the climate system and its consequences, to reflect their historical responsibility for the causes of climate change, and to respect the principles of equity and common but differentiated responsibilities in accordance with the UNFCCC.

The causes and consequence of climate change

Since 1750 the emission of greenhouse gases has increased significantly as the result of human activities. These emissions have accumulated in the atmosphere leading to current atmospheric concentrations, which now far exceed levels dating back hundreds of thousands of years. These concentrations, in turn, are warming the Earth with significant and catastrophic effects.

Current levels of warming are already damaging forest, mountain and other ecosystems, melting snow and glaciers, thinning ice sheets, causing the oceans to rise and acidify, threatening coral reefs and intensifying droughts and floods, fires and extreme weather events. These adverse effects threaten to worsen the damages already produced by the current global warming on the Earth's systems.

The countries most vulnerable to the adverse effects of climate change are developing countries. Climate-induced disasters, water stress, adverse impacts on agriculture, threats to coastlines, ecosystems and infrastructure, and altered disease vectors are already imposing substantial and rising costs, damages and setbacks in development – undermining developing countries' rights and aspirations to development.

The historical cumulative emissions debt of developed countries

Responsibility for the majority of the historical emissions contributing to current atmospheric concentrations and to current and committed future warming lies with developed countries. Developed countries with less than twenty percent of the world's population are responsible for around three quarters of historical emissions. Their current per person emissions continue to exceed those of developing countries by a factor of four. Their accumulated historic emissions on a per person basis exceed those of developing countries by a factor of eleven.

Developed countries – which have contributed disproportionately to the causes of climate change – now seek to appropriate a disproportionate share of the Earth's remaining environmental space. By basing their future emission allowances on their past excessive level of emissions, they seek an entitlement to continue emitting at 70% or more of their 1990 levels through until 2020 (i.e. consistent with reductions of 30% or less). At the same time, they propose limiting developing countries – which most need environmental space in the course of their development – to much lower levels of per person emissions.

The excessive past, current and proposed future emissions of developed countries are depriving and will further deprive developing countries of an equitable share of the much diminished environmental space they require for their development and to which they have a right. By over-consuming the Earth's limited capacity to absorb greenhouse gases, developed countries have run up an "emissions debt" which must be repaid to developing countries by compensating them for lost environmental space, stabilizing temperature and by freeing up space for the growth required by developing countries in the future.

Quantifying developed countries' mitigation commitments

Developed countries' commitments to reduce emissions should be sufficient to address their historical emission debt, minimize their contribution to further adverse impacts on the climate and developing countries, provide sufficient environmental space for developing countries to develop, and conform with the ultimate objective of the Convention.

The scale and timing of these commitments should reflect the latest scientific information and be rooted in the objective, principles and provisions of the UNFCCC and its Kyoto Protocol. They should be quantified on the basis of a clear and objective methodology that reflects, among other factors:

- The historic responsibility of developed countries for current atmospheric concentrations;
- The historic and current per-capita emissions of developed countries; and
- The share of global emissions required by developing countries in order to meet their first overriding priorities which are the economic and social development and poverty eradication.

The establishment of assigned amounts of emissions for developed countries is a question of policy as well as science and must address issues of equity as well as effectiveness. The level of their assigned amounts also bears a close relationship to the extent of their obligations to provide compensation for the effects of climate change. Bearing in mind these considerations, the Annex to this document offers some possible elements of a methodology for evaluating developed countries' emission debt and associated further mitigation commitments.

Emissions and adaptation debts are components of climate and ecological debt

Despite not being responsible for the problem of global warming, developing countries are among the worst affected its adverse impacts. The historical emissions of developed countries, as well as denying developing countries the atmospheric space they need for development, are harming poor countries and people who live daily with rising costs, damages and lost opportunities for development.

These impacts are the direct result of current atmospheric concentrations, which have been caused predominantly by emissions from developed countries. Developed countries are thus responsible for compensating developing countries for their contribution to the adverse effects of climate change as part of an "adaptation debt" owed by developed countries to developing countries.

Developed countries "climate debt" – the sum of their emissions debt and adaptation debt – are part of a broader ecological debt reflecting their heavy environmental footprint, excessive consumption of resources, materials and energy and contribution to declining biodiversity and ecosystem services.

Repaying their climate debt

The climate debt of developed countries must be repaid, and this payment must begin with the outcomes to be agreed in Copenhagen.

Developing countries are not seeking economic handouts to solve a problem we did not cause. What we call for is full payment of the debt owed to us by developed countries for threatening the integrity of the Earth's climate system, for over-consuming a shared resource that belongs fairly and equally to all people, and for maintaining lifestyles that continue to threaten the lives and livelihoods of the poor majority of the planet's population. This debt must be repaid by freeing up environmental space for developing countries and particular the poorest communities.

There is no viable solution to climate change that is effective without being equitable. Deep emission reductions by developed countries are a necessary condition for stabilizing the Earth's climate. So too are profoundly larger transfers of technologies and financial resources than so far considered, if emissions are to be curbed in developing countries and they are also to realize their right to development and achieve their overriding priorities of poverty eradication and economic and social development. Any solution that does not ensure an equitable distribution of the Earth's limited capacity to absorb greenhouse gases, as well as the costs of mitigating and adapting to climate change, is destined to fail.

Developed countries must therefore fulfill their responsibilities through deeper domestic emission reduction commitments than so far considered in the current negotiations, and through all available means to generate the opportunities required for developing countries to achieve their development.

Developing countries are willing to play their part in addressing this common challenge. But any such participation can and must be based on the provisions of the Convention, on a clear understanding of the causes of climate change and its consequences, and on an equitable approach to stabilizing the Earth's climate system and to ensuring a sustainable future.

Annex

Elements of a methodology for evaluating Annex I countries' emission debt and associated mitigation commitments

Quantifying the extent of developed countries' emission debt and their associated future mitigation commitments should take into consideration, among other factors, the historical and proposed emissions by Annex I countries as well as the needs of developing countries for sufficient environmental space to achieve their rights to development.

Historical and proposed emissions by Annex I countries

The extent of developed countries excessive use of the Earth's limited environmental space can be illustrated by examining Annex 1 emissions (actual historical emissions plus a projection of future emissions through 2050), and by comparing it with an allocation based on equal per person emissions.

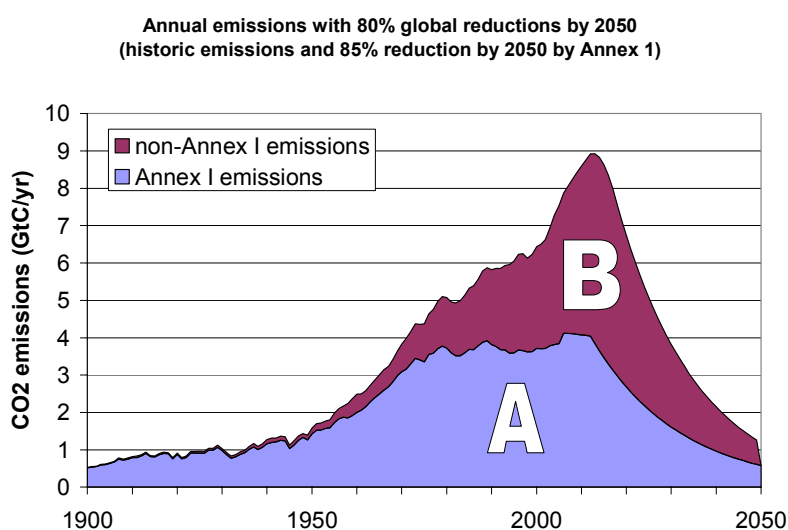


Figure 1

The total emissions of Annex I countries (Area A) will greatly exceed emissions of non-Annex I countries (Area B), even assuming that future emission reduction targets proposed by some Annex I countries are adopted. In particular, these figures assume a 30% reduction by Annex I countries from 1990 levels by 2020, and an 85% reduction by 2050 (see figure 1)¹.

In contrast, if the global emissions in each year were shared equally on a per person basis in the past through to 2050, the emissions of Annex I countries (Area C) and non-Annex I countries (Area D) would be significantly different, respectively, assuming a global emission reduction of 80%.

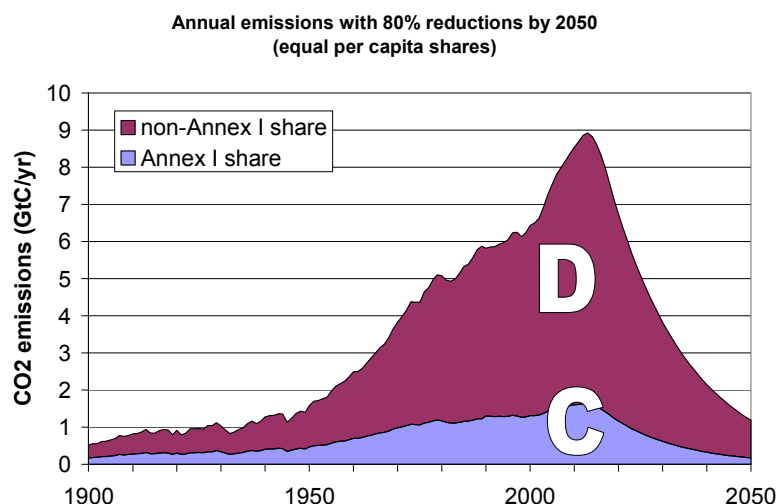


Figure 2

Note that this global emission pathway would still entail a considerable risk of exceeding 2°C, and major climate impacts and associated need for adaptation) (see figure 2).

Note also that a per-capita allocation to developed countries would still be advantageous to them as their higher levels of emission intensity, technology and financial capacity allow them to secure greater levels of welfare for each unit of carbon emitted.

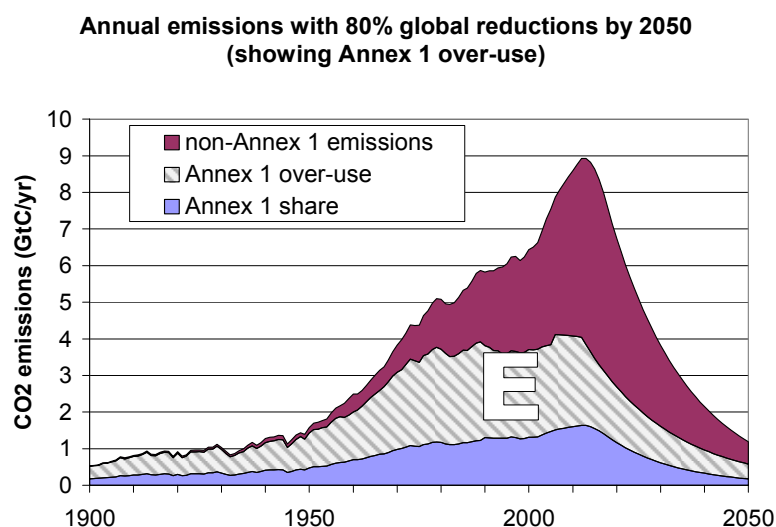


Figure 3

The difference between actual/projected emissions and a fair allocation illustrates Annex I countries' excessive use of the Earth's limited environmental space (see figure 3). Specifically, it demonstrates that a wealthy minority has already over-consumed a considerable amount of environmental space by 2050 (Area E), denying it to the poorer majority who needs it in the course of their development.ⁱⁱ

Just as proposals by Annex I countries fail to address their responsibility for historical emissions, they also fail to evaluate the environmental space needed by developing countries in the future.

The needs of developing countries

In evaluating this need, projections of emissions of developing countries associated with their economic growth and development pathways can be considered. In the absence of technological and financial support, the emissions pathway is shown as “development without support” (see figure 4). Respecting a right to development would imply that the developing countries should be allocated the environmental space necessary to satisfy their development and poverty eradication needs, given the amount of financial and technological support that is made available.

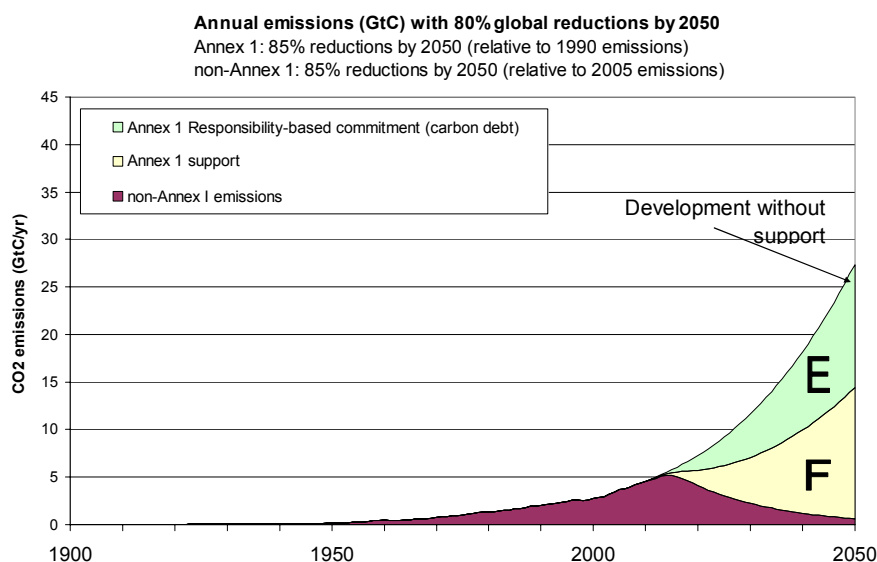


Figure 4

Different assumptions about the development pathway for developing countries will affect the level of support required to enable emissions to be adequately mitigated without losses of welfare in developing countries. **A moderate development pathway would require support to enable considerable reductions by 2050 (see figure 4).ⁱⁱⁱ A higher growth pathway (e.g. 5.5% growth per year) would require support to enable reductions of a higher level by 2050 (see figure 5).**

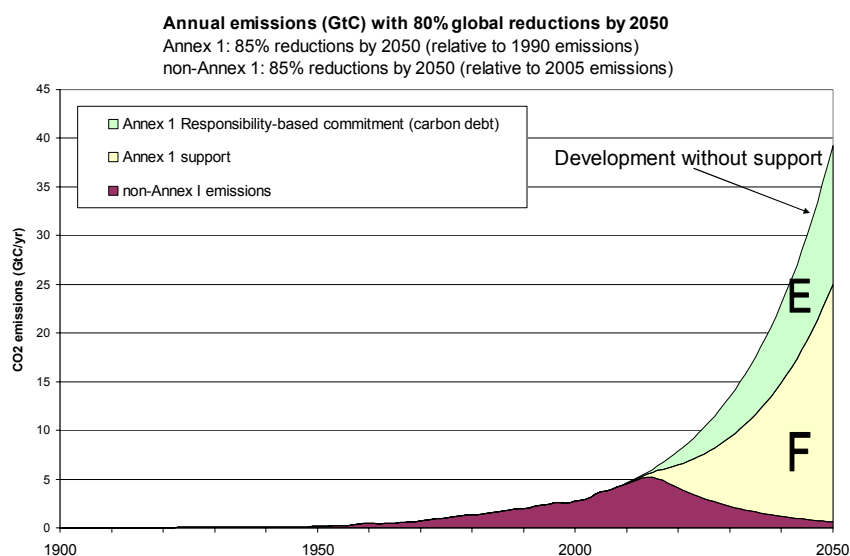


Figure 5

Based on such pathways, and the need for environmental space they imply, an ambitious package of financial and technological transfers is clearly required from Annex I Countries to help developing

countries reduce their emissions without undermining development. The necessary lower global emissions path demanded by the science would thereby be enabled.

Quantifying commitments for Annex I countries

Mitigation commitments for Annex I countries must, at a minimum, reflect their historical responsibility for the causes of climate change and the needs of developing countries for adequate environmental space in future. Developed countries must repay developing countries in the environmental space required for their development by making emission reductions as deep as technically possible. The more the repay now; the less they repay later.

To the extent it is not technically possible to repay the full measure of debt in terms of environmental space, some part of may need to be repaid by Annex I countries in the form of financing and technology (Area E) (i.e., as recognition of the greatly responsibility of Annex I for the problem of climate change). The remainder is justified by the greater financial and technological capability of Annex I countries (Area F). Together, these reflect the UNFCCC principles of countries acting “on the basis of equity and in accordance with their common but differentiated responsibilities”.

In line with approaches such as these, Annex I countries’ further commitments under the Kyoto Protocol, as well as the full, effective and sustained implementation of their commitments under the UNFCCC, must be based on a fuller evaluation of their historical emissions debt and an appropriate sharing of the remaining available environmental space among Annex I and non-Annex I countries, taking into account their accumulated emissions and the needs of developing countries for adequate environmental space.

It must also be based on fulfillment by Annex I countries of their commitments to provide the full incremental costs of implementing measures covered by Article 4.1 of the Convention. These include full incremental costs associated with the “development, application and diffusion, including transfer, of technologies, practices and processes to control greenhouse gas emissions” and the formulation and implementation of “national and, where appropriate, regional programs containing measures to mitigate climate change”.

Reference: Calculations based on dataset “National CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2005”, August 27, 2008, Gregg Marland, Tom Boden, Robert J. Andres. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, <http://cdiac.ornl.gov>

ⁱ This global scenario establishes a emission budget for the period 1800 and 2050 and assumes a global emission reduction of 80% from 1990 levels by 2050, corresponding to a low-moderate reduction which still results in a significant risk of exceeding 2°C (and associated adaptation impacts and needs in developing countries). We note that this scenario is based on proposals by the European Union for emission reductions by; Bolivia has proposed a first commitment period ending in 2017.

ⁱⁱ This constitutes part of the emissions debt owed to developing countries, which would be larger when adjusted for differing levels of technology and capacity. Developed countries, with higher historical and current levels of capacity and technology are able to secure greater levels of welfare for each unit of emissions allocated to them.

ⁱⁱⁱ This “development without support” emissions pathway is based on Sheehan (2008) as cited in den Elzen and Hohne (2008)

PAPER NO. 8B: BOLIVIA

**Proposal on REDD-plus financing under the
G77 and China proposal on
Financial Mechanism for Meeting Financial Commitments under the Convention**

Objective

This proposal seeks to define a framework for the delivery of financial resources for REDD-plus actions under para 1(b)(iii) of the Bali Action Plan, consistent with and under the G77 and China Financial Mechanism proposal (referred to as 'the proposed mechanism'), which seeks to operationalise an effective financial mechanism under the COP.

The proposed mechanism is one example on how to fund the agreed full incremental costs for the implementation of developing countries' commitments under Article 4.1 which includes mitigation activities, and in particular, Article 4.1 (d) - that deals with the commitment of all Parties to promote sustainable management; and promote and cooperate in the conservation and enhancement of sinks and reservoirs of all greenhouse gases, including forests ecosystems.

Accordingly, the principles, elements and design and structure of the proposed mechanism will apply to the REDD-plus actions.

Rationale:

1. A fund based mechanism allows for equitable distribution of funds.
2. It will not allow for off-set mechanisms.
3. Is more likely to ensure environmental integrity.
4. Is able to protect the rights of indigenous peoples and local communities as there is no transfer of rights of carbon ownership to the market.
5. Ensures sovereignty and national as well as local control over REDD-plus activities. Where the REDD plus activities must be framed under the national laws and policies and to not affect the national interests.
6. Forest conservation can be funded, including adaptation activities related to forests.

Elaboration of the design and structure

As stated under the proposed mechanism, the COP is to decide on the policies, programme priorities and eligibility criteria for financing and the COP and Board (established under the proposed mechanism) shall establish specialized funds, and funding windows under its governance, and a mechanism to link various funds. Further, each of the separate funds may be advised by an expert group or committee, which could also be supported by a technical panel or panels addressing specific issues addressed by the fund.

Consequently,

- a funding window or specialised fund can be established for REDD-plus activities as set out under para 1(b)(iii) of the BAP.
- In addition, an expert group or committee can be established to facilitate the implementation of such activities supported by a technical panel if needed.
- The establishment of such a funding window or specialised fund supported by an expert group or committee as above must ensure the predictable, adequate and timely access to financial resources for developing countries for the implementation of Article 4.1(d) of the Convention.

Elaboration of eligibility criteria

Some eligibility criteria for consideration should include the following:

1. Support for proposals that address the underlying causes of forest loss, including actions within but not limited to the forest sector;

2. Proposals that guarantee lasting protection of natural forests and reduction of deforestation and degradation, including policy, institutional and legislative reforms, enhanced forest law enforcement and improved forest governance, and strengthened recognition of Indigenous Peoples' and community rights, regardless of whether the impact of these measures can be immediately quantified in terms of carbon emission units;
3. Proposals that do not allow industrial-scale logging to benefit from financing for REDD-plus activities;
4. Proposals that do not promote or finance conversion of natural forests to plantations;
5. Lasting reduction of emissions from deforestation and forest degradation is not possible without the full and effective participation of forest-dependent Indigenous Peoples and local communities. There is increasing scientific evidence that forest areas controlled by the local communities that live in and depend on them are less susceptible to deforestation and degradation. Hence, measures must respect and promote the rights and interests of Indigenous Peoples and local communities, including the right to free, prior and informed consent (FPIC), in its design and implementation, in full compliance with relevant international human rights conventions and applicable national laws, including *inter alia*, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Convention on Biological Diversity (CBD), as well as other relevant international, customary and national law;
6. Proposals are developed and implemented with the active involvement of particularly Indigenous Peoples, local communities and civil society in every step of the process;
7. Proposals and activities that promote good governance, in particular with respect to forest policies and law enforcement;
8. Proposals and activities that promote and/or ensure transparent and participatory mechanisms to prevent or resolve conflicts over access, use, and ownership rights that could arise during the development and/or implementation of REDD-plus related activities.

PAPER NO. 9A: BRAZIL

Submission from Brazil on subparagraph 1.b.i of the Bali Action Plan

(mitigation by Annex I countries)

The Bali Action Plan calls for enhanced national/international action on mitigation of climate change. Annex I countries, who have the responsibility of leading international mitigation efforts, must enhance their efforts by means of ambitious, economy-wide, quantified emission reduction commitments for all. National actions must be directed towards the fulfillment of a quantified emission reduction commitment, otherwise they will not help to ensure an adequate contribution by Annex I countries to the global mitigation effort.

As the Bali Action Plan has a mandate to define enhanced action, it cannot generate a result that reduces the level of mitigation ambition and legal rigor of current commitments under the Kyoto Protocol. The quantified emission reduction commitments that are being negotiated for Annex I Parties in the second commitment period of the Kyoto Protocol are the reference for the mitigation commitments to be defined for non-Kyoto Protocol Annex I Parties under subparagraph 1.b.i of the Bali Action Plan.

The Bali Action Plan establishes a comparability requirement for the efforts of all Annex I Parties. Such a requirement does not exist for the negotiations under the AWG-KP. Therefore, the result of 1.b.i must be comparable to the result of the AWG-KP, not the other way around. This confirms that, without a concrete and ambitious result in the AWG-KP negotiations, comparability cannot be established and a result in the AWG-LCA negotiations will not be possible. Mitigation under 1.b.i must be elevated to the level of mitigation ambition and legal rigor of the Kyoto Protocol.

The concept of “nationally appropriate”, regarding Annex I countries, must be compatible with quantified emission reduction commitments for all Annex I countries. Specific actions by Annex I countries will be nationally appropriate and will reflect national circumstances, but their sum result, in each Annex I country, should be directed towards fulfilling a economy-wide, quantified emission reduction commitment. Subparagraph 1.b.i does not allow for a bottom-up approach, by which each developed country would select the nature of commitments it wishes to adopt. This would not suffice to ensure comparability or the level of mitigation ambition needed from developed countries as a group.

Comparability of form is ensured as all Annex I countries adopt economy-wide, quantified emission reduction commitments. Comparability in magnitude must also be ensured. The magnitude of mitigation by each Annex I country must reflect its historical responsibility for global temperature increase and the magnitude of mitigation by Annex I countries as a group should allow for compliance with ambitious midterm and long term mitigation targets. The same compliance requirements should also be applied for all Annex I countries, as a necessary aspect of comparability.

What is measured, reported and verified, regarding Annex I countries, is compliance with economy-wide, quantified emission reduction commitments. To ensure the same conditions of measuring, reporting and verifying, Kyoto Protocol rules should be applied for all Annex I countries. This includes articles 5 (estimation of emissions and removals), 7 (information on compliance with commitments), 8 (review by expert teams) and associated guidance defined by the COP.

PAPER NO. 9B: BRAZIL

**Submission from Brazil on subparagraph 1.b.ii of the Bali Action Plan
(mitigation by non-Annex I countries)**

Non-Annex I countries will contribute to “enhanced national/international action on mitigation of climate change” (Bali Action Plan, paragraph 1.b) by means of nationally appropriate mitigation actions (NAMAs), in the context of sustainable development. These NAMAs would be voluntarily proposed by non-Annex I countries and supported, through financing and technology transfer, by Annex I countries. These NAMAs under 1.b.ii and the support they receive should both be measured, reported and verified, as indicated in the Bali Action Plan.

These NAMAs under 1.b.ii are distinct from the significant mitigation actions that non-Annex I countries have been implementing based on their own resources. Recognition of unilateral actions by non-Annex I countries is important, but it falls outside of the framework defined under subparagraph 1.b.ii.

A NAMA under 1.b.ii is clearly distinct from a quantified mitigation commitment. Therefore, what will be measured, reported and verified under 1.b.ii will be the result of the proposed action, nationally measured in terms of direct emission reductions. This result is not based on the definition of hypothetical emission baselines.

Brazil supports the proposal of a registry as a framework both for NAMAs under 1.b.ii and for the support they receive from developed countries. Non-Annex I countries would voluntarily propose actions for the registry, along with an estimate of the international support needed for such actions and their expected mitigation result. Information in the registry should allow for the confirmation that specific support has been channeled to a specific action. Once this channeling has been confirmed, both support and action would become “effective” within the registry simultaneously.

Mitigation in the registry should be balanced. The registry should include NAMAs that cover several different areas and should be open to the participation of all developing countries wishing to participate. One example of an area that should be included in the registry is that of forest activities. Brazil considers that forest activities can offer an important contribution within the registry and that significant financing and technology from developed countries should be directed towards such activities.

The results of NAMAs under 1.b.ii should be measured, reported and verified according to national measuring and reporting procedures and UNFCCC verification. National measuring and reporting would present direct emission reductions produced by the NAMA, without consideration of hypothetical baselines.

The registry would not replicate CDM procedures. It would allow for large-scale mitigation programs, beyond projects. Financial support within the registry would not generate offsets, as the mitigation generated by NAMAs within the registry must be additional, in a context of enhanced action, to the mitigation generated by the CDM, the domestic effort of Annex I countries and the domestic unilateral actions of non-Annex I countries that decide to implement such actions.

As the registry proposal is developed, it is important to note that support from developed countries for mitigation, under the Bali Action Plan, should not be channeled solely to actions that generate direct emission reductions. In other words, such support must also be channeled outside of the registry structure, in order to enhance initiatives in areas such as capacity building and institutional strengthening. These initiatives must receive greater support, without associated efforts to calculate a direct emission reduction result.

PAPER NO. 9C: BRAZIL

SUBMISSION OF BRAZIL ON ENHANCED ACTION ON ADAPTATION AND ITS MEANS OF IMPLEMENTATION, IN THE CONTEXT OF THE BALI ACTION PLAN

The Government of Brazil welcomes the opportunity to submit views on elements of a draft negotiating text on enhanced action on adaptation and its means of implementation, which is an essential pillar of the Bali Action Plan.

Brazil believes that the outline below, with related elements, should be reflected in the draft negotiating text that will be provided by the Chair of the AWG-LCA. It is worth highlighting that these elements are complementary to and consistent with the G-77 and China proposals on financing and technology under the AWG-LCA.

RATIONALE OF A FRAMEWORK FOR ADAPTATION AND ITS MEANS OF IMPLEMENTATION

Sustainable development and building resilience are the best and lasting approach to adaptation to the impacts from climate change. In this context, a comprehensive and flexible approach for enhanced action on adaptation and its means of implementation, including finance, technology and capacity-building, now, up and beyond 2012, must be defined.

The fact that the adaptive capacity to climate change is uneven across countries requires enhanced international cooperation to face increasing adaptation needs.. This fact was acknowledged by the Parties to the UNFCCC through the adoption of paragraph 1(c) of the Bali Action Plan. Further action is needed for the full implementation of articles 4.3 and 4.4 of the Convention, which determine that Annex II Parties will assist developing countries in coping with climate impacts.

Current barriers to implementing adaptation include knowledge gaps, impediments to flows of knowledge and information relevant for adaptation decisions, and, most importantly, insufficient resources available for building adaptive capacity and translating them into action in developing countries.

The development of a comprehensive and robust framework for adaptation is a first step for enhanced action under the Convention. The elaboration of such a framework should take into account lessons learned from the “Nairobi work programme on impacts, vulnerability and adaptation to climate change”, which is expected to be concluded in 2010. Crucial in the framework is that it increase capacity to translate data into information for users and, thus, information into action.

OBJECTIVE

To establish a comprehensive and structured approach to enhance action on adaptation under the Convention, including, *inter alia*, actions identified in the Bali Plan of Action, paragraph 1 (c).

To establish a comprehensive and structured approach to enable, support, facilitate and implement adaptation actions by addressing the predictable, stable, adequate and timely flow of new and additional financial resources and development, deployment, diffusion and transfer of technology to support national, sub-regional and regional adaptation activities and programmes to address the adverse effects of climate change in all developing countries, taking into account the urgent and immediate needs of developing countries defined as particularly vulnerable under the Convention, specially the LDCs, SIDs, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, as well as those adaptation activities that need to be implemented over a longer time horizon.

The comprehensive and structured approach must support, on an ongoing basis, efforts to enhance national capacity to incorporate adaptation considerations into the national development process; and to implement stand-alone adaptation efforts.

PRINCIPLES

Key principles for enhanced action on adaptation and means of implementation include:

- principle of common but differentiated responsibilities under the Convention and be strictly guided by equity;
- establish new, additional and predictable financial resources separate and apart from ODA that are supported by appropriate institutional mechanisms;
- promote coherence in the way that adaptation issues are addressed under the UNFCCC;
- projects and programmes on adaptation to the adverse effects of climate change must be country-driven;
- implementation of adaptation actions should take into account specific characteristics of sub-national and national, and sub-regional and regional vulnerability assessments;
- cover full costs for adaptation technologies and for stand-alone adaptation projects.

SCOPE

- be comprehensive, including vulnerability assessments, planning and implementation;
- distinguish between, and balance the needs for (i) adaptation to short-term climate shocks, due to increasing numbers of extreme events related to climate change, including adaptation to the impacts of unavoidable climate change; and (ii) adaptation to long-term shifts in climate change;
- distinguish between, and balance the needs for finance for adaptation programmes that are (i) integrated with development planning; and (ii) stand-alone programmes which are additional to national development planning, and which should be financed at full costs;

MEANS OF IMPLEMENTATION: PROVISION OF FINANCIAL RESOURCES, TECHNOLOGY, CAPACITY-BUILDING AND KNOWLEDGE SHARING

FINANCIAL RESOURCES

The comprehensive and structured approach on adaptation must be seen as complementary to and consistent with the Group's proposals of financing and technology under the AWG-LCA, given that appropriate means of implementation must be provided in terms of finance, technology, capacity building and knowledge sharing. Enhanced implementation of the adaptation provisions of the Convention will require significant new financial resources. Financing for adaptation should be considerably increased in order to redress the balance in the allocation of funds under the climate change regime.

Financing for the consolidated work programme under the comprehensive and structured approach must:

- be predictable and stable, new and additional, adequate and timely, for the implementation of nationally determined adaptation priorities, both urgent and long term,;
- ensure the timely flow of new and additional resources to address the immediate and urgent national adaptation activities in particularly vulnerable countries, as well as those activities that need to be implemented over a longer time horizon;
- be provided from the assessed and mandatory contributions of developed countries as part of their commitments under the UNFCCC;
- be supported by new and innovative international and regional mechanisms to ensure predictable financing;
- not jeopardize the developing countries' efforts to alleviate poverty as part of sustainable development planning;
- enable and support efforts, including high-priority ones, on an ongoing basis, to enhance national capacity to incorporate adaptation concerns into the development process;
- be substantially scaled up to match with needs and ensure adequacy and equity in allocation of funds for adaptation, including the mobilization of new resources, beyond the existing funds under the Convention and the Protocol; and
- go beyond the integration of adaptation into the development process, include stand alone adaptation projects and be separate and apart from ODA (Official Development Aid) channels;
- ensure direct access to financial resources.

TECHNOLOGY

Technology support for the consolidated work programme under this comprehensive and structured approach must:

- take into account sector specific adaptation technologies and, where appropriate, incorporate ecosystem-scale intersectoral linkages;
- address the need for research and development, deployment, diffusion and transfer of appropriate adaptation technologies;
- enhance endogenous adaptation technologies
- enable technology development, deployment, diffusion and transfer, and capacity-building and knowledge transfer, including social learning, enabling environments and information dissemination and sharing; and
- cover full costs for technology for stand-alone adaptation projects.

CAPACITY BUILDING

Capacity building — which must be considered in conjunction with knowledge sharing actions identified below — for implementation of adaptation programmes must be a central element of the consolidated work programme. The comprehensive and structured approach for adaptation must:

- establish national and regional centers, or strengthen existing ones, which could assist Parties to build endogenous capacity;
- include a package of assistance to support the implementation of NAPAs including financial, technical, capacity building and institutional support;
- include a 3-year pilot phase of “adaptation activities implemented cooperatively” to catalyze rapid learning about adaptation “good practice “ by supporting enhanced implementation of demonstration projects, programs and policies in vulnerable countries and communities;
- include capacity-building for operational planning of adaptation including detailed project designs, costing of adaptation, and increase of adaptive capacity, among others.

KNOWLEDGE SHARING

The comprehensive and structured approach for adaptation must enhance knowledge and information sharing through:

- strengthening of national or regional centres to coordinate and disseminate information on best practices;
- promotion of professional exchange between technical personnel from different countries and regions;
- promotion of professional development opportunities, through scholarships, fellowships and access to other forms of training;
- strengthening of information networks;
- establishment and maintenance of databases and repositories of adaptation-related information;
- preparation and dissemination by UNFCCC of compilations and syntheses of best practices in adaptation;
- support for public information and awareness-raising activities at national level;
- publication of peer-reviewed documents and journals;

ADAPTATION ACTIVITIES

Categories of adaptation activities that must be enabled and supported include, *inter alia*:

- Enabling activities including, *inter alia*, institutional strengthening, learning-by-doing, capacity-building, knowledge-sharing, planning and design options, evaluation activities including ecosystem-based adaptation activities, where appropriate;
- Activities related to reducing vulnerabilities;
- Resilience-building through adaptation projects and programmes;
- Rehabilitation (and compensation) for loss and damages.

IMPLEMENTATION ARRANGEMENTS

Implementation arrangements must include, *inter alia*, the following:

- build access to means of implementation including finance, technology, capacity building, and knowledge sharing for adaptation at national, sub-national, regional and sub-regional levels;
- develop appropriate linkages with other national, sub-regional, regional and international bodies and stakeholders that are implementing adaptation and related activities;
- establish national and regional centers, or strengthen existing ones, which could assist Parties to build endogenous capacity for, *inter alia*: i) the development of analytical tools to enable scenario generation and downscaling for current and future impact assessments; ii) the research, development and transfer of adaptation technologies, including for, *inter alia*, in the areas of food, forestry, water resources, human health, industry, human settlements and society; iii) awareness raising; iv) support of pilot projects; and v) publication of studies on adaptation.
- establish a mechanism, under the Convention, which could enable and support the creation of partnerships among companies and research institutions of developed and developing countries for adaptation technologies and the implementation of adaptation activities.

MECHANISM TO ADDRESS LOSS AND DAMAGE INCLUDING INSURANCE

A mechanism to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change must be established, in accordance with paragraph 1.c (iii) of the Bali Plan of Action. Consideration of transfer mechanisms such as insurance can also be taken into account, in accordance with paragraph 1.c (ii) of the Bali Plan of Action.

PAPER NO. 9D: BRAZIL

Submission from Brazil on a Shared Vision for Long-Term Cooperative Action

paragraph 1.a of the Bali Action Plan

The shared vision is a common understanding on the long-term cooperative action that Parties need to undertake and on the results they must achieve to ensure the full, effective and sustained implementation of the Convention, with a view to achieving its ultimate objective. The shared vision must be comprehensive, covering the full scope of long-term cooperative action.

The shared vision should include a number of essential consensus points, based on the provisions and principles of the UNFCCC, on issues such as the level of international financial and technological support needed for ambitious actions in mitigation and adaptation and the need to ensure adequate conditions for sustainable development, the achievement of which is an important part of the ultimate objective.

The shared vision includes, as indicated in the Bali Action Plan, a long-term global goal, which is useful as an aspirational reference for international actions to face climate change. The long-term global goal must be defined in accordance with the principles and provisions of the Convention, including historical responsibility, equity, common but differentiated responsibilities and respective capabilities and the legitimate priority of achieving sustained economic growth and eradicating poverty in developing countries.

The long-term global goal should be ambitious, based on the best science and updated accordingly. This updating should reflect progress in our knowledge of the potential effects generated by different levels of global temperature increase.

The long-term global goal should be defined in terms of global temperature increase. Initially, this goal could be set at 2° C and updated according to progress in scientific knowledge. To allow for this updating, the 2° C goal would be broken down into partial targets: initially, 0,2° C temperature increase per decade over ten decades. Every ten years, the partial target would be evaluated, with a view to possible redefinition, taking into account advances in scientific knowledge and the reduction of uncertainties.

It is important not to attribute to science definitions which are not scientific, such as the identification of a specific global emission pathway as the sole pathway that can maintain global temperature increase below a certain level. Avoiding misleading definitions will be important to ensure that we advance towards what is needed: an ambitious long-term goal to control global warming.

PAPER NO. 10: CANADA

Inputs to the Negotiating Text for Consideration at the

Sixth session of the AWG-LCA

April 2009

A Shared Vision for Long-term Cooperative Action

Ref: Bali Action Plan 1(a)

All Parties should cooperate to build a low-carbon global economy that ensures continued growth and sustainable development, increases global supplies of secure, and affordable clean energy, and strengthens the capacity of all Parties to adapt to the adverse effects of climate change. All Parties shall support long-term cooperative action to achieve an aggregate reduction in global greenhouse gas emissions of at least 50% by 2050.

Enhanced Action on Mitigation

Ref: Bali Action Plan 1 (b) (i) (ii)

All Parties, taking into account their common but differentiated responsibilities and respective capabilities, their specific national and regional development priorities, objectives and circumstances, and their mitigation potential, with a view to achieving an aggregate reduction in global greenhouse gas emissions of at least 50% by 2050, shall:

- i. Establish, regularly update and submit in writing to the Secretariat a long-term national greenhouse gas emissions limitation or reduction pathway for regular review by the Conference of the Parties;*
- ii. Develop, regularly update and submit in writing to the Secretariat a verified national inventory¹ of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol for regular review by the Conference of the Parties;*
- iii. Formulate, regularly update and implement the contents of national schedules annexed to this agreement, which shall include long-term national greenhouse gas emissions limitation or reduction pathways, quantified emissions limitation or reduction commitments for 2020, and the measureable, reportable and verifiable mitigation policies and measures designed to meet those commitments, subject to regular review by the Conference of the Parties;*
- iv. Register nationally appropriate mitigation actions that require support by technology, financing and capacity-building cooperation, subject to measurement, reporting and verification, and regular review by the Conference of the Parties; and*
- v. Cooperate, as appropriate, to enable mitigation at the least economic cost through the use of environmentally effective market based instruments.*

Enhanced Action on Adaptation

Ref: Bali Action Plan 1(c)

The Convention should continue to play a catalytic role in recognizing and encouraging cooperative action by all Parties and by relevant international, regional and national organizations and institutions in order to reduce the adverse effects of climate change and build resilience to its impacts, guided by the following:

- i. Cooperative action on adaptation should be country-driven and implemented in the context of national sustainable development priorities and plans;*

¹ Convention Articles 4, 7.2, 9.2(b), 10.2 and 12: greenhouse gas emission inventories shall be documented and consistent with IPCC guidelines, assessed for uncertainties, and subject to quality control and assurance and verification.

- ii. *Cooperative action should place a priority on assistance to those most vulnerable to the adverse effects of climate change and least able to adapt to its impacts, particularly small island developing states and least developed countries.*²

*All Parties, in order to enhance understanding and cooperative action on adaptation*³, shall:

- i. *Promote strong enabling environments at the national level, including appropriate policy, legal and regulatory frameworks, to increase flows of investment and financing and enhance communication and the sharing of experience, technologies and tools;*
- ii. *Scale up data collection and availability to ensure that adaptation planning at all levels is based on a solid foundation of scientific and technical knowledge;*
- iii. *Exchange information and knowledge at the national, regional, and international level in a manner to facilitate sharing of best practices and lessons learned;*
- iv. *Employ a range of decision making tools and methodologies for vulnerability assessments, natural resource management, and land use planning, in order to reduce risks and build resilience; and*
- v. *Integrate climate change considerations into disaster risk reduction, poverty reduction, and sustainable development, in a manner that maximizes synergies and avoids duplication of efforts*⁴.

Enhanced Action on Technology Development and Transfer

Ref: Bali Action Plan 1 (d)

All Parties should cooperate to develop, demonstrate, deploy and diffuse existing and innovative environmentally sound technologies to reduce global anthropogenic greenhouse gas emissions and build resilience to climate change impacts. Recognizing the critical role of private sector investment, capacity and expertise, all Parties shall:

- i. *Undertake national actions to support the development, demonstration, deployment and diffusion of environmentally sound technologies through, inter alia, assessment of technology needs and implementation of supportive legal and policy frameworks;*
- ii. *Enhance and strengthen international technology cooperation, including existing mechanisms and tools, through investments, as appropriate, to support international development, demonstration, deployment and diffusion of environmentally sound technologies; and*
- iii. *Recognize international technology cooperation efforts, including those external to the Convention, as contributions to the fulfillment of commitments under the Convention.*⁵

² Convention Articles 4.4; 4.9

³ Convention Article 4.1 (e) (h)

⁴ Convention Article 8.2(e); BAP 1(c)(v); 2/CP.11

⁵ Convention Articles 4.1c, 4.5 and 11.5

PAPER NO. 11: CHINA

**CHINA'S SUBMISSION ON ELEMENTS TO BE INCLUDED IN THE DRAFT NEGOTIATING
TEXT OF LCA**

24th April 2009

China welcomes the opportunity to submit additional views on paragraph 1 of the Bali Action Plan in accordance with document FCCC/AWGLCA/2008/17, paragraph 26 (b) and submits the following as elements to be included in the negotiating text:

1. A shared vision for long-term cooperative action

- a) The discussion on a shared vision for long-term cooperative action is an exchange of views or ideas about how to enable the full, effective and sustained implementation of the Convention, focusing on the means to implement long-term cooperative action under the framework of the Convention and the four building blocks of the Bali Action Plan, namely, mitigation, adaptation, technology development and transfer and financing.
- b) A shared vision is for long-term cooperative action, such a vision shall be guided by the ultimate objective of the Convention, which consists of the following three aspects: to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system; to adapt to the impacts of climate change; and to ensure sustainable development.
- c) A shared vision for long-term cooperative action shall be comprehensive and include mitigation, adaptation, finance, technology as well as sustainable development.
- d) A shared vision shall be guided by the principles of common but differentiated responsibilities and equity, which are established by the Convention to guide the international community in addressing climate change and shall be the essential guiding principles to carry out the shared vision for long-term cooperation.
- e) Discussions on a long-term global goal of emission reductions under the shared vision shall focus on how to ensure and enable the implementation of mitigation and adaptation actions. The most urgent requirement at present is to set the mid-term emission reduction target for developed country Parties, rather than a general long-term global goal. Only with such mid-term target being clearly determined, is it meaningful to talk about any long-term goals for emission reductions. All developed country Parties to the Convention shall commit to reduce their GHG emissions by at least 40% below 1990 levels by 2020.
- f) The right to development is a basic human right that is undeprivable. Economic and social development and poverty eradication are the first and overriding priorities of the developing countries. The right to development of developing countries shall be adequately and effectively respected and ensured in the process of global common efforts in fighting against climate change. Developed country Parties shall have deeper cuts on their GHG emissions so as to ensure adequate spaces for developing countries to achieve their goals of substantive development and eradication of poverty.

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

RE 1(b) (i) of the Bali Action Plan:

- a) Developed country Parties shall undertake deeper cuts in their GHG emissions to reflect their historical responsibility and current science, and to allow developing countries development space.
- b) Given historical responsibility, equity and development stage, the Annex I Parties as a group shall reduce their GHG emissions by at least 40% below 1990 levels by 2020.
- c) Each developed country shall undertake individual quantified emission reduction target, and each developed country shall adopt effective policies and take concrete actions to achieve the target.
- d) The commitments by developed country Parties shall be comparable, in particular in terms of

emission reduction targets, which include:

- Comparability of commitments: must reflect in relevant policies, measures, actions and targets;
 - Comparability of targets: shall be same in nature - quantified and legally-binding
 - Comparability of targets: shall be approximate in magnitude
 - Comparability of targets: shall also have the same procedures for compliance and monitoring like those under the *Kyoto Protocol*
- e) The commitments and targets by developed countries shall be measurable, reportable and verifiable (MRV):
- MRV shall be applicable to all relevant policies, measures and actions
 - MRV shall be applicable to progress and effect of implementation of commitments and targets
 - The MRV procedures and methods shall be based on:
 - National GHG emissions inventory
 - National communication
 - Relevant *Kyoto Protocol* procedures

RE 1(b) (ii) of the Bali Action Plan:

- f) Nationally appropriate mitigation actions by developing countries in para 1(b)(ii) of BAP shall be country-driven, in conformity with the legitimate and prior needs of developing countries for sustained economic growth and eradication of poverty. The form of specific actions shall be subject to the determination of each developing country, taking into account its respective capacities and specific national circumstances.
- g) Nationally appropriate mitigation actions by developing countries in the BAP shall be supported and enabled by technology, financing and capacity building from developed countries. Such support shall be new, additional, adequate, predictable and sustained. Relevant supporting mechanism shall also be developed as channels for providing technology, financing and capacity building support for nationally appropriate mitigation actions by developing countries.
- h) MRV on nationally appropriate mitigation actions by developing countries is only applicable to the mitigation actions per se and shall be undertaken by their national entities under the guidance of UNFCCC in accordance with their national circumstances and practices. Provision of support in terms of technology transfer, financing and capacity building by developed country Parties to developing countries shall be measurable, reportable and verifiable in a proper manner.
- i) The emission reduction credits generated from nationally appropriate mitigation actions under 1(b)(ii) shall not be used by developed country parties to offset their quantified emission reduction targets

RE 1(b) (iv) of the Bali Action Plan:

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

3. Enhanced action on adaptation

A comprehensive adaptation framework shall be established for enhanced actions on adaptation and its means of implementation, including finance, technology and capacity-building, now, up to and beyond 2012. The elements of a comprehensive adaptation framework shall include:

a) Objectives and principles

Objectives

- To enhance implementation of all stages of adaptation and promote climate resilient development of all developing countries, which are vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, through enhanced action on adaptation identified in the Bali Action Plan paragraph 1(c);
- To provide adequate, predictable and timely flow of new and additional financial resources and deployment, diffusion and transfer of technology to support urgent and immediate adaptation activities and programmes in all developing countries, in particular the most vulnerable communities and population.

Principles

- Strictly guided by the principles of common but differentiated responsibilities and equity;
- The financial and technology support are commitment of developed country Parties under UNFCCC
- Financial resources for adaptation shall be adequate, predictable, stable and timely financing at full-cost and grant based;
- Financial resources additional to ODA
- Support developing countries to have access to means of implementation including finance, technology, capacity building, and knowledge sharing for adaptation at different levels;
- Cover full costs for adaptation technology and for stand-alone adaptation projects.

b) Institutional Mechanism

- Establish a Subsidiary Body under the Convention, with a majority of members from developing countries, to enhance urgent action for adaptation, focusing on the provision of financial resource and technical support to enable and support developing countries' adaptation actions.
- The functions of the Subsidiary Body include, but not limited to, provisions of technical advice, assessing adaptation financing, adaptation planning, enhancing technology development and transfer, coordination and enabling implementation of activities of international actions on adaptation, monitoring and evaluation.
- Regional centers in developing countries shall be strengthened or established, if appropriate, to facilitate the implementation of adaptation, capacity building, knowledge sharing, technology development, diffusion and transfer;

c) Means of Implementation

- Means shall be provided, on a continuous basis, to enable, support and enhance national capacity to incorporate adaptation in planning and designing adaptation activities; and
- Coherence shall be maintained in funding adaptation through the Convention, and outside the financial mechanism of the Convention, in accordance with the guidance provided by the COP;
- Establishment of an "Adaptation Fund" within the framework of the G-77 and China's proposed Financial Mechanism for Meeting Financial Commitments under the Convention, based on assessed contributions from Annex I countries and other possible sources of financial.
- "Adaptation Fund" must ensure sufficient financial resources for all developing countries to:
 - Enhance capacity building, including data collection, climate scenarios, assessment on vulnerability and adaptation, including assessment of adaptation cost; Promote education, training and public awareness related to climate change;
 - Cover full cost for preparation of national adaptation action plans, Identify priority activities/projects intended to address urgent and immediate adaptation needs, and

incorporation adaptation considerations into sectoral and national development planning;

- Implement adaptation actions, projects and programmes, in particular those urgent ones;
- Implement risk management and risk reduction strategies, including establishment of the early warning system;
- Build climate resilience through economic diversification;
- Enhance institutional capacity, for preventive measures, planning, preparedness of disasters relating to climate change;
- Access to adaptation technologies, promote research, development and diffusion of adaptation technologies, taking into account sector specific adaptation technologies; develop and enhance endogenous capacities for technologies; have adequacy of funds for accessing transferred technology.

d) Implementation

- The following categories of activities in developing countries shall be enabled and supported;
 - Enabling activities, inter alia,
 - i. Climate change risk, vulnerability and adaptation assessment
 - ii. National, sub-national, sectoral adaptation planning
 - iii. Incorporation of adaptation into sectoral and national planning
 - iv. Capacity building, including institution capacity
 - v. Knowledge sharing
 - Implementation of short-, medium- and long-term adaptation actions, projects and programmes
 - Implementation of risk management and risk reduction strategy
 - Development, transfer and diffusion of adaptation technology for monitoring, forecasting of extreme climate events and modelling of climate change, for early warning of extreme climate events, for improving the resilience to the impacts of extreme climate events and climate change
 - Economic diversification in response to the adverse impacts of climate change

e) Monitoring and evaluation

- Monitor and record the financial resources provided by developed country Parties
- Monitor technology transferred to developing countries
- Monitor the utilization of financial resources and evaluate the effectiveness of implementation of adaptation actions, projects and programmes;
- Evaluate the sufficiency of financial and technology support to developing countries

5. Enhanced action on technology development and transfer

- a) A subsidiary body under the Convention shall be established by the COP;
 - i. Organizational framework. The Subsidiary Body for Development and Transfer of Technologies shall be an operational and implementing body. It consists of a strategic planning committee and several panels on (1) technology needs assessment and information; (2) clearing house for technology information and transaction management; (3) dialogue and coordination for enabling policy and measures, intelligent property management; (4) management of financial resources targeting at development, transfer, and deployment (D&T&D) of environmentally sound technologies (ESTs); (5) capacity building; and (6) monitoring and assessment of performance.
 - ii. Functions.

- Provide advice, guidance and recommendations;
 - Coordinate actions by different international stakeholders and governments' policies;
 - Guide and supervise utilization of special TT fund based on public finance;
 - Promote communication and info/knowledge sharing; and
 - Monitor and assess the performance and progresses.
- iii. Governance: member distribution and decision-making process. The Subsidiary Body for Technology is open to all the Parties. Members of corresponding committee and panels shall be determined by the COP. Decisions shall be made by consensus.
- b) Technology needs assessment and development action plans for development and transfer of ESTs.
 - i. Action plan to speed up and enlarge development and transfer of ESTs should be developed with clear objective and means of assistance from developed countries.
- c) Performance assessment and monitoring. The speed, range, scale, and barriers of technological flows from developed to developing countries shall be the major dimension to develop assessment indicator and regularly monitored and assessed. A set of indicators, data base, steps and modalities shall be developed to implement monitoring and assessment. The results of monitoring and assessment shall be fully used for planning and further decisions;
- d) Financial mechanism. The basic idea of the financial mechanism supporting D&T&D of ESTs is to develop public private partnership by linking public finance with carbon market, capital market and technology market and, leveraging larger amount of private finance by smaller amount of public finance. A Multilateral Technology Acquisition Fund (MTAF) shall be established with sources mainly from public finance from developed countries. The sources for the MTAF may be from parts of the regular fiscal budget for R&D, fiscal revenues from taxation on carbon transaction and/or auction of emission permit in carbon market, as well as fiscal revenues from energy or environmental taxation. Significant amount of fund from the above mentioned potential sources shall be made available for the MTAF annually specifically for development and transfer of ESTs into developing countries in a timely manner. The MTAF shall be used as a catalyst to provide stakeholders with incentives to implement D&T&D of ESTs by means of proper policy instruments, financial instruments/products and investments;
 - i. The policy instruments, among others, may include:
 - Subsidies in R&D for invention and demonstration of identified ESTs in prioritized areas;
 - Insurance to curb risks of investment in D&T&D of new ESTs;
 - loan guarantee or subsidies for exporting and diffusing ESTs;
 - Direct investment in D&T&D of ESTs as share holder in normal forms or via venture capital investment;
 - Investment in financial products related to D&T&D of ESTs by holding stocks, bonds and other potential financial products;
 - Investment in infrastructures like information, transaction platform, monitoring and enforcement system;
 - Expenses on capacity building in developing countries with development of human resources as a priority;
 - Purchases of ESTs by governments;
 - Permits, compulsory licensing for patented ESTs, etc.; and
 - Others.
 - ii. Incremental costs for deployment and diffusion of ESTs in developing countries shall be

compensated by appropriate policy instruments as mentioned above. Agreements shall be reached on methodologies to determine baseline cost of technological change in specific sectors and technological areas, against which incremental costs are estimated;

Full costs of such activities as R&D and demonstration of ESTs, capacity building, technology need assessment, information service, construction of policy infrastructure, among others, shall be covered by the proposed financial mechanism. Capacity building related to development and transfer of ESTs may concentrate more on institutional development focusing on capacity enhancement of implementation and enforcement of policies and human resources development by conducting international training and exchange scheme for trainees from developing countries.

- e) With regard to Intellectual Property Rights. The existing IPR system does not match the increasing needs for accelerating D&T&D of ESTs to meet challenges of climate change. Specific measures should be taken to overcome barriers of D&T&T related to IPR issues.

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

Institutional arrangement shall be established for the operationalization of an effective financial mechanism under the COP.

- a) Developed country Parties shall take substantive actions to secure adequate and predictable financial resources for the implementation of the Convention, in particular, Article 4.3, 4.4, 4.5, 4.8, 4.9 and Article 11 of the Convention.
- b) Developed country Parties shall make assessed contributions by a percentage of annual GDP, e.g. 0.5-1%, in addition to the existing ODA.
- c) The developed country Parties shall fulfill their financial commitments under the Convention in a measurable, reportable and verifiable manner; any funds pledged outside the UNFCCC shall not be regarded as the fulfillment of commitments by developed country Parties for the implementation of Article 4.3 of the Convention and the Bali Action Plan.
- d) The funding is used to enhance actions on adaptation, mitigation and technology development and transfer, as well as related capacity building. The institutional arrangements shall include an Adaptation Fund, a Mitigation Fund, a Multilateral Technology Acquisition Fund and a Capacity Building Fund.
- e) Innovative financial instruments, e.g. Venture Capital Fund and Climate Insurance Fund, could be developed and integrated into the financial mechanism, for addressing risks associated with climate change.
- f) The governance of the financial mechanism shall be under the authority and guidance of the COP with equitable and balanced representation of all Parties in a transparent and efficient manner. The funds under the financial mechanism shall be managed with easy accessibility and low administrative cost. The financial mechanism shall be operated by a Board accountable to the COP, with the support of a Secretariat, a Scientific Advisory Panel, a Monitoring and Evaluation Panel, and a Trustee or Trustees.
- g) Developed country Parties shall take their full responsibilities under the UNFCCC in providing sufficient public funding for climate change while using enormous financial resources to deal with financial crisis. Private sector approach and market-based mechanism can only play a complementary role in addressing climate change, given the fact that private players are profit-driven and market-based approach has its weakness in providing public goods.

PAPER NO. 12A: COLOMBIA

ELEMENTS OF A NEGOTIATING TEXT ON THE BALI ACTION PLAN

1. Shared vision

- The shared long-term vision that will guide actions on climate change for the international community should be guided by the principle of equity, the principle of common but differentiated responsibilities and respective capabilities and contribute to the ultimate objective of the Convention;
- Annex I Parties collectively, whether or not Parties to the Kyoto Protocol, must reduce their emissions by at least 45% below 1990 levels by 2020;
- Annex I Parties collectively, whether or not Parties to the Kyoto Protocol, must reduce their emissions by at least 95% below 1990 levels by 2050;
- Further commitments for Annex I Parties shall be calculated using historical responsibility and national capacity criteria.
- Mitigation, and adaptation financial support, and technology transfer commitments by all Annex I Parties shall be comparable

2. Mitigation

- a. Our countries, aware of the threat that climate change represents, express their interest in contributing towards achieving a resilient and low carbon development, in accordance to the principle of common but differentiated responsibilities and directly associated to the support from developed countries in the form of financing and technology;
- b. There must be equilibrium between mitigation and adaptation efforts by developing countries, and support for such efforts by developed countries;
- c. Business as usual and current pledges by developed countries will represent further impacts and catastrophic adverse impacts to our region;
- d. It is of utmost importance to include a framework for positive incentives and policy on REDD within the AWGLCA negotiations.

3. Adaptation

- a. Latin-American countries are, as stipulated by the UNFCCC's preamble text, particularly vulnerable to adverse effects of climate change and this vulnerability shall be recognized in future arrangements for adaptation under the UNFCCC;
- b. Any adaptation framework shall take into account development planning at the national and local levels. Adaptation shall be integrated as part of development;
- c. All developing countries should develop- with the proper financial support by developed countries- their NAPAs and or adaptation strategies, as instruments that could catalyze actions in different sectors providing an efficient and effective use of the financial resources for adaptation provided under the UNFCCC;
- d. There is an intrinsic connection between adaptation policies and measures and risk management, insurance and disasters reduction strategies, this fact shall be taken into account under the new adaptation framework of the UNFCCC;
- e. Adaptation framework shall take into account inter alia: ecosystem-based adaptation, territorial planning risk and opportunities associated to biodiversity.

4. Finance

- a. Financing for enhancing mitigation and adaptation actions in developing countries in the long term should be predictable, equitable, sufficient and effective;
- b. Any governance scheme for financing adaptation and mitigation of climate change shall include stipulations for equitable geographical representation and be established under the guidance and authority of the COP;
- c. Financing for adaptation shall be provided by developed countries taking into account the principle of historic responsibility and national capabilities as follows:
 - i). 2% of each developed country's GDP
 - ii). The share of proceeds of 2% from CDM project activities and 4% of JI project activities and emissions trading

PAPER NO. 12B: COLOMBIA

ELEMENTS OF A NEGOTIATING TEXT ON ADAPTATION AND MEANS OF IMPLEMENTATION

Preambular

- Acknowledging that change in the earth's climate and its effects are a common concern of human kind;
- Recognizing that all developing countries are vulnerable to the adverse effects of climate,
- As stated in Paragraph 19 of UNFCCC "Recognizing further, that low lying and other small island countries, countries with low lying coastal, arid and semi-arid areas liable to floods, drought and desertification, and **developing countries with fragile mountainous ecosystems** are particularly vulnerable to the adverse effects of climate change";
- Also recognizing that **adaptation is of the highest priority for all developing countries**;
- Recognizing that mitigation, adaptation and its associated means of implementation should be treated on an equal basis;
- Acknowledging that the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their **common but differentiated responsibilities** and respective capacities;
- Bearing in mind that the developed country parties should take the lead in combating climate change and the adverse effects thereof;
- Noting with concern the fact that developing countries still have to meet their social, environmental and economic needs, and because of the significant costs of adaptation are being forced to put aside other development priorities;
- Also noting the fact that the provision of financial resources is inadequate for adaptation needs;
- Recognizing the importance of ecosystem based approaches and biodiversity protection for adaptation;
- Noting with concern the rise of global temperature and the adverse impact that climate change has on sustainable development.

Decides:

I. Scope

To establish a comprehensive and structured instrument to enhance action on adaptation under the Convention. This should enable, support, facilitate, and implement adaptation actions and schemes by addressing the adequate, predictable and timely flow of new, additional, adequate, predictable and of long-term financial resources additional to ODA, to support urgent and immediate national, local, sub-regional and regional adaptation activities and programmes in all developing countries taking into account their urgent and immediate needs as considered in paragraph 19th of the UNFCCC Preamble.

II. Objectives

Reduce vulnerability related to climate change and climate variability through sustainable development driven actions that ensure poverty reduction among all developing countries Taking actions in particular on:

- Reduction of poverty strategies and implement adaptation within national development plans;
- Implementation of ecosystem-based adaptation approaches and further taking into account risk and opportunities associated to biodiversity;

- Improvement and establishment of early warning systems and downscaling of climate change models;
- Design and establishment of disaster attention and prevention schemes;
- Enhance Insurance, risk assessment and management, through inter alia the implementation of Hyogo Framework for Action;
- Integration of adaptation policies within regional, national and international development planning;
- Address unavoidable consequences and impacts of climate change;
- Capacity building at national, regional and local level;
- Enhance the role of local communities in adaptation activities;

III. Institutional Arrangements

The COP/ decides to establish:

Taking into account that adaptation has the highest priority for developing countries, the COP decides to establish:

1. A mechanism to enhance and support action on adaptation now, up to and beyond 2012, with the following functions:

- Overview the level of adaptation of developing countries
- Assess capacity building needs.
- Overview the creation of the necessary funds and insurance mechanisms.
- Overview the effectiveness of funds allocated to adaptation programs and stand-alone projects.

2. A financial mechanism for adaptation for the timely provision of financial resources to all developing countries, taking into account all the relevant provisions of the United Nations Framework Convention on Climate Change, particularly Articles 4.3, 4.4 ,4.5 and 11, bearing in mind that financing for adaptation in developing countries has to be predictable, equitable, sufficient, long-term and efficient. The financial resources are to be provided by:

- As a starting point, 0.7% of each developed country's annual GDP and contributions calculated on the basis of their historical responsibilities on GHG emissions and capacity. This percentage has to raise considerably. By the end of the Second Commitment period the percentage has to be 2%.
- Taxes to a carbon-intensive products and services from Annex I Parties.
- The share of proceeds of 2% from CDM project activities, and of 8% of JI project activities and emissions trading.
- Fines to be established for non compliance of Annex I and Annex B Party's emission reduction commitments and adaptation.
- Non compliance on the provision of contributions to the technology transfer fund. (See Colombian submission on Technology Transfer).

The funds shall be used to enable and support particularly vulnerable¹ developing countries in the following areas, *inter alia*:

- Adaptation to the additional burden of climate change, its additional costs and the development and urgent implementation of adaptation.
- Preparation and implementation of country driven adaptation actions, strategies and projects including those identified in their NAPAs and other country-driven adaptation plans and strategies;
- Stand-alone projects and a wide variety of adaptation interventions to support the development of experience and technologies, while promoting the protection of public health, local communities' life quality and economic competitiveness.
- Enhance active and effective participation of the local communities in the vulnerability assessments and adaptation measures design.
- An insurance system to deal with the catastrophic losses arising from climate change hazards.
- Research, development, deployment, transfer and diffusion of appropriate adaptation technologies;
- Reducing vulnerability related to climate change, including through ecosystem-based adaptation approaches and further taking into account risk and opportunities associated to biodiversity.
- Resilience building through adaptation projects and programs, including *inter alia*, infrastructure, ecosystem and sectoral approaches and building on what already works and is successful today, taking into account the role of local communities. Rehabilitation and compensation for loss and damage, including insurance.
- *Reducing agricultural vulnerabilities* that challenge the sustainable supply of food, including through diversification of crops.
- Capacity building and technology transfer to produce tools and information and enhance institutional and scientific actions to study and determine the climate change scenarios, the vulnerability and risk assessments in correct and useful scales and resolutions for the developing countries.
- Positive on-the-ground incentives for local communities for the successful demonstration of locally appropriate adaptation technologies.
- Establishment of a Regional adaptation centre in Latin America to promote information exchange on short-, medium-, and long-term climate change challenges and risks in the region, capacity-building, research, development and transfer of technologies.
- Enhance regional centres of research and technology transfer for adaptation including those scientific tools to enhance regional climate change scenarios.
- Increase education, training and public awareness as a strong basis to downscaling national adaptation plans in the subnational, community and local levels adaptation strategies including the Implementation of art 6 of the UNFCCC.

¹ As stated in the preamble of the UNFCCC "...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..."

Adaptation Activities and functionality

Accelerated sustainable development and development planning that incorporates climate change risks into account, are the best short-term response for enhancing adaptation.

Adaptation interventions shall be categorized into four groups: concrete adaptation projects; adaptation technologies; insurance; and mainstreaming adaptation into ongoing development programmes. A programmatic approach (medium- and long-term) in the form of a national, country-driven adaptation plan shall also be implemented. Cost-benefit analysis shall be included in the four groups.

A. Compliance Committee (CC)

The COP decides:

To establish a compliance committee to ensure the full implementation of Annex I and Annex B Party, emission reduction commitments and adaptation and Multilateral Climate Technology Fund assessed contributions

This body will:

- i) Review compliance of Annex I and Annex B Parties to their commitments on the provision of financial resources on a timely and predictable manner as stipulated in paragraph III above and in A.3 for technology transfer in Colombia's adaptation submission.
- ii) Define non-compliance parameters and fines, and implement parameters and procedures defined by the COP to retrieve funds derived from fines.

PAPER NO. 12C: COLOMBIA

ELEMENTS OF A NEGOTIATING TEXT ON A REDUCING EMISSIONS FROM
DEFORESTATION IN DEVELOPING COUNTRIES –REDD- MECHANISM

REDD Mechanism

A mechanism for REDD shall be defined in accordance to the principle of common but differentiated responsibilities and capabilities.

The purpose of the REDD Mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments established under the framework of the Convention.

Under the REDD mechanism:

(a) Parties not included in Annex I will benefit from project activities resulting in certified REDD emission reductions; and

(b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under the framework of the Convention.

The Conference of the Parties to the Convention shall, at its sixteenth session, elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities.

Participation in the REDD mechanism, including the acquisition of REDD certified emission reductions, may involve private and/or public entities.

Definitions

Existing relevant definitions under the framework of the Convention (e.g. Decisions 11/CP.7, 17/CP.7 etc) should apply, plus:

A “REDD certified emission reduction” or “REDD-CER” is a unit issued pursuant to the relevant provisions to be decided by the COP and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

Institutional framework

The Conference of the Parties shall have authority over and provide guidance to the REDD Mechanism.

A specific body shall be created or appointed by the COP to supervise the REDD Mechanism, under the authority and guidance of the COP, and be fully accountable to the COP.

An entity or group of entities/bodies shall be designated by the COP to verify and certify the emissions reductions achieved through the REDD Mechanism. Such entities shall be accountable to the COP through the supervising body and shall comply with the relevant COP decisions and other guidance provided by relevant UNFCCC bodies.

Participation requirements

Participation by developing countries is voluntary.

Parties participating in the REDD Mechanism shall designate a national authority for such Mechanism.

A Party included in Annex I with a quantified emissions reduction commitment shall be eligible to use REDD ERs, issued in accordance with the relevant provisions to be established by the COP, to contribute to compliance with part of its commitment if it is in compliance with the eligibility requirements to be determined by the COP for such group of Parties.

Validation and registration

REDD activities shall be validated and registered following the guidance to be developed by the COP.

Monitoring

The COP shall develop, based on the work already carried out by SBSTA and the IPCC, as well as on any other relevant data, adequate guidance for monitoring REDD activities, both at the subnational and national levels, in order to guarantee the environmental integrity of such activities.

Verification and certification

Emission reductions resulting from each national or sub-national RED activity shall be certified by a body(ies) or entities to be determined by the Conference of the Parties on the basis of:

- a) Real, measurable and long-term benefits related to the mitigation of climate change;
- b) Reductions in emissions that are additional; and
- c) Sustainable development benefits, as determined by the participating developing country

Issuance and accounting of REDD emission reductions

Emission reductions from activities that reduce emissions from deforestation may be accounted for out either at a national or sub-national scale, as decided by each participating Party. When a Party has decided to apply a national level accounting, this approach shall be maintained for the length of the commitment period.

When a Party has selected to apply a subnational accounting, such Party may decide to scale it up, from subnational to national, during an ongoing commitment period or at the start of subsequent ones.

REDD+ Fund

A special climate change fund shall be established by the COP to finance activities, programmes and measures, relating to REDD+, that are complementary to those funded by the resources allocated to the climate change focal area of Global Environment Facility and by bilateral and multilateral funding, in the following areas:

- Enhancing the capabilities of developing countries to monitor changes in their forest cover and the carbon stocks associated to them;
- Designing and implementing policies that reduce deforestation and degradation; and
- Supporting ongoing forest conservation and forest carbon stock enhancement efforts in developing countries.

PAPER NO. 12D: COLOMBIA

ELEMENTS OF A NEGOTIATING TEXT ON A TECHNOLOGY MECHANISM UNDER THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE

A Technology Mechanism under the convention shall be defined to enhance the implementation of all relevant provisions of the United Nations Framework Convention on Climate Change, particularly articles 4.1.c, 4.1.e, 4.1.g, 4.3, 4.4, 4.5, and 4.7

The Technology Transfer Mechanism shall operate under the authority and guidance of the Conference of the Parties, and be accountable to it. It shall pursue, *inter alia*, the following:

- i. Accessibility, affordability, appropriateness, adaptability and capacity building for technologies required by developing countries to enhance actions on adaptation and mitigation;
- ii. Provision of agreed full incremental costs of implementing measures covered by article 4.1 and 4.3 of the Convention;
- iii. Adequacy, predictability and sustainability of funds for technology transfer.
- iv. Support for the development, enhancement, diffusion and deployment of local adaptation capacities and technologies of developing country parties; and
- v. Removal of barriers for technology development and transfer.

Definition of a Technology Transfer Mechanism under the Convention

The Technology Mechanism comprises a Multilateral Climate Technology Fund operating under the authority of the Conference of the Parties and with the Expert Group on Technology Transfer as an advisory body.

A. Multilateral Climate Technology Fund (MCTF)

1. The COP decides

To establish a Multilateral Climate Technology Fund for the provision of technology-related financial resources on a grant or concessional basis. The financial mechanism shall have an equitable and balanced representation of all parties within a transparent system of governance.

2. The Conference of the Parties shall agree upon arrangements to give effect to the above paragraphs, which shall include the following:
 - i. Modalities to ensure that the funded projects facilitate the development, deployment, diffusion and transfer of technologies to developing countries under the Convention in conformity with the policies, programme priorities and eligibility criteria established by the Conference of the Parties;
 - ii. Modalities by which a particular funding decision may be reconsidered in light of these policies, programme priorities and eligibility criteria;
 - iii. Provision by the entity of regular reports to the Conference of the Parties on its funding operations; and
 - iv. Determination in a predictable and identifiable manner of the amount of funding necessary and available for the implementation of this Convention and the conditions under which that amount shall be periodically reviewed.
 - v. Generation of a reference inventory of available adaptation and mitigation technologies in cooperation with the EGTT, and based on Countries' TNAs identified technology priorities.

3. The MCTF shall be financed by assessed contributions from developed country Parties. Contributions to the mechanism shall be new and additional to ODA, and must be raised according to respective responsibilities for cumulative and historical GHG. The financial resources are to be provided by:
 - i. 5% levy to a carbon-intensive products and services in Annex I Parties.
 - ii. 5% profits participation of carbon-intensive patented processes.
 - iii. 2% overprice on fossil fuels to be contributed by Annex I Parties.

B. Compliance Committee (CC)

The COP decides:

To establish a compliance committee to ensure the full implementation of Annex I and Annex B Party, emission reduction commitments and adaptation and Multilateral Climate Technology Fund assessed contributions

This body will:

- iii) Review compliance of Annex I and Annex B Parties to their commitments on the provision of financial resources on a timely and predictable manner as stipulated in A.3 above for technology and in paragraph III in Colombia's adaptation submission.
- iv) Define non-compliance parameters and fines, and implement parameters and procedures defined by the COP to retrieve funds derived from fines.

C. Expert Group on Technology Transfer (EGTT)

The EGTT will act in accordance to decision 4/CP.7. The EGTT shall define a Technology Action Plan in accordance with the results of countries TNA's to facilitate the development, deployment, diffusion and transfer of technologies to developing countries under the Convention.

The SBSTA shall endorse in their thirty-second session, the terms of reference for the EGTT to develop a Technology Action Plan, which shall include clear actions and dates for the first period of three years, and will be updated for successive three-year periods. The proposals and means should be comprehensive in order to address all stages of the technology development cycle (R&D, demonstration, deployment and diffusion) and should seek to transfer technologies identified in each country's TNAs.

The SBSTA shall endorse in the same session the terms of reference for the EGTT to develop and strategic plan to enhance the TT:Clear platform in order to provide and disseminate information of best available technologies and practices for adaptation and mitigation, and to facilitate the involvement of the private sector and stimulate their investments in a coherent manner with developing country Parties needs.

PAPER NO. 13: COSTA RICA

**DRAFT NEGOTIATING TEXT SUBMITTED BY COSTA RICA
ON ADAPTATION**

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 Adaptation part of the text.

Rationale of a Framework for Enhanced Action on Adaptation

1. A comprehensive and flexible approach for enhanced actions on adaptation and its means of implementation, including finance, technology and capacity building, now, up to and beyond 2012.
2. The central role for the United Nations Framework on Climate Change Convention, the Convention must play a leading role in coordinating and promoting adaptation planning and implementation.
3. Appropriately scaled up and streamlined financial and technological support will be needed to support adaptation action in developing countries. Commitments of developed country Parties to developing country Parties to meet costs of adaptation.
4. Adverse impacts of climate change is a challenge especially to all developing countries, particularly LDCs, SIDS, areas in Africa affected by drought, floods and desertification and the most vulnerable populations in developing countries.

I. Formulating and Implementing Adaptation Plans

5. Adaptation planning and implementation should be undertaken with a view to ensuring that the process effectively reflects regional, national, sub-national and local considerations, other considerations include:
 - a) Adaptation plans, taking into account all sectors, should be integrated into long-term planning and policies;
 - b) Best available scientific information and analytical tools, use of local and traditional knowledge, and experiences, should be integrated in the adaptation planning process;
 - c) Capacity-building should be promoted to enable the effective implementation and monitoring of adaptation;
 - d) Assessments should be undertaken of impacts, vulnerability and adaptation measures, as well as assessments on areas and ecosystems (on which livelihoods depend) that are expected to suffer from the most severe impacts;
 - e) Knowledge, experiences and lessons learned drawn from existing activities, including those carried out at the community level as well as, activities from ongoing initiatives such as the Nairobi work programme, the UN Convention on Biological Diversity, the Convention to Combat Desertification and the Ramsar Convention on Wetlands;
 - f) The proposed national plans should benefit from experience in developing NAPAs, and these could orient long-term programmatic approach to adaptation.

II. Provisions for Financial Resources, Technology and Capacity-Building

6. Financial resources should be provided under the authority, guidance and be fully accountable to the COP.
7. Measureable, reportable and verifiable financial and technological support provided by developed country Parties for enhanced action on adaptation required by developing country Parties.
8. Effective mechanisms and institutional arrangements for the provision of adequate, predictable, additional and sustainable financial resources to support adaptation measures in developing country Parties, and access to affordable environmentally sound technologies.

9. Adaptation financing must be substantially scaled up and must be sufficient to:
 - a) Meet the financial requirements for adaptation in developing countries at national, sub-national and regional levels;
 - b) Meet the required financial resources, technologies and capacity-building for the implementation of action on adaptation in accordance with the commitment of the developed country Parties;
 - c) Provide adequate, predictable, stable and timely financing at full-cost and grant based with direct, simplified and expeditious access;
 - d) Cover different stages of adaptation from identification of actions to implementation;
 - e) Provide additional resources to ODA financing;
 - f) Meet the cost of adaptation in conjunction with additional sources, including finance of the Adaptation Fund extended to Joint Implementation and Emissions Trading Schemes, 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; and
 - g) Address urgent adaptation measures, including risk and disaster reduction strategies, means to address loss and damage associated with climate change and climate variability, design of resilient economies and ecosystem based adaptation strategies.
10. Adaptation technologies should be provided to enhance resilient development processes and for economic diversification, both in response to the impact of climate change.
11. Development of an adaptation strategy and programme should be enabled if it is not available at a national level. Means should be provided, on a continuous basis, to enable, support and enhance national capacity to incorporate adaptation in planning and designing adaptation activities.
12. The following indicative categories of activities should be enabled and supported:
 - a) Enabling activities, inter alia, planning, design, implementation, learning by doing, capacity-building, knowledge-sharing where consideration of the implications of adaptation strategies for ecosystem services on which people depend are included;
 - b) Reducing vulnerabilities, including where appropriate, through ecosystem-based approach;
 - c) Rehabilitation for loss and damage, including insurance;
 - d) Resilience-building through adaptation projects and programmes, including, inter alia, infrastructure, ecosystem and sectoral approaches where appropriate.
13. Establishment or strengthening, as appropriate, of coordination mechanisms at national, sub-national, regional levels for supporting enabling activities, inter alia, planning, design, implementation, monitoring through learning-by-doing, capacity-building and knowledge sharing.

III. Provisions for Building Resilience, Risk and Disaster Reduction and Management

14. There is an intrinsic connection between adaptation policies and measures and risk management and disasters reduction strategies. As adaptation cannot be separated from mitigation, the support required from developed country Parties for risk and disaster reduction and management should be sufficient and consistent with global mitigation efforts.
15. Priority areas in technology support for adaptation could include, inter alia, technologies for monitoring, forecasting and modeling of climate change, for early warning, for enhancing resilience of ecosystems and agriculture to the impact of climate change, and for coastal zone management.
16. Vulnerability assessments of ecosystems and ecosystem services and dependent livelihoods should be part of risk reduction plans, and, ecosystem-based adaptation should be considered and included into sectoral and national planning for disaster reduction and management.

PAPER NO. 14: COSTA RICA AND PANAMA

**DRAFT NEGOTIATING TEXT SUBMITTED BY COSTA RICA AND PANAMA
ON 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.

PREAMBLE

Emphasizing the urgency of effectively addressing climate change as indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change and more recent scientific information.

Renewing the political determination to ensure that environmental constraints do not undermine the equitable development needs of present and future generations.

Recalling the need for Long Term Cooperative Action among all Parties to enable the full and sustained implementation of the Convention now, up to and beyond 2012, in order to achieve its ultimate objective.

Intending to establish a new and equitable global partnership through the creation of new levels of cooperation among Parties.

Affirming a Shared Vision of a long term goal to equitably, successfully and coherently integrate the ambitious efforts of all Parties.

PRINCIPLES

The Shared Vision for Long Term Cooperative Action shall be guided *inter alia* by the following provisions and principles:

- a. Protection of the climate system for the benefit of present and future generations of human kind on the basis of equity and in accordance with Parties' common but differentiated responsibilities and respective capabilities, taking into account social and economic conditions
- b. Given the urgency and immediate needs of developing countries that are particularly vulnerable to the adverse effects to climate change, precautionary measures to anticipate or prevent further impacts of climate change and minimize its adverse effects.
- c. The global priorities of poverty alleviation, the legitimate human right to economic and social development and the central role that sustainable and climate resilient development will play in reducing vulnerability to a changing climate and in making economic growth possible in a low emission economy.
- d. Due to their historical responsibility, leadership of developed countries in achieving quantified emission reductions aimed at achieving a long term stabilization goal guided by a science-based medium term reduction goal.
- e. The importance of sufficient and early action in mitigation to reduce current and future vulnerability and adaptation costs to societies

The Shared Vision for Long Term Cooperative Action shall be built on four pillars:

- a. Economy-wide domestic emissions reductions by industrialized country Parties be enough to reach stabilization level of 350 ppm 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.
- b. Nationally appropriate mitigation actions by developing country Parties that result in a substantial deviation from baseline by 2020, in a measurable, reportable and verifiable

manner if enabled and supported by financial and technological support provided by industrialized country Parties and according to the sustainable development goals and national circumstances of each developing country Party.

- c. Measureable, reportable and verifiable financial and technological support provided by industrialized country Parties for urgent adaptation measures required by developing country Parties, including risk and disaster reduction strategies, means to address loss and damage associated with climate change and climate variability, design of resilient economies and ecosystem based adaptation strategies.
- d. Effective mechanisms and institutional arrangements for the provision of adequate, predictable, additional and sustainable financial resources to support mitigation and adaptation in developing country Parties, and access to affordable environmentally sound technologies.

PAPER NO. 15: CZECH REPUBLIC ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS
MEMBER STATES

This submission is supported by the Former Yugoslav Republic of Macedonia, Serbia and Turkey

Prague, 28 April 2009

**Sixth session of the Ad Hoc Working Group on Long-term Cooperative Action under the
Convention (AWG-LCA 6) (Bonn, 1-12 June 2009)**

Subject: A negotiation text for consideration at AWG-LCA 6

The Czech Republic, on behalf of the European Community and its Member States, welcomes the opportunity to submit proposals for the Chair's negotiation text that will be presented at the sixth session of the AWG-LCA.

Introduction

1. We reiterate that all building blocks of the Bali Action Plan are essential elements of the Copenhagen outcome and that we need to ensure balance between them. We expect that the AWG-LCA 6 negotiation text will address all these elements, by integrating elements based on our previous submissions, as well as specific EU proposals and operational language (cf. Annex A) highlighted in the present submission.
2. As we move towards negotiating an agreed outcome in Copenhagen, the synergies between this process and the negotiations under the AWG-KP are increasingly important. In our deliberations in Bonn in April, it became obvious that a strict separation is not feasible.
3. In respect to the EU's views, ideas and proposals on all building blocks of the Bali Action Plan and an agreed Copenhagen outcome, we refer to our earlier submissions both under the AWG-LCA and the AWG-KP, and views expressed during the previous sessions.

Shared vision, including a long-term goal

4. The EU proposes to include in the negotiation text an overarching shared vision statement. It should encompass all building blocks, and describe what needs to be achieved on these building blocks in the light of meeting a long-term goal. This long-term goal should be seen as the operational part of the shared vision.
5. The EU is of the view that the overarching shared vision statement should also incorporate gender considerations.
6. The long-term goal should guide our action under all building blocks in the Bali Action plan both in the short- and mid-term. For this reason, the long-term goal needs to focus on the global emission reductions needed in line with the objective of keeping global mean temperature increase below 2°C compared to pre-industrial levels. It therefore needs to be quantified in terms of two components:
 - a long-term global emissions reduction goal
 - a global mid-term pathway in terms of the timeframe for peaking of global emissions – reflecting the urgency as shown by the IPCC AR4
7. Such a specification will be useful to review the results and benefits of actions under all building blocks and their consistency with the long-term goal. The long-term goal should itself be reviewed based on the most recent science, building on the IPCC AR5 which is to be published in 2014 and taking account of observed impacts and efforts made to adapt to climate change.

Mitigation commitments for developed countries

8. The EU refers to its previous submissions on the matter and in particular reiterates its proposition that developed countries should commit to collectively reducing their emissions of GHGs in the order of 30% by 2020 compared to 1990 levels.

9. We stress that the overall target for developed countries must be distributed in a manner that is fair and ensures the comparability of efforts. We consider that the distribution of the overall target for developed countries should be guided by considerations of capability and responsibility, making use of a balanced combination of criteria, such as:
 - the capability to pay for domestic emission reductions and to purchase emission reduction credits from developing countries;
 - the GHG emission reduction potential;
 - domestic early action to reduce GHG emissions;
 - population trends and total GHG emissions.
10. The EU notes the particular relevance of discussions taking place under the AWG-KP for the discussions under the AWG-LCA on sub-paragraph 1b(i) of the Bali Action Plan.
11. We call upon non Annex I Parties that are at levels of development and GDP/capita comparable to those of the group of developed countries, notably OECD member countries and candidates for membership thereof, to consider making similar commitments in line with their responsibilities, capabilities and national circumstances.

Low-carbon development strategies for developing countries

12. The EU proposes to include in the negotiation text the concept of low-carbon development strategies (LCDS), as the structure for developing countries to indicate their contribution to the global mitigation effort and to describe the nationally appropriate mitigation actions (NAMAs) they intend to undertake in order to realise this contribution, as well as to indicate what support would be necessary to enable these NAMAs.
13. The LCDS is a further implementation and natural evolution of the national mitigation programmes of Article 4.1b of the Convention.
14. We propose that all developing countries integrate such LCDS covering all key emitting sectors, and have LCDS in place as soon as possible and no later than 2012.
15. We would expect the ambition of propositions made by developing countries to be in line with their common but differentiated responsibilities and respective capabilities. Recent analysis indicates that such deviation will need to be of the order of 15 to 30% below business as usual by 2020 for developing countries as a group, respecting the principle of common but differentiated responsibilities and respective capabilities.
16. We call upon developing countries, in particular the most advanced amongst them, to propose ambitious LCDS, or update existing strategies, already before Copenhagen, to demonstrate enhanced contributions to the global effort.
17. The description of the NAMAs in the LCDS should differentiate between actions taken autonomously, actions requiring support, and actions to be supported by the carbon market.
18. The LCDS could include:
 - the description by the developing country of a long-term strategy, including emissions pathways, for its low-carbon development in the context of its broader sustainable development strategies;
 - the description of all NAMAs, as part of this long-term strategy and for each identified NAMA, the LCDS would:
 - indicate autonomous action that is mainly to be financed and implemented by the country itself;

- identify barriers to the implementation of autonomous action, including identifying technology needs and barriers to technology deployment and diffusion, whose removal needs support;
 - action that, due to the incremental costs, requires assistance, in the form of financing, technology or capacity building for implementation;
 - specify, when relevant, what type of support (in terms of finance, capacity-building and technology) it considers most appropriate to enable the implementation of the NAMA;
 - specify, when relevant, if the use of a carbon market mechanism is proposed, and the associated caps and thresholds;
 - specify the outcomes of the NAMA that are foreseen in terms of emission reductions (for several time horizons, e.g. 2020, 2030 and 2050) and provide indications on how these emission reductions were estimated.
19. Such integrative LCDS would allow the international community to have a full picture of the actions that would be proposed and of the overall pathway in which these actions would be embedded – paving the way for an international recognition of the set of actions implemented by the developing country. The LCDS would be an opportunity for each developing country to indicate how it intends to reconcile emission mitigation actions with its broader sustainable development strategies (and its priorities, including poverty eradication).
 20. The elaboration of LCDS for the least developed countries should be supported financially and technically.
 21. The EU proposes the establishment of a coordinating mechanism, which would provide:
 - a) A technical assessment of the LCDS and the NAMAs contained therein and of the corresponding needs for support identified, in particular in terms of contribution of the proposed emission pathway to the substantial deviation from business as usual emission projections (we could explore setting up supporting technical bodies for this phase, bringing in relevant expertise, including from the private sector).
 - b) Matching action to support, in such a way as to maximise the cost-efficiency and to strengthen financing for NAMAs (i.e. as to maximise emissions reductions achieved with regard to the support provided), taking into account the capability of each country.
 - c) Validating matched action and support.
 22. The procedure of discussion and assessment of the LCDS and of the NAMAs and corresponding support through a coordinating mechanism essential to confirm the mutual pledge of the developing country to undertake nationally appropriate action, and of developed countries to support.
 23. We envisage that NAMAs and corresponding support would be inscribed in a register also with a view to recognising actions undertaken by developing countries.
 24. A strong MRV of both national action and support would allow Parties to effectively keep track of the action implemented on the ground and of the support provided. Elements of this MRV system would be more frequent inventories and national communications. It would contribute to assessing the overall progress towards the ultimate objective of the Convention, and provide for the official recognition of the action undertaken by the developing country.

Sectoral crediting and sectoral trading

25. The EU proposes that the negotiation text contain the concepts of sectoral crediting and sectoral trading as specific carbon market based mechanisms, in addition to CDM projects, that can incentivise the implementation of NAMAs by developing countries.

26. **Sectoral crediting** would be based on an agreed emissions threshold or “no-lose target”. This threshold would be an agreed level of emissions in a sector, defined below the business-as-usual (BAU) trend, at an ambitious level, taking into account national circumstances, the specifics of the sector and the potential for efficiency and innovation.
27. The developing country would undertake actions, which could take various forms, to deviate its sectoral emissions from the BAU trend and down to and beyond the threshold. Actions down to the threshold could be undertaken autonomously or require some international support. For all the emission reductions achieved beyond the threshold, the developing country would receive emission credits that it could sell.
28. Beating the threshold would provide revenues to the developing country through the sale of credits. Such mechanisms also provide flexibility, as the country would be free to implement domestic actions as it sees fit. No penalty would accrue in the case the threshold is not reached. It should be noted that in this system developing countries would be able to use “low-hanging fruits”, including negative cost opportunities, to deviate their emissions towards the no-lose target; actions beyond the no-lose target are more expensive and would be financed by developed countries buying credits.
29. Robust MRV requirements would be needed to ensure that only real emission reductions are credited. Other implementation issues that would need further consideration include the coverage and boundaries of the sector, prevention of double counting of emission reductions between mechanisms and incentives for the private sector to participate.
30. **Sectoral trading** would be based on an agreed cap, to be defined below the BAU emission trend for the sector considered. Here again, the developing country would undertake actions to deviate emissions in a sector from the BAU trend and keep them within the cap. These actions could take various forms (including domestic company-based emissions trading or policy-based incentives).
31. The difference with sectoral crediting as explained above is that tradable units would be created ex-ante, and allocated to the developing country to a level equivalent to its target. The developing country would be able to sell trading units. This would have the advantage that value would be created upfront.
32. It would be necessary to check that eventually emissions have indeed been reduced below the target. If that is not the case, the Party would need to buy back units to ensure that the target is met, in order to maintain the environmental integrity of the system.
33. We would envisage that robust monitoring, reporting and verification would be needed to support such a scheme at international level and this would need to be supported. Once implemented, however, that system may be simpler in practice than the system required to support ex-post crediting approaches. Other implementation issues that would need further elaboration include the coverage and boundaries of the sector and prevention of double counting of emission reductions between mechanisms.
34. The advantages of this mechanism include the generation of a price signal in the sector that could drive mitigation action in a cost-effective way. This mechanism would also allow the developing country to participate more effectively in the growing international carbon market than through ex-post crediting approaches.
35. Developing countries could indicate their intention to use sectoral mechanisms to incentivise their NAMAs in their low-carbon development strategies. The propositions would need to be in line with the common but differentiated responsibilities and respective capabilities of Parties. We would envisage ambitious proposals, in particular from the more economically advanced developing countries, in this regard.

REDD+

36. The EU recognises the importance of supporting appropriate specific financial support for the forest sector and in particular for the reduction of emissions from deforestation and forest degradation. The support should be performance-based and provided on the basis of verified results in terms of avoided emissions from gross deforestation and forest degradation, while promoting the role of conservation, sustainable forest management, and enhancement of forest carbon stocks. We highlight the need for the incentives provided and the measures taken under these provisions to ensure achievement of co-benefits, including the protection of biodiversity, increased resilience and improved livelihoods in forest regions. We emphasise the need for fair and transparent consultation processes with the stakeholders concerned, including local communities and indigenous peoples when measures for reduced emissions from forest degradation and deforestation are being assessed, planned and implemented.

Emissions from international aviation and maritime transport

37. All sectors of the economy should contribute to limit emissions, including international maritime shipping and aviation, a large and rapidly growing source of GHG emissions. Emission reduction targets for these sectors should be incorporated into the Copenhagen agreement, and Parties need to commit to work through ICAO and IMO to enable international agreement before the end of 2010, to be approved by 2011. The EU acknowledges that market-based instruments can ensure cost-effective emission reductions.

HFCs

38. Since the accelerated phase-out of HCFCs mandated under the Montreal Protocol may further add to a rapid increase in the use of HFCs, many of which are very potent GHGs, the EU proposes that the Copenhagen agreement include an international emission reduction arrangement for HFC emissions.

Annual emission inventories

39. Annual inventories of national GHG emissions should be provided by all Parties as soon as possible and not later than 2011, at least for key emitting categories, facilitated by comprehensive capacity building and technical and financial support. These inventories should include a national inventory report with the estimation methodologies used and should be subject to international review by expert review teams.

Adaptation

40. Following on the ideas presented in our previous submissions and during negotiating sessions, the EU is of the view that a framework for action on adaptation could be structured as follows:
41. **The purpose of the framework** is to facilitate adaptation action in an effective, coherent and timely manner at all levels, within and beyond the climate change process and enhance action as agreed in the Bali action plan.
42. **The overall approach to frame adaptation action** would cover the guiding principles that would frame all adaptation action at all levels.
43. **A framework for adaptation action** should contain guiding principles to frame the overall approach to adaptation action at all levels.
44. **The scope** would include initial areas for enhanced action on adaptation, for example:
- scaling up of financial resources
 - capacity building,
 - improving the knowledge and information base,
 - development of climate resilient strategies, and

- development, transfer and deployment of technologies for adaptation.

45. Means for Implementation:

- institutional arrangements (including the role of regional centres and networks, other international organisations and processes etc..),
 - the modalities for support (scaling up of sources and delivery of finance from multiple channels including bilateral, multilateral, private and other mechanisms), and
 - review of progress in resilience building and reducing vulnerability.
46. We recognise the need to act promptly and with urgency to address the needs of the most vulnerable countries and communities. In this regard, we underscore the need to continue supporting the implementation of NAPAs and the implementation of other identified needs.
47. In our view, all Parties should commit to preparing and implementing strategies to integrate adaptation in all development planning. This is necessary to enable the transition from project-based adaptation which is needed in the short term to programmatic approaches in the long term.

Technology

48. Enhanced development, transfer, deployment and diffusion of low-GHG-emitting technologies are crucial components of the Copenhagen agreed outcome. The respective roles of the public and private sector need to be elaborated to ensure effectiveness of the international framework.

Finance

49. Adequate, predictable and timely financial support for implementation of a Copenhagen agreement is crucial. Significant domestic and external sources of finance, both private and public, will be required for financing mitigation and adaptation actions, particularly in the most vulnerable developing countries. The EU is prepared to take on its fair share, in the framework of a global and comprehensive Copenhagen agreement which entails appropriate and adequate contributions by Parties.
50. Future discussions on generating financial support should focus on, inter alia, different approaches, including a contributory approach based on an agreed scale, market-based approaches based on auctioning arrangements or a combination of these and other options.
51. We also emphasise that the international financial architecture providing this support must be governed by the principles of effectiveness, efficiency, equity, transparency, accountability, coherence, predictability and sound financial management. The financial architecture should ensure strong coherence and effectiveness between the mechanisms under the UNFCCC and promote synergies with efforts outside the UNFCCC framework, in particular with the Multilateral Development Banks and bilateral institutions.

Review

52. The EU proposes that the negotiation text contain a periodic review of the adequacy of actions under all building blocks, including support by developed countries. In particular a comprehensive review not later than 2016 with consideration of future emission reduction requirements and targets should be foreseen.

Annex A contains the EU's proposals for negotiation text on these issues.

ANNEX A – Proposed legal text on the concepts referred to above

SHARED VISION

On sub-paragraph 1a of the BAP – shared vision

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2008/MISC.5/Add.1 (14 November 2008)*
- ***Specific input on the long-term global goal for emission reductions:***

In order to achieve the ultimate objective of the Convention as contained in its Article 2, the Parties shall work towards keeping the increase in global mean surface temperature below 2 degrees Celsius compared with pre-industrial levels, which requires reversing the trend of increasing global greenhouse gas emissions by 2020 at the latest, reducing these emissions by at least 50 per cent as compared with 1990 levels by 2050, and continuing the decline thereafter.

MITIGATION

On sub-paragraph 1b(i) of the BAP

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009), FCCC/AWGLCA/2008/MISC.5/Add.1 (14 November 2008), FCCC/AWGLCA/2008/MISC.2 (30 July 2008), and submissions sent by the EU in the context of the AWG-KP.*
- Developed countries shall commit to collectively reducing their emissions of GHGs in the order of 30% by 2020 compared to 1990 levels.

On sub-paragraph 1b(ii) of the BAP

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009), FCCC/AWGLCA/2008/MISC.5/Add.1 (14 November 2008), FCCC/AWGLCA/2008/MISC.2 (30 July 2008)*
- ***Specific input on Low-Carbon Development Strategies, including a coordinating mechanism and a register:***
 1. Each developing country shall elaborate a low-carbon development strategy.
 2. Low-carbon development strategies shall contain:
 - the description of a long-term strategy, for the low-carbon development of the developing country in the context of its broader sustainable development strategies, including an emission pathway, this means an emission projection planned to be achieved with the implementation of the strategy.
 - the description of all NAMAs, i.e. all mitigation actions, that the developing country intends to undertake on its territory in a short- and mid term as part of this long-term strategy; for each NAMA, the developing country should:
 - indicate autonomous action that is mainly to be financed and implemented by the country itself;
 - identify barriers to the implementation of autonomous action, including identifying technology needs and barriers to technology deployment and diffusion, whose removal needs support;
 - action that, due to the incremental costs, requires assistance, in the form of financing, technology or capacity building for implementation;;
 - specify, when relevant, what type of support (in terms of finance, capacity-building and technology) it considers most appropriate to enable the implementation of the NAMA;
 - specify, when relevant, if the use of a carbon market mechanism is proposed, and the associated caps and thresholds;

- specify the outcomes of the NAMA that are foreseen in terms of emission reductions (for several time horizons, e.g. 2020, 2030 and 2050) and provide indications on how these emission reductions were estimated.
 - *(other elements)*
3. Developing countries shall commit to integrate low-carbon development strategies covering all key emitting sectors into national and sectoral strategies, and have them in place as soon as possible and no later than 2012.
 4. The elaboration of low-carbon development strategies and plans for the least developed countries should be supported financially and technically.
 5. The Conference of the Parties [by 2010] elaborate further guidelines and modalities for the elaboration and reporting of low-carbon development strategies under this Article.
 6. A coordinating mechanism is hereby established. The purpose of the coordinating mechanism shall be *(to be further developed)*:
 - d) Technical assessment of propositions
 - of the LCDS, in particular in terms of contribution of the proposed emission pathway to the substantial deviation from business as usual expected from developing countries as a group by 2020;
 - of the proposed NAMAs and of the corresponding needs for support identified;
 - e) Matching action to support, in such a way as to maximise the cost-efficiency and strengthen financing for actions (i.e. as to maximise the emissions reductions achieved with regard to the support provided);
 - f) Validating matched action and support;
 7. Governance of the coordinating mechanism, including possible supporting technical bodies *(to be developed)*
 8. NAMAs and corresponding support that are approved by the coordinating mechanism as part of a low-carbon development strategy shall be inscribed into a register.
 9. For each approved nationally appropriate mitigation action and corresponding support, the register shall in particular contain the following information: *(to be determined)*
 10. The Conference of the Parties shall [by 2011] elaborate further modalities and procedures for the coordinating mechanism and the register.
 11. NAMAs and corresponding support shall be monitored, reported and verified.
 - 1) Monitoring should be done at a national level following internationally agreed methodological guidance and the need to monitor quantitative outcomes of actions, e.g. aggregate emissions;
 - 2) Reporting needs to follow internationally agreed guidance (building inter alia on existing IPCC guidance), taking into account the principles of transparency, accuracy, consistency, comparability and completeness. The outcomes of actions should be reported to the UNFCCC;
 - 3) Verification needs to occur at an international level under the auspices of the UNFCCC.

On sub-paragraph 1b(iii) of the BAP – REDD+

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009), FCCC/AWGLCA/2008/MISC.5/Add.1 (19 November 2008), FCCC/AWGLCA/2008/Misc.5/Add.2 (Part I) (6 December 2008), FCCC/AWGLCA/2008/MISC.4 (30 July 2008)*

On sub-paragraph 1b(iv) of the BAP – sectoral approaches

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009), FCCC/AWGLCA/2008/MISC.5/Add.1 (19 November 2008), FCCC/AWGLCA/2008/MISC.4 (30 July 2008)*

- ***Specific input on emissions from international aviation and maritime transport:***

Parties shall take the necessary action to achieve reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels.

Global reduction targets for the aforementioned emissions from the aviation and marine bunker fuels shall be set equal to respectively [X per cent] and [Y per cent] below [year XXXX] levels in the commitment period [20XX to 20XX]. Units from existing and potential new flexibility mechanisms may contribute towards achieving these targets.

Parties shall work through the International Civil Aviation Organization and the International Maritime Organization, to enable effective international agreements to achieve these targets, which does not lead to competitive distortions or carbon leakage, to be approved by 2011. The Parties shall assess progress of the implementation of this paragraph, and shall take action to advance the implementation, as appropriate.

- ***Specific input on HFC:***

An arrangement shall be established for HFC emissions.

On sub-paragraph 1b(v) of the BAP – market-based approaches

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009)*

- ***Specific input on sectoral crediting:***

1. A sectoral crediting mechanism is hereby defined.
2. The purpose of the sectoral crediting mechanism shall be to:
 - (a) enable developing countries to strengthen their contribution to the ultimate objective of the Convention and to access carbon markets;
 - (b) assist developed countries in achieving compliance with part of their quantified emission limitation and reduction commitments;
 - (c) promote sustainable development.
3. The sectoral crediting mechanism shall be subject to the authority and guidance of the Conference of the Parties and supervised by [a body].
4. Developing countries that have absolute sectoral emission thresholds and meet requirements *(to be developed)* may participate in sectoral crediting.
5. Developing countries may propose absolute sectoral emission thresholds, as part of their low-carbon development strategy.
6. [Certified emissions reductions/other fungible units] may be issued [by a body] in respect of sectoral emissions reductions beyond the absolute emission threshold.
7. The Conference of the Parties shall, [at its Xth session], elaborate modalities and procedures for the:
 - (a) preparation, submission, review and approval of proposals for inscribing absolute sectoral emission thresholds;
 - (b) monitoring, verification and reporting of emissions and accounting of units.

8. The modalities and procedures shall as a minimum ensure that:
 - (a) Parties absolute emission thresholds for the relevant sectors should deviate significantly from business as usual emissions and be established in a conservative manner taking into account, *inter alia*, the most efficient techniques, procedures, substitutes and alternative production processes;
 - (b) independently verified data and projected emissions in the relevant sector are taken into account;
 - (c) methodologies for estimating and accounting sectoral greenhouse gas emissions in a conservative manner are available;
 - (d) sectoral emissions are effectively monitored, reported and reviewed;
 - (e) there is a clear definition of sectoral boundaries;
 - (f) the crediting period for [certified emission reductions ~~or~~/other fungible units] shall be [X] years;
 - (g) absolute sectoral emissions thresholds are reviewed every [X] years;
 - (h) leakage is minimised to the extent possible.
 - (i) revenues derived from sectoral emission reductions are additional to any other financial support for NAMAs

- ***Specific input on sectoral trading:***

1. Developing countries that have sectoral emission targets and meet requirements (*to be developed*) may participate in international emissions trading.
2. Developing countries may propose sectoral emission targets, as part of their low-carbon development strategy.
3. The Conference of the Parties shall, [at its Xth session], elaborate modalities and procedures for the:
 - (a) preparation, submission, review and approval of proposals for sectoral emission targets;
 - (b) monitoring, verification and reporting of emissions and accounting of units.
4. The modalities and procedures shall as a minimum ensure that:
 - (a) sectoral emission targets should deviate significantly from [business as usual/reference] emissions and be established in a conservative manner taking into account, *inter alia*, the most efficient techniques, procedures, substitutes and alternative production processes;
 - (b) independently verified data and projected emissions in the relevant sector are taken into account;
 - (c) methodologies for estimating and accounting sectoral greenhouse gas emissions in a conservative manner are available;
 - (d) sectoral emissions are effectively monitored, reported and reviewed;
 - (e) there is a clear definition of sectoral boundaries;
 - (f) the trading period for [assigned amount/fungible units] shall be [X] years;
 - (g) sectoral emission targets are reviewed every [X] years;
 - (h) leakage is minimised to the extent possible.
 - (j) revenues derived from sectoral emission reductions are additional to any other financial support for NAMAs
5. The Conference of the Parties shall also consider possible modalities and procedures for the recognition of units created under mandatory emissions trading systems in developing countries, thereby ensuring environmental integrity.
6. Any trading pursuant to paragraph 1 shall be supplemental to domestic actions for the purpose of meeting sectoral emission targets under paragraph 2.

- ***Specific input on double counting in relation to mechanisms***

1. The Conference of the Parties shall, [at its Xth session], define modalities and procedures which prevent double counting between the [abovementioned] mechanisms and other support.

On sub-paragraph 1b(vi) of the BAP – response measures

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2008/Misc.5/Add.2 (Part I) (6 December 2008)*

On the whole sub-paragraph 1b of the BAP – mitigation

- ***Specific input on annual emission inventories:***

Annual inventories shall be provided by all Parties as soon as possible and not later than 2011, at least for the key emitting categories, facilitated by comprehensive capacity building and technical and financial support. These inventories shall include a national inventory report with the estimation methodologies used and shall be subject to international review by expert review teams. The Conference of the Parties shall, by 2010, decide on guidance on reporting and by [20XX] on review of national GHG inventories of developing countries under this Article.

ADAPTATION

On sub-paragraph 1c of the BAP – adaptation

- *The negotiation text should integrate the concept of a framework for action on adaptation as described above and draw on the proposals in our previous submissions, in particular as contained in FCCC/AWGLCA/2008/Misc.5/Add.2 (Part I) (21 November 2008), FCCC/AWGLCA/2008/MISC.2 (30 July 2008)*
- ***All Parties*** shall put in place enabling environments which ensure a country- driven, dynamic, long-term process (flexible over time), gender-sensitive, effective and internationally and nationally transparent process allowing for mutual accountability and laying the foundation for continuous improvement
- Cooperate in measures to facilitate effective adaptation to climate change and support countries that are particularly vulnerable to the adverse impacts of climate change, especially LDCs, SIDS and African countries prone to drought, desertification and flooding.

DELIVERY

On sub-paragraph 1d of the BAP – technology

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009), FCCC/AWGLCA/2008/MISC.5/Add.1 (14 November 2008)*

On sub-paragraph 1e of the BAP – finance

- *The negotiation text should integrate elements based on our previous submissions, in particular as contained in FCCC/AWGLCA/2009/MISC.1/Add.4 (30 March 2009), FCCC/AWGLCA/2008/Misc.5/Add.2 (Part I) (21 November 2008)*

CROSS-CUTTING

- ***Specific input on reviews:***

The Parties shall periodically review the overall progress towards the ultimate objective of the Convention and actions related to mitigation, adaptation and means of implementation, including a comprehensive review not later than 2016 with consideration of future emission reduction requirements and targets in light of the IPCC's Fifth Assessment Report.

PAPER NO. 16: ECUADOR

**AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION UNDER DE CONVENTION
FULFILLMENT OF THE BALI ACTION PLAN AND COMPONENTS OF THE AGREED OUTCOME.**

Quito, April 2009

1. INTRODUCTION

In attention to a decision of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA), the President prepared the document: Ideas and Proposals on Paragraph I of the Bali Action Plan, to which Ecuador sent its submission on February 2009.

Following the process and taking into account the new Document “Fulfillment of the Bali Action Plan and components of the agreed outcome”, from March 17 2009, Ecuador ratifies the criteria sent on February, emphasizes the criteria indicated in this document and hopes that the text of negotiation to be prepared by the President considers them.

2. SHARED VISION

- Developing countries, despite not being responsible for the generation of historical climate change, are being adversely affected through two channels:
 - The impact of anthropogenic changes in the climate system and,
 - The impact of response measures that the developed countries are taking.
- Adaptation to the adverse effects of climate change is of high priority for all countries, and special attention is to be taken to the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, *especially those considered under Article 4.8 of the UNFCCC*, the Least Developed Countries (LDCs), Small Island Developing States (SIDS), taking into account the needs of countries in Africa affected by drought, desertification and floods, and *countries with biodiversity unique in the world, tropical glaciers and fragile ecosystems affected by climate change*.

A long-term global goal for emission reductions

- Developed countries must achieve stabilization of emissions at levels of 350 ppm and reduce its emissions by 45% to 2020 from 1990 levels and 95% until 2050.

3. ADAPTATION

A Cooperative framework for promoting adaptation and resilience

- Ecosystem-based approaches to adaptation provide community-based adaptation actions that further sustainable development and poverty reduction; promote gender equity; can be implemented from the short to long term and often form a critical component of adaptation plans and strategies from local to national levels.

Matching enhanced action on adaptation with financial and technological support

- The allocation and use of financial resources should be provided as a priority to particularly vulnerable developing countries, including LDCs, SIDS, countries in Africa affected by drought, desertification and floods and *countries with unique biodiversity in the world, tropical glaciers and fragile ecosystems*.
- The funding for adaptation should not be confused with the funding to countries for development.

4. MITIGATION BY DEVELOPING COUNTRIES

Nationally Appropriate Mitigation Actions (NAMAs) by developing countries

- In the framework of NAMAs, it is important to consider innovative options for developing countries, for example: to maintain petroleum underground (without exploiting) and to generate an economic compensation in similar magnitude to that which the country would receive in case of exploitation, through mechanisms to be defined that will take advantage of past and present experiences.

Economic and social consequences of response measures

- Developing countries, whose economy essentially depends on fossil fuel exportation and production, are undergoing direct and indirect impacts by response measures of the developed world. These countries require a direct support to face the present and future social, environmental and economic impacts, for example in economic diversification matters.

5. ON REDD

About the objectives and political mechanisms of incentives:

- To envision a mechanism applied to the forestry sector oriented towards global reduction of GHG emissions, in order to achieve the ultimate goal of the Convention expressed in its Article 2.

On the context and nature of incentives and political mechanisms:

- The implementation of activities related to paragraph 1b (iii) of decision 1/CP.13 and decision 2/CP.13, through a mechanism in which the developed country Parties take the lead in the process by transferring technological and economic means of implementation towards developing country Parties.
- The reduction of GHG emissions realized by the implementation of activities related to paragraph 1b (iii) of decision 1/CP.13 and decision 2/CP.13 are additional to the emissions reduction obligations of Annex 1 Parties of the Kyoto Protocol and should not offset exceeding emissions of Annex 1 Parties.
- The implementation of activities related to paragraph 1b (iii) of decision 1/CP.13 and decision 2/CP.13 is developed including the following:
 - a) Broad participation of several sectors from the government, as well as from civil society through a concerted planning process.
 - b) Mechanisms of consultation directed towards indigenous peoples and local communities.
 - c) The necessary provisions to ensure a transparent and fair distribution of resources.
 - d) Criteria of territory planning based on the individual circumstances of Parties, in the context of sustainable development and management of renewable natural resources, including forests, so that permanence is promoted for the development of activities related to paragraph 1b (iii) of decision 1/CP.13. and decision 2/CP.13
- Emissions reduction resulting from the development of activities related to paragraph 1b (iii) of decision 1/CP.13 and decision 2/CP.13, undertaken before year 2012, and appropriately measured, reported, and verified are recognized by the Convention.
- The implementation of activities related to paragraph 1b (iii) of decision 1/CP.13. and decision 2/CP.13 is designed to reach the national scale, taking into account special circumstances of some Parties with regards to ungoverned areas. Subnational implementation is designed to continuously scale up, so that national implementation is reached ahead in time. Each Party develops a unique GHG emissions accounting and monitoring system for its forestry sector, which includes all subnational activities.

About MRV:

- The Convention encourages the use of the appropriate IPCC Guidelines for National Greenhouse Inventories and the use of the Good Practice Guidance for LULUCF for accounting the emissions reduction realized by the development of activities related to paragraph 1b (iii) of decision 1/CP.13 and decision 2/CP.13. The use of such guidelines is subject to an effective measurable, reportable, and verifiable transfer of technology and economic resources from developed to developing country Parties. Without such transfer of resources, the use of the Revised 1996 IPCC Guidelines for National Greenhouse Inventories is accepted. Technology transfer is based on a case-by-case analysis, taking into account national circumstances of each developing country.
- The implementation of activities related to paragraph 1b (iii) of decision 1/CP.13 follows a phase wise approach. Parties choose voluntarily to move from one phase to another. In the first phase, “readiness” activities directed to prepare Parties to create the needed infrastructure are financed through a specific fund established with that purpose. In the second phase, Parties implement activities which could be financed by market or non-market mechanisms; the purpose of this phase is to scale up implementation towards the national level. In the third phase, the methodology and the institutional framework are fully developed and activities are measured, reported and verified within the Convention. Financial resources are available through market (voluntary or regulated) and non-market mechanisms at all phases; those mechanisms are not mutually exclusive.

About capacity-building, readiness, and demonstration:

- Coordinating activities with other agencies outside the Convention and multilateral institutions is encouraged to unify efforts for accomplishing the ultimate goal of the Convention. Such coordination does not imply embedded conditions or requirements other than those specifically related to Article 2 of the Convention. Significant economic resources should be provided by developed country Parties to further support initiatives already in place.

6. FINANCE AND TECHNOLOGY

Generation of financial resources

- Contributions from developed countries taking into account their historic GHGs emissions and economic capacity.

Delivery of financial resources:

- All developing countries should be eligible to access financial resources to reduce the impact of anthropogenic changes in the climate system, as well as the impact of response measures that developed countries are taking.
- Access to the financial resources must be as direct as possible towards the countries, avoiding the intermediation of implementation agencies and/or world-wide and regional organizations.

Institutional arrangements for the provision of financial resources and investments

- The global structure must be handled by and for the countries, considering the lessons learned of current structures and creating a Multilateral Fund that groups all developing countries.

PAPER NO. 17: GHANA

**OTHER INCENTIVES MECHANISMS FOR TECHNOLOGY DEVELOPMENT AND
TRANSFER - IN ACCORDANCE WITH BALI ACTION PLAN
(DECISION 1/CP.13, PARA 1.D.(I))**

PROPOSAL FROM GHANA – 6 APRIL 2009

In the Bali Action Plan it was decided that the future negotiating process shall address not only enhanced national and international action on mitigation, but also enhanced action on adaptation, technology development and transfer, and provision for financial resources and other incentives as well as investments. This includes, amongst others, consideration of:

- measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives by all developed countries, taking into account differences in their national circumstances; and
- nationally appropriate mitigation actions by developing countries in the context of sustainable development supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable manner.

The idea for a technology-related mechanism as incentive for technology development and transfer, was launched via the submission of Ghana at the AWGLCA-3. At the AWGLCA-4 in Poznan, as reflected in the Assembly Document, several developed and developing parties mentioned the need for mechanisms in relation to technology in different contexts.

This submission proposes an **incentive mechanism** that embodies more coherent ideas for technology-related mechanisms under the UNFCCC based on elements from the last version Assembly Document that might help to achieve compromise between the different interests:

Flexible mechanism for mitigation via projects/programmes that stimulate accelerated diffusion and transfer of existing environmentally sound technologies to developing countries.

The possible added value and nature of this mechanism is outlined below. In addition, elements for draft texts for a Copenhagen agreement are suggested.

**FLEXIBLE MECHANISM FOR MITIGATION VIA PROJECTS/PROGRAMMES THAT
STIMULATE ACCELERATED DIFFUSION AND TRANSFER OF EXISTING
ENVIRONMENTALLY SOUND TECHNOLOGIES TO DEVELOPING COUNTRIES.**

Description:

Parties propose National Technology Authorities in accordance with decision 3/CP.13 and also prepare National Mitigation Plans in accordance with their nationally appropriate mitigation actions. These plans include amongst others Technology Needs Assessments (TNAs) and/or Technology Action Plans.

For example, the Technology Action Plans could contain a credible baseline and realistic mitigation projections with targets and objectives regarding contribution of the accelerated diffusion and transfer of prioritized technologies, for the case of National Mitigation Plans. The estimated contribution is expressed in Environmentally Sound Technology Rewards (ESTRs).

The Technology Action Plans are published on the UNFCCC website, TTCLEAR, for comments by stakeholders and the general public within a period of, for example, 30 days. Based on the comments received, the host country may wish to reconsider and improve its Technology Action Plans. The final version is published on the TTCLEAR.

The UNFCCC issues the number of rewards in the account of the host country and holds them until further guidance by the National Technology Authority of the host country.

Project participants (public, private and multilateral) may submit project proposals that contribute to the achievement of the targets and objectives in the Technology Action Plans for approval by the National Technology Authority of the host country. Upon approval, the National Technology Authority also allocates Environmentally Sound Technology rewards to the project. Each project participant must be authorized for participation in this mechanism by the National Technology Authority of a Party.

Project participants may submit approved projects for registration at the UNFCCC. The UNFCCC allocates rewards to the project according to the specifications by the National Technology Authority of the host country in the Letter of Approval and holds them until a request for issuance has been submitted.

An independent body verifies the monitoring reports of the project and the National Technology Authority of the host country approves the requests for issuance of rewards by the UNFCCC.

The UNFCCC issues the rewards in accordance with the Rewards Issuance Approval by the host country. An Executive Body for technology development and transfer under the UNFCCC, supported by the Secretariat facilitates the process.

Actors:

National Technology Authorities of all Parties

(Local) verifiers

Project participants (private, public and multilateral)

Executive Body for Technology Development and Transfer under UNFCCC

UNFCCC Registry (adjusted)

ITL (adjusted)

Other stakeholders

New elements:

Executive Body for Technology Development and Transfer consistent with the G77 & China's submission on Technology Development and Transfer under the LCA

Creation of a new mitigation unit: EST reward (ESTR) = 1t CO₂ equivalent

Incentives/added value:

The EST rewards are tradable and can be used to meet part of the mitigation/MRV commitments of Parties, as well as for offset of activities. This will attract public and private investments.

The results of the projects contribute to the achievement of the EST targets and objectives of the host countries that benefit from greening of national economies. It provides a more strategic role for the host country government in the approval process and determination of additionally than in the case of other existing mechanisms and will allow for broader participation of all developing countries.

The proposal further addresses the Bali Action Plan concept of “**now and up and beyond 2012**”, but with the emphasis on the “**now and up to**”

This mechanism **can** also be extended to cover National Adaptation Plans that are developed by developing countries as part of their national adaptation strategies, in which case a new rewarding unit aside ESTRs will be needed.

It will also compliment the EU proposal for a facilitative mechanism for mitigation support and the EU call for scaling up R&D, demonstration projects etc. for all areas where the current carbon market fall short.

Other possible implications:

This project/programme/sector-based mechanism is supplemental to CDM, which might need to be adjusted to optimize overall performance.

Suggestion for draft Negotiation Text:

1. For the purpose of meeting its (reduction/MRV) commitments a Party may transfer to or acquire from other Parties emission reduction units resulting from projects/programmes that accelerate the diffusion or transfer of environmentally sound technologies, provided that:

- (a) Voluntary participation is approved by each Party involved.
- (b) Any such project results in measurable, reportable and verifiable reductions of GHG emissions (by sources or sinks)
- (c) The project contributes to the achievement of the technology targets and objectives of the host country
- (d) The host country has allocated AAUs/EST rewards to the project/programme
- (e) The project/programme is registered by the UNFCCC

2. Participants may involve private and public companies

PAPER NO. 18: GUYANA
DRAFT GUYANA SUBMISSION
POSITION STATEMENTS FOR THE NEGOTIATING TEXT
AWG on Long term Cooperative Actions 6
AWG on Kyoto Protocol 8
SBSTA
To be held in Bonn, Germany
June 1 – June 12, 2009

April 24, 2009

A shared vision for long-term cooperative action

A long-term global goal for emission reductions should:

Be based on the principle of common but differentiated responsibilities and respective capabilities, taking into account social and economic conditions and other relevant factors;

Be further based on the best available scientific information, in particular from the Intergovernmental Panel on Climate Change (IPCC)

Have as one of the key benchmarks the minimization of further climate change impacts on vulnerable developing countries;

We support a vision for the future where industrialized countries take the lead in reducing emissions and assist vulnerable countries to establish a low carbon development path through the transfer of technology and sufficient financial resources.

Further, in recognition of accelerated sea level rise, Arctic and Antarctic ice melt, oceanic acidification and atmospheric CO₂ concentrations, and their consequent negative accelerated impacts on the physical environment, economic activities and livelihoods in vulnerable societies, we support the following long term goals:

- Stabilization of atmospheric greenhouse gas concentrations at 350 ppm CO₂ equiv;
- Limiting of global average surface temperature increases to 1.5° C above pre-industrial levels;
- Global CO₂ reductions of at least 85% by 2050;
- Global greenhouse gas emissions must peak by 2015.
- Reduction by Annex 1 parties of at least 45% of their 1990 emission levels by 2020, and by 85% by 2050.

Mitigation

Forest conservation and sustainable forest management

Recognizing that deforestation and forest degradation account for about 1/5 of all GHG emissions, we believe that forest conservation and sustainable forest management have the potential to play a major role in mitigating the negative effects of climate change. We believe that this is the very *raison d'être* for paragraph 1 b iii of the Bali Action plan.

On the other hand, we note that the existing Kyoto Protocol provides a disincentive for High Forested / Low Deforestation (HFLD) countries to protect and maintain tropical forests, rewarding those who have destroyed or degraded their forest for economic advancement and are now attempting to afforest or reforest/rehabilitate.

This disconnect between the existing protocol on the one hand, and the intent and objective of the BAP on the other, as contained in paragraph 1 b iii must be corrected, and must be corrected now.

Guyana therefore calls for:

- A new Agreement that incorporates paragraph 1 b iii of the BAP ; that is, an agreement that recognizes forest conservation, sustainable forest management and enhancement of forest carbon stocks as mitigation tools.
- A new Agreement that provides for positive market based financial incentives for developing countries that have voluntarily kept their greenhouse gas emissions very low through sustainable forest practices.
- The level of financial resources to be determined by the opportunity cost of keeping these forests alive, their economic value to the nation and their ecological value to the world.

Reducing Emissions from Deforestation in Developing Countries (REDD)

Guyana supports the need for urgent actions under the a REDD mechanism to reduce emissions from Deforestation and Degradation.

We believe that rules and methodologies should be inclusive of a variety of national circumstances including those with historically lower than average deforestation rates.

We believe that a financial mechanism for REDD should be established, and that this should be market based.

We call for REDD and REDD plus to be incorporated into a post 2012 Agreement.

Finally, given the importance of forest degradation and the degree to which it has fallen behind on the road from Bali, Guyana supports the proposal by Norway and others for dedicated time be given to REDD and REDD plus in the succeeding AWG meetings later this year.

Reference emissions levels.

The use of historic or stock-based baselines penalizes HFLD countries which have consciously kept their emission levels low through sustainable forest management practices. Guyana is currently harvesting only 30% of what is allowed under internationally accepted SFM guidelines. This makes it unfair and punitive if we were to be held to this level for future assessments. We believe that reference emission levels should be forward looking, and incorporate national circumstances of HFLD countries to effectively elevate the baseline and allow for the development aspirations of these countries.

Emission reduction targets.

Most of our population, and urban and rural infrastructure lie below sea-level, protected by dykes. We are among the most vulnerable in the world to the threat of rising sea levels. We are therefore compelled to support not a 2 degree cap, but 1.5 degrees. We consequently call for reduction targets of 45% by 2020, and by 85% by 2050.

Displacement of Emissions (leakage).

Guyana supports an “All In” approach. It is necessary to ensure that there is a net emission reduction from the forest sector and that international mechanisms, including positive incentives and disincentives for emissions created by import and consumption, would be needed to ensure this outcome.

National and Sub-national approaches.

National approaches are supported. Sub-national approaches are both unnecessary and cumbersome and would not lend to greater accuracy in monitoring and assessment. Further, the particular land tenure characteristics and forest classification make sub-national approaches unsuitable. While we support pilots, these should be national based.

Guiding Principles

Guyana supports the use of IPCC compliant methodologies, specifically based on data availability, national capacities and national circumstances.

Capacity building

Guyana calls for capacity building and institutional strengthening to implement REDD and adaptation activities. Developing countries should be provided with the necessary resources for REDD planning, preparation and implementation in a timely manner.

Aviation and Maritime emissions

The issue of emissions from aviation and maritime fuel needs to be examined more closely so as to enable a more informed position on the issue.

Carbon capture and storage (CCS)

We note that emissions reduction targets cannot be achieved by a single strategy, and so there is a role for CCS in geological formations. However, CCS needs to be examined more closely so as to enable a more informed position on the issues, including leakage and permanence.

Monitoring, reporting and verifying (MRV)

We endorse the use of a monitoring, reporting and verification (MRV) mechanism for monitoring progress in achieving emission reduction targets. We believe that it must only be applied to mitigation actions based on technological and financial assistance, and implementation of financing, technology and capacity-building commitments by developed countries.

Support should be given for the establishment of robust national forest monitoring systems and methodologies based on remote sensing and ground truthing.

Nationally appropriate mitigation actions (NAMA's) by developing countries

We believe that NAMA's can contribute to the mitigation of climate change in accordance with countries' capabilities and national circumstances. We believe that NAMAs should be formulated at a national level and on a voluntary basis, and may include low-carbon development plans and strategies, as well as national sector-based mitigation actions and standards.

We do not support the subsuming of REDD in NAMA's, but REDD as a stand alone mechanism.

More flexible verification requirements for any type of action should apply to LDCs and small island and coastal low lying developing states.

Land Use, Land use change, and Forestry (LULUCF)

Forest management accounting. Guyana supports the use of forward looking baselines. This can factor out natural disturbances, age-class legacies, and indirect human-induced impacts.

Gross net accounting We support land based, net net accounting, noting that gross net activity based accounting affords Annex 1 Parties an unfair advantage in being able to pick and choose areas they report on, and so underestimate their actual emission levels.

ADAPTATION AND MEANS OF IMPLEMENTATION:

Guyana is highly vulnerable to climate change with approximately 90% of the population residing on the Coastal Zone which lies 1-2 metres below sea level. Despite the efforts Guyana is currently making to adapt to this situation, there is a need for stronger support to improve the capacity of the country to adapt. Developing countries, with limited resources such as Guyana, will be hit the hardest by climate change, even though they have contributed the least to causing the problem. Further, these vulnerable countries have the least resources and capacity to adapt. There is therefore an urgent need for greater support from industrialized countries to provide adequate and predictable financial resources to meet our adaptation needs.

Adaptation actions should be prioritized, and priority should be given to the needs of the most vulnerable countries;

Action should be guided by the principle of equity, polluter pays principle, common but differentiated responsibilities and respective capabilities.

Regarding the allocation and use of financial resources, financial support should be provided as a priority to particularly vulnerable developing countries.

Levels of vulnerability should be determined by national circumstances, respective capabilities, and levels of risk.

We call for the following:

1. Improvements in the area of capacity building under the Convention especially in the areas of disaster management and strengthening of key institutions and sectors.
2. Establishment of national and regional adaptation centers.
3. Incentivizing adaptation and creating enabling environments to build climate resilience in the areas of risk assessment, reduction and management, disaster management strategy and actions, insurance-related mechanisms, and economic diversification.
4. Support for vulnerable countries to formulate adaptation strategies, plans and activities, and quantify the cost of adaptation..
5. Technology support in the areas of monitoring, forecasting and modelling of climate change, for early warning, for improving the resilience of agriculture to the impacts of climate change, and for coastal zone management.
6. Scaling up of new, additional and predictable financial resources for adaptation.
7. Financing to be provided for implementation of adaptation measures
8. Establishment of a Convention adaptation fund.
9. Creation of a new multi-window mechanism that would include insurance, compensation, and risk management.
10. Implementation of a Global carbon dioxide levy to generate resources for adaptation.

DELIVERING ON TECHNOLOGY TRANSFER:

We underscore the need for increased access to appropriate technologies for adaptation and for enhancement of country and regional capacity for adaptation. We also emphasize the need to scale up global investment in adaptation technology R&D, diffusion and transfer of technology. Any action in this area would need to actively engage the private sector and encourage cooperative partnerships between governments and industry.

More specifically, we call for

- Long-term implementation of the strategic programme on technology transfer, including addressing gaps in current GEF and other relevant operations relating to technology transfer, leveraging private sector investment, and promoting innovative project development;
- Financial resources for research, development, manufacture, commercialization and diffusion of appropriate technologies for adaptation and mitigation.
- Technical support to developing countries to prepare or update their technology needs assessments;
- The transfer of publicly owned technologies for mutual and global benefit. Options explored include: pooling and sharing publicly funded technologies; making the technologies available in the public domain at affordable price and promoting joint R&D activities with developing countries.
- Establishment of regional technology centres and networks, enhancement of existing ones or a combination of both.
- A register of available technologies and how to access and utilize them.
- A new subsidiary body on technology transfer under the Convention, which would include a strategic planning committee, technical panels focused on different sectors whilst at the same time, maximizing use of existing institutions.

We believe that intellectual property rights should not be a fundamental obstacle for fulfilling developed countries' commitments on technology transfer. Recognizing that IPR's is a major barrier and that adaptation does not attract private sector investment, there should be greater accessibility and

affordability of appropriate technologies without compromising incentives for innovation provided by IPR protection.

DELIVERING ON FINANCIAL RESOURCES

Guyana underscores the need to mobilize financial resource both inside and outside the Convention, and to create enabling environments for mobilizing private investments and addressing barriers to public investment flows.

There should be a new financing architecture which should be based on the principles of effectiveness, efficiency and equity, and should be country-driven.

Generation of resources should be based on the principles of equity and common but differentiated responsibilities and respective capabilities.

Guyana further emphasizes the following:

- Climate change is an *additional* challenge to the development aspirations of LDC's, and so funding should be new, additional and predictable.
- All developing countries should be eligible to access financial resources, with emphasis on the needs of vulnerable countries in the context of adaptation;
 - Market-based mechanisms should be developed to provide positive incentives; these can be as stand-alone mechanisms, and/or in combination with non-market- based financial resources.
 - The level of financial resources for forest based mitigation should be determined by the opportunity cost of keeping these forests alive, their economic value to the nation and their ecological value to the world. .
 - There should be greater access to GEF financing through (a) greater simplification of application procedures, (b) reduction in transaction costs and (c) a faster turn-around time, (d) future consideration to tax all carbon credits and allowances in addition to increase the currently limited adaptation financing.
- Funding should come from implementation of Annex I countries' commitments, the 2% CDM adaptation fund, the private sector, as well as from new and innovative financial mechanisms.
- Financial initiatives outside of the UNFCCC should not be counted as fulfillment of Annex 1 arties' financial commitments.

For access to financial resources for adaptation we highlight the level of vulnerability, determined by national circumstances, respective capabilities and levels of risk and impacts;

For REDD and Redd Plus, we support a two-track approach that includes support provided by both fund based mechanisms and market-based mechanisms for deforestation, forest degradation and avoided deforestation, and a broad range of land-use activities.

PAPER NO. 19: ICELAND

24 April 2009

Submission

to the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA)
of ideas and proposals on the elements of paragraph 1 of the Bali Action Plan

**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**

Shared Vision (Paragraph 1 (a) of the Bali Action Plan)

Principles

The shared vision should be based on the principles of the United Nations Framework Convention for Climate Change. To be forward looking the shared vision must also include additional principles, such as gender perspectives, as a necessary and appropriate update of the Convention principles. Adding the gender principle will also bring the UNFCCC in line with existing agreements on gender equality.

As stipulated in paragraph 1 (a) of the Bali Action Plan, social and economic conditions and other relevant factors are to be taken into account when addressing a shared vision for long-term cooperative action. Incorporating gender considerations into the shared vision is vital and truly relevant as a social dimension in the future framework for climate change action. In order to fully promote the participation of all stakeholders in the shared vision women have to be defined as important stakeholders. That will, in return, ensure that gender considerations and balanced gender participation in decision-making become an indispensable part of the shared vision.

A long-term global goal for emission reductions

An ambitious long-term goal for emission reductions is required to ensure the necessary deep cut in global emissions. Such a long-term goal must be aspirational to ensure the involvement of all Parties. The developed countries must lead and the developing countries must take nationally appropriate mitigation actions (NAMAs)

The long-term goal must be comprehensive and based on best available scientific information from the Intergovernmental Panel on Climate Change (IPCC). It should be expressed in terms of limiting the global average temperature increase to 2 °C above pre-industrial levels. To attain this, the global emissions need to be reduced by at least 50 per cent by 2050 and the emissions must peak no later than 2020.

Enhanced action on mitigation (Paragraph 1 (b)(i) of the Bali Action Plan)

Comparability of efforts

Mitigation commitments of individual countries must be fair, achievable and cost-effective and ensure comparability of efforts among developed countries, taking into account mitigation potentials and national circumstances.

Comparable effort must be ensured in a transparent manner taking into account both general economic characteristics including total yearly GHG emissions, emissions per GDP (GHG/GDP), emissions per capita (GHG/cap), and special national circumstances including population trends and emissions per energy unit (CO₂ emissions/TPES). Particular attention needs to be paid to differences between countries with respect to domestic mitigation costs and domestic mitigation potentials.

Comparability of efforts between large and small Parties

Due consideration should be given to comparability of efforts between large and small Parties. Small Parties should not face disproportionate disadvantages due to lack of flexibility of action. This was addressed in Decision 14/CP.7 and should be reflected in a new agreement. The following language is proposed:

The mitigation commitment of a Party where a single project adds in any one year more than 5 per cent to the total carbon dioxide emissions of the Party in 1990, shall be adjusted by subtracting the proportional impact provided the following conditions: (i) the total carbon dioxide emissions of the Party were less than 0.05 per cent of the total carbon dioxide emissions of Annex I Parties in 1990, (ii) renewable energy is used for the single project, resulting in a reduction in greenhouse gas emissions per unit of production, and (iii) best environmental practice is followed and best available technology is used to minimize process emissions.

Wetland restoration as a new activity of mitigation

Drained and degraded wetlands are a significant source of greenhouse gas emissions that can be reduced or reversed by wetland restoration. Incentives to conserve wetlands and reduce emissions from degraded wetlands are lacking at present. Wetland restoration that reduces emissions of greenhouse gases and thus limits carbon stock degradation should be eligible activity for countries to meet their mitigation commitments.

Mitigation commitments

Measurable, reportable and verifiable nationally appropriate mitigation commitments shall be expressed as quantified emission limitation and reduction objectives (QELROS). For countries that are Parties to the Kyoto Protocol, the QELROS shall be expressed as a reduction compared to total reported emissions falling within limits set by the Kyoto Protocol and relevant COP and CMP decisions during the first commitment period.

Adaptation (Paragraph 1 (c) of the Bali Action Plan)

Gender perspective

In the last two sessions of the LCA the gender perspective has been referred to as being a necessary aspect for adaptation planning and policies. Encouraging women to participate in discussions on adaptation planning and policy-making will pave the way to their participation in the decision-making process and thereby ensure balanced gender participation at all levels.

Women and girls are among the groups that are more vulnerable to the consequences of climate change. Therefore, incorporating the gender perspective in the new framework for climate change serves as a vital foundation for a gender focused implementation of the new commitments within in that framework. The gender perspective has to be one of the guiding principles of the new framework.

Sustainable development

As stipulated in Article 3, paragraph 4 of the United Nations Framework Convention on Climate Change, sustainable development is one of the principles of the Convention. The strong link between sustainable development and climate change resilience has to be integrated into adaptation policies and their implementation. If an adaptation framework would be established, this link should be reflected in such a framework as well as the necessary policy guidelines for the framework and the different roles of different actors in adaptation work at the local, national, regional and international level.

Capacity building

Building up knowledge in the field of adaptation is important and presents better opportunities for countries to work together to tackle climate change drawing up on the experiences of each other. This should be done through partnerships at the bilateral and multilateral level. Cooperation in training professionals could be facilitated through existing or new programmes, including through the UNU Training Centres and Programmes.

Technology development and transfers (Paragraph 1 (d) of the Bali Action Plan)

The most efficient way of achieving effective and comprehensive technology collaboration with emphasis on cooperative research, development and innovation, is to engage the private sector and encourage cooperative partnership between governments and industries. Most nations are already engaged in a variety of multinational R&D collaboration which forms a sound base for further cooperation with the objective of ensuring effective deployment, diffusion and transfer of technology. Reforming and making efficient use of current institutional arrangements is essential, before any plans are made for establishing new mechanisms.

In order to achieve early results and returns on efforts and investments a particular emphasis needs to be on renewable and sustainable energy and improvements in energy efficiency. Emphasis should also be placed on sectors with the highest emissions and sectors where most benefits and early returns are to be expected.

Small and medium size enterprises (SMEs) play an important role in any economic development, in particular in emerging economies. They are the main creators of new jobs and thus could play a vital role for the success of the adaptation and mitigation efforts. The institutional structure needs to be aware of the particular needs of SMEs, including minimal bureaucracy and efficiency at all levels of administration.

Economic incentives for the private sector are likely to be the most effective stimulus for environmental improvements. Taking advantage of the flexibility of the carbon markets and trading systems will leverage maximum private sector participation and thus accelerate constructive developments.

PAPER NO. 20A: INDIA

Submission by Government of India on BAP paragraph 1(a) / UNFCCC Articles 2, 3 and 4

“Adopts a shared vision for long-term cooperative action in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, integrating:

- (i) enhanced provision of financial resources by developed countries to meet the agreed full incremental costs of mitigation and adaptation actions by developing countries;
- (ii) promotion of technology development, diffusion and transfer by operating the intellectual property rights regime in a manner that encourages development of climate - friendly technologies and simultaneously facilitates their diffusion and transfer to developing countries;
- (iii) enhancing the adaptive capacity of developing countries by promoting rapid sustainable development in these countries and by increased financial assistance to developing countries that are particularly vulnerable;
- (iv) effecting deep long-term reductions in global greenhouse gas emissions with appropriate mid-term emission reductions, based on an equitable allocation of the global atmospheric resource, in order to prevent dangerous anthropogenic interference with the climate system, while enabling developing countries to exercise the Right to Development and rectifying unsustainable life-styles in all countries.

Submission by Government of India on BAP paragraph 1(b)(ii) / UNFCCC Articles 4 and 12

[Decides]

‘Developing countries may, on a voluntary basis, **propose** mitigation actions that they offer to implement provided the agreed full incremental costs are met by developed countries through the financial mechanism referred to in Article 11, paragraph 1, of the Convention. Such proposals should include an estimate of all incremental costs, including for the transfer of technology and capacity-building, as well as an estimate of reductions of emissions and increments of removals of greenhouse gases. Proposed mitigation actions, as well as the support required to enable their implementation should be measurable, reportable and verifiable. **Each proposal, together with the agreed financial support, shall be inscribed in a “Register of NAMAs (Nationally Appropriate Mitigation Actions) of Developing Countries Supported and Enabled by Technology, Financing and Capacity-building”, on conclusion of an agreement between the proposer developing country and the financial mechanism in accordance with Article 4, paragraph 3 of the Convention.**’

Submission by Government of India on BAP paragraph 1(e) (i) / UNFCCC Article 4

[Decides]

‘Each developed country Party or other developed Party included in Annex II of the Convention shall contribute 1 percent of its GDP to the financial mechanism referred to in Article 11, paragraph 1, in order to enable developing countries to implement nationally appropriate mitigation and adaptation actions involving incremental costs, in accordance with the provisions of Article 4, paragraphs 3, 4 and 7 of the Convention.’

Submission by Government of India on BAP paragraph 1(b)(i) / UNFCCC Article 4.2(a) & (b)

“Decides that developed country Parties listed in Annex I of the Convention shall, as a group, reduce their emissions of greenhouse gases not covered by the Montreal Protocol, by over [] per cent by 2020, compared to the base year 1990. This overall target shall be met through the individual emission reduction commitments of all Annex I Parties to the Kyoto Protocol for the second commitment period and the commitment of the United States of America to reduce its emissions of these gases by [] per cent by 2020, compared to the same base year, reflecting a comparable effort on its part, taking into account differences in its national circumstances. The emission reduction commitments of developed countries shall be subject to the same rules of measurement, reporting and verification.”

PAPER NO. 20B: INDIA

Submission by Government of India on Enhanced Action on Adaptation and its Means of Implementation

Preamble

- Adaptation needs to receive the same level of attention as that given to mitigation for reasons that the adverse impacts of climate change can pose a serious risk to a sustainable economic and social development.
- There is need for a comprehensive and flexible framework to address the different aspects of adaptation that will lead to the formulation and implementation of adaptation plans, build resilience, and reduce and manage risks with appropriate financial and technological support.

I. Principles

- Key principles for enhanced action for adaptation and means of implementation inter alia should include:
 - Equity and principle of common but differentiated responsibilities and respective capabilities under the convention.
 - Establish new, additional and predictable financial resources that are supported by appropriate institutional mechanism.
 - Promote coherence in a way that adaptation issues are addressed under the UNFCCC.
 - Build access to means of implementation including finance, technology, capacity building, and knowledge sharing for adaptation at national, sub regional, regional and international levels.
 - Implementation of Adaptation actions should take into account diverse and specific characteristics of different levels of vulnerability assessments including gender sensitivity as integral part of adaptation actions.
 - Cover full costs of technology for stand alone adaptation projects.

II. Institutional Mechanism

- Appropriate institutional mechanisms at national, sub regional, regional and international level for adaptation should be established with an executive board responsible to Conference of Parties for the management, delivery and easy access of resources. The executive board should be supported by an advisory body that will assist the board on issues related to methodologies, provide guidance on additional costs, and for establishing templates and matrices for project design reflecting sector specific characteristics. A secretariat to support the operations of the arrangements and a trustee for managing and disbursing funds will be required to be incorporated within this institutional arrangement.

III. Means of Implementation

- The financial resources for enhanced adaptation action should be adequate, agreed full costs, predictable, timely and stable with provisions of direct, simplified and expeditious access to developing country Parties.

IV. Implementation of adaptation actions

- The adaptation actions should inter alia include, enabling activities, activities related to reducing vulnerabilities, rehabilitation and compensation for loss and damage, resilience building through Adaptation projects and programmes; Adaptation technologies; Insurance; and mainstreaming adaptation in the national developmental programmes. This should also include activities such as capacity building, learning by doing and knowledge sharing.

V. Risk and Insurance

- Assessment of risks associated with climate change is the fundamental requirement for devising adaptation plans to combat climate change. For addressing climate change risks, insurance mechanisms in the nature of crop insurance, flood insurance and other insurances as per the adaptation requirements need to be included.

VI. Monitoring and Feedback

- An appropriate monitoring and feed back mechanism should be established to ensure full implementation of developed country Parties under the Convention.

PAPER NO. 20C: INDIA

Submission by Government of India on Enhanced action for provision of financial resources under the Convention

The Conference of the Parties,

Recalling the relevant provisions of the Convention, in particular Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention,

Recalling further the resolve of the Parties, as expressed in para 1(b)(ii), 1(c) and 1(e) of Decision 1/CP.13, to enhance action on the provision of financial resources and investment to support action, inter alia, on mitigation and adaptation and technology cooperation,

Affirming that the developed countries are committed to provide agreed full additional costs of mitigation and adaptation, including costs of technology transfer, incurred by developing countries as laid out in 4.3, 4.4 and 4.5 of the Convention;

Recognising that the agreed incremental costs must include the upfront incremental costs of investment and technology transfer and the lifetime incremental economic costs incurred by the developing countries.

Agreeing that the agreed full incremental costs of mitigation and adaptation, including costs of technology transfer in Non-Annex I Parties will be recompensed in full by the Annex I Parties through resource transfers, grants or grant equivalent of soft loans,

Conscious of the fact that the funding for addressing climate change needs to be adequate and predictable as required under Art 4.3 of the Convention, and hence cannot be voluntary,

Acknowledging that the implementation of commitments under Article 4.3 will provide the main source of funding, and that such funding will be “new and additional”, over and above all existing and likely flows from both domestic and foreign official and private sources currently financing development;

Recalling Art. 11 of the Convention defining a financial mechanism of the Convention that will function under the guidance of and be accountable to the Conference of the Parties,

[Decides that]

the assessed contributions equal to at least 0.5% of the Gross Domestic Product of the Annex I Parties will be contributed by the Annex I Parties to provide for financial resources and investment to support action, inter alia, on mitigation and adaptation and technology cooperation as envisaged in para 1(e), 1(b)(ii) and 1(c) of Decision 1/CP.3,

the determination of individual Annex-1 obligations shall be based on responsibility and respective capability,

the Annex I Parties will be free to meet their respective assessed contributions either by earmarking domestic public funds from respective budgets or by raising the funds from country-specific or region-specific auctioning of emission allowances, or any other means considered feasible within respective developed country borders as consistent with the principles and the provisions of the Convention,

[the resources shall be grant-based, particularly for adaptation, without prejudice to certain concessional loan arrangements in appropriate form, to meet the needs of a specific programme],

the contributions of the Parties shall be made to a Fund that will be managed and operated by an entity subject to the direct supervision and authority of an Executive Board, constituted and appointed by the CoP,

the Executive Board of the Fund shall have an equitable and balanced representation of all Parties within a transparent system of governance and shall function under the supervision and the authority of the COP,

the Executive Board shall ensure that all Parties have direct access to the Fund in accordance with guidelines as laid down by the CoP which shall decide on the policies, programme priorities and eligibility criteria for accessing the funds,

any funds pledged to an entity or Fund not managed and operated by the Financial Mechanism shall not be regarded as the fulfilment of commitments by developed countries under Art. 4.3 of the Convention,

the Executive Board, with approval of the CoP, may authorize the national entities of developing country Parties as designated by such Parties to approve activities, projects, programmes for funding, subject to the guidelines and procedures approved by the CoP,

the financial mechanism shall have separate windows for funding projects, programmes and activities aimed at mitigation and adaptation and technology cooperation and each of the funding windows shall be assisted by a dedicated team of experts (thematic assessment unit) to carry out the relevant assessments for disbursement to the designated national funding entities of the developing country Parties

the thematic assessment units shall be a part of the Financial Mechanism and shall function under the authority of the Executive Board,

the Executive Board shall manage a certification and registry system for receiving financial resources in compliance of the financial commitments of developed country Parties under Art 4.3 of the Convention,

the Executive Board, with approval of the CoP will institute suitable external independent oversight as well as internal monitoring and evaluation into the management and operation of Fund

PAPER NO. 20D: INDIA

Submission by Government of India on Reducing emissions from deforestation in developing countries: approaches to stimulate action

The Conference of the Parties,

Recalling the relevant provisions of the Convention, in particular Article 2, Article 3, paragraphs 1, 3 and 4, and Article 4, paragraphs 1(a)–(d), 3, 5 and 7,

***Recalling* the decision 2/CP.13, and draft conclusions proposed by the SBSTA 28 Chair as contained in document FCCC/SBSTA/2008/L.12 and SBSTA 29 contained in document FCCC/SBSTA/2008/L.23**

Acknowledging the contribution of the emissions from deforestation to global anthropogenic greenhouse gas emissions,

Acknowledging that forest degradation also leads to emissions, and needs to be addressed when reducing emissions from deforestation,

***Acknowledging*, inter alia, the contribution of forest conservation, maintenance, and enhancement of carbon stocks by sustainable management of forests in reducing anthropogenic greenhouse gas emissions,**

***Recognizing* the need of a comprehensive REDD mechanism, encompassing all policy approaches that enhance or save forest carbon, including approach of forest conservation, and increase in forest cover due to sustainable management of forests, and that of reducing deforestation and degradation,**

Recognizing that efforts and actions to reduce deforestation, and to maintain and conserve forest carbon stocks **including their enhancement due to sustainable management of forests** in developing countries are already being taken,

***Recognizing* the complexities, efforts of communities, and high opportunity cost involved in stabilization, maintenance, and conservation of forest cover in diverse national circumstances,**

***Recognizing* the need of encouraging all activities including reduction in deforestation, and stabilization, maintenance, and conservation of forest carbon stocks including their enhancement due to increase in forest cover and/or sustainable management of forests in order to reduce emissions and thereby helping to achieve the ultimate objective of the Convention,**

Affirming the urgent need to take further meaningful action encompassing all relevant activities to reduce emissions from deforestation and degradation in developing countries,

Noting that **all activities resulting in** sustainable reduction in emissions from deforestation and forest degradation, **including conservation and enhancement of forest carbon stocks** in developing countries require stable and predictable availability of resources,

***Recognizing* that reducing emissions from deforestation and forest degradation through activities resulting in reduction in deforestation, maintenance and conservation of forest carbon stocks including their enhancement due to increase in forest cover and/or sustainable management of forests** in developing countries can promote co-benefits and may complement the aims and objectives of other relevant international conventions and agreements,

Recognizing also that the needs of local and indigenous communities should be addressed when action is taken to reduce emissions from deforestation and forest degradation,

1. *Invites* Parties to further strengthen and support ongoing efforts to reduce emissions from deforestation and forest degradation, **by reducing deforestation, and maintenance and conservation of forest carbon stocks including their enhancement due to increase in forest cover and/or sustainable management of forests** on a voluntary basis;

2. *Encourages* all Parties, in a position to do so, to support capacity-building, provide technical assistance, facilitate the transfer of technology to improve, inter alia, data collection, estimation, **monitoring and reporting** of emissions from deforestation, forest degradation, **and maintenance and conservation of forest carbon stocks including their enhancement due to increase in forest cover and/or sustainable management of forests**, and address the institutional needs of developing countries to undertake the above tasks;

3. *Encourages* developing countries to undertake a programme of work using remote-sensing techniques with minimum ground verification to develop national monitoring systems in order to produce demonstrable, transparent, verifiable, and result oriented estimations in context of paragraphs 5 and 6 below;

4. *Further encourages* developing countries to ascertain reference emission and removal levels and bench mark year in the context of national circumstances taking into account reliable historical data;

5. *Decides* that all activities leading to following objectives shall qualify to be acceptable for positive incentives under Reducing Emissions from Deforestation and Degradation (REDD) mechanism:

- (a) Stabilization of forest cover, and thereby forest carbon stocks
- (b) Conservation and maintenance of forest carbon stocks due to sustainable management of forests
- (c) Reduction in deforestation rates
- (d) Enhancement of forest carbon stocks due to sustainable management of forests, and increase in forest cover due to afforestation and reforestation
- (e)

6. *Decides* that methods agreed by the Parties to estimate, measure, monitor and report status of stabilized forest carbon stocks and/or changes in forest carbon stocks and greenhouse gas emissions in respect of activities mentioned in paragraph 5 above shall be applied by developing countries to claim positive incentives,

7. *Decides* that separate financial approaches shall be adopted for providing positive incentives for the two types of carbon stocks under REDD regime as under

- (a) Change in carbon stocks
 - i) Incremental carbon stocks
 - ii) Reduced deforestation

- (b) Baseline carbon stocks

8. *Decides* that the financial mechanism for providing positive incentives for i) change in carbon stocks, and ii) baseline stocks shall be as under

(a) A market based approach for fluxes with reference to paragraph 7(a) and for actions mentioned in paragraphs 5 (c) and (d) above

(b) A non-market based approach for stocks with reference to paragraph 7(b) and for actions mentioned in paragraphs 5 (a) and (b) above

9. *Invites* Parties, in particular Parties included in Annex II to the Convention, to mobilize resources to operationalize the non-market mechanism

10. *Invites* Parties to establish market-based and non-market based mechanisms for disbursement of positive incentives with reference to paragraph 8 above; and

11. *Decides* that definitions, modalities, rules and guidelines relating to REDD mechanism including establishment of the market and non-market financial mechanisms for disbursement of positive incentives shall be finalized, and placed before the COP in itsth Session.

PAPER NO. 20E: INDIA

SUBMISSION BY GOVERNMENT OF INDIA ON DEVELOPMENT AND TRANSFER OF TECHNOLOGIES UNDER THE CONVENTION

The Conference of the Parties,

Recalling chapter 34 of Agenda 21 and the relevant provisions of the programme for the further implementation of Agenda 21 on the transfer of environmentally sound technologies adopted by the United Nations General Assembly at its nineteenth special session,

Recalling the relevant provisions of the Convention, in particular Article 4, paragraphs 1, 3, 5, 7, 8 and 9, Article 9, paragraph 2(c), Article 11, paragraphs 1 and 5, and Article 12, paragraphs 3 and 4,

Recalling decisions 13/CP.3, 4/CP.7, 6/CP.10, 6/CP.11, 3/CP.12 and 1/CP.13,

Recognizing that there is a crucial need to accelerate innovation in the development, deployment, adoption, diffusion and transfer of environmentally sound technologies among all Parties, and particularly from Annex II Parties to non-Annex I Parties,

Further recognizing that current institutional arrangements, access to financing and suitable indicators for monitoring under the Convention for the implementation of Article 4, paragraph 5, are limited and should be enhanced to deliver immediate and urgent technology development, deployment, diffusion and transfer to non-Annex I Parties,

Further recognizing the barriers to technology transfer and trade, and highlighting the urgency for access of advanced clean technologies to non-Annex I Parties, while balancing rewards for innovators with the common good of humankind, including jointly developed technology and intellectual property rights (IPR) sharing.

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

1. *Agrees* to establish an arrangement for the purposes of providing financial and technical co-operation, including the transfer of technologies to non-Annex I Parties pursuant to Article 4, paragraph 5, to enable mitigation and adaptation actions and approaches under the relevant paragraphs of decision 1/CP.13. The arrangement shall meet the costs incurred by such Parties in order to enable these actions.

2. Decides that the categories of full costs met by the arrangement shall include, inter alia:

- (a) Procurement of technologies for adaptation to the adverse effects of climate change
- (b) Research, development and demonstration of new adaptation and mitigation technologies
- (c) Guarantees on foreign direct investment for adaptation and mitigation technologies
- (d) Capacity-building to manage and generate technological change and enhance absorptive capacity
- (e) Commercialization of new and emerging technologies, inter alia:
 - i. Venture capital, with public investment leveraging private capital markets for emerging adaptation and mitigation technologies;
 - ii. Research and development of new adaptation and mitigation technologies, financed by venture capital and other sources
 - iii. Joint development of adaptation and mitigation technologies

3. *Decides* that the categories of full incremental costs met by the arrangement shall include, *inter alia*:

- (a) Creation of manufacturing facilities for adaptation and mitigation technologies, including *inter alia*:
 - i. Compulsory licensing, cost of patents, designs, and royalties;
 - ii. Cost of conversion of existing manufacturing facilities or of establishing new facilities;
 - iii. Cost of research and development activities, including joint research, development and demonstration
 - iv. Technology adaptation
 - v. Cost of retraining and dissemination of know-how;
 - vi. Operational costs; and
 - vii. Cost of monitoring and verification.
- (b) Procurement of adaptation and mitigation technologies, including software and hardware, *inter alia*:
 - i. Cost of premature modification or of replacement of existing equipment, as well as the cost of new equipment;
 - ii. Cost of retraining and dissemination of know-how;
 - iii. Cost of technical assistance for the design, installation, and stable operation of the technology;
 - iv. Cost of fuel and other operational costs;
 - v. Cost of monitoring and verification.

4. *Decides* that the list of categories of costs, in paragraph 2 and 3 above, eligible for support by the arrangement can be modified by the Conference of the Parties.

5. *Decides* that the arrangement shall monitor activities, using performance indicators, and periodically report to the COP on the performance assessment of the activities supported by the arrangement, including, *inter alia*, the speed of technology flows and the range and effectiveness of technologies transferred, with a view to measuring, reporting and verifying the results of the arrangement.

6. *Decides* that the arrangement established under paragraph 1 shall include an Executive Board of Technology, as a subsidiary body as established in accordance with Article 7(2)(i), a Technology Fund which shall be a window of the financial mechanism under the UNFCCC, and a Secretariat, who shall operate under the authority of the Conference of the Parties, and who shall decide on its overall policies.

7. *Agrees* that the Executive Board of Technology shall develop strategy and technology action plans, and monitor the implementation of specific operational policies, guidelines and administrative arrangements, including the disbursement of resources, for the purpose of achieving the objectives of the Technology Fund, taking into account, the cost-effectiveness of the proposed activities, as well as the potential for their replicability, and the cost-sharing by project beneficiaries.

8. *Agrees* that the Executive Board of Technology shall elaborate modalities and procedures for implementation to report for adoption by the Conference of the Parties at its sixteenth session.

9. *Decides* that the Executive Board of Technology shall recommend a work programme based on the expected assessed contributions to the Technology Fund for each 3-year period.

10. *Decides* that the members of the Executive Board of Technology shall be elected by the Conference of the Parties on the basis of a balanced representation of non-Annex I Parties and Annex I Parties.

11. *Agrees* that a new branch of the UNFCCC Secretariat shall support and facilitate the activities of the Executive Board of Technology, and shall be accountable to it.

12. *Decides* that the Technology Fund shall meet the costs incurred by such Parties in order to enable the actions specified in paragraph 2 and 3 above and other decisions of the Conference of the Parties, as well as the administrative costs of the Executive Board of Technology, and the Secretariat.

13. *Decides* that resources under the Technology Fund shall be disbursed with the concurrence of the beneficiary Party.

PAPER NO. 21A: INDONESIA

Jakarta, 24 April 2009

IMPORTANT ELEMENTS ON AWG-LCA:

CONSIDERATION FOR AWG-LCA NEGOTIATION TEXT AT THE SIXTH SESSION

Submission on the Agenda Item 3 (a-e) of AWG-LCA: Enabling the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012

In Bonn, 28 March - 8 April 2009, the Ad-Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) invited parties to submit *their views on ideas and proposals on the element of paragraph 1 of the Bali Action Plan (BAP) which will be taken into account in a negotiating text to be prepared by the chair for consideration at the sixth session of the AWG-LCA.*

In Poznan, Indonesia has submitted its initial ideas and proposals on the element of paragraph 1 of BAP as contain in document **FCCC/AWGLCA/2009/MISC.1**. This document elaborates in more details Indonesia's proposal for elements to be considered in the negotiation texts. In addition to this submission, Indonesia also submitted proposals for specific elements of Bali Action Plan, namely ***Enhanced Action on Mitigation – Now, Up To and Beyond 2012 (para 1 b of BAP)*** and ***Enhanced Action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation (para 1 e of BAP)*** in separate documents.

At the outset, we would like to re-emphasize the importance of an agreed outcome to be adopted by COP-15 of the UNFCCC in Copenhagen that in our views should contain not only possible elements but also concrete measures to address the climate change.

The Government of Indonesia hereby submits its ideas and proposals on the elements should be contained in negotiating text to the AWG-LCA.

I. A SHARED VISION FOR LONG-TERM COOPERATIVE ACTION

Definition of A Shared Vision

In regard to the definition of a shared vision for long-term cooperative action, Indonesia is in the view of the following:

1. A shared vision for long-term cooperative action should be considered as an integrated approach that pay equal attention to the four climate building blocks as contained in Decision 1/CP 13 (Bali Action Plan): mitigation, adaptation, technology development and transfer, and provision of finance resource and investment.
2. Approaches for the Shared Vision for long-term cooperative action, including a long-term global goal for emission reduction, shall be the based on how to achieve the ultimate objective to the Convention, in accordance with the provisions and principles of the Convention, in particular the principle common but differentiated responsibilities, respective capabilities, and on the basis of equity; taking into account social and economic conditions, the specific needs and special circumstances of developing countries, precautionary approach, the right for sustainable development and sustainable economic growth.

A long-term global goal for emission reduction

To elaborate specific consideration given to a long-term global goal for emission reduction as an element of the Shared Vision, Indonesia's expresses its views, as follow:

1. The long-term emission reduction goal, as one of the important element of the shared vision, should be based on ambitious mid-term, based on recent science findings, and allows the consideration of cost-effectiveness and precautionary approach for actions undertaken to enhance mitigation action now, up to and beyond 2012. A stabilization level of 450 ppm by 2020 should be pursued as the basis in identifying the ranges of this long-term emission reduction goal.

2. The leadership of developed countries in taking action to reduce emissions shall aim to achieve this long-term goal, guided by the mid-term goal, in the form of measurable, reportable and verifiable Nationally Appropriate Mitigation Actions or Commitments (NAMACs), including quantified emission reduction objectives.
3. Nationally appropriate mitigation actions (NAMAs) by developing countries shall aim to enhance full, effective and sustained implementation of the convention in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.

II. ENHANCED ACTION ON ADAPTATION

In regard to the importance of full, effective and sustained implementation of adaptation as stipulated in the Convention, Indonesia is in the view of the following:

1. Vulnerability and adaptation to climate change is context-specific and adaptive capacity varies by national socio-economic conditions as well as other local circumstances.
2. In order to achieve its ultimate objective in full accordance with its principles and commitments, a comprehensive mechanism is necessary to enhance action on adaptation. The mechanism should support action on adaptation now, up to and beyond 2012.
3. The comprehensive mechanism should be established to enable, support, facilitate, and implement adaptation actions by addressing adequate, predictable and timely flow of new and additional financial resources as well as deployment, diffusion and transfer of technology to support urgent and immediate national, sub-regional and regional adaptation activities and programmes in all developing countries.
4. The comprehensive mechanism must support, on an ongoing basis, efforts to enhance national capacity to incorporate adaptation considerations into the national development process, to implement stand-alone adaptation efforts.
5. The technology support under this comprehensive mechanism must:
 - a. Account sector specific adaptation technologies and incorporate ecosystem scale inter-sectoral linkages;
 - b. Address the need for research and development, deployment, diffusion and transfer of appropriate adaptation technologies.
6. The financial support under this comprehensive mechanism must:
 - a. Be predictable and stable, new and additional, adequate and timely, for the implementation of nationally urgent and long-term determined adaptation priorities;
 - b. Be supported by contributions from developed countries as part of their commitments under the Convention;
 - c. Be supported by new and innovative international and regional mechanisms to ensure predictable financing.

III. ENHANCED ACTION ON MITIGATION

A. MITIGATION BY DEVELOPED COUNTRIES: NATIONALLY APPROPRIATE MITIGATION ACTIONS OR COMMITMENTS (NAMACs)

Modalities and Procedures

1. Provisions of the Conventions reflected a distinct Annex-I and Non-Annex I obligations on actions on mitigation based on the principle of common but differentiated and respective capabilities, with developed countries should take the lead on such actions;

2. Measurable, reportable and verifiable Nationally Appropriate Mitigation Actions or Commitments (NAMACs), including quantified emission limitation and reduction objectives (QELROs), should be undertaken mostly by domestic actions.
3. For the purpose of meeting its NAMACs, Developed Countries may acquire from Developing Countries, emission reduction units resulting from projects in Developing Countries aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:
 - (a) Any such project has the approval of the Countries involved;
 - (b) Any such project provides a reduction in emission by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;
 - (c) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting the NAMACs.

Measurable, Reportable and Verifiable of NAMACs

1. Monitoring of compliance with NAMACs should occur, including a methodologies and procedures to register, reporting and review of actions and commitments, that will provide a foundation for measurement, reporting and verification of NAMACs.
2. The compliance system of NAMACs could be built on the existing compliance mechanism, such as the one established under the Kyoto Protocol, as well as taking into account experiences gained from other multilateral agreements.
3. The compliance system of NAMACs could be supported by an establishment of New Body under COP that will manage, on an ongoing basis, the measurement, reporting and verification of NAMACs.

B. MITIGATION BY DEVELOPING COUNTRIES: NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMAS)

Modalities and Procedures

1. Provisions of the Conventions, as stipulated in Article 4 and Bali Action Plan, developing countries global climate responsibilities is to pursue a sustainable development strategy in accordance with their respective capabilities.
2. Nationally Appropriate Mitigation Actions (NAMAs) should be based on sustainable development strategy, on the basis of 'a no-lose target', and taking into account the priority needs of developing countries to achieve the economic growth and poverty eradication in a sustainable manner.
3. NAMAs should be majorly supported and enabled by technology, financing and capacity-building provided by developed countries; in addition, where applicable, Developing Countries may self-finance such actions.
4. Developing Countries may transfer to Developed Country, emission reduction units resulting from projects in Developing Countries aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:
 - (a) Any such project has the approval of the Countries involved;
 - (b) Any such project provides a reduction in emission by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;
 - (c) Any such project benefits sustainable development strategies, policies and measures of the Developing Countries involved;

- (d) The transfer of emission reduction units shall be supplemental to the ‘no-lose target’ domestic actions for the purposes of meeting the NAMAs;

MRV of NAMAs and its Technology, Financing and Capacity-Building supports

1. Monitoring on implementation of NAMAs should occur, including a methodologies and procedures to register actions that will provide a foundation for measurement, reporting and verification of the technology, financing and capacity-building supports needed by NAMAs.
2. The monitoring system of NAMAs could be supported by an establishment of New Body under COP that will manage, on an ongoing basis, the measurement, reporting and verification of NAMAs and its respective technology, finance, and capacity-building supports.

C. REDD-PLUS

1. Mechanism on REDD Plus-should be designed to accommodate different national circumstances of developing countries and its respective capabilities.
2. The Mechanism should establish way to engage REDD-Plus in NAMAs, in the context of sustainable development, supported and enabled by technology, financing and capacity-building provided by developed countries, in a measurable, reportable and verifiable manner.
3. REDD-Plus may included through a market-based mechanism, where emission reduction units resulting from REDD-Plus projects in Developing Countries aimed at reducing deforestation or forest degradation, provided that:
 - (e) Any such project has the approval of the Countries involved;
 - (f) Any such project provides a reduction in emission from deforestation or forest degradation in Developing Countries, that is additional to any that would otherwise occur;
 - (g) Any such project benefits sustainable development strategies, policies and measures of the Developing Countries involved;
 - (h) The transfer of emission reduction units shall be supplemental to the ‘no-lose target’ domestic actions for the purposes of meeting the NAMAs.
4. While international carbon markets may offer the best means to provide financial incentives at the scale required to effectively address emissions from deforestation and forest degradation, there is certainly needs for funds in providing resources for capacity building and market readiness activities including in addressing drivers of deforestation and forest degradation.

D. ECONOMIC AND SOCIAL CONSEQUENCES OF RESPONSE MEASURES

1. Possible remedies that may come as negative economic and social impacts of the policies and measures by Developed Countries to Developing Countries should be assessed.
2. A framework to address the impacts of response measures is necessary to enhance action on mitigation, taking into account existing knowledge and experiences on using win-win technologies to minimize adverse effects of the response measures.
3. Potential consequences of policies and measures by Developed Countries shall not be twisted into means to implement trade barriers.

E. APPROACHES FOR COOPERATIVE ACTIONS ON MITIGATION

Sectoral Approach

1. Sectoral approaches should not replace national emission target or being used to quantify national target.
2. Any such approaches could be used as a tool for bottom-up analysis of mitigation potentials, based on recent scientific findings and existing knowledge.

3. Any such approaches shall not be applied as a single standard to determine emission reduction potential.
4. Application of any such approach shall not leading to any new commitment for Developing Countries nor shall be used as a means to imply discrimination or disguised restriction of access for Developing Countries into international trading.

Market-Based Approach

1. Expansion of International carbon markets and auction of allowances for emission may offer means to provide financial incentives at the scale required to effectively implement global mitigation actions.
2. Maintaining the carbon value at appropriate level such that the emission trading through carbon market can be continued for transfer of clean technology including its associated financial flows to ensure that developing countries grow their economies in a sustainable manner.
3. Carbon markets offer the potential for some cost-effective means to reduce emission. If designed well, they can mobilize additional private finance. Safeguarding the instruments to ensure high quality projects would be highly required.

IV. FINANCE AND TECHNOLOGY

A. GENERATION OF FINANCIAL RESOURCES

1. Resources should be predictable and sufficient to support programmatic approach of actions on mitigation and adaptation, in particular in Developing Countries.
2. Provisions of Convention indicate that the major source for finance shall derived from public fund, while significant amount of new and additional sources through market mechanism and other private sector resource are require to complement the fund.
3. New and additional source could be generated from:
 - (a) Auctioning of assigned amounts or emission allowances from Developed Countries at the international and/or domestic level
 - (b) A share of proceeds from market-based mechanisms under the Kyoto Protocol
4. Harnessing market forces in the battle against climate change is essential, new form of more cost-effective and flexible way of international carbon market need to be delivered.
5. Climate change is an aspect to all development issues, institutional challenges concerning public fund and in particular concern on the utilization of ODA should be at the same level of attention.

B. INSTITUTIONAL ARRANGEMENT AND ORGANIZATIONS

1. Any such Funding Mechanism should maintain consistency with the policies, programs priorities and eligibility criteria adopted by decision of COP and all activities related to climate change undertaken outside the financial framework of the financial mechanism, consistent with decision 11/CP.1.
2. Any such mechanism must be established under COP. Political oversight by the COP on fund policies and safeguards are essential to enabling effective accountability and political palatability.
3. Participation of eligible countries in identification, preparation and implementation as well as monitoring of the result must be ensured.
4. To ensure transparency and accountability, there must a process of set activities on identifying country's needs and validation.

C. DELIVERY OF FINANCIAL RESOURCES

1. All Developing Countries should be eligible to access the financial resources.
2. The delivery of resources should be measurable, reportable and verifiable.

3. Any such country eligible for the fund must have direct access to funding.
4. Financial resources should be majorly provided on a grant basis.
5. An agreed level of full incremental cost should be used as a basis for providing support to implementation of enhanced action on mitigation, adaptation and technology cooperation.

D. TECHNOLOGY COOPERATION

The transfer of technology should be based on the following principles:

1. Equal opportunities for all parties to collaborate on technology transfer programs;
2. Transparent and mutually benefitting partnerships between public and private sectors
3. Ensuring active participation of Small and Medium-sized Enterprises (SMEs);
4. Ensuring that intellectual property rights shall not be used as a barrier to the transfer technology activities

PAPER NO. 21B: INDONESIA

Jakarta, 24 April 2009

VIEWS AND PROPOSALS ON ENHANCED ACTION ON MITIGATION

– NOW, UP TO AND BEYOND 2012

Submission on the Agenda Item 3 (b) of AWG-LCA: 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: Enhanced national/international action on mitigation of climate change

In Bonn, 28 March - 8 April 2009, the Ad-Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) invited parties to submit *their views on ideas and proposals on the element of paragraph 1 of the Bali Action Plan (BAP) which will be taken into account in a negotiating text to be prepared by the chair for consideration at the sixth session of the AWG-LCA.*

At the outset, this document elaborates in more details Indonesia's proposal as viewed in another submission titled: ***Important Elements for AWG-LCA: Consideration for AWG-LCA Negotiation Text in the Sixth Session*** for specific elements related to para 1 (b) of Bali Action Plan: Enhanced Actions on International/National Mitigation.

An agreed outcome to be adopted by COP-15 of the UNFCCC in Copenhagen should contain not only possible elements but also concrete measures to address climate change.

The Government of Indonesia hereby submits its ideas and proposals on the element of paragraph 1 (b) of the Bali Action Plan (BAP) to the AWG-LCA.

A GLOBAL INTEGRATED PROCESS ON ACHIEVING A LONG-TERM GLOBAL GOAL FOR EMISSION REDUCTION

Recalling the objective of the Convention to stabilize GHG concentrations in the atmosphere at the level that would prevent dangerous anthropogenic interference with the climate system, such level of stabilization should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change.

In view of the said consideration, there is an urgent need for reaching a comprehensive agreement in Copenhagen, based on, *inter alia*, the planning works that will lead to a global effort to enhance international/national mitigation actions, that would be conducted in appropriate and systematic order as shown in Figure 1. This scheme, presented as a global integrated process in this proposal, shall be considered by Parties, moving from current mitigation debates in AWG-LCA, for further elaboration in such global goal for emission reductions.

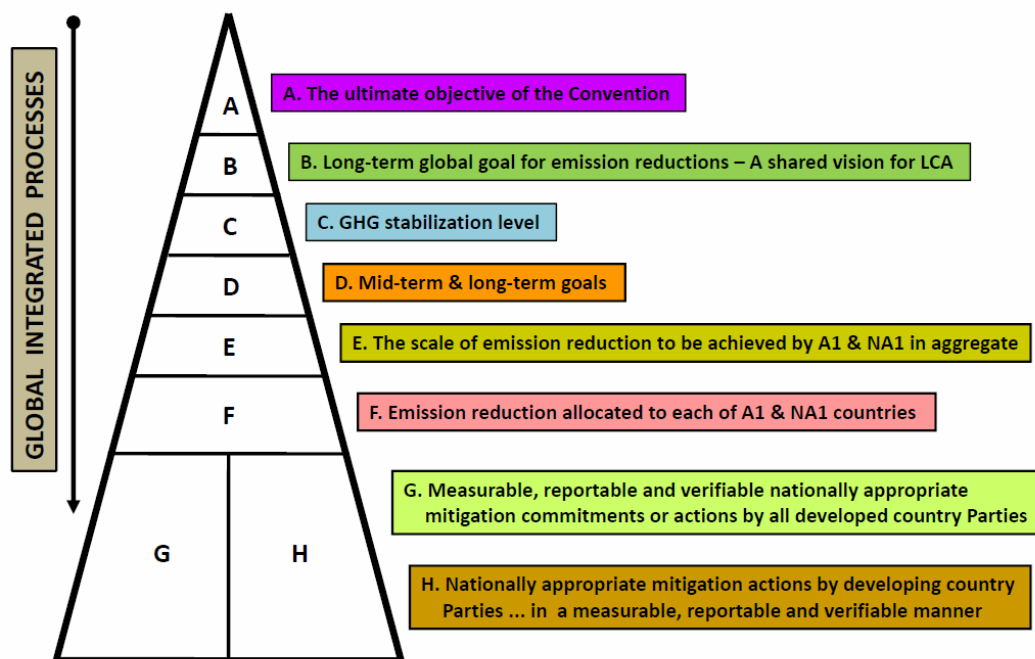


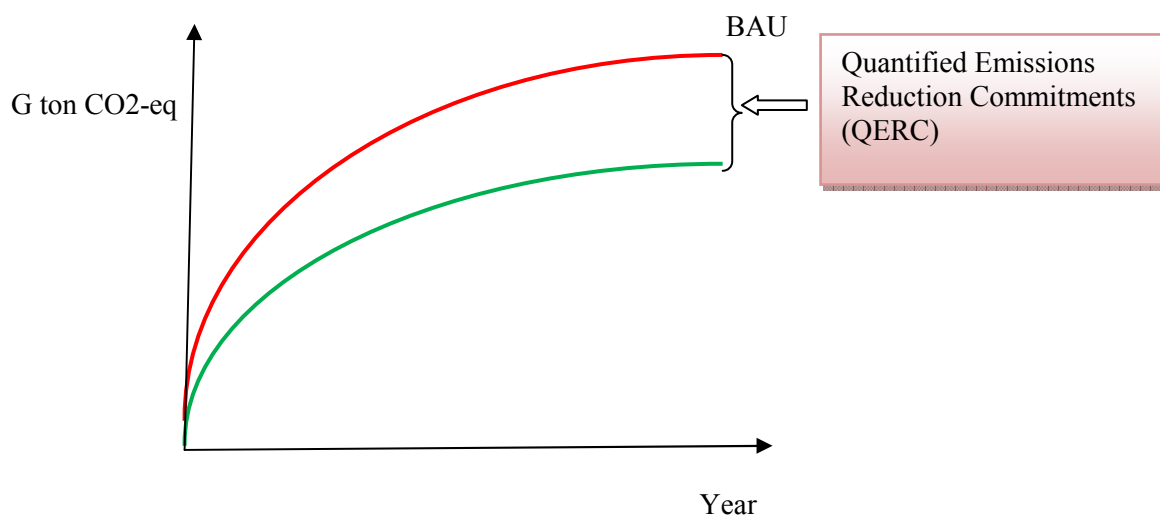
Figure 1: Global Integrated Process on Enhanced International/National Mitigation Actions

NATIONAL APPROPRIATE MITIGATION ACTIONS OR COMMITMENTS

- (i) **NAMACs for Developed Country Parties - BAP of paragraph 1(b)(i), namely Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties.**

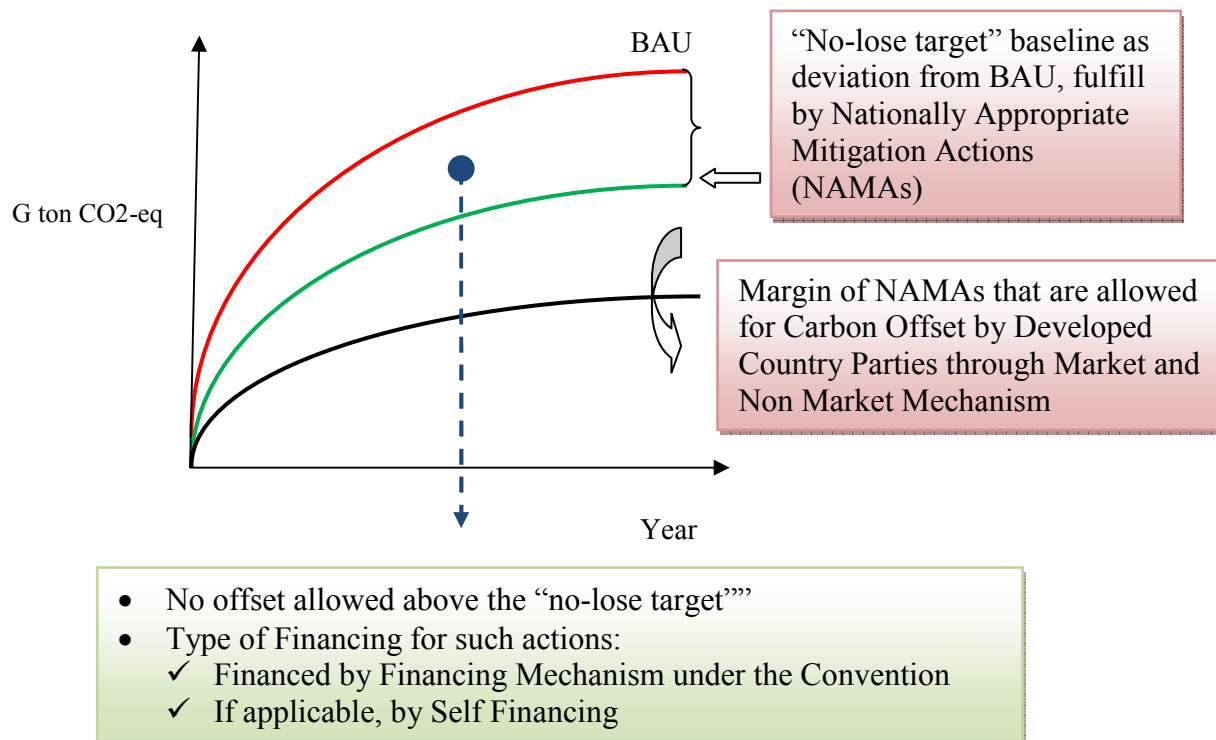
Measurable, reportable and verifiable Nationally Appropriate Mitigation Actions or Commitments (NAMACs), including quantified emission reduction commitments (QERC) by Developed Country Parties, should be undertaken mostly by domestic actions.

For the purpose of meeting its NAMACs, Developed Countries may acquire from Developing Countries, emission reduction units resulting from projects in Developing Countries aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that the acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting the NAMACs.



(ii) NAMAs for Developing Country Parties - BAP of paragraph 1(b)(ii), namely nationally appropriate mitigation actions by developing country Parties

Developing Country Parties may submit a ‘**no-lose target**’ as deviation from business as usual (BAU) development that will be pursued in the form of Nationally Appropriate Mitigation Actions (NAMAs) supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.



Developing Countries may transfer to Developed Country, emission reduction units resulting from projects in Developing Countries aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that any such project benefits sustainable development strategies, policies and measures of the Developing Countries involved and the transfer of emission reduction units shall be supplemental to the ‘no-lose target’ domestic actions for the purposes of meeting the NAMAs.

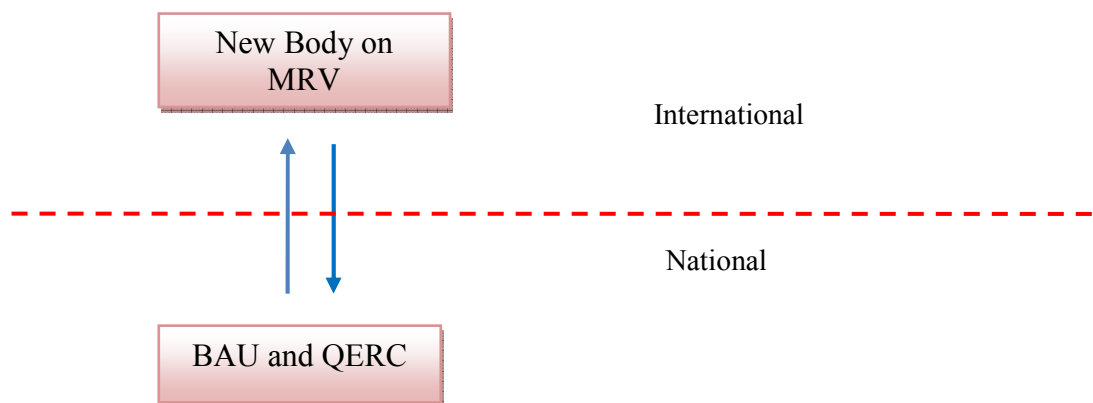
COMPLIANCE SYSTEM

To ensure the full achievement of long-term global goal for emission reductions, there is an urgent need to establish a compliance system that is supported by reliable information of the agreed BAU of the Parties. This constitutes the reference to measure the agreed level of emission reductions by the Parties to be used as the basis bases for the verification and recognition of the actions undertaken by the Parties.

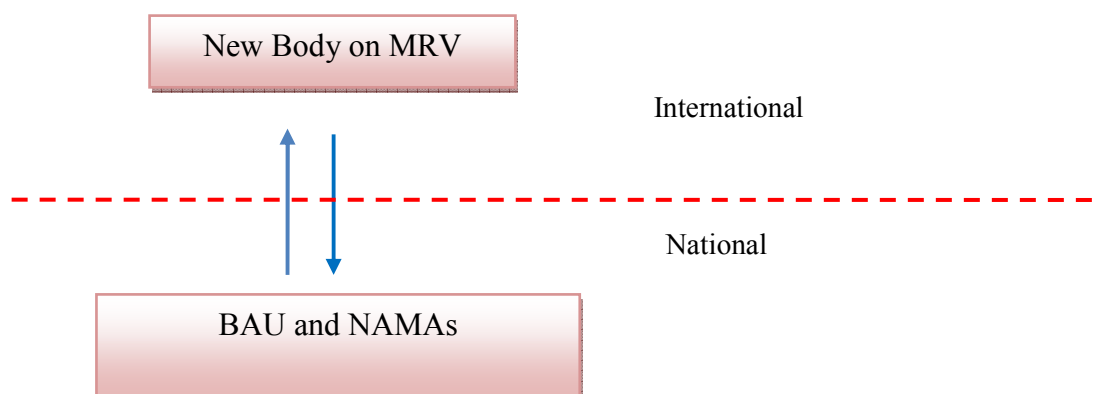
This compliance system will ensure that NAMAs as well as NAMAs and its technology, financing and capacity-building support should also measurable, reportable and verifiable.

(i) Registry and MRV Framework for Quantified Target for NAMAs and No-Lose Target for NAMAs

- (a) Quantified Target of NAMAs of Developed Country Parties should be registered. In addition, NAMAs should also be reported, registered and verified by a New Body established under COP to monitor the MRV. Considering broad scope of work of the proposed New Body on MRV, it is preferable that this body be established as a subsidiary body of the Convention in accordance with Article 7.2 (i) to enable implementation of the Convention, and report its work to the COP on a regular basis.

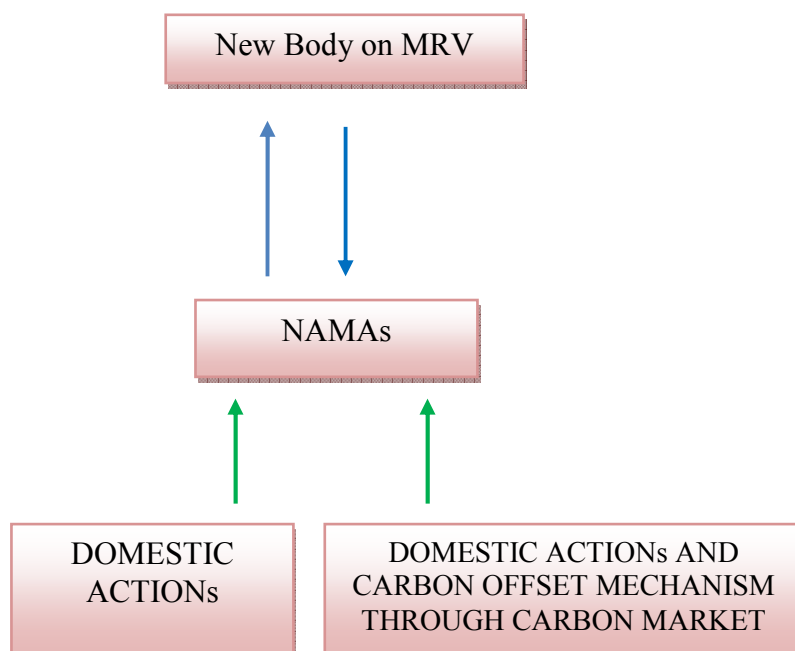


- (b) The ‘no-lose target’ of NAMAs as deviation from the baseline of Developing Country Parties could be reported, registered and verified by New Body established under COP to monitor the MRV.



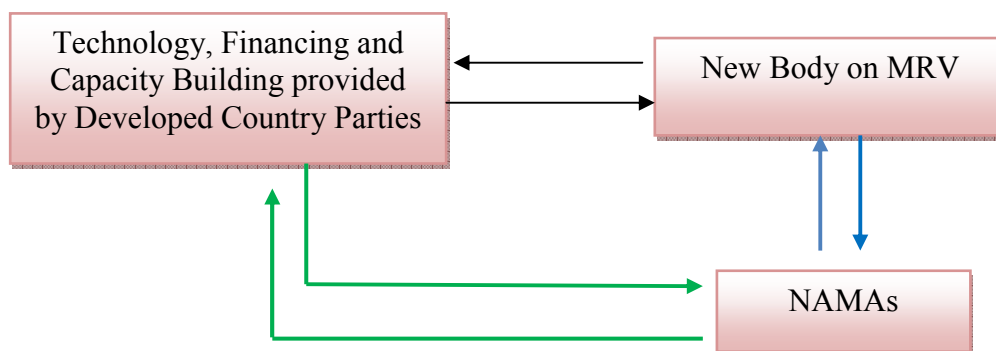
(ii) **Registry and MRV Framework for NAMACs and NAMAs**

- (a) Registry and MRV on NAMACs of Developed Country Parties: NAMACs of Developed Country Parties could be undertaken through their domestic actions, or domestic actions and carbon offset mechanism through the carbon market. These mitigation actions should be reported, registered and verified by the New Body on MRV.



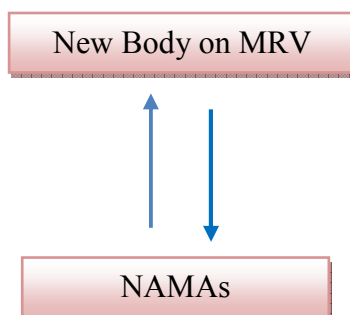
- (b) NAMAs of Developing Country Parties: NAMAs of Developing Country Parties could be undertaken through: (i) supported and enabled by technology, financing and capacity-building provided by Developed Countries; considering the scope of work and the need of its accountability, then it should be managed under the Convention, and/or (ii) if applicable, by self financing. These mitigation actions could be reported, registered and verified by the Executive Body on MRV.

NAMAs of Developing Country Parties with supported and enabled Technology, Financing and Capacity-Building provided by Developed Country Parties



These mitigation actions could be reported, registered and verified by the New Body on MRV above.

NAMAs of Developing Country Parties through Self Financing



These mitigation actions could be reported, registered and verified by the New Body on MRV.

SECTORAL AND MARKET – BASE APPROACHES

(i) Sectoral Approach

Sectoral approach as a means of establishing an analytical foundation for commitments to enhance implementation of Article 4, paragraph 1(c) of the Convention has several issues that need to be considered, such as social and economic conditions and other relevant factors at national level. In addition, it should also be a complement tools in further formulating the principle of common but differentiated responsibilities and respective capabilities.

Therefore, the implementation of sectoral approach as climate change complement instrument should be guided, *inter alia*, by the following:

- efforts to enhance the implementation of Article 4, paragraph 1(c) of the Convention;
- further assessment on how the approach could be used as complementary instrument for the principle of common but differentiated responsibilities and respective capabilities, taking into account social and economic conditions and other relevant factors that may be considered in agreeing NAMAs and NAMAs;

- bottom-up analysis of mitigation potentials that can be useful tools for calculating reduction targets and can provide scientific and objective knowledge that contribute further to the formulation of an effective future regime;
- should not intended to be used for quantification of national target. It should complement, rather than replace national strategies and mid-term goals;
- should not be used as an attempt to apply a uniform and equal standard for Developed and Developing Country Parties;
- should be implemented as analytical tool to inform national mitigation efforts depending on the capabilities of each sector, but not to replace the national targets;
- does not lead to new commitments for Developing Country Parties and constitute a means for unjustifiable discrimination or disguised restriction of access for Developing Country Parties to international trade; and
- contribute to the enhancement of the measurable, reportable and verifiable actions to ensure the environmental integrity.

Sectoral approach could be used as a means to establish a bottom-up analysis of possible commitments or actions taken by Parties, in accordance with implementation of article 4 paragraph 1 (c). Furthermore, it will contribute to efforts to strengthen the cooperation not only on the technological aspect but also on the financial aspect between Parties based on the principle guideline for implementing sectoral approach. Sectoral Approach may be used as a tool or instrument for both market and non market mechanism.

(ii) Market-Based Approach

Expansion of International carbon markets and auction of allowances for emission may offer means to provide financial incentives at the scale required to effectively implement global mitigation actions.

As presented in the UNFCCC Dialogue Working Paper 8 (2007) in Vienna Climate Talk in 2007, if the funding available under the financial mechanism of the Convention remains at its current level and continues to rely mainly on voluntary contribution, it will not be sufficient to address the future financial flows estimated to be needed for mitigation and adaptation. Several other options have been suggested. Some of these options, such as the expansion of the carbon market and the auction of allowances for emissions, could generate revenues commensurate with the additional needs.

The global predictable carbon price is one of the key elements which can be rendered by global coherent actions in the trajectory toward long-term stabilization goal. It is important to maintain the carbon value at appropriate level such that the emission trading through carbon market can be continued for transfer of clean technology including its associated financial flows to ensure that developing countries grow their economies in a sustainable manner.

Carbon markets offer the potential for some cost-effective means to reduce emission. If designed well, they can mobilize additional private finance. However, the practical experiences show the need for stringent safeguards and the need to tailor carbon market instruments so they will provide high quality and targeted finance to low carbon development schemes in developing countries. Therefore, a basic requirement of the application of carbon market is an assessment on market viability including its predictive carbon value.

In this regard, we would like to request the UNFCCC Secretariat to organize further discussion with business community and carbon market experts on appropriate policy instruments and associated mechanisms required at international and national levels, that may include inter-sessional workshops or technical briefings on viability of the market and assurance of the appropriate carbon value as well as involvement of private sector for generating resources to enhance cost effectiveness and to promote mitigation actions.

PAPER NO. 22A: JAPAN

Submission on paragraph 1(b)(i) and 1(b)(ii) of the Bali Action Plan

Japan welcomes the opportunity to submit the following ideas on the main elements in 1(b)(i) and 1(b)(ii) of the Bali Action Plan.

1. Commitments or actions by developed country Parties (paragraph 1(b)(i) of the Bali Action Plan)

[Commitments or actions by developed country Parties]

Developed country Parties (OECD member countries, countries that are not OECD members but whose economic development stages are equivalent to those of the OECD members, and countries which voluntarily wish to be treated as developed countries) should set their quantified national emissions limitation and reduction commitments. (see Japan's submission in FCCC/AWGLCA/2009/MISC.1)

[Comparability of efforts and consideration on different national circumstances]

Quantified national emissions limitation and reduction commitments for developed country Parties should be evaluated from the viewpoint of both international comparison on adequacy and consideration on different national circumstances. As for international comparison on adequacy, domestic mitigation efforts by each country for national target should be evaluated using the analyses of mitigation potential. As far as national circumstances are concerned, due consideration should be given to differences of emitting sectors and other factors which have considerable effect to the emission amount.

- Sectoral approaches (see Japan's submission in FCCC/AWGLCA/2008/MISC.4)
 - + In order to ensure comparability among developed country Parties, sectoral approaches are useful to analyze mitigation potentials and costs, considering sector-specific circumstances.
 - + Comparison on efficiency through international cooperation would be used supplementarily in industrial sectors whose production process are comparatively homogenous (especially iron and steel, cement, aluminum, etc.) and comparable, and whose efforts for international data collection and comparison on efficiency are currently ongoing. In addition, comparison can be also applied to power generation sectors in terms of efficiency on coal fired power plants as well as introduction rate for non fossil fuels. However, it should be noted that uniform targets are not necessarily appropriate even in these sectors because national circumstances are different in the following areas;

Note) Factors to be considered in sectoral comparison

- Residential sector: Simple comparison on efficiency/intensity is not appropriate because these factors differ much according to the conditions of each country including geographical conditions. However, in some areas, for example efficiency of electric appliances or buildings, would fit into a certain level of comparison.
 - Road transport sector: Simple comparison on efficiency/intensity is not appropriate because these factors differ much according to the conditions of each country including geographical conditions. However, some indicators can be visualized such as fuel economy or introduction rate of bio fuels.
 - Power generation sector: For instance, capacity for introduction of wind power, hydroelectric power, or nuclear power, etc., depends much on geographical conditions or social constraints of each country. However, visualization can be achieved to a certain extent through utilizing indicators such as introduction rate of non-fossil fuels.
- Ways for comparison
 - + Efforts should not be compared by reduction rates from a certain base year. Reduction rates from base years should be utilized to show trends of efforts of each country. From this perspective, reduction rates from plural base years (including the latest year for which data are available) enable to grasp objective mitigation efforts, avoiding arbitrariness in using a single base year.
 - + In considering commitments which ensure comparability, adequacy should be evaluated with

regard to domestic mitigation efforts by developed country Parties separately from mitigation by utilizing flexibility mechanisms.

- + Such analysis should be implemented individually on each country, including the case when countries jointly fulfill their agreed reduction targets in the phase of implementation.
- + In Japan, the “Mid-term Target Committee” consists of leading experts is now implementing international comparison utilizing model analyses.

[Systems to ensure measurability, reportability and verifiability (MRV)]

As for national emissions by developed country Parties, current reporting system on GHG emissions through national communications and inventories and review mechanism by expert review team should be continued in the future framework.

In addition to the above mechanisms, following system is needed for sectors such as industry and power generation in order to enable the multilateral analysis of emission and efforts. Ongoing plant-based data collection and data accumulation driven by private sector or the International Energy Agency (IEA) can be utilized complementary for this purpose. In collecting data, careful attention should be paid to confidential information of private companies.

- Measurement: Emission should be measured in the major sectors (such as iron and steel, cement, aluminium, power generation, and road transport), utilizing private-driven methodologies which have been agreed voluntarily by the industrial community in organization such as the International Aluminium Institute, Cement Initiatives, and world steel associations. Cooperative works by the IEA and the International Organization for Standardization (ISO) on international standardization to promote energy efficiency and alternative energy resources can be also useful for this purpose.
- Reporting: Emissions measured based on above methodologies should be embedded into inventory of each country and reported to the COP via the secretariat of the UNFCCC.
- Verification: Experts in each sector can be a member of above mentioned expert review team in order to verify emissions from that sector.

2. Actions by developing country Parties (paragraph 1(b)(ii) of the Bali Action Plan)

[Actions by developing countries]

- Content of actions

Following the principle of “common but differentiated responsibilities and respective capabilities”, developing countries should set voluntary national action plan including policies and measures for mitigation. In addition, major developing countries should set their binding targets for “economy-wide GHG emissions or energy consumption per GDP” and “GHG emissions or energy consumption per unit in major sectors”. (see Japan’s submission in FCCC/AWGLCA/2009/MISC.1)

- Sectoral approaches (see Japan’s submission in FCCC/AWGLCA/2008/MISC.4)

Sectoral approaches can also accelerate mitigation actions taken by developing country Parties, which will contribute to global emission reduction. Best practices and Best Available Technologies (BATs) for each sector can be identified through cross-border analysis. It is possible to promote transfers of those identified best practices and BATs from developed country Parties through analyzing reduction potentials and setting indicators.

[Systems to ensure MRV]

In order to achieve the ultimate objective to stabilize global GHG concentrations in the atmosphere, it is necessary to grasp global GHG emissions and reductions and to ensure steady emission reductions. From this perspective, mechanisms to ensure MRV in developing country Parties should be established. Analysis of emissions looking through efficiency/intensity and volumes of activities as well as national circumstances is indispensable to reveal trend of efforts and analyze substantial factors for increase or decrease of emissions. Bottom-up activities of plant-based data collection conducted in developing country Parties should be utilized in this context. Especially for major developing countries, measurement reporting and verification related to the implementation of targets is necessary.

- Measurement: Actions set in the national voluntary action plan should be quantified in terms of GHG emissions as far as possible. Guidelines, methodologies or indicators are necessary to support quantification of actions. Especially for major developing country Parties, measurement systems in major sectors (such as iron and steel, cement, aluminium, power generation, and road transport) should be promoted utilizing indicators such as energy efficiency or carbon intensities, basically based on the above mentioned methodologies which is same as developed country Parties.
- Reporting: Reporting of national inventories should be regularly implemented to grasp emissions from developing country Parties¹. Especially for major developing country Parties, inventory should be submitted annually, including information on sector-based emissions measured by the abovementioned methodologies.
- Verification: National action plans by developing country Parties should be under periodical review by Conference of the Parties. Especially those by major developing country Parties should be verified by expert review team.

[Support for measurement, reporting and verification]

In order to establish the above-mentioned mechanisms to ensure MRV, it is necessary that support from developed country Parties is provided. For this purpose, it is important to strengthen capacity of data collection in developing country Parties for both public and private sectors through promoting voluntary efforts by the IEA or other industrial organization and utilizing public support. Necessary support should be also provided to develop national inventories in developing country Parties. Capacity building for national inventories, as is conducted for Asian countries by Government of Japan, should be scaled up.

Besides, it is also important to appropriately incentivize developing country Parties through making a linkage between supporting measures (technology and finance) and efforts on measurement and reporting. For example, developing country Parties with appropriate measurement and report should be prioritized in making public support.

It is also useful to utilize analyses by experts in each sector on necessary support, policies and measures, and ways for prepare enabling environment. Advisory group on sectoral technology cooperation can be utilized for this purpose through collecting data and making list of effective technologies.

(As for Japan's idea on finance and technology, see Japan's submission in FCCC/AWGLCA/2008/MISC.5/Add.2 (Part I), FCCC/AWGLCA/2009/MISC.1/Add.3)

¹ Under the current framework, all parties are obliged to develop national communication and required to periodically update national inventories and steps taken to implement convention with report to the Conference of the Parties (Art 4.1). As for Annex I countries, inventories have been reported and reviewed annually and national communication have been submitted in every 4-5 year. As for non-Annex I countries, inventories were reported only once in their national communication based on data in 1994. Four countries (Argentina, Mexico, South Korea, and Uruguay) submitted their second national communication, and only Mexico developed third national communication.

PAPER NO. 22B: JAPAN

Submission of Japan

For preparation of the Chair's negotiating text for consideration at the AWG-LCA6

Japan hereby submits the Draft Protocol to the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) as its inputs for the Chair's negotiating text for consideration at the AWG-LCA6 to be prepared in accordance with the work programme adopted at the AWG-LCA4. Japan also sends the Draft Protocol to the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) with a view to ensuring coherence and consistency between the AWG-LCA and the AWG-KP.

***** DRAFT PROTOCOL TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE**

The Parties to this Protocol,

Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as “the Convention”,

In pursuit of the ultimate objective of the Convention as stated in its Article 2,

Recalling the provisions of the Convention,

Being guided by Article 3 of the Convention,

Recalling the significant progress achieved under the Kyoto Protocol to the United Nations Framework Convention on Climate Change, hereinafter referred to as “the Kyoto Protocol”,

Bearing in mind the changes of circumstances since the adoption of the Kyoto Protocol,

Pursuant to the Bali Action Plan adopted by decision 1/CP.13 of the Conference of the Parties to the Convention at its thirteenth session which identified five pillars as bases for a new global framework,

Aiming at a long-term goal of achieving at least fifty per cent reduction of global emissions of greenhouse gases from its current level by 2050, with a reference to scientific knowledge of the Intergovernmental Panel on Climate Change through realization of a low carbon society and development of innovative technologies,

Recognizing that peaking-out of the global emissions of greenhouse gases in the next ten to twenty years should be pursued and all Parties should share the vision on how to pave the way to reduce global emissions by 2050 with flexibility and diversity of nationally appropriate actions,

Recognizing that all Parties should take mitigation actions under an enlightened sense of solidarity in accordance with their common but differentiated responsibilities and respective capabilities,

Have agreed as follows:

Article 1 (*Definitions*)

For the purposes of this Protocol, the definitions contained in Article 1 of the Convention shall apply. In addition:

1. “Conference of the Parties” means the Conference of the Parties to the Convention.
2. “Convention” means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.
3. “Intergovernmental Panel on Climate Change” means the Intergovernmental Panel on Climate Change established in 1988 jointly by the World Meteorological Organization and the United Nations Environment Programme.
4. “Kyoto Protocol” means the Kyoto Protocol to the United Nations Framework Convention on Climate Change, adopted in Kyoto on 11 December 1997.
5. “Montreal Protocol” means the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Montreal on 16 September 1987 and as subsequently adjusted and amended.
6. “Parties present and voting” means Parties present and casting an affirmative or negative vote.
7. “Party” means, unless the context otherwise indicates, a Party to this Protocol.
8. “Party included in Annex I” means a Party included in Annex I to the Convention, as may be amended, or a Party which has made a notification under Article 4, paragraph 2 (g), of the Convention.

Article 2 (*Policies and measures*)

1. Each Party shall, to the extent practicable, in implementing relevant Articles of this Protocol:

- (a) Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:
 - (i) Enhancement of energy efficiency in relevant sectors of the national economy;
 - (ii) Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements;

promotion of sustainable forest management practices, afforestation and reforestation;

- (iii) Promotion of reducing emissions from deforestation and forest degradation;
- (iv) Promotion of sustainable forms of agriculture in light of climate change considerations;
- (v) Promotion of measures for adaptation to the adverse effects of climate change;
- (vi) Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;
- (vii) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;
- (viii) Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;
- (ix) Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector;
- (x) Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy;

(b) Cooperate with other Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article. To this end, these Parties shall take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness.

2. The Parties shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.

3. The Parties shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of

the Convention, taking into account Article 3 of the Convention. The Conference of the Parties serving as the meeting of the Parties to this Protocol may take further action, as appropriate, to promote the implementation of the provisions of this paragraph based on the information provided by affected Parties.

Article 3 (*Mitigation Obligations of the Parties*)

1. (*Commitments by the Parties included in Annex I*)

(a) (*Quantified national emissions reduction target*)

The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed, in the commitment period 2013 to 20xx, their respective assigned amounts inscribed in Annex B which are established in a manner ensuring comparability of efforts of each Party included in Annex I, taking into account national and sectoral aspects, in order to take the lead in combating climate change, with a view to contributing to the global efforts towards the peaking-out of the global emissions of greenhouse gases in the next ten to twenty years, and to ensuring a long-term pathway for each Party included in Annex I towards significant emission reduction.

(b) (*Joint fulfilment*)

- (i) Any Parties included in Annex I that have reached an agreement to fulfil their respective commitments under subparagraph (a) above jointly, shall be deemed to have met those commitments provided that their total combined aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts inscribed in Annex B. The respective emission level allocated to each of the Parties to the agreement shall be set out in that agreement.
- (ii) The Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement.
- (iii) Any such agreement shall remain in operation for the duration of the commitment period referred to in subparagraph (a) above.
- (iv) If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization, any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol.

- (v) In the event of failure by the Parties to such an agreement to achieve their total combined level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement.
 - (vi) If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization acting in accordance with Article 24, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with subparagraph (ii) above.
- (c) *(LULUCF)*
 - (i) The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in the commitment period referred to in subparagraph (a) above, shall be used to meet the commitments under subparagraph (a) above of each Party included in Annex I. The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner and reviewed in accordance with Articles 5 and 6.
 - (ii) The greenhouse gas emissions by sources and removals by sinks resulting from additional human-induced land use, land-use change and forestry activities may be used to meet the commitments under subparagraph (a) above of each Party included in Annex I, provided that these activities have taken place since 1990.
 - (iii) The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, decide upon modalities, rules and guidelines related to the issues referred to in subparagraphs (i) and (ii) above, taking into account uncertainties, transparency in reporting, verifiability, the methodological work of the Intergovernmental Panel on Climate Change, the advice provided by the Subsidiary Body for Scientific and Technological Advice in accordance with Article 4 and the decisions of the Conference of the Parties.

(d) *(Others)*

Taking into account Article 4, paragraph 6, of the Convention, in the implementation of their commitments under this Protocol other than those under this Article, a certain degree of flexibility shall be allowed by the Conference of the Parties serving as the meeting of the Parties to this Protocol to the Parties included in Annex I undergoing the process of transition to a market economy.

2. *(Actions by Parties included in Annex C)*

(a) The Parties other than Parties included in Annex I shall take nationally appropriate mitigation actions as described in Annex C.

(b) *(National action plan)*

As part of the nationally appropriate mitigation actions described in Annex C, each Party included in Annex C shall develop and submit a national action plan, including policies and measures for mitigation, which shall include quantified elements to the extent possible. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall decide upon the guidelines for the national action plans which shall incorporate methodologies for the quantification, prior to the start of the commitment period referred to in paragraph 1 (a) above.

(c) *(Intensity target)*

The Parties included in Annex C which have substantial contribution to the global emissions of greenhouse gases and have appropriate response capabilities, shall achieve their respective greenhouse gas emission intensity targets as described in Annex C in the commitment period referred to in paragraph 1 (a) above, with a view to limiting substantially their greenhouse gas emission growth.

Article 4 (*Methodological issues*)

1. Each Party included in Annex I shall have in place, no later than one year prior to the start of the commitment period referred to in Article 3, paragraph 1 (a), a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for the national systems, which shall incorporate the methodologies specified in paragraph 3 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of such commitment period.

2. Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall have in place, no later than one year prior to the start of the commitment period referred to in Article 3, paragraph 1 (a), a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for the national systems, which shall incorporate to the extent possible the methodologies specified in paragraph 3 below, shall be decided upon by the Conference of the

Parties serving as the meeting of the Parties to this Protocol prior to the start of such commitment period.

3. Methodologies for estimating anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Where such methodologies are not used, appropriate adjustments shall be applied according to methodologies agreed upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session. Based on the work of, *inter alia*, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise such methodologies and adjustments, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to methodologies or adjustments shall be used only for the purposes of ascertaining compliance with commitments in respect of any commitment period adopted subsequent to that revision.

4. The global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases listed in Annex A shall be those accepted by the Intergovernmental Panel on Climate Change and decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of the commitment period referred to in Article 3, paragraph 1 (a). Based on the work of, *inter alia*, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise the global warming potential of each such greenhouse gas, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to a global warming potential shall apply only to commitments in respect of any commitment period adopted subsequent to that revision.

Article 5 (*Inventory and Information*)

1. Each Party included in Annex I shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the Conference of the Parties, the necessary supplementary information, including sectoral information, for the purposes of ensuring compliance with Article 3, paragraph 1, to be determined in accordance with paragraph 4 below.

2. Each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to

demonstrate compliance with its commitments under this Protocol, to be determined in accordance with paragraph 4 below.

3. Each Party included in Annex I shall submit the information required under paragraph 1 above annually, beginning with the first inventory due under the Convention for the first year of the commitment period referred to in Article 3, paragraph 1 (a), after this Protocol has entered into force for that Party. Each such Party shall submit the information required under paragraph 2 above as part of the first national communication due under the Convention after this Protocol has entered into force for it and after the adoption of guidelines as provided for in paragraph 4 below. The frequency of subsequent submission of information required under paragraph 2 above shall be determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol, taking into account any timetable for the submission of national communications decided upon by the Conference of the Parties.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under paragraphs 1 and 2 above, taking into account guidelines for the preparation of national communications by Parties included in Annex I adopted by the Conference of the Parties. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the start of the commitment period referred to in Article 3, paragraph 1 (a), decide upon modalities for the accounting of assigned amounts.

5. Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, the necessary supplementary information, including sectoral information, for the purposes of ensuring the compliance with Article 3, paragraph 2, to be determined in accordance with paragraph 8 below.

6. Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information with respect to the implementation of Article 3, paragraph 2, to be determined in accordance with paragraph 8 below.

7. Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall submit the information required under paragraph 5 above annually. Each such Party shall submit the information required under paragraph 6 above as part of the first national communication due under the Convention after this Protocol has entered into force for that Party and after the adoption of guidelines as provided for in paragraph 8 below.

8. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under paragraphs 5 and 6 above. The Conference of the Parties serving as

the meeting of the Parties to this Protocol shall also, prior to the start of the commitment period referred to in Article 3, paragraph 1(a), decide upon modalities for the measurement of intensity targets.

Article 6 (*Review of information*)

1.

(a) The information submitted under Article 5, paragraph 3, by each Party included in Annex I shall be reviewed by expert review teams pursuant to the relevant decisions of the Conference of the Parties and in accordance with guidelines adopted for this purpose by the Conference of the Parties serving as the meeting of the Parties to this Protocol under subparagraph (b) below. The information required under Article 5, paragraph 1, shall be reviewed as part of the annual compilation and accounting of emission inventories and assigned amounts. Additionally, the information required under Article 5, paragraph 2, shall be reviewed as part of the review of communications.

(b) The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the review of implementation of the commitments by Parties included in Annex I by expert review teams taking into account the relevant decisions of the Conference of the Parties.

2. The information submitted under Article 5, paragraph 7, by each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall be reviewed by expert review teams. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for this review.

3. Expert review teams referred to in paragraphs 1 and 2 above shall be coordinated by the secretariat and shall be composed of experts selected from those nominated by Parties to the Convention and, as appropriate, by intergovernmental organizations, in accordance with guidance provided for this purpose by the Conference of the Parties.

4. The review process shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of this Protocol. The expert review teams shall prepare a report to the Conference of the Parties serving as the meeting of the Parties to this Protocol, assessing the implementation of the commitments of the Party and identifying any potential problems in, and factors influencing, the fulfilment of commitments. Such reports shall be circulated by the secretariat to all Parties to the Convention. The secretariat shall list those questions of implementation indicated in such reports for further consideration by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

5. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, with the assistance of the Subsidiary Body for Implementation and, as appropriate, the Subsidiary Body for Scientific and Technological Advice, consider:

(a) The information submitted by Parties under Article 5 and the reports of the expert reviews thereon conducted under this Article; and

(b) Those questions of implementation listed by the secretariat under paragraph 4 above, as well as any questions raised by Parties.

6. Pursuant to its consideration of the information referred to in paragraph 5 above, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take decisions on any matter required for the implementation of this Protocol.

7. The national action plan submitted under Article 3, paragraph 2, by each Party included in Annex C shall be reviewed by the Conference of the Parties serving as the meeting of the Parties to this Protocol. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for such review.

Article 7 (JI, Emissions Trading, CDM)

1. *(addition to or subtraction from the assigned amount)*

(a) Any emission reduction units, any certified emission reductions, any assigned amount units or removal units, which a Party acquires from another Party in accordance with the provisions of paragraph 2 or 3 below, shall be added to the assigned amount for the acquiring Party.

(b) Any emission reduction units, any certified emission reductions, any assigned amount units or removal units, which a Party transfers to another Party in accordance with the provisions of paragraph 2 or 3 below, shall be subtracted from the assigned amount for the transferring Party.

(c) Any certified emission reductions which a Party acquires from another Party in accordance with the provisions of paragraph 4 below shall be added to the assigned amount for the acquiring Party.

(d) The acquisition of emission reduction units, certified emission reductions, assigned amount units or removal units under paragraphs 2, 3 and 4 below shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3, paragraph 1.

2. *(JI)*

(a) For the purpose of meeting its commitments under Article 3, paragraph 1, any Party included in Annex I may transfer to, or acquire from, any other such Party emission

reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

- (i) Any such project has the approval of the Parties involved;
- (ii) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur; and
- (iii) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 4 and 5.

(b) A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition, under this paragraph of emission reduction units.

(c) If a question of implementation by a Party included in Annex I of the requirements referred to in this paragraph is identified in accordance with the relevant provisions of Article 6, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3, paragraph 1, until any issue of compliance is resolved.

3. (*Emissions Trading*)

The Parties included in Annex I may transfer and/or acquire, through emissions trading, emission reduction units, certified emission reductions, assigned amount units or removal units for the purposes of fulfilling their commitments under Article 3, paragraph 1.

4. (*CDM*)

(a) A clean development mechanism is hereby defined.

(b) The purpose of the clean development mechanism shall be to promote nationally appropriate mitigation actions by Parties included in Annex C in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in meeting their quantified emission limitation and reduction commitments under Article 3, paragraph 1.

(c) Under the clean development mechanism:

- (i) Parties included in Annex C will benefit from project activities resulting in certified emission reductions; and
- (ii) Parties included in Annex I may use the certified emission reductions accruing from such project activities to meet part of their quantified emission limitation and reduction commitments under Article 3,

paragraph 1, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

(d) The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.

(e) Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:

- (i) Voluntary participation approved by each Party involved;
- (ii) Real, measurable, and long-term benefits related to the mitigation of climate change; and
- (iii) Reductions in emissions that are additional to any that would occur in the absence of the certified project activity while adopting methodologies widely and efficiently applied to project activities.

(f) The clean development mechanism shall assist in arranging funding of certified project activities as necessary.

(g) The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

(h) Participation under the clean development mechanism, including in activities mentioned in subparagraph (c) (i) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.

5. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, decide upon guidelines for the implementation of paragraphs 2, 3 and 4 above, including for verification and reporting, taking into account the characteristics of respective schemes.

Article 8 (*Reducing Emissions from Deforestation and Forest Degradation in Parties included in Annex C*)

The Conference of the Parties serving as the meeting of the Parties shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for reducing emissions from deforestation and forest degradation in Parties included in Annex C.

Article 9 (*Adaptation*)

1. The Parties shall, based on scientific and technological knowledge, give full consideration to necessary actions to meet the urgent needs and concerns of developing country Parties arising from the adverse effects of climate change.
2. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall identify most vulnerable countries to the adverse effects of climate change that require urgent and additional assistance, *inter alia*, least developed countries and small island developing countries. Such developing country Parties shall formulate, develop, update, and submit national adaptation programmes of actions, which should be examined on a country-to-country basis and should result in prioritization of actions requiring assistance for implementation.
3. The developed country Parties and other developed Parties included in Annex II to the Convention shall enhance cooperation to support adaptation actions, in accordance with paragraph 2 above. All Parties, taking into account their common but differentiated responsibilities and respective capabilities and their specific national and regional development priorities, objectives and circumstances, shall cooperate to increase climate change resilience, particularly in vulnerable countries, through exchange of information, knowledge and lessons, capacity building, and assistance for integration of adaptation actions into national planning, specific projects and programmes by involving multilateral or regional bodies, the public and private sectors and civil society.

Article 10 (*Technology*)

1. All Parties, taking into account their common but differentiated responsibilities and respective capabilities, shall cooperate to promote the transfer and diffusion of, or access to, technologies and know-how necessary for supporting the mitigation and adaptation actions taken by developing country Parties. The developed country Parties shall promote development of innovative technologies through strengthening international cooperation including sharing roadmaps for technology development. All Parties shall periodically review progress and identify areas where international cooperation should be strengthened.
2. The cooperation for mitigation actions may involve private entities and/or relevant international organizations, at national and/or sectoral level, through, *inter alia*, the enhancement of public-private partnership and the provision of advisory functions by experts in public and/or private sector.
3. The cooperation to support adaptation actions may also be required to enhance the sharing of existing technologies and know-how at global, regional, national and civil society levels in a coherent and integrated manner.

Article 11 (*Finance*)

1. In the context of the implementation of Article 4, paragraph 1, of the Convention, in accordance with the provisions of Article 4, paragraph 3, and Article 11 of the Convention, and through the entity or entities entrusted with the operation of the financial mechanism of the Convention, the developed country Parties and other developed Parties included in Annex II to the Convention shall:

(a) Provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in advancing the implementation of existing commitments under Article 4, paragraph 1 (a), of the Convention; and

(b) Also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of advancing the implementation of existing commitments under Article 4, paragraph 1, of the Convention and that are agreed between a developing country Party and the international entity or entities referred to in Article 11 of the Convention, in accordance with that Article.

The implementation of these existing commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among developed country Parties. The guidance to the entity or entities entrusted with the operation of the financial mechanism of the Convention in relevant decisions of the Conference of the Parties, including those agreed before the adoption of this Protocol, shall apply *mutatis mutandis* to the provisions of this paragraph.

2. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall decide on modalities for the financial resources, prior to the start of the commitment period referred to in Article 3, paragraph 1 (a).

3. The developed country Parties and other developed Parties included in Annex II to the Convention may also provide, and developing country Parties may avail themselves of, financial resources through bilateral, regional and other multilateral channels, while recognizing the catalytic role of public financial flow to facilitate private sector funding and investment.

Article 12 (*Cooperation*)

All Parties, taking into account their common but differentiated responsibilities and respective capabilities, as well as their specific national and regional development priorities, objectives, and circumstances, reaffirming existing commitments under Article 4, paragraph 1, of the Convention, and continuing to advance the implementation of such commitments, shall:

(a) Cooperate in sharing information and data, and in capacity building to assist, where necessary, developing country Parties in developing national action plans referred to in Article 3, paragraph 2, in developing inventory referred to in Article 5, paragraph 5, and in

formulating, developing and updating national adaptation programmes of actions referred to in Article 9, paragraph 2;

(b) Cooperate in scientific and technical research and promote the maintenance and the development of systematic observation systems and development of data archives to reduce uncertainties related to the climate system, the adverse impacts of climate change, and promote the development and strengthening of endogenous capacities and capabilities to participate in international and intergovernmental efforts, programmes and networks on research and systematic observation, taking into account Article 5 of the Convention; and

(c) Cooperate in and promote at the international level, and, where appropriate, using existing bodies, the development and implementation of education and training programmes, including the strengthening of national capacity building, in particular human and institutional capacities and the exchange or secondment of personnel to train experts in this field, in particular for developing countries, and facilitate at the national level public awareness of, and public access to information on, climate change.

Article 13 (*Conference of the Parties serving as the meeting of the Parties to this Protocol*)

1. The Conference of the Parties, the supreme body of the Convention, shall serve as the meeting of the Parties to this Protocol.

2. Parties to the Convention that are not Parties to this Protocol may participate as observers in the proceedings of any session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. When the Conference of the Parties serves as the meeting of the Parties to this Protocol, decisions under this Protocol shall be taken only by those that are Parties to this Protocol.

3. When the Conference of the Parties serves as the meeting of the Parties to this Protocol, any member of the Bureau of the Conference of the Parties representing a Party to the Convention but, at that time, not a Party to this Protocol, shall be replaced by an additional member to be elected by and from amongst the Parties to this Protocol.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall keep under regular review the implementation of this Protocol and shall make, within its mandate, the decisions necessary to promote its effective implementation. It shall perform the functions assigned to it by this Protocol and shall:

(a) Assess, on the basis of all information made available to it in accordance with the provisions of this Protocol, the implementation of this Protocol by the Parties, the overall effects of the measures taken pursuant to this Protocol, in particular environmental, economic and social effects as well as their cumulative impacts and the extent to which progress towards the objective of the Convention is being achieved;

(b) Periodically examine the obligations of the Parties under this Protocol, giving due consideration to any reviews required by Article 4, paragraph 2 (d), and Article 7, paragraph 2, of the Convention, in the light of the objective of the Convention, the experience gained in its implementation and the evolution of scientific and technological knowledge, and in this respect consider and adopt regular reports on the implementation of this Protocol;

(c) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under this Protocol;

(d) Facilitate, at the request of two or more Parties, the coordination of measures adopted by them to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under this Protocol;

(e) Promote and guide, in accordance with the objective of the Convention and the provisions of this Protocol, and taking fully into account the relevant decisions by the Conference of the Parties, the development and periodic refinement of comparable methodologies for the effective implementation of this Protocol, to be agreed on by the Conference of the Parties serving as the meeting of the Parties to this Protocol;

(f) Make recommendations on any matters necessary for the implementation of this Protocol;

(g) Seek to mobilize additional financial resources in accordance with Article 11;

(h) Establish such subsidiary bodies as are deemed necessary for the implementation of this Protocol;

(i) Seek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies; and

(j) Exercise such other functions as may be required for the implementation of this Protocol, and consider any assignment resulting from a decision by the Conference of the Parties.

5. The rules of procedure of the Conference of the Parties and financial procedures applied under the Convention shall be applied *mutatis mutandis* under this Protocol, except as may be otherwise decided by consensus by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

6. The first session of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be convened by the secretariat in conjunction with the first session of the

Conference of the Parties that is scheduled after the date of the entry into force of this Protocol. Subsequent ordinary sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be held every year and in conjunction with ordinary sessions of the Conference of the Parties, unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

7. Extraordinary sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be held at such other times as may be deemed necessary by the Conference of the Parties serving as the meeting of the Parties to this Protocol, or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.

8. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not party to the Convention, may be represented at sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by this Protocol and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties serving as the meeting of the Parties to this Protocol as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure, as referred to in paragraph 5 above.

Article 14 (*Secretariat*)

1. The secretariat established by Article 8 of the Convention shall serve as the secretariat of this Protocol.

2. Article 8, paragraph 2, of the Convention on the functions of the secretariat, and Article 8, paragraph 3, of the Convention on arrangements made for the functioning of the secretariat, shall apply *mutatis mutandis* to this Protocol. The secretariat shall, in addition, exercise the functions assigned to it under this Protocol.

Article 15 (*Subsidiary Body*)

1. The Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation established by Articles 9 and 10 of the Convention shall serve as, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Protocol. The provisions relating to the functioning of these two bodies under the Convention shall apply *mutatis mutandis* to this Protocol. Sessions of the meetings of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Protocol shall be held in conjunction with the meetings of, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of the Convention.

2. Parties to the Convention that are not Parties to this Protocol may participate as observers in the proceedings of any session of the subsidiary bodies. When the subsidiary bodies serve as the subsidiary bodies of this Protocol, decisions under this Protocol shall be taken only by those that are Parties to this Protocol.

3. When the subsidiary bodies established by Articles 9 and 10 of the Convention exercise their functions with regard to matters concerning this Protocol, any member of the Bureaux of those subsidiary bodies representing a Party to the Convention but, at that time, not a Party to this Protocol, shall be replaced by an additional member to be elected by and from amongst the Parties to this Protocol.

Article 16 (*Multilateral Consultative Process*)

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, as soon as practicable, consider the application to this Protocol of, and modify as appropriate, the multilateral consultative process referred to in Article 13 of the Convention, in the light of any relevant decisions that may be taken by the Conference of the Parties. Any multilateral consultative process that may be applied to this Protocol shall operate without prejudice to the procedures and mechanisms established in accordance with Article 18.

Article 17 (*Review of the Protocol*)

1. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall undertake reviews of this Protocol, including the consideration of commitments of the Parties for subsequent periods, in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information, bearing in mind the changes of circumstances of the Parties. The first review shall take place at least five years before the end of the commitment period referred to in Article 3, paragraph 1 (a), and further reviews shall take place at regular intervals and in a timely manner. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action, which may include the adoption of amendment to Annexes B and C.

2. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, identify elements, including the economic development stages, response capabilities and shares of greenhouse gas emissions in the world, to be considered as criteria for changes of circumstances of the Parties.

Article 18 (*Compliance*)

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree

and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol.

Article 19 (*Settlement of Disputes*)

The provisions of Article 14 of the Convention on settlement of disputes shall apply *mutatis mutandis* with respect to this Protocol.

Article 20 (*Amendments*)

1. Any Party may propose amendments to this Protocol.
2. Amendments to this Protocol shall be adopted at an ordinary session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. The text of any proposed amendment to this Protocol shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate the text of any proposed amendments to the Parties and signatories to the Convention and, for information, to the Depositary.
3. The Parties shall make every effort to reach agreement on any proposed amendment to this Protocol by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted amendment shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.
4. Instruments of acceptance in respect of an amendment shall be deposited with the Depositary. An amendment adopted in accordance with paragraph 3 above shall enter into force for those Parties having accepted it on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three fourths of the Parties to this Protocol.
5. The amendment shall enter into force for any other Party on the ninetieth day after the date on which that Party deposits with the Depositary its instrument of acceptance of the said amendment.

Article 21 (*Annex*)

1. Annexes to this Protocol shall form an integral part thereof and, unless otherwise expressly provided, a reference to this Protocol constitutes at the same time a reference to any annexes thereto. Any annexes adopted after the entry into force of this Protocol shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.
2. Any Party may make proposals for an annex to this Protocol and may propose amendments to annexes to this Protocol.
3. Annexes to this Protocol and amendments to annexes to this Protocol shall be adopted at an ordinary session of the Conference of the Parties serving as the meeting of the Parties to this

Protocol. The text of any proposed annex or amendment to an annex shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate the text of any proposed annex or amendment to an annex to the Parties and signatories to the Convention and, for information, to the Depositary.

4. The Parties shall make every effort to reach agreement on any proposed annex or amendment to an annex by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the annex or amendment to an annex shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. Any amendments to Annexes B and C shall be adopted only with the written consent of the Party concerned. The adopted annex or amendment to an annex shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

5. An annex, or amendment to an annex other than Annex A, that has been adopted in accordance with paragraphs 3 and 4 above shall enter into force for all Parties to this Protocol six months after the date of the communication by the Depositary to such Parties of the adoption of the annex or adoption of the amendment to the annex, except for those Parties that have notified the Depositary, in writing, within that period of their non-acceptance of the annex or amendment to the annex. The annex or amendment to an annex shall enter into force for Parties which withdraw their notification of non-acceptance on the ninetieth day after the date on which withdrawal of such notification has been received by the Depositary.

6. Amendment to Annex A that has been adopted in accordance with paragraphs 3 and 4 above shall enter into force in accordance with the procedure set out in Article 20, paragraphs 4 and 5.

7. If the adoption of an annex or an amendment to an annex involves an amendment to this Protocol, that annex or amendment to an annex shall not enter into force until such time as the amendment to this Protocol enters into force.

Article 22 (*Votes*)

1. Each Party shall have one vote, except as provided for in paragraph 2 below.
2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to this Protocol. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

Article 23 (*Depositary*)

The Secretary-General of the United Nations shall be the Depositary of this Protocol.

Article 24 (*Ratification/acceptance/approval/accession*)

1. This Protocol shall be open for signature and subject to ratification, acceptance or approval by States and regional economic integration organizations which are Parties to the Convention. It shall be open for signature at United Nations Headquarters in New York from XX to XX. This Protocol shall be open for accession from the day after the date on which it is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.
2. Any regional economic integration organization which becomes a Party to this Protocol without any of its member States being a Party shall be bound by all the obligations under this Protocol. In the case of such organizations, one or more of whose member States is a Party to this Protocol, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Protocol. In such cases, the organization and the member States shall not be entitled to exercise rights under this Protocol concurrently.
3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by this Protocol. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

Article 25 (*Entry into Force*)

1. This Protocol shall enter into force on the ninetieth day after the date on which not less than xx Parties to the Convention, incorporating Parties which accounted in total for at least xx per cent of the total global energy-related carbon dioxide emissions for [2007] as determined by the Conference of the Parties at its [th] session, have deposited their instruments of ratification, acceptance, approval or accession.
2. For each State or regional economic integration organization that ratifies, accepts or approves this Protocol or accedes thereto after the conditions set out in paragraph 1 above for entry into force have been fulfilled, this Protocol shall enter into force on the ninetieth day following the date of deposit of its instrument of ratification, acceptance, approval or accession.
3. For the purposes of this Article, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of the organization.

Article 26 (*Reservation*)

No reservations may be made to this Protocol.

Article 27 (*Withdrawal*)

1. At any time after three years from the date on which this Protocol has entered into force for a Party, that Party may withdraw from this Protocol by giving written notification to the Depositary.
2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.
3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from this Protocol.

Article 28 (*Authentic texts*)

The original of this Protocol, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

Annex A

Greenhouse gases

Carbon dioxide (CO₂)

Methane (CH₄)

Nitrous oxide (N₂O)

Hydrofluorocarbons (HFCs)

Perfluorocarbons (PFCs)

Sulphur hexafluoride (SF₆)

Sectors/source categories

Energy

Fuel combustion

Energy industries

Manufacturing industries and construction

Transport

Other sectors

Other

Fugitive emissions from fuels

Solid fuels

Oil and natural gas

Other

Industrial processes

Mineral products

Chemical industry

Metal production

Other production

Production of halocarbons and sulphur hexafluoride

Consumption of halocarbons and sulphur hexafluoride

Other

Solvent and other product use

Agriculture

Enteric fermentation

Manure management

Rice cultivation

Agricultural soils

Prescribed burning of savannas

Field burning of agricultural residues

Other

Waste

Solid waste disposal on land

Wastewater handling

Waste incineration

Other

Annex B

Party	Quantified emission limitation or reduction commitment in the commitment period 2013-20xx				
	Assigned amount (Gg-CO ₂ e)	reduction rates from 1990 (%)	reduction rates from 2000 (%)	reduction rates from 2005 (%)	reduction rates from 2007 (%)
A	xxx	xxx	xxx	xxx	xxx
B	xxx	xxx	xxx	xxx	xxx
...

Annex C

Party	Nationally appropriate mitigation actions to be taken pursuant to Article 3, paragraph 2
A	To develop and submit national action plan
B*	<p>(1) To develop and submit national action plan</p> <p>(2) To achieve targets as described below:</p> <p>(a) Economy-wide GHG emissions or energy consumption per GDP: xx tonnes-CO₂e/US\$ or millions tons of oil equivalent/US\$</p> <p>(b) GHG emissions per unit and other targets in major sectors</p> <p>(i) Iron and Steel: xx kg-CO₂e/ton-crude steel (distinguished by major steel-making methods)</p> <p>(ii) Cement: xx kg-CO₂e/ton-cement or MJ/t-clinker</p> <p>(iii) Aluminum : xx kg-CO₂e/ton-primary aluminum</p> <p>(iv) Power generation: Thermal efficiency of Coal fired powered plant (%) / Share of total introduction volume of non-carbon energy (% or kw)</p> <p>(v) Other sectors</p>
C	To develop and submit national action plan
...	...

(Note) Parties marked with an asterisk ("*") are the Parties which have substantial contribution to the global emissions of greenhouse gases and have appropriate response capabilities.

Drafting Notes

The following are the drafting notes by the Government of Japan (GOJ) to give supplementary explanations to this proposed Draft Protocol for reference only and do not form an integral part thereof.

1. Headings of the Articles and paragraphs

Headings of the Articles and paragraphs in the Draft Protocol are inserted only for convenience of reference.

2. Parties included in Annex I

The GOJ is of the view that (i) OECD member countries, (ii) countries that are not OECD members but whose economic development stages are equivalent to those of the OECD members, and (iii) countries which voluntarily wish to be treated as developed countries should either join Annex I or be bound by Article 4, paragraphs 2 (a) and (b), of the Convention in accordance with the procedure set forth in Article 4, paragraph 2 (g), of the Convention.

3. Gases

The GOJ recognizes that when broadening the coverage of greenhouse gases ((i) new gases in HFCs and PFCs, (ii) NF₃, HFEs, PFPME, SF₆, and (iii) gases controlled by the Montreal Protocol) under the post-2012 framework, it should be considered, from legal points of view, whether or not relevant COP/MOP decisions, the Draft Protocol, and/or the Convention need to be modified or amended.

4. Overall emission reductions by Parties included in Annex I

The GOJ recognizes the essential importance of enhanced greenhouse gas mitigation. Further discussion is necessary for the consideration of overall emission reductions by Parties included in Annex I, which are ambitious, realistic and achievable, taking into account scientific and economic analyses.

5. Crediting mechanisms and LULUCF

The outcome of the current discussions being conducted in the AWG-KP regarding the crediting mechanisms and LULUCF may need to be reflected as appropriate in the Draft Protocol. Any further considerations of issues such as crediting mechanisms need to examine how to ensure transparency, efficiency, accountability and environmental integrity.

6. Inventory

In accordance with Article 4, paragraph 1, of the Convention, all Parties are required to formulate, periodically update and submit national inventories. The GOJ recognizes the importance of the submission of inventories from Parties other than Parties included in Annex I for ensuring global emission reductions.

7. Finance

The GOJ recognizes that the amount of financial flows should be increased for actions taken by developing countries in the field of mitigation of and adaptation to climate change and would like to continue contributing actively to the discussion on the issue of finance, including the examination on currently proposed ideas without excluding other possibilities. Therefore, the GOJ is further exploring the ways to address the issues regarding financial resources and mechanisms.

8. Entry into force

Appropriate requirement for entry into force of the new framework should be considered, with a view to realizing an effective framework where all of the major economies should participate.

9. Inventory guideline

The GOJ recognizes that the outcome of the further discussions relating to the 2006IPCC Guidelines for National Greenhouse Gas Inventories may need to be reflected as appropriate in the Annex A and relevant Articles of the Draft Protocol.

10. Annex

The base years in Annex B, as well as the sectors and the indicators in Annex C, are illustrative and non-exhaustive. "Other sectors" the readers should find in the proposed Annex C may include "Road Transport" where appropriate.

PAPER NO. 22C: JAPAN

Japan's submission to the AWG-KP and AWG-LCA: Coverage of greenhouse gases

I. Views on the coverage of greenhouse gases in the framework beyond 2012

(1) Consideration of the coverage of greenhouse gases in the next framework

- Inclusion of new greenhouse gases (GHGs) in the next framework will affect the amount of GHG emissions and measures for emission reductions not only in Annex I Parties which are Parties to the current Kyoto Protocol, but also in all participating countries in the framework beyond 2012, including developing and developed countries which are not Parties to the current Kyoto Protocol. It is also necessary for all these countries to take mitigation actions in order to achieve effective global emission reductions. Therefore, it is necessary that the outcome of the previous discussions in the AWG-KP and relevant information on the GHG coverage should be provided to the AWG-LCA, and that this issue should be discussed in both AWGs in a comprehensive and consistent manner, before the conclusion is drawn as a result of discussions only in the AWG-KP.
- It should be noted that mitigation actions in developing countries are particularly necessary regarding NF3 from a viewpoint of effective implementation of addressing global warming, because the technical information prepared by the secretariat suggests that a production and market of NF3 has extended to developing countries.
- Such new gases have relatively high GWPs. The experience of HFC-23 destruction projects under the CDM recalls us that, if emissions from those gases are regulated only in developed countries and sufficient emission reduction actions are not taken in developing countries, it might cause unnecessary emission increase of such gases in developing countries.

(2) Technical information

- In deciding inclusion of new GHGs, it is important to consider whether the technical information on these gases is available and whether inclusion of each gas is appropriate from a viewpoint of effective implementation.
- The UNFCCC secretariat has compiled and uploaded technical information on new GHGs¹ mentioned in the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC) at the request of the AWG-KP. Recalling the conclusion of the first part of the sixth session of the AWG-KP in Accra², there are gases which have insufficient technical information in the following points.
 - methodologies to estimate emissions based on application of individual gases
 - application or sources of emissions of individual gas
 - available substitutes or alternative technologies
- Though the Government of Japan (GOJ) has contributed to Secretariat's work to collect technical information in response to the past conclusions of the AWG-KP meetings, there are limitations in collecting information in spite of the efforts by the secretariat and Parties. Further progress by international researches and work on the IPCC fifth assessment report are anticipated especially on the following gases.
 - Gases that are not currently expected to be commercialized (Influence on global warming is extremely small.)
 - Gases whose methodologies for estimating emissions, application, substitutes and alternative technologies have not been identified (It is very difficult to estimate the amount of emissions and to consider mitigation measures.)
- On the other hand, as for the category "hydrocarbons and other compounds", the background of categorization of these gases by the AR4 is not clear.³ Moreover, it is doubtful whether there is a certain influence of those gases on global warming. Therefore, further progress by international

¹ http://unfccc.int/national_reports/annex_i_ghg_inventories/items/4624.php

² FCCC/KP/AWG/2008/5, paragraph 35

³ For example, this category does not include the most major substances in "hydrocarbons" such as Isobutene (R600a) or Propane (R290) – these gases also have certain GWPs. On the other hand, substances that are controlled by the Montreal Protocol are listed in the category.

researches and work on the IPCC fifth assessment report are continued to be anticipated.

- As for so-called “Montreal gases” (CFCs and HCFCs) which are thought to have more influence on emissions and impact on climate change than those new GHGs listed in the AR4, information compiled by the UNFCCC secretariat and the outcome of the workshop to be held in July with participation of the UNFCCC secretariat and climate experts should be noted.⁴

II. Legal issues on the coverage of GHGs in the next framework

(1) Coverage of GHGs

- In case the next framework beyond 2012 is established in the form of a new single protocol under the Convention as Japan has proposed, all regulated gases and their GWPs are to be identified under the new single protocol.
- If the next framework is in the form of the amended Kyoto Protocol, the following measures will be necessary:
 - (a) Inclusion of new “HFCs” and “PFCs”
 - If Parties decide to add new GHGs to the category of “HFCs” and “PFCs” provided in Annex A of the Kyoto Protocol, a CMP decision pursuant to Article 5, paragraph 3, of the Kyoto Protocol will be necessary in order to set GWPs of those new gases.
 - In this case, the CMP decision should include such necessary information as GWPs and base years of new HFCs and PFCs which will come to be controlled as a result of consideration by Parties.
 - (b) Inclusion of NF3
 - In the case of including new gases or their categories which are not listed in current Annex A, such as NF3, it is necessary to amend Annex A first, and then adopt a CMP decision as is in the case of (a) above.

(2) Base year of new GHGs

In general, possible new gases for inclusion in the next framework such as new gases of HFCs (HFC-245fa, HFC-365mfc) or NF3 are substitutes for ozone depleting substances (ODS) or GHGs controlled by the current Kyoto Protocol and such GHGs are being used as a result of production regulation under the Montreal Protocol. Considering that, in the time of adopting the Kyoto Protocol, Parties were allowed to choose not only 1990 but also 1995 as the base year of HFCs, PFCs and SF6, base years of alternative gases should be flexible. In this context, it should be noted that Japan proposes to use total volume of GHG emissions and reduction rates from the plural base years including the latest year for which data are available for expressing emission reduction commitments of developed countries

(3) Detailed description of each GHG

New Zealand proposes to itemize individual gases of HFCs and PFCs in a similar manner as in the Montreal Protocol, replacing current prescription “HFCs” and “PFCs” in Annex A of the Protocol in the next framework.⁵ Japan would like to consider the proposal, including with regard to the procedures for amending Annex A, since it clarifies intended gases and improves transparency.

(4) Relationship with the Convention

In case substances controlled by the Montreal Protocol are newly regulated under the UNFCCC, it is necessary to consider seriously whether there are any problems with regard to the Article 4 of the Convention which excludes substances controlled under the Montreal Protocol (it may necessary to consider amendment to the Convention itself).

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⁴ FCCC/SBSTA/2008/13

⁵ FCCC/KP/AWG/2009/MISC.6