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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION UNDER THE CONVENTION
Fourth session
Poznan, 1–10 December 2008

Agenda item 3 (a–e)
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

Addendum

Part I

1. In addition to the 42 submissions from 22 Parties contained in document FCCC/AWGLCA/2008/MISC.5 and Add.1, 65 further submissions from 34 Parties have been received.

2. As requested by the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, these submissions have been posted on the UNFCCC website.[1] In accordance with the procedure for miscellaneous documents, they are attached and reproduced* in the language in which they were received and without formal editing.

[1] <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.

CONTENTS

Part I

[1] This submission is supported by Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslov Republic of Macedonia, Montenegro and Turkey

[2] This submission is supported by Albania, Croatia, the Former Yugoslov Republic of Macedonia, Montenegro, Serbia, Turkey and Ukraine

Part II

(Submission received 6 December 2008)

21. NEW ZEALAND

A. _ _ _ _

B. Item 1b of the Bali Action Plan

(Submission received 6 December 2008)

22. NORWAY

Comments from Norway on the assembly document prepared by the Chair of the AWGLCA

(Submission received 6 December 2008)

23. PAKISTAN

Ideas and proposals on paragraph 1 of the Bali Action Plan

(Submission received 6 December 2008)

24. PHILIPPINES ON BEHALF OF THE GROUP OF 77 AND CHINA

A. Mitigation and Means of Implementation

B. Shared Vision

C. General Views

(Submission received 6 December 2008)

25. RUSSIAN FEDERATION

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

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

(Submission received 6 December 2008)

26. SAUDI ARABIA

MRV for the Impact of Response Measures

(Submission received 5 December 2008)

27. SOUTH AFRICA

Elements for the concepts of measurable, reportable and verifiable, and related issues of measuring comparability and compliance

(Submission received 6 December 2008)

28. SURINAME

Decision 2/CP 13 of the Bali Action Plan

(Submission received 6 December 2008)

29. SWITZRLAND

Coperative sectoral approaches and sector-specific actions

(Submission received 28 November)

30. SWITZERLAND ON BEHALF OF THE ENVIRONMENTAL INTEGRITY GROUP

MRV

(Submission received 6 December 2008)

31. TRINIDAD AND TOBAGO

Technology Transfer Framework and Modality under the Ad-Hoc Working Group on Long-Term Cooperative Action

(Submission received 6 December 2008)

32. TURKEY

Information, Views and Proposals by Turkey Regarding Paragraph 1 of the Bali Action Plan of the Ad-Hoc Working Group on Long-Term Cooperative Action under the Convention

(Submission received 5 December 2008)

33. UNITED STATES OF AMERICA

(Submission received 6 December 2008)

34. VENEZUELA (BOLIVARIAN REPUBLIC OF)

Propuestas especificas sobre los elementos contenidos en el párrafo 1 del Plan de Accion de Bali

(Submission received 6 December 2008)

PAPER NO. 1: ALGERIA

Submission to be considered in the update of the Assembly document (FCCC/AWGLCA/2008/16)

An equity-oriented proposal for a shared vision for long term cooperative action

A number of Parties propose an approach to a shared vision for long-term cooperative action which refers to sections of the IPCC 4th assessment report. Drawing on the report, these Parties propose emissions reductions by Annex I Parties in a range of 25 to 40 percent from 1990 levels by 2020 and in a range of 80 to 95 percent from 1990 levels by 2050.Using other studies, these Parties derive from these numbers emissions reductions for developing countries in the range of 15 to 30 percent below baseline by 2020 and amounting to a return to 1990 levels by 2050.

Such an approach presents a number of serious methodological flaws:

- It misrepresents as prescriptions or even objectives numbers given by the IPCC as examples, i.e. as elements of a scenario among many conceivable ones. As a scientific body, the IPCC has no mandate to prescribe a burden-sharing formula between developed and developing countries, which is a political issue, and does not claim to do so;
- The approach identifies emissions reductions efforts to be carried-out by developing countries without indicating what corresponding level of financial and technological support by developed countries would be required to enable these efforts, thereby ignoring articles 4.3 and 4.7 of the Convention, as well as paragraph 1(b) (ii) of the Bali Action Plan;
- The approach makes no reference to past emissions and /or the historical responsibility of developed countries, which amounts to forgiving a major environmental debt; and
- Most of all, the approach apportions global atmosphere by identifying first the needs of the small minority of the world's population living in developed countries and considering as residual the needs of the vast majority of the world's population living in developing countries, without verifying whether the balance of environmental space apportioned to developing countries is compatible with their economic and social development needs.

We would therefore like to propose an alternative, equity-oriented approach, which could be sketched as follows:

- Defining, along with the global emissions profile, an extrapolation of current developing countries emissions, ensuring the same economic growth and social benefits as a business as usual path, but taking advantage of win-win emissions reductions opportunities. This amount of environmental space would be apportioned to developing countries, and the balance to developed countries, in case financial and technological transfers remain insignificant;
- Defining an ambitious package of financial and technological transfers to help developing countries reduce their emissions without incurring any welfare losses. A corresponding lower emissions path for developing countries would thereby be defined. This would free environmental space that would enable developed countries to follow a less stringent emissions reductions path than above.
- Past excess emissions of developed countries would be considered an additional basis for the provision by developed countries of financial, technological and capacity-building support for adaptation.

This would define an equity-oriented long-term cooperation approach consistent with Convention and Bali Action Plan provisions in which developing and developed countries would confront together the climate change challenge in decades ahead.

PAPER NO. 2: ALGERIA, EGYPT, IRAN, JORDAN, KUWAIT, LEBANON, NIGERIA, OMAN, QATAR, SAUDI ARABIA, SYRIAN ARAB REPUBLIC AND UNITED ARAB EMIRATES

Submission by the following countries for AWGLCA

December 5, 2008

The following paragraphs and ideas must be included in the mitigation section:

1. The specific needs and special circumstances of developing country Parties that are particularly vulnerable to the adverse effects of climate change and the adverse impacts of the implementation of response measures, that would have to bear a disproportionate or abnormal burden, shall be given full consideration to avoid abnormal burden on any developing country.

2. All mitigation actions, policies and measures shall have sustainable development as a priority and shall take into account different socio-economic circumstances. Such actions, policies and measures must be comprehensive; covering all relevant sources, sinks and reservoirs of greenhouse gases, and aim towards actions to cover all economic sectors without bias.

3. Parties should cooperate to promote a supportive international economic system that would lead to sustainable economic growth and development for all developing country Parties, thus enabling them better to address the problems of climate change and the impact of response measures.

4. All Parties shall implement mitigation actions, policies and measures in such a way as to minimize the adverse effects of their actions, policies and measures including the adverse effects on international trade, and social, environmental and economic impacts on other Parties, especially on developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention.

5. All mitigation actions, policies and measures taken to combat climate change, including unilateral ones, shall not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

6. Parties mitigation actions Portfolios should include comprehensive studies of direct costs and impacts, as well as associated indirect costs and impacts on other Parties, especially on developing country Parties identified in Articles 4.8 and 4.9 of the Convention.

PAPER NO. 3A: ALLIANCE OF SMALL ISLAND STATES

AOSIS Input into the Assembly Paper on Adaptation

IV. Enhanced action on adaptation

Action on adaptation should respond to the impacts that are already occurring and be sufficient to address the impacts that are expected to occur in the future. Action should be achieved through a structured but flexible approach to adaptation that provides for:

- institutional arrangements under the Convention process that co-ordinate adaptation efforts at the international and regional levels to support country-driven priorities;
- national-level adaptation planning and implementation mechanisms, establishing and building on existing processes and methodologies where available and appropriate, for example national reports including National Communications or NAPAs as appropriate;
- new, additional and predictable financial resources separate and apart from ODA that are supported by appropriate institutional mechanisms;
- a Convention Adaptation Fund
- a Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, with Insurance, Rehabilitation/Compensatory, and Risk Management Components.
- Enhanced capacity at all levels in the most vulnerable countries, in particular LDCs and SIDS, as an integral part of this enhanced action on adaptation.
- Priority actions under adaptation targetting the needs of the most vulnerable countries and communities, in particular the LDCs and SIDS.
- Knowledge sharing and transfers of adaptation technologies.

The UNFCCC must play the key role in enhancing adaptation and demonstrate greater leadership on mobilizing adaptation action both in the short and long term.

A. International cooperation to support urgent implementation of adaptation actions

Adaptation planning and implementation

94. On the **context** of **adaptation planning and implementation**:

There is a need to know what to expect from climate change to be able to: 1) build resilience to the negative impacts of climate change; 2) develop measures to address the impacts for which it is difficult or impossible to build resilience; and 3) plan and implement adaptation actions both for urgent and immediate needs and for the long term. It is necessary to consider climate risks for national planning; the streamlining and scaling up of financial and technological support; enhancing knowledge sharing; and creating effective institutional arrangements for adaptation.

95. On the **nature of adaptation plans**:

AOSIS calls for a flexible structured approach to adaptation under the Convention, which provides for, *inter-alia,* 1) institutional arrangements under the Convention process that coordinate adaptation efforts at the international and regional levels; 2) financial arrangements; 3) support for national level adaptation planning, establishing and building on existing processes and methodologies where available and appropriate, for example. second national communications and NAPAS, with an adaptation support mechanism in order to assist countries in strategic planning, including provision of guidelines and

expertise to assist in priority identification; and 4) enhanced capacity to respond to disasters that are exacerbated by climate change, including risk management arrangements.

National adaptation plans for developing countries should build on the lessons learned from the review of the existing NAPA process in the context of other processes within the Convention. This expanded national adaptation planning process should be formalised and provided with support and guidance through the Convention process. Recognising that national planning processes are conducted on different time scales depending upon national circumstances, where adaptation priority activities have been identified by Parties through national communications or other processes, implementation should proceed and national plans should not be a conditionality for access to funding.

96. On the **integration of adaptation into national policy**:

Climate change adaptation places an additional burden on SIDS, above and beyond that of ensuring that development is sustainable. International cooperation can support the consideration of climate risks to sustainable development as well as identification and implementation of measures to address the exacerbated risks of climate change in national policies. Support to address the additional burden of climate change adaptation activities must be new, additional, predictable and separate from ODA and available over the long term.

97. On **vulnerability and adaptation assessments** to support adaptation planning and implementation:

Given the limited capacity of many SIDS, SIDS require international support to produce packages of scenario outputs that are appropriately downscaled, incorporate uncertainty ranges, and address information ownership concerns. The production of such SIDS-specific scenario output information packages could be through international cooperation and support for regional or international institutions.

There is still the need to strengthen climate change data collection and analysis at the local level. Support the implementation of regional GCOS plans will provide better climate observation data to inform vulnerability assessments. Improved access to satellite imagery and other data relevant to the mapping of impacts is also needed. Further development, transfer and deployment of soft adaptation technologies is a critical element for improving the capacity of SIDS to perform and update V&A assessments.

The use of participatory approaches to vulnerability assessments has proven effective for SIDS communities and capacity building programmes for these approaches are required.

98. On **incentivizing adaptation, and creating enabling environments:**

The successful demonstration of locally-appropriate adaptation technologies with positive on the ground outcomes for local communities provides a clear incentive for adaptation.

The creation of enabling environments, including through fiscal measures, regulatory policies, legislative changes, national capacity-building and environmental impact assessments must be twinned with actual implementation of adaptation activities on the ground. Policies in and of themselves will not resolve practical adaptation needs.

99. On **the context of streamlining and scaling up financial support and technological support for adaptation:**

Access to financial resources for adaptation should be direct and simplified, with priority access given for the urgent, immediate and pressing adaptation needs of particularly vulnerable developing countries, SIDS and LDCs. Funding should be provided in the form of grants rather than loans

The Convention Adaptation Fund proposed by AOSIS would scale up financial support for adaptation.

The Multi-Window Mechanism proposed by AOSIS would also scale up financial and technological support for adaptation through its Insurance Component, and Risk Management Component.

Technologies for adaptation, including endogenous technologies require multi-sectoral support for their development and dissemination in a measurable, reportable and verifiable manner.

100. Financial support should be directed at:

- The implementation of adaptation planning, concrete projects and activities, including priorities identified through a flexible structured approach to adaptation under the Convention
- A Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, which includes Insurance, Rehabilitation/Compensatory and Risk Management Components
- Country-driven adaptation activities

101. Technological support should be directed at:

The development and transfer of technologies for adaptation must be given equal weight as that given to mitigation technologies. SIDS require a range of adaptation technologies, including soft adaptation technologies, based on the particular vulnerability of SIDS to climate change impacts. AOSIS is of the view that greater emphasis should be given to the implementation of early warning systems, flood management systems, drought monitoring and management, disaster risk management, hazard-resilient construction and impact prediction modelling.

It is important that technology be locally-appropriate and barriers to development deployment transfer and diffusion be overcome.

Enhancing knowledge sharing

102. On the context of enhancing knowledge sharing:

There are several of sources of knowledge on adaptation that when shared can greatly enhance the timely and appropriate implementation of adaptation activities.

Scientific knowledge is clearly important, and from the outset has guided decision-making in the Convention process. AOSIS notes that gaps in scientific information on the impact of climate change on SIDS continue to exist. For example, more work needs to be done to understand the impacts of climate change on ocean habitats, which are fundamental to the livelihoods and well-being of island citizens. .

Another important source of knowledge on adaptation is the experience and lessons learned in implementing adaptation projects, including the management of risks, the uses of technology and the tailoring of approaches. The implementation of adaptation actions is a balance between top down and bottom up approaches. While the exchange of experience and lesson learned can be an important method for facilitating both approaches, it is particularly useful in facilitating the dissemination of locally-developed adaptive techniques. The sharing of traditional knowledge - experience built up over years of practice - is a key element of bottom up approach to implementing adaptation.

103. On the ways to enhance knowledge sharing:

a) The following are needed to enhance knowledge sharing:
   - Strengthening of information networks;
   - Support for education, training, public information and awareness;

- Establishment and maintenance of data management systems and repositories of adaptation-related information;
- Preparation and dissemination of compilations and syntheses of best practices for adaptation;
- Availability of professional development opportunities through scholarships, fellowships and other forms of access to training;
- Study visits and professional exchanges between technical personnel from different countries and regions;
- The publication of peer-reviewed documents/journals.

b) Regional centres should be established in regions where they do not exist, and existing regional centres enhanced as a means to deliver information and training
c) In delivering information and training through networks and regional centres, the following are needed, *inter alia*:
   - Learning institutions to assist vulnerable communities to identify long-term needs;
   - International, regional and national adaptation research and technical support centres;
   - Exchange of experiences on endogenous technologies.

Institutional arrangements

105. On context of institutional arrangements for adaptation

In order for action on adaptation to respond to the adverse impacts of climate change that are already occurring and be sufficient to address the impacts that are expected to occur in the future, such action must be underpinned by the appropriate institutional arrangements under the Convention process. These institutional arrangements should have the objective of advancing the development and implementation of adaptation activities under the Convention, including the co-ordination of adaptation efforts at the international and regional levels to support country-driven priorities.

The successful implementation of adaptation actions will require a country-driven, integrated approach, at a national and sectoral level. This approach should involve cooperation among various stakeholders (the private sector, governments, the donor community, bilateral and multilateral institutions, non-governmental organizations and academic and research institutions) under the umbrella of the Convention.

106. On nature of institutional arrangements

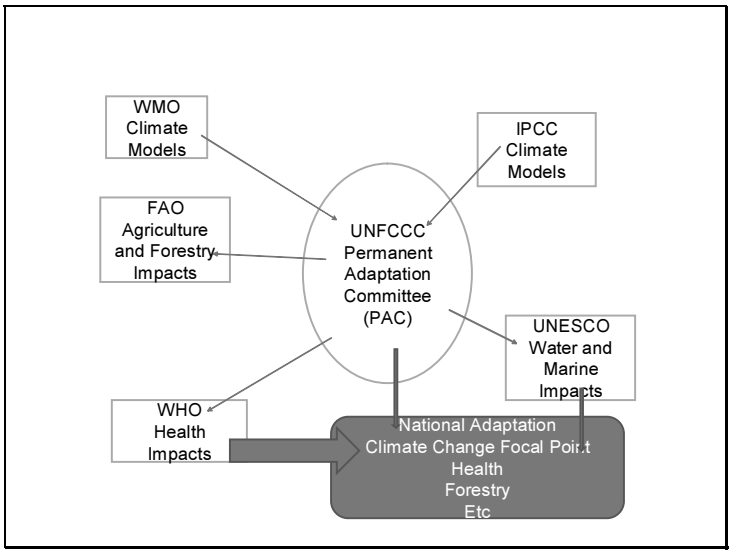
AOSIS proposes the establishment of a Permanent Adaptation Committee (PAC) under the Convention. The role of this committee would be to facilitate adaptation to the adverse effects of climate change for vulnerable developing countries, especially SIDS and LDCs. This facilitative role would be fulfilled by

- providing advice and technical support to Parties;
- interfacing with the mechanisms that provide financing for adaptation, both for the most urgent and immediate needs of SIDS and LDCs and for longer term adaptation actions (including a Convention adaptation fund and a multi-window mechanism to address loss and damage from climate change impacts);
- developing mechanisms for transfer of adaptation technologies;
- supporting capacity building;
- disseminating guidance on best practices in adaptation; and
- identifying opportunities for learning by doing through practical application of adaptation activities at the national and community levels.

The PAC would be managed by a Board comprised of Party members nominated for fixed terms, similar to the CDM Executive Board and the Adaptation Fund Board. While Board members would have

adaptation expertise, the Board would also be able to marshal the expertise of Parties not on the PAC Board as well as major agencies involved directly in adaptation implementation efforts such as those now involved in the NWP.

The PAC would act as an umbrella to draw together the fragments of adaptation activities currently operating under the Convention, providing a bridge between SBSTA and SBI. Going forward, it would be responsible for developing, implementing and coordinating future actions on adaptation taken under the Convention. As with other Convention bodies, the PAC would operate under the guidance and supreme authority of the COP.



Proposed structure of the Permanent Adaptation Committee (PAC)

B. Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance

111. On **context**, AOSIS notes that

The Bali Action Plan requires the Parties to address enhanced action on adaptation, including, inter alia, in the context of paragraphs 1(c)(ii) and 1(c)(iii) of decision 1/CP.13.

112. In the view of AOSIS, an essential part of the post-2012 agreement must be a ***Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts*** in SIDS and other developing countries particularly vulnerable to the impacts of climate change. This new Multi-Window Mechanism would consist of <u>three inter-dependent components</u>:

- Insurance Component
- Rehabilitation/Compensatory Component
- Risk Management Component

These three components play different and complementary roles and comprise necessary components of an integrated approach to risk reduction, risk transfer and risk management efforts. Taken together, the three components aim to enhance adaptive capacity of SIDS and other countries particularly vulnerable to the impacts of climate change.

- An *Insurance Component* is needed to help SIDS and other particularly vulnerable developing countries manage financial risk from increasingly frequent and severe extreme weather events; many SIDS either cannot access insurance or find it increasingly difficult to afford commercial insurance to

address impacts on national economies and require support in addressing the burden of increasing risks due to climate change.

- A *Rehabilitation/Compensatory Component* is needed to address the progressive negative impacts of climate change, such as sea level rise, increasing land and sea surface temperatures and ocean acidification that result in loss and damage. Even with financial risk management mechanisms in place and efforts to reduce physical risks and exposure, some measure of loss and damage due to climate change impacts will be unavoidable and must be addressed.
- A *Risk Management Component* is needed to support and promote risk assessment and risk management tools and facilitate and inform the *Insurance Component* and *Rehabilitation/Compensatory Component*.

Support for the establishment and maintenance of such a ***Multi-Window Mechanism to Address Loss and Damage*** is appropriately viewed as adaptation assistance.

On **Institutional arrangements**:

- The *Multi-Window Mechanism* would be situated under the umbrella of the Convention and housed within the UNFCCC Secretariat.
- A *Multi-Window Mechanism Board* would provide oversight and have a transparent governance structure.
- Institutional arrangements would include technical, financial and administrative functions.
- A *Technical Advisory Facility* and a *Financial Vehicle/Facility* would provide support to all three components, providing different services to different components.
- The *Technical Advisory Facility* would provide advice and assistance, and receive input from the insurance and reinsurance sectors, the disaster risk reduction community, UN agencies and other organisations.
- The *Financial Vehicle/Facility* would manage funds held by the Multi-Window Mechanism. It would be created inside the UNFCCC but could be housed in a financial institution outside the UNFCCC.
- The UNFCCC Secretariat would provide administrative support.

MULTI-WINDOW MECHANISM TO ADDRESS LOSS AND DAMAGE FROM CLIMATE CHANGE IMPACTS		
MULTI-WINDOW MECHANISM BOARD		
1. Insurance Component	**2. Rehabilitation / Compensatory Component**	**3. Risk Management Component**
To address climate-related extreme weather events such as hurricanes, tropical storms, floods and droughts, which result in loss and damage	**To address progressive negative impacts,** such as sea level rise, increasing sea and land temperatures and ocean acidification, that result in loss and damage (e.g., land loss, coral bleaching, impacts on potable water availability, reduction in fisheries, desertification, etc.)	**To promote** risk assessment and risk management tools and strategies at all levels; to facilitate the implementation of risk reduction and risk management measures
Triggers - e.g. might include precipitation, wind speed, storm surge	**Parameters** - might include sea level rise, temperature increases, loss of land, damage to coral reefs, loss of fisheries, salinisation of aquifers, or use an all-risk parameter	
A. TECHNICAL ADVISORY FACILITY		
With respect to Insurance Component: - Provides advice and guidance to	**With respect to Rehabilitation / Compensation Component:** - Works with countries to establish	**With respect to Risk Management Component:** - Provides advice to countries on

MULTI-WINDOW MECHANISM TO ADDRESS LOSS AND DAMAGE FROM CLIMATE CHANGE IMPACTS		
countries on types of available instruments - Advises on best practices and innovative approaches for identified needs - Provides technical support for the establishment of appropriate risk sharing and risk transfer schemes as requested (e.g., risk pooling arrangements; indexed insurance mechanisms such as catastrophe bonds, weather derivatives; reinsurance schemes; public private partnerships etc.)	baseline parameters in local context - Verifies when parameter thresholds exceeded - Considers means to graduate parameters to reduce basis risk	risk management techniques in the context of climate change - Facilitates collection of weather data and analysis (e.g., that can support development of insurance tools) - Identifies hazards and provides support to risk assessments - Recommends appropriate investments in risk reduction - Assists in building capacity for managing risk and reducing risk exposure
B. FINANCIAL VEHICLE / FACILITY		
With respect to Insurance Component - Enables / administers / supports risk sharing / risk transfer schemes as required / requested through start up financing, subsidization - Manages and invests reserves accumulated from assessed Annex I Party contributions, from premiums / contributions from covered private and public sector institutions and from other donor sources	**With respect to Rehabilitation / Compensation Component** Accumulates funds from - assessed Annex I Party contributions, preferably through the proposed Convention Adaptation Fund based on GHG emissions (responsibility) and GDP (capacity) - other donor sources - Pays out when parametric threshold crossed	**With respect to Risk Management Component** - Fund measures to support risk reduction and risk management measures - e.g., data collection, hazard mapping, risk assessments
C. ADMINISTRATION - UNFCCC SECRETARIAT		

C. Disaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change

114. On Context

Building resilience to climate change often also enhances resilience to disasters. The links between disaster risk reduction strategies and adaptation should be encouraged and facilitated.

115. AOSIS is of the view that an essential part of the post-2012 agreement must be a new ***Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts***. The Multi-Window Mechanism would consist of three inter-dependent components:

- Insurance Component
- Rehabilitation/Compensatory Component
- Risk Management Component

These three components play different and complementary roles and comprise necessary components of an integrated approach to risk reduction, risk transfer and risk management efforts. Taken together, the three components aim to enhance adaptive capacity and address loss and damage from climate change. (For a full description see Section B. above.)

D. Economic diversification to build resilience

117. The livelihoods of communities in AOSIS member States are heavily dependent on a limited number of economic activities including tourism, agriculture and fisheries that are particularly vulnerable to climate change impacts. Support to identify options and build capacity for small island developing states to diversify from dependence on specific vulnerable natural resource-based economies is required, and could be provided through the mechanisms and institutional arrangements proposed by AOSIS as part of a flexible structured approach to adaptation.

E. Ways to strengthen the catalytic role of the Convention in encouraging multilateral bodies, the public and private sectors and civil society, building on synergies among activities and processes, as a means to support adaptation in a coherent and integrated manner

119. The consideration of adaptation in the UNFCCC process must be consolidated and strengthened internally. Enhanced action on climate change should be delivered under the UNFCCC umbrella in a manner that enables particularly vulnerable Parties to access adaptation support in a simple and coherent manner, with multilaterally-agreed criteria and institutional, technical, and financial support. The UNFCCC must play a proactive role in bringing together resources from multilateral bodies, the public and private sectors, and civil society, to enable SIDS and LDCs, the countries most vulnerable to climate change, to cope with the additional burdens of adaptation. Financial flows for adaptation should be monitored and reported in a transparent manner.

The Convention Adaptation Fund and the Multi-Window Mechanism to Address Loss and Damage from Climate Impacts would both catalyse action under the Convention to encourage a range of actors to support adaptation to the adverse effects of climate change in a coherent and integrated manner.

PAPER NO. 3B: ALLIANCE OF SMALL ISLAND STATES

AOSIS Input into the Assembly Paper on Financing

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

The inadequacy of financing for adaptation activities in vulnerable developing countries particularly Small Island Developing States (SIDS) and Least Developed Countries (LDC) is a major failing of the entire international system as well as the Convention process. UNDP estimates that that new additional adaptation finance of **at least US$86 billion a year** will be required by 2015 to meet the most basic and pressing adaptation needs of developing countries.

Despite the clear language of Convention Articles 4.3 and 4.4, funding for adaptation has eroded almost completely under the Convention's financial mechanism, in the climate change focal area. The LDC Fund, Special Climate Change Fund and Adaptation Fund were created in part to respond to these shortcomings but these funds are clearly insufficient, and many pledges of support for projects through these processes remain unfulfilled. Even when the Adaptation Fund is fully operational, new sources of funding will clearly be needed in addition to existing funding under the Convention. The full cost of adaptation measures must be provided to SIDS given that they are being forced to react to the adverse impacts of a phenomenon to which they have a miniscule contribution and which have been caused by the carbon intensive production patterns and lifestyles of others.

In the consideration of enhanced action on financing under the Convention there is a need to differentiate between financing secured for adaptation and financing secured for mitigation. Although securing financing for mitigation is a major challenge, financing for mitigation is more readily available and easier to access than financing for adaptation. Furthermore it is easier to attract private investment for mitigation activities and projects, since they can generate revenue, while adaptation projects in SIDS (e.g. shoreline protection, coral reef restoration, protection of coastal infrastructure, protection against saline intrusion, food security etc.) are generally considered public goods to be provided and protected by the State.

146. On **characterizing the provision of new and additional resources**

1) **New and additional** – A significant injection of **new** money is required separate and apart from traditional ODA and the 0.7% target, and specifically devoted to adaptation.

2) **Predictability** – The sources of this new financing must be stable and predictable including from mandatory or assessed contributions from developed countries and levies on the market based mechanisms

3) **Grant-based** – Consistent with the polluter-pays-principle financing to developing countries for adaptation should be in the form of grants rather than loans. SIDS are being forced to react to the adverse impacts of a phenomenon to which they have a miniscule contribution and which have been caused by the carbon intensive production patterns and lifestyles of others.

4) **Priority access for the most vulnerable** – Particularly vulnerable developing countries especially the SIDS and LDCs should be given priority access to any financing for adaptation given their unique vulnerability, limited capacity to adapt and negligible contribution to the problem.

5) **A New Approach to Governance** – Any new financing should be channeled through the Convention and any new Fund(s) for addressing climate change should be under the guidance and supreme authority of Parties to the Convention. The governance arrangements of the international financial institutions places small countries at a distinct disadvantage and more often the priorities of these institutions mirror the priorities of those in control.

6) **Coherence** – Coherence and coordination at the international level among all actors and utilizing the Convention as the fulcrum for action.

147. **On provision of new and additional:**

(a) Provision should be based on:

- For adaptation, provision of new and additional financing should be towards the implementation of Articles 4.3 and 4.4 of the Convention, consistent with the polluter pays principle and should be directed at addressing the urgent and priority needs of the most vulnerable.

(b) **Resources should be generated by**:

- For adaptation resources should be generated from assessed contributions from developed country Parties as well as market-based mechanisms and private sector sources.

(c) R**esources should be provided by Parties on the basis of, or taking into account, the following criteria and indicators:**

- The level of countries GHG emissions, taking into account their historical contribution, respective levels of development and ability to pay.

(d) On **contributions**

- To guarantee a stable, predictable source of financing to support adaptation in particularly vulnerable developing countries, assessed contributions from developed countries should form the core revenue stream into the Convention Adaptation Fund

148. On the **generation of resources**:

For Adaptation:

- **Assessed contributions** based on the level of countries' GHG emissions, taking into account their respective levels of development and ability to pay as well as historical responsibilities
- **International revenue generation schemes including:**
  - Auctioning of a percentage of national mitigation allocation schemes
  - International Levies
- **Voluntary contributions** from developed and developing countries and philanthropic organizations over and above assessed contributions

For Mitigation

- Developed country Parties should pledge funding for mitigation action in developing countries based on a formula calculated two criteria: (i) based on cumulative historical emissions and (ii) ability to pay (GDP). Contributions should be reported, measured and verified using a central register of funding for mitigation action.
- Developing country Parties may also wish to make contributions to a central fund for mitigation action established under the Convention.

149. On **generation of new and additional resources from fiscal measures**

For Adaptation**:**

- International revenue generation schemes
  - Auctioning of a percentage of national mitigation allocation schemes
  - International Levies

For Mitigation:

- New and innovative source of funding should be developed under the Convention for mitigation action. Developed countries Parties should pledge a certain percentage of revenue generated from national mitigation allocation schemes undertaken under the Convention. Such revenue could be generated through the auctioning of a percentage of national mitigation allocation schemes.
- A global levy on the use of fossil fuels in developed country Parties should be established as a means of generating finance for supporting NAMAs.

150. On **mobilization of the public-sector funding and investment**,

For Adaptation:

- To guarantee a stable and predictable source of financing to support adaptation in particularly vulnerable developing countries, assessed contributions from developed countries should form the core revenue stream into the Convention Adaptation Fund:

151. On **the mobilization of public-sector funding outside the Convention**,

The following are required:

- Coherence and coordination at the international level among all actors and utilizing the Convention as the fulcrum for action
- Additional funding from multilateral financial institutions, under bilateral or multilateral development programmes, should be brought into line with the principles and objectives of the Convention
- International financial institutions should prioritize funding for renewable energy and energy efficiency technologies. Current support for fossil fuel technologies should be eliminated.

152. On the **mobilization of private-sector funding and investment**,

- All countries should pledge to remove barriers to the import of renewable energy and efficiency technologies.
- The Insurance Component of the Multi-Window Mechanism would mobilize private sector funding for adaptation through support for new and innovative risk sharing and risk transfer schemes.

153. On **positive incentives for developing countries**:

- Positive incentives should be given to developing country Parties for enhanced implementation of national mitigation actions
- Major emitting developing countries should take the lead and make a significant contribution to reducing their emissions below business as usual projections. Actions by major emitting developing countries could be based on key sectors. Emissions reductions below measured, reported and verified business as usual baselines could be eligible for trading under a trading mechanism established under the Convention.
- For SIDS and LDC, developing NAMAs is seen as a matter of national energy security and as a means of meeting sustainable development aspirations. Appropriate financing will be required to support national energy security needs of SIDS and LDCs;

155. On **generating financial resources specifically for technology cooperation**,

- Funding should be provided to support the diffusion and deployment of renewable energy and energy efficiency technologies in developing countries. Support should be provided to assist in encouraging the private sector to release intellectual property protection on renewable energy and energy efficiency technologies so that they can be readily reproduced in developing countries.
- Equal priority should be given to technologies for mitigation and adaptation

156. On the **role of enabling environments in mobilizing funding and investment**

- The Paris Declaration on Aid Effectiveness is not relevant to the Convention process as financing for addressing climate change is a separate obligation from ODA, therefore the Paris Declaration principles do not apply in the climate change context.

157. On **guiding the disbursement of, and access to, financial resources** for mitigation and adaptation and technology cooperation

- For adaptation access should be direct and simplified
- Priority access should be given to particularly vulnerable developing countries SIDS and LDCs
- The disbursement of, and access to, funding for mitigation, adaptation and technology transfer should be based on country-driven priorities

- Funding for mitigation actions should also be provided to all developing countries. Funding should contribute to global emissions reductions and achieving sustainable development objectives through the use of renewable energy and energy efficiency technologies.

158. On **guiding access and disbursement for adaptation**

- Funding should be provided in the form of grants rather than loans
- Direct, simplified access and expeditious disbursement should be ensured for SIDS and LDCs

160. On **priority access to funds for adaptation**

- Funding should be provided as a priority to particularly vulnerable developing countries, especially LDCs and SIDS

163. On the **disbursement of funds for adaptation**

(a) On **criteria for disbursing funds for adaptation**:

- Funding should respond to the urgent, immediate and pressing needs of the most vulnerable, particularly the LDCs and SIDS
- Funding should also respond to progressive negative impacts in particularly vulnerable countries, SIDS and LDCs

(b) **Allocations of funds for adaptation** should be based on

- The implementation of adaptation planning, concrete projects and activities, including priorities identified through a structured approach to adaptation under the Convention.
- A Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, which includes Insurance, Rehabilitation/Compensatory and Risk Management Components.
- The disbursement of, and access to, funding for adaptation and adaptive technologies should be based on country-driven priorities.

164. On **other activities to be supported through the provision of financial resources and investment**

- Funding for national climate change focal points
- Funding for national capacity self-assessment and capacity-building in particularly vulnerable developing countries

168. On **financing for adaptation / differentiated from financing for mitigation,**

There is a need to differentiate between securing financing for adaptation and securing financing for mitigation. Although securing financing for mitigation is a major challenge, financing for mitigation is more readily available and easier to access than financing for adaptation. Furthermore it is easier to attract private investment for mitigation activities and projects, since they can generate revenue, while adaptation projects in SIDS (e.g. shoreline protection .coral reef restoration, protection of coastal infrastructure, protection against saline intrusion, food security etc.) are generally considered public goods to be provided and protected by the State

169. On **innovative means of funding to assist developing country Parties in meeting the cost of adaptation**

- Convention Adaptation Fund
- International revenue generation schemes
- Auctioning of a percentage of national mitigation allocation schemes
- International Levies
- Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, with an Insurance Component, Rehabilitation/Compensatory Component and a Risk Management Component

170. On **funding**,

- Convention Adaptation Fund
- Mandatory or assessed contributions from developed countries
- Auctioning of a percentage of national mitigation allocation schemes

- A structured approach/process to identify and fund the most urgent and immediate adaptation needs of SIDS and LDCs and a mechanism for delivering resources and technical support
- A Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts

171. On **means to incentivize adaptation actions on the basis of sustainable development**:

- A Permanent Adaptation Committee, as an adaptation support mechanism to assist in strategic planning, as well as the development of policy and legal frameworks to enable climate-resistant development
- A Convention Adaptation Fund
- A Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts which has three components :
- An Insurance Component, to help SIDS manage financial risks from increasingly frequent and severe weather events
- A Rehabilitation and Compensatory Component to address loss and damage from the progressive negative impacts of climate change, such as sea level rise, increasing sea and land temperatures and ocean acidification, and
- A Risk Management and Risk Reduction Component to support risk assessment and risk reduction

C. Institutional arrangements for the provision of financial resources and investments

175. On the **overall institutional framework under the Convention**,

(a) The goal is to bring about coherence in the global financial architecture for financing under the authority and governance of the COP. The financial mechanism would facilitate links between the various funding sources and separate funds in order to promote access to the variety of available funding sources and reduce fragmentation

(b) The Convention should be utilized as a fulcrum to ensure coherence and coordination at the international level among all actors

176. On the **governance of financial resources**,

- Any new financing should be channeled through the Convention and any new fund(s) for addressing climate change should be under the guidance and supreme authority of the COP.

177. On **existing and potential new institutional arrangements**

- Alternate governance arrangements are required, recognizing that existing international financial institutions places small countries at a distinct disadvantage and more often the priorities of these institutions mirror the priorities of those in control, rather than the priorities of particularly vulnerable developing countries.

178. On **financial mechanism under the Convention**

For adaptation funding, a Convention Adaptation Fund should be created (for specific institutional arrangements, see below)

179. On **general institutional arrangements** to support action on mitigation, adaptation and technology cooperation.

181. On **specific institutional arrangements to support adaptation**

Convention Adaptation Fund

AOSIS believes that Parties should agree to create a **Convention Adaptation Fund** to:

- Generate a substantial new, additional and predictable funding source to address developing country adaptation needs
- Implement Articles 4.3 and 4.4 of the Convention as well as the Polluter Pays Principle
- Link GHG emissions to adaptation funding
- Complement and not replace the Adaptation Fund under the Kyoto Protocol

The Convention Adaptation Fund would fund:

- The implementation of adaptation planning, concrete projects and activities, including priorities identified through a structured approach to adaptation under the Convention.
- A Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, which includes Insurance, Rehabilitation/Compensatory and Risk Management Components
- Country-driven adaptation activities

Contributions

To guarantee a stable, predictable source of financing to support adaptation in particularly vulnerable developing countries, assessed contributions from developed countries should form the core revenue stream into the Convention Adaptation Fund. AOSIS believes that the three main categories of contributions should be as follows:

1. **Assessed contributions** based on the level of countries' GHG emissions, taking into account their respective levels of development and ability to pay as well as historical responsibilities.
2. **International revenue generation schemes**
    a. Auctioning of a percentage of national mitigation allocation schemes
    b. International Levies
3. **Voluntary contributions** from developed and developing countries and philanthropic organizations over and above assessed contributions

Access

Access should be:

- Direct and simplified
- With priority access for particularly vulnerable developing countries SIDS and LDCs

Governance and Institutional Arrangements

- The Convention Adaptation fund would operate under the guidance and supreme authority of the **COP**

Multi-Window Mechanism to Address Loss and Damage from Climate Impacts

AOSIS believes that Parties should agree to create a **Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts**. This ***Multi-Window Mechanism*** would consist of <u>three inter-dependent components</u>:

- An ***Insurance Component*** that would help SIDS and other particularly vulnerable developing countries manage financial risk from increasingly frequent and severe extreme weather events
- A ***Rehabilitation/Compensatory Component*** that would address the progressive negative impacts of climate change, such as sea level rise, increasing land and sea surface temperatures, and ocean acidification, which result in loss and damage
- A ***Risk Management Component*** that would support and promote risk assessment and risk management tools

On **Institutional Arrangements:**

- The **Multi-Window Mechanism** would be situated under the umbrella of the Convention and housed within the UNFCCC Secretariat.
- A ***Multi-Window Mechanism Board*** would provide oversight and have a transparent governance structure.
- A ***Technical Advisory Facility*** and a ***Financial Vehicle/Facility*** would provide support to all three components, providing different services to different components.
- The ***Technical Advisory Facility*** would provide advice and assistance, and receive input from the insurance and reinsurance sectors, the disaster risk reduction community, UN agencies and other organizations.

- The ***Financial Vehicle/Facility*** would manage funds held by the Multi-Window Mechanism. It would be created inside the UNFCCC, but could be housed in a financial institution outside the UNFCCC.
- The ***UNFCCC Secretariat*** would provide administrative support.

182. On **specific institutional arrangements to support technology cooperation**

  - An international fund to fast-track development of renewable energy technologies.

PAPER NO. 3C: ALLIANCE OF SMALL ISLAND STATES

Proposal to the AWG-LCA

Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts

Introduction

The Bali Action Plan requires the Parties to address enhanced action on adaptation, including, inter alia, consideration of:

> Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance (1(c)(ii))
>
> Disaster risk reduction and strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change (1(c)(iii))

The Bali Action Plan also requires Parties to address enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation under paragraph 1(e).

The following proposal, which provides further detail on AOSIS's earlier call for an International Insurance Mechanism, is relevant to Bali Action Plan paragraphs 1(c)(i), 1(c)(ii), 1(c)(iii) and 1(c)(v) on adaptation, as well as paragraphs 1(e)(i), 1(e)(ii), 1(e)(iii), 1(e)(iv), 1(e)(v), and 1(e)(vi) on finance and investment.

Proposal

In the view of AOSIS, an essential part of the post -2012 agreement must be a new ***Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts*** in SIDS and other developing countries particularly vulnerable to the impacts of climate change.

This ***Multi-Window Mechanism*** would consist of three inter-dependent components:

1. Insurance Component
2. Rehabilitation/Compensatory Component
3. Risk Management Component

These three components play different and complementary roles and comprise necessary components of an **integrated approach** to risk reduction, risk transfer and risk management efforts. Taken together, the three components aim to enhance adaptive capacity.

- An ***Insurance Component*** is needed to help SIDS and other particularly vulnerable developing countries manage financial risk from increasingly frequent and severe extreme weather events. Many SIDS either cannot access insurance or find it increasingly difficult to afford commercial insurance to address impacts on national economies and require support in addressing the burden of increasing risks due to climate change.
- A ***Rehabilitation/Compensatory Component*** is needed to address the progressive negative impacts of climate change, such as sea level rise, increasing land and sea surface temperatures, and ocean acidification, which result in loss and damage. Even with financial risk management mechanisms in place and efforts to reduce physical risks and exposure, some measure of loss and damage due to climate change impacts will be unavoidable and must be addressed.

- A ***Risk Management Component*** is needed to support and promote risk assessment and risk management tools and facilitate and inform the *Insurance Component* and *Rehabilitation/Compensatory Component*.

Support for the establishment and maintenance of such a Multi-Window Mechanism to Address Loss and Damage is appropriately viewed as adaptation assistance.

On **Guiding Principles**:

- **Principle of State Responsibility -** States have the responsibility to ensure that activities under their jurisdiction or control do not cause damage to the environment of other states or areas beyond national jurisdiction (Principle 21 of the Stockholm Declaration; Principle 2 of the Rio Declaration). Where there is a breach of this international obligation, there is a duty to cease and to make reparation.[1]
- **Principle 13 of the Rio Declaration –** States shall cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.
- **Polluter Pays Principle**
- **Common but differentiated responsibilities and respective capabilities**
- Parties should take **precautionary measures** to anticipate, prevent or minimize the causes of climate change and minimize its adverse effects
- **Principles of equity and intergenerational equity**
- **International solidarity**

On **Objectives**

- To institute a mechanism to reduce vulnerability and enhance adaptive capacity to climate risks in SIDS, LDCs and other developing countries particularly vulnerable to the adverse impacts of climate change.

On **Context**[2]

- SIDS and LDCs face enormous challenges in managing climate-related risk and in addressing loss and damage due to the impacts of climate change.[3]
- The impacts of climate change represent an additional burden these countries, which are already heavily impacted by extreme weather events as a result of their physical and economic vulnerability.
- Increasing sea surface temperatures and rising sea levels affect the frequency and intensity of extreme weather events (hurricanes, cyclones, typhoons, droughts, floods), and contribute to increasing loss and damage associated with these events.
- Many small islands within SIDS are a maximum of a few meters above sea level, and have a substantial portion of their population living by the coast in highly exposed areas.[4] These

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[1] See International Law Commission Draft Articles on Responsibilities of States for Internationally Wrongful Acts, with commentaries (2001).

[2] See UNFCCC Technical Paper, *Mechanisms to Manage Financial Risks from direct impacts of climate change in developing countries* (FCCC/TP/2008/9).

[3] See UNFCCC Technical Paper, *Physical and socio-economic trends in climate-related risks and extreme events, and their implications for sustainable development* (FCCC/TP/2008/3) paras. 111-144 (socio-economic trends, 'when combined with physical trends, put SIDS at a unique level of vulnerability to climate risk').

[4] FCCC/TP/2008/3, para. 112 (noting that low-lying SIDS such as the Maldives and Papua New Guinea have nearly 50-80% of their land area less than one meter above sea level) and para. 116 (further noting that in most

characteristics limit the capacity of SIDS to adapt to the adverse effects of climate change. At the 1992 United Nations Conference on Environment and Development, SIDS were singled out as requiring special consideration.[5]

- SIDS, LDCs and countries in Africa face serious difficulty in obtaining accessing cost-effective and appropriate risk sharing and risk transfer mechanisms. There is limited capacity to spread risk geographically; insurance markets are vulnerable to changes in the international markets; in many regions non-life insurance markets are underdeveloped; these countries lack the financial means to adapt to the adverse effects of climate change and the capacity to manage financial risks from the direct impacts of climate change.[6]
- From 2000 to 2006 the annual number of climate-related disasters rose to 365 from an annual average of 195 in the period from 1987 to 1998 - an increase of 87 per cent. In the 1990s about three quarters of all disasters were triggered by weather-related events. More than 95 per cent of deaths caused by natural disasters occur in developing countries. Losses due to natural disasters are 20 times greater as a percentage of GDP in developing countries than in industrialized countries.[7]
- From 1980-2003, insurance covered 4% of total costs of climate-related disasters in developing countries, compared with 40% in high income countries.
- Although loss and damage may be significantly reduced by risk reduction measures, resilience building and climate change adaptation, this still leaves a substantial degree of risk from climate-related hazards.
- Climate change affects a range of assets, both financial and non-financial.
- A portfolio of tools is needed to address climate risk.

On **Source of funds:**

- External support is needed, as the increasing climate change impacts represent an additional burden on developing countries from the effects of past developed country emissions.
- ***Convention Adaptation Fund*** - funding should come from Annex I Parties, preferably through the *Convention Adaptation Fund* proposed by AOSIS, which includes assessed contributions based on the level of countries' GHG emissions, taking into account their respective levels of development and ability to pay as well as historical responsibilities, with
  - ***greenhouse gas emissions*** as a measure of responsibility and
  - ***Gross Domestic Product*** as a measure of capability.
- Funding could also come from the Kyoto Protocol Adaptation Fund.
- Additional contributions may come from bilateral and multilateral sources and other actors (donors, IGOs, NGOs).
- Substantial financial resources will be needed to support the Multi-Window Mechanism, commensurate with required and projected adaptation needs.

On **Structure:**

- The Multi-Window Mechanism would have three components:
  - Insurance Component
  - Rehabilitation/compensatory Component
  - Risk Management Component
- All three components are ***inter-dependent*** and needed as part of an integrated approach to the impacts of climate change.

SIDS, major cities or towns hosting strategic infrastructure such as airports, seaports, industrial and central business areas and government activities are located in coastal zones exposed to sea level rise).

[5] FCCC/TP/2008/9 para. 72.

[6] See FCCC/TP/2008/9 para. 46.

[7] FCCC/TP/2008/9 para. 41.

<table>
<tr><th colspan="3">MULTI-WINDOW MECHANISM TO ADDRESS LOSS AND DAMAGE FROM CLIMATE CHANGE IMPACTS</th></tr>
<tr><th colspan="3">MULTI-WINDOW MECHANISM BOARD</th></tr>
<tr><td>1. Insurance Component</td><td>2. Rehabilitation / Compensatory Component</td><td>3. Risk Management Component</td></tr>
<tr><td>To address climate-related extreme weather <u>events</u> such as hurricanes, tropical storms, floods and droughts, which result in loss and damage</td><td>To address <u>progressive</u> negative impacts, such as sea level rise, increasing sea and land temperatures and ocean acidification, that result in loss and damage (e.g., land loss, coral bleaching, impacts on potable water availability, reduction in fisheries, desertification, etc.)</td><td>To promote risk assessment and risk management tools and strategies at all levels; to facilitate the implementation of risk reduction and risk management measures</td></tr>
<tr><td>Triggers – e.g., might include precipitation, wind speed, storm surge</td><td>Parameters[8] – might include sea level rise, temperature increases, loss of land, damage to coral reefs, loss of fisheries, salinisation of aquifers, or use an all-risk parameter</td><td></td></tr>
<tr><th colspan="3">A. TECHNICAL ADVISORY FACIILITY</th></tr>
<tr><td>With respect to Insurance Component:

- Provides advice and guidance to countries on types of available instruments

- Advises on best practices and innovative approaches for identified needs

- Provides technical support for the establishment of appropriate risk sharing and risk transfer schemes as requested (e.g., risk pooling arrangements; indexed insurance mechanisms such as catastrophe bonds, weather derivatives; reinsurance schemes; public private partnerships etc.)</td><td>With respect to Rehabilitation/Compensation Component:

- Works with countries to establish baseline parameters in local context

- Verifies when parameter thresholds exceeded

- Considers means to graduate parameters to reduce basis risk</td><td>With respect to Risk Management Component:

- Provides advice to countries on risk management techniques in the context of climate change

- Facilitates collection of weather data and analysis (e.g., that can support development of insurance tools)

- Identifies hazards and provides support to risk assessments

- Recommends appropriate investments in risk reduction

- Assists in building capacity for managing risk and reducing risk exposure</td></tr>
<tr><th colspan="3">B. FINANCIAL VEHICLE/FACILITY</th></tr>
<tr><td>With respect to Insurance Component

- Enables/administers/supports risk sharing/risk transfer schemes as required/requested through start up financing, subsidization

- Manages and invests reserves accumulated from assessed Annex I Party contributions, premiums/contributions from covered private and public sector institutions and from other donor sources</td><td>With respect to Rehabilitation/Compensation Component

- Accumulates funds from

- assessed Annex I Party contributions, preferably through the proposed Convention Adaptation Fund based on GHG emissions (responsibility) and GDP (capacity)

- other donor sources

- Pays out when parametric threshold crossed</td><td>With respect to Risk Management Component

- Fund measures to support risk reduction and risk management measures

-e.g., data collection, hazard mapping, risk assessments)</td></tr>
</table>

[8] See FCCC/TP/2008/9, paras. 361-371 (on parametric all risk insurance).

MULTI-WINDOW MECHANISM TO ADDRESS LOSS AND DAMAGE FROM CLIMATE CHANGE IMPACTS

C. ADMINISTRATION - UNFCCC SECRETARIAT

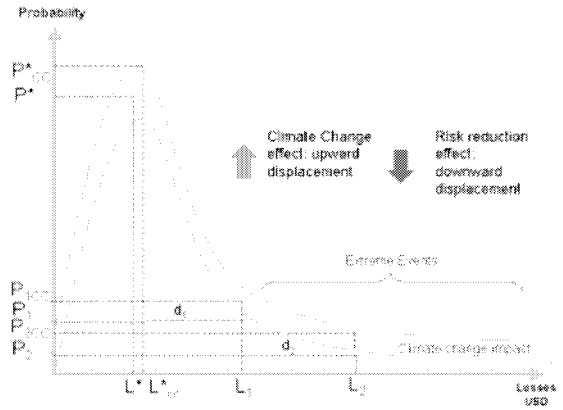
On **Institutional Arrangements:**

- The Multi-Window Mechanism would be situated under the umbrella of the Convention and housed within the UNFCCC Secretariat.
- A ***Multi-Window Mechanism Board*** would provide oversight and have a transparent governance structure.
- Institutional arrangements would include ***technical***, ***financial*** and ***administrative*** functions.
- A ***Technical Advisory Facility*** and a ***Financial Vehicle/Facility*** would provide support to all three components, providing different services to different components.
- The ***Technical Advisory Facility*** would provide advice and assistance, and receive input from the insurance and reinsurance sectors, the disaster risk reduction community, UN agencies and other organizations.
- The ***Financial Vehicle/Facility*** would manage funds held by the Multi-Window Mechanism. It would be created inside the UNFCCC, but could be housed in a financial institution outside the UNFCCC.
- The ***UNFCCC Secretariat*** would provide administrative support.

1. Insurance Component

The ***Insurance Component*** of the ***Multi-Window Mechanism*** would assist SIDS, LDCs and other developing countries particularly vulnerable to the impacts of climate change in better manage financial risks associated with increasingly frequent and severe climate-related extreme weather events, such as hurricanes, tropical storms, storm surge, floods and droughts. These events already result in significant loss or damage and many hazards will be caused or exacerbated by climate change.[9] Thus climate change impacts create an additional burden on SIDS and other particularly vulnerable countries, as represented in the diagram below. In many cases these impacts now exceed or threaten to exceed countries' adaptive capacities.

Figure 14. Probability distribution with climate change impact



Source: FCCC/TP/2008/9, para. 310.

Risk sharing and risk transfer mechanisms can *reduce the vulnerability* of developing country economies to these hazards. The ***Insurance Component*** of the ***Multi-Window Mechanism*** would facilitate the development and implementation of financial risk management tools tailored to the needs of countries that are particularly vulnerable to the

[9] See FCCC/TP/2008/9, paras. 94-112, listing and describing types of hazard caused by climate change and dividing these into acute (windstorm, storm surge, flood, drought, fire, heatwave) and chronic (sea level rise, ocean acidity, changes in precipitation, melting glaciers and permafrost, temperature rise).

impacts of climate change, in order to facilitate the establishment of affordable, sustainable and *equitable* risk sharing and risk transfer mechanisms.

In many SIDS, insurance markets are undeveloped or almost non-existent; the scale, the physical infrastructure, data systems and financial infrastructure needed to support the engagement of the private insurance sector is lacking. In SIDS with more developed insurance markets, insurers respond to increasing climate-related risk by raising the cost of insurance premiums, or restricting or removing coverage – the end result is less coverage and a decrease in ability to recover from extreme events.

In the absence of tools to manage growing climate-related risk, SIDS face substantial challenges to their sustainable development from an inability to access credit for development and also an inability to speedily access capital in the wake of extreme weather events. In recognition that SIDS face an additional burden resulting from the impacts of climate change, an internationally-supported mechanism is needed to assist impacted Parties in exploring and establishing *appropriate* and *cost-effective* mechanisms to manage the increasing financial risk associated with climate-related hazards. The ***Insurance Component*** would leverage private and public sector funds to enhance adaptive capacity.

Greater access to conventional risk sharing and risk transfer instruments (such as risk pooling and assisted reinsurance schemes) and to innovative risk sharing and risk transfer instruments (including indexed-based mechanisms such as catastrophe bonds and weather derivatives), should assist SIDS in reducing the cost of insurance, in order to better equipped to manage the financial impacts of climate-related extreme events. Index-based approaches (e.g., using parametric triggers linked to wind speed or level of precipitation), may reduce transaction costs, information needs and typical challenges associated with insurance tools (moral hazard, adverse selection, etc.).

The improved availability of cost-effective new and innovative insurance tools can provide cost savings, enhance financial and social security, increase adaptive capacity, improve coordination between the public and private sectors in identifying, reducing and addressing climate-related risk, and support sustainable development.

The ***Insurance Component*** would work closely with the ***Risk Management Component*** to enhance for exposed sectors and infrastructure. Insurance tools, such as hazard mapping, can support risk reduction and risk management efforts. Similarly, improved risk management tools, including risk assessments and GIS mapping (supported by the ***Risk Management Component***) can enable the expansion of private insurance markets and facilitate the development of innovative schemes. The ***Insurance Component*** could support risk reduction by creating incentives for the implementation of risk reduction measures.

A degree of international support is needed to ensure that risk sharing and risk transfer mechanisms not only reduce costs on vulnerable countries, but also lift the burden of climate risk that would otherwise remain with the countries that have contributed little to the GHG emissions that have caused this increase in risk.

2. <u>Rehabilitation/Compensatory Component</u>

The second ***Rehabilitation/Compensatory Component*** is needed to address the progressive negative impacts of climate change such as sea level rise, increasing sea and land temperatures and ocean acidification that result in loss and damage (e.g., permanent or extended loss of useful land, damage to coral reefs, damage to water tables, loss of fisheries, etc.).

Even with a range of new and innovative risk transfer mechanisms possible (through the *Insurance Component*), and risk reduction measures in place (through the support of the *Risk Management Component*), a measure of residual risk will remain. The UNFCCC Technical Paper on managing risk notes that "even with the successful development and deployment of existing and new risk-transfer mechanisms, the vulnerable would still be at risk from climate hazards. Owing to the increased

interdependence of global economy and society, impacts in poor and vulnerable regions could cascade throughout the world. It would therefore be cost-effective as well as equitable for the international community to contribute to managing these risks."[10] In this regard, the Technical Paper notes AOSIS's earlier proposal for an international insurance pool "to be funded by developed countries *to compensate small-island and low-lying developing countries for the otherwise uninsured loss and damage from slow-onset sea level rise*"[11] (emphases added).

The Technical Paper has identified ways these risks might be addressed through its proposed Scheme C. Scheme C is a long-term approach to these challenges through a Climate Change Risk Mechanism.[12] The Technical Paper also acknowledges and commends an independent but similar proposal by Munich Climate Insurance Initiative (see para. 348 and Box 8).

The ***Rehabilitation/Compensatory Mechanism*** would address loss and damage from climate change risks that cannot be addressed under the ***Insurance Component*** or be minimized or eliminated through the ***Risk Management Mechanism*** and that exceed the adaptive capacity of particularly vulnerable countries.

Rehabilitation/Compensatory payments could be triggered by changes in parameters relative to baselines. Parameters could include:

- Sea level rise
- Sea surface temperature
- Air temperature
- Precipitation
- Windspeed
- Soil salinity
- Ocean acidity

Loss and damage addressed should include:

- economic loss
- property loss and damage
- loss of life
- environmental damage (e.g., coral reef damage, salt-water intrusion, loss of fisheries, ecosystem damage)

Baseline data could

- rely on historical data where available (e.g., long-term averages of extreme event frequency or severity, precipitation)

be established by Parties through risk assessments
be based on data gathered by the Multi-Window Mechanism's ***Technical Advisory Facility*** from objective sources

Assessment of claims and payouts could be

- made by the Multi-Window Mechanism's ***Financial Vehicle/Facility***
- based on actual losses or on modeled impacts

Rehabilitation/Compensation would

- cover a portion of impacts, to minimize the need for a case-by-case requirement that each impacted country establish a causal link between emissions and impacts, or
- cover all projected impacts, depending upon the level at which triggers are set and the level of agreed payouts

[10] FCCC/TP/2008/9 at 13.
[11] Ibid.
[12] Id. paras. 336–348.

The ***Rehabilitation/Compensation Component*** is closely linked to the ***Risk Reduction Component,*** which would provide resources to ensure that reasonable risk reduction measures are taken in light of the assessed risk. The ***Risk Reduction Component*** would also provide support for the tools needed to assess climate risk. This interaction between the Multi-Window Mechanism components recognizes the role of particularly vulnerable developing countries in undertaking risk reduction efforts, as well as Convention obligations on the provision of funding to assist particularly vulnerable countries in meeting the costs of adaptation.

3. Risk Management Component

A ***Risk Management Component*** is the third integral component. This Component would provide advice and assistance to countries on risk management techniques, facilitate the provision of support for the collection of weather data and analysis, provide support to risk assessments, identify hazards, recommend appropriate investments in risk reduction and assist in building capacity to manage climate-related risk and reduce risk exposure.

The ***Risk Management Component*** would provide both ***technical*** and ***financial*** support to risk reduction efforts in connection with climate-related extreme weather events (e.g., retrofitting buildings to withstand greater windspeeds, integration of risk assessments into planning processes, upgrading infrastructure).

It would also facilitate consideration of ways to reduce risk from the impacts of progressive negative impacts of climate change that result in loss and damage, including sea level rise, increasing sea temperatures, increasing air temperatures and ocean acidification, which have impacts on coastal infrastructure, shorelines, coral reefs, etc). The ***Risk Management Component*** would work closely with the two other Components within the Multi-Window Mechanism.

Financial support for this component of the Multi-Window Mechanism would be drawn preferably from the ***Convention Adaptation Fund*** proposed by AOSIS. Funding could also come from the Adaptation Fund. Technical support could be contributed from a range of intergovernmental organisations, disaster management agencies and donor entities with relevant expertise.

Further Remarks

The UNFCCC Technical Paper on *Physical and socio-economic trends in climate-related risks and extreme events, and their implications for sustainable development* (FCCC/TP/2008/3) highlights the unique socio-economic and physical vulnerability of SIDS to climate risk. The above proposal will respond to this unique vulnerability.

Many elements of the ***Multi-Window Mechanism to Address Loss and Damage*** resonate with recommendations contained in the UNFCCC Technical Paper on *Mechanisms to manage financial risk from direct impacts of climate change in developing countries* (FCCC/TP/2008/9), and in particular Scheme C, paragraphs 336 and following for a Climate Risk Management Mechanism. Scheme C aims to provide a long-term approach at the global level and recognizes that support is needed from the international community where underlying risks may be uninsurable due to the high degree of hazard or the inability of the Parties at risk to pay an adequate premium. Elements of the Multi-Window Mechanism also resonate with the proposal made by ***Munich Climate Insurance Initiative*** (MCII), which is referenced in FCCC/TP/2008/9.

Each of these proposals recognizes the pressing need to address the challenges faced by countries particularly vulnerable to the impacts of climate change in managing climate risk and the opportunities afforded by insurance tools and concepts in this context.

AOSIS looks forward to further focused discussions on this issue and the above proposals in order to address the urgent and immediate needs of SIDS, LDCs and other particularly vulnerable developing country Parties.

PAPER NO. 3D: ALLIANCE OF SMALL ISLAND STATES

AOSIS Input into the Assembly Paper on Mitigation

III Enhanced action on mitigation on climate change

A. : 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;

33. On leadership of emission reductions
Developed country Parties should take the lead on addressing climate change, specifically in their commitment to reduce GHG emissions based on the principle of historical responsibility.

34. On the nature of national mitigation commitments or actions by developed countries
Commitments made under 1(b)(i) should be based on a legally binding instrument that implements the Bali Action Plan.

Economic instruments to address demand side management will be essential in achieving substantial emission reductions. These include taxes on carbon intensive activities, ecolabelling, appliance standards, fuel efficiency standards, the removal of subsidies for fossil fuels and the creation of incentives for the uptake of renewable energy and for the implementation of energy efficient measures.

Technologies that increase dependency on carbon intensive fuel sources should be discouraged. Technologies that generate hazards to human health and/or the environment, such as nuclear power, should not be included in the energy mix.

35. On the quantification of national actions and commitments by developed countries:

Quantified emission limitation objectives by developed country Parties should be comparable with commitments taken by Annex I Parties under the Kyoto Protocol.
Stabilization of atmospheric GHGs should be well below 350ppm CO2 eq.
Temperature limits compared with pre-industrial levels should peak well below 1.5 deg levels.
Global emissions should peak by 2015 and then reduce by more than 85% by 2050.
Annex I emissions should reduce by more than 40% of their 1990 levels by 2020.
Annex I emissions should reduce by more than 95% of their 1990 levels by 2050.

Non Annex I as a group would need significant deviation from baseline over comparable periods

36. On comparablility of efforts and national circumstances
Comparable effort should include:
(i) setting targets for emission reductions with the same base year established under the Kyoto Protocol Parties;
(ii) timeframes for emissions reduction should be the same for Kyoto Protocol Parties;
(iii) third party review of inventories;
(iv) comparable compliance requirements;
Any arrangement for quantified emission limitation objectives established under 1(b)(i) should not create a mechanisms for Annex I Parties to the Kyoto Protocol to leave their obligations under the KP and take up new obligations under 1(b)(i)
A base year for committing to quantified emission limitation objectives under 1(b)(i) should be similar if not the same for the base year established under the KP;

Consideration would be given to having fungibility between trading mechanism established under the KP and 1(b)(i) subject to similar rules relating to measurable, reportable and verifiable being applied.
Measures established under 1(b)(i) should not supersede the Kyoto Protocol. The process should not supersede or undermine the Kyoto Protocol.

37. On what needs to be measured, reported and verified:
Arrangements for measuring, reporting and verifying should be similar to arrangements for QELROs under the Kyoto Protocol

38. How to measure, report and verify
National inventories reported on an annual basis and verified by expert review teams

B. 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;

40. On the sustainable development context of NAMAs by developing country Parties
All developing countries should take action to reduce their emission trajectories, with assistance from developed country Parties, in line with their cumulative emissions, mitigation potential and opportunities, bearing in mind national circumstances and the principle of common but differentiated responsibilities and respective capabilities. These countries should be prepared to purse a clean development path now up and beyond 2012 through measurable and verifiable actions that result in the significant deviation from emissions growth from business-as-usual scenarios.

Renewable energy and energy efficiency policies and measures should form the central pillars of the Convention's future climate mitigation strategy. Expanding access to renewable energy and energy efficient technologies should be the key strategy for engaging developing countries in mitigation efforts.

Technologies that increase dependency on carbon intensive fuel sources should be discouraged. Technologies that generate additional or new environmental and health risk challenges for the international community, such as nuclear power, should not be included in the energy mix.

41. On the nature of NAMAs by developing countries
Developing countries should take voluntary, nationally appropriate mitigation actions (NAMAs) and any identified pledge to take NAMAs should be recorded in an international registry held by the UNFCCC Secretariat;
For SIDS and LDCs, developing NAMAs is seen as a matter of national energy security and as a means of meeting sustainable development aspirations. Appropriate financing, technology transfer and capacity building will be required to support national energy security needs of SIDS;
An incentive mechanism should be established for major emitting developing countries (based on absolute emissions) to take specific NAMAs targets.
The incentive mechanism would provide appropriate financial and technical support to undertake NAMAs
Funding for NAMAs for major emitting developing countries could come from innovative sources such as auctioning of AAUs
All developing countries should develop NAMAs and that appropriate financial and technical support should be provided for all developing countries to implement NAMAs
Within the context of NAMAs developing countries may wish to explore sectoral approaches

42. On measurement, reporting and verification of actions
NAMAs for major emitting developing countries could include a verification component to allow an independent review of actions taken by these countries and to verify that the necessary financial and

technical support has been provided. Appropriate benchmarks or indicators should be developed to measure progress.
Each of these efforts must contribute to the overall reduction of GHG emissions in a measurable way, so that overall progress in achieving a global reduction in emissions can be assessed and effort can be compared.

43. On what needs to be measured, reported and verified in relation to actions
Energy efficiency targets and renewable energy targets can form a useful mechanism for assessing progress. National renewable energy targets, accompanied by concessionary financing from the international community to assist in achieving these targets, can be helpful in addressing both climate change and sustainable development.

44. Verification of action should/could:
NAMAs for major emitting developing countries should include a verification component to allow an independent review of actions taken by these countries and to verify that the necessary financial and technical support has been provided.

45. How to measure, report and verify
IPCC methodologies should provide the basis for measurement, reporting and verification.
Annual reports should be provided.

46. On measurement, reporting and verification of support
Financial support to assist developing countries with their NAMAs should be verified by means of an international register of contributions by developed and developing countries within their respective capacities.

47. On what should be measured, reported and verified relating to support
Financial contributions by developed countries and developing countries within their respective capacities.
Technology transfer actions by developed countries and developing countries within their respective capacities.

48. On contributions by different groups of countries
All developing countries should take action to reduce their emission trajectories, with assistance from developed country Parties, in line with their cumulative emissions, mitigation potential and opportunities, bearing in mind national circumstances and the principle of common but differentiated responsibilities and respective capabilities. These countries should be prepared to pursue a clean development path now, up to and beyond 2012 through measurable and verifiable actions that result in the significant deviation from emissions growth from business-as-usual scenarios.

C: Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;

51. On the context and objectives and policy approaches and positive incentives
Any consideration of all actions under the REDD agenda should ensure that there are no adverse consequences for biodiversity or for the livelihoods of indigenous peoples or local communities.

52. On the nature of policies approaches
Options for exploring demand side measures relating to drivers of deforestation (e.g. export of timber and forest products) noting however possible implications for discriminatory trade measures.

53. On concrete policy approaches

Forest degradation should be included in the REDD mechanism.
The definition of forest degradation should relate to the loss of carbon stocks in forest land remaining forest land.
Further work is required to develop methodologies for assessing degradation.
Measures associated with the sustainable management of forests should be considered as an outcome of reducing emissions from deforestation and forest degradation
Measures for addressing REDD could be addressed at the national or sub-national level, although countries should be encouraged, where possible, to undertake national measures as a means of reducing the likelihood of emissions displacement within national boundaries
Approaches for addressing REDD need to take in consideration issues regarding non-permanence and leakage.
Approaches to establishing national reference levels should be flexible depending on national circumstances.

54. On the provision of positive incentives
Financing for conservation should come from a REDD fund and also funding associated with adaptation as the conservation of forests is an adaptation strategy.

57. On capacity-building, readiness and demonstration
The IPCC should be invited to assist in developing methodologies for assessing degradation.
There is a need to build the capacity of developing countries so that they can actively monitor their forests and reduce their emissions from deforestation and forest degradation.

D: Cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention;

63. On the objective of sectoral approaches and sector specific actions
For developed country Parties, economic and fiscal instruments to address demand side management will be essential in achieving substantial emission reductions. These include taxes on carbon intensive activities, eco-labelling, appliance standards, fuel efficiency standards, the removal of subsidies for fossil fuels and the creation of incentives for the uptake of renewable energy and for the implementation of energy efficient measures.
For developing country Parties sectoral approaches, particularly for major emitting developing countries should be developed but it should not lead to mandatory standards for developing countries.

65. On selecting sectors
Priority sectors should include coal-fired power generation, cement, aluminium industry and transport.

66. On the scope of sectoral approaches and sector specific actions
Accelerate progress within the ICAO and IMO to address emissions from international aviation and maritime transport, respectively, in cooperation with processes under the UNFCCC and Kyoto Protocol.
Consideration should be given to the implications for SIDS arising from proposed actions to address emissions from bunker fuels.

68. On instruments and deliver/support mechanisms
There should be no mixing of KP mechanisms and Bali Action Plan mechanisms.

E: Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries;

71. On the role of market and market-based mechanisms

For developed country Parties and for developing country Parties there should be no mixing or fungibility of market based mechanisms under the Kyoto Protocol and any market mechanisms developed, if appropriate, under the Bali Action Plan.

74. On the extension, scaling up, review and improvement of the market based mechanism
Supplementarity should guide approaches to offsetting mechanisms between developed country Parties and developing country Parties.

76. On the means to facilitate the implementation of NAMAs in developing countries
New and innovative source of funding should be developed under the Convention for mitigation action. Developed countries Parties should pledge a certain percentage of revenue generated from national mitigation allocation schemes undertaken under the Convention. Such revenue could be generated through the auctioning of a percentage of national mitigation allocation schemes.

F: Economic and social consequences of response measures;
79. Developed country Parties should be encouraged to consider implications of spillover effects (e.g. food miles, biofuels - both positive and negative) of taking mitigation actions and develop policies to minimise adverse impacts, especially on poorer countries.

G: Ways to strengthen the catalytic role of the Convention in encouraging multilateral bodies, the public and private sectors and civil society, building on synergies among activities and processes, as a means to support mitigation in a coherent and integrated manner;

85. On synergy with national and international processes
Accelerate progress within the ICAO and IMO to address emissions from international aviation and maritime transport, respectively, in cooperation with processes under the UNFCCC and Kyoto Protocol.
Consideration should be given to the implications for SIDS arising from proposed actions to address emissions from bunker fuels.

PAPER NO. 3E: ALLIANCE OF SMALL ISLAND STATES

AOSIS Input into the Assembly Paper on Technology

AOSIS proposes the following suggestions to the Assembly Paper on Technology under the respective sub-headings:-

Under Section V – Enhanced Action on Technology Development and Transfer to support action on Mitigation and Adaptation

A. 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

   a. As General Principles:
      i. Guided by Article 4, paragraphs 3 and 5 of the UNFCCC

      ii. Take into consideration that technology development, deployment, transfer and diffusion can play a critical role in global efforts to adapt to, and mitigate against, climate change

   b. On institutional arrangements:
      i. Funding for technology transfer should be managed by an international regime that is transparent
      ii. The transfer of technology should be implemented in a manner where it can be monitored and verified

   c. Mechanisms to address intellectual property right issue:
      i. promotion of joint research and development of technologies between developed and developing countries through research, academic and government institutions, particularly for adaptation can secure joint IPRs

   d. On the strategy of disbursement of financial resources
      i. AOSIS is of the view that technologies that address the adaptation needs of the most vulnerable states should receive the highest priority along with renewable energy and energy efficiency technologies

B. Ways to accelerate deployment, diffusion, and transfer of affordable Environmentally Sound Technologies
   a. On general principles
      i. immediate and urgent delivery of technology to developing countries requires suitable responses, including a continued emphasis by all Parties, in particular developed country Parties to the Convention,
         - on enhancement of enabling environments
         - facilitating access to technology information and capacity-building,
         - identification of technology needs and
         - innovative financing that mobilises the vast resources of the private sector to supplement public finance sources where appropriate.
      ii. Compilation of information by the UNFCCC Secretariat on adaptation and mal-adaptation experiences, on currently deployed technologies and techniques, and to assess capacity building needs.
      iii. Provision of adequate financial resources to facilitate the transfer of technologies to developing countries for mitigation and adaptation. Such financing should be

made available to defray and/or pay for the cost of Intellectual Property Rights or pay for alternative access regimes.

b. On ways to accelerate deployment, diffusion and transfer of technologies, specific proposals on capacity-building include:
    i. The establishment and provision of support to national and regional academia and Centres of Excellence the promotion of South – South co-operation

c. On strengthening enabling environments, specific proposals include:
    i. Legislative and policy reform in both developed and developing countries to allow for more effective participation of the private sector such as incentives, addressing IPR issues and removal of barriers for both the deployment and receipt of technologies.

C. Co-operation on research and development of current, new and innovative technology, including win-win solutions
    a. On concrete elements and means to enhance cooperation on R&D, specific proposals include
        i. promotion of joint research and development of technologies between developed and developing countries through research, academic and government institutions, particularly for adaptation.

D. The effectiveness of mechanisms and tools for technology cooperation in specific sectors
    a. As general principles:
        i. Sectoral approaches should consider possible cross-sectoral synergy and impacts to achieve mutually beneficial outcomes.
    b. On specific sectors and technologies
        i. Technologies that are less carbon intensive, such as renewable energy and those that promote energy efficiency should be given priority over those that may generate additional or new forms of pollution challenges for the international community (nuclear). Technologies such as CCS could be considered when outstanding issues including those related to monitoring, leakage and permanence are resolved.
        ii. Indigenous technologies have a significant role to play and their dissemination should be supported

PAPER NO. 3F: ALLIANCE OF SMALL ISLAND STATES

AOSIS Input into the Assembly Document

"Shared Vision"

Contents

Contents

1. Scope, Nature and Elements of a Shared Vision for Long-term Cooperative Action

(i) Context

AOSIS is of the view that in order to address the serious challenges of climate change all countries must work together to ensure that the negative impacts resulting from the buildup of greenhouse gases in the atmosphere do not adversely effect the developmental aspirations and survival of any country, especially the most vulnerable among us, particularly Small Island Developing States (SIDS) and Least Developed Countries (LDCs).

AOSIS believes that a decision on a long term global goal for emission reductions must be one of the central elements in a shared vision and that this goal must be guided by the ultimate objective of the Convention. Hence global efforts must be ambitious, must reflect the urgency of our collective endeavours and must be consistent with a mitigation pathway that safeguards the most vulnerable countries from the adverse impacts of climate change.

The shared vision for long-term cooperative action under the Convention should accelerate actions to address the adverse impacts of climate change that are now occurring and will increase without aggressive intervention.

The Shared Vision must provide a framework for actions commencing now and continuing into the future. It must be guided by the urgency of action, bearing in mind that many countries are already experiencing dangerous impacts and that globally we must avoid rapid, abrupt, catastrophic impacts. This accelerated effort must:

a) Demonstrate leadership by the global community in modifying longer term trends in emissions;

b) Fulfill the requirements of the Bali Action Plan, including enabling action now;

c) Speed up efforts to mitigate climate change;

d) Reduce the rate of climate change and therefore create an opportunity for threatened communities and ecosystems to adapt to climate change;

e) Build experience and confidence in the UNFCCC process;

Action commencing now provides a practical way of linking efforts on environmentally sound mitigation and adaptation. Early action to mitigate greenhouse gas emissions achieves mitigation goals as well as reduces the future costs of adaptation to climate change.

AOSIS notes that for SIDS, the negative impacts of climate change are already occurring. AOSIS also recognizes the urgent social, economic and survival threats caused by the adverse impacts of climate change and sea level rise to our sustainable development, territorial integrity and continued existence as viable dynamic communities. These factors are important and should guide the development of a Shared Vision.

AOSIS countries have limited capacities to respond to the challenges resulting from climate change, and require special efforts to access opportunities to build capacities in a timely manner, as part of the long-term cooperative action under the Convention. Such action will be aimed at ensuring:

a) That all countries take action in mitigating GHG emissions in line with the long-term goal for the stabilization of temperature increases and the GHG concentrations;

b) That all countries especially the most vulnerable, in particular SIDS and LDCs, are able to adapt in a timely manner to the adverse effects of climate change that are already being experienced, and the impacts that will occur in the future;

c) That all countries collaborate in the development, diffusion and transfer of environmentally sound technologies, including technologies for adaptation and mitigation;

d) Adequate and appropriate access to environmentally sound technologies, including technologies for adaptation and mitigation, in particular to SIDS and LDCs;

e) Availability of new and sufficient financial resources separate from the current ODA commitments to vulnerable countries, especially the SIDS and LDCs, to assist them in building their capacities, implementing adequate adaptation measures and accessing appropriate technology to respond to the challenge of climate change.

(ii) Scientific Basis

The long-term target should be informed by the best available scientific assessment and the precautionary principle. In this context, minimizing further negative impacts of climate change on SIDS must be one of the key benchmarks for assessing the adequacies of this long-term goal. It must be noted that even at ranges suggested by IPCC-AR4 and other relevant sources all AOSIS countries will be challenged to survive and provide a livelihood for their population. The stabilization level must therefore be ambitious and respect the sovereignty and rights to survival of all countries.

(iii) Nature of the shared vision for Long Term Cooperative Action

A Vision Statement describes where one wants to go, the destination to be arrived at and the goals that one wishes to achieve. The Shared Vision should therefore be aspirational in nature consisting of an ambitious, concrete and measurable long-term target, and a framework for immediate and future action to implement the four pillars of the Bali Action Plan.

(iv) Scope of shared vision

The Shared Vision should be aimed at achieving the ultimate objective of the Convention as set out in its Article 2. It should provide a basis for enabling the most vulnerable countries, in particular SIDS, and LDC's, to pursue actions with support from the global community that help to ensure their survival and the achievement of the sustainable development aspirations of present and future generations.

(v) Principles

This Shared Vision for LCA including a long term global goal for emission reductions must be based on best available scientific information that uses impacts on SIDS as a benchmark for effectiveness and its appropriateness, consistent with articles 3.2 and 3.3 of the Convention. Additionally, the Shared Vision should be guided by Articles 3 and 4 of the Convention, as well as the following:

a) Actions taken under the Convention must be urgent, practical, ambitious, and designed to protect the most vulnerable Parties, and to ensure their survival and sustainable development both in the short and in the long term.

b) The polluter-pays principle and the principle of common but differentiated responsibilities and respective capabilities must be used to determine the obligation of different Parties and Groups of Parties.

c) Parties should use the precautionary principle in their efforts to anticipate, prevent the causes of and minimize the further adverse impacts of climate change.

d) Actions should also reflect the principle of state responsibility - that States have the responsibility to ensure that activities within their jurisdiction or control do not cause

damage to the environment of other States or of areas beyond the limits of their national jurisdiction (Principle 2 of the Rio Declaration).

e) Actions should reflect the principle of inter-generational equity – the need to protect the global climate for both present and future generations.

(vi) Cooperative Action on Mitigation

- Actions on mitigation must be aggressive and result in deep cuts in global GHG emissions to allow global emissions to peak by 2015 and reduce thereafter.

- Mitigation efforts by all countries should be based on the most recent scientific information and the imperative to reduce emissions rapidly to limit the impact on Small Island Developing States and other highly vulnerable countries. Critical physical, environmental, social and economic thresholds exist for many SIDS and LDC's. Actions under the Convention must aim to ensure that these thresholds are not further breached by the impacts of climate change.

- Developed country Parties should take the lead on addressing climate change, specifically in their commitment to reduce GHG emissions based on the principle of historical responsibility.

- Renewable energy and energy efficiency policies and measures should form the central pillars of the Convention's future climate mitigation strategy. Expanding access to renewable energy and energy efficient technologies should be the key strategy for engaging developing countries in mitigation efforts.

- For developed country Parties economic instruments to address demand side management will be essential in achieving substantial emission reductions. These include taxes on carbon intensive activities, eco-labelling, appliance standards, fuel efficiency standards, the removal of subsidies for fossil fuels and the creation of incentives for the uptake of renewable energy and for the implementation of energy efficient measures.

- All developing countries should take concerted action to reduce their emissions as part of the Bali Action Plan package. Major emitting developing countries should make a significant contribution to reducing their emissions significantly deviating from their current emissions baselines, supported through technological and financial incentives in particular by developed countries consistent with their commitments under the Convention.

- Technologies that increase dependency of carbon intensive fuel sources should be discouraged. Technologies that generate additional or new environmental and health risk challenges for the international community, such as nuclear power, should not be included in the energy mix.

(vii) Enhanced Action on Adaptation

- Action on adaptation should respond to the impacts that are already occurring and be sufficient to address the impacts that are expected to occur in the future. This action should be achieved through a structured but flexible approach to adaptation that provides for:

i. institutional arrangements under the Convention process that co-ordinates adaptation efforts at the international and regional levels to support country driven priorities;
ii. new, additional and predictable financial resources separate and apart from ODA that are supported by appropriate institutional mechanisms;
iii. national-level adaptation planning and implementation mechanisms, building on existing processes and methodologies where available and appropriate, e.g. national reports including National Communications or NAPAs as appropriate;
iv. a multi-window mechanism to address loss and damage from climate change impacts, with insurance, rehabilitation/compensatory, and risk management components.
v. enhance existing financial assistance for recovery from extreme events

- Enhanced capacity at all levels in the most vulnerable countries, in particular LDCs and SIDS, will be required as an integral part of this enhanced action on adaptation.
- The priority actions under adaptation should be targeted to the needs of the most vulnerable countries and communities, in particular the LDCs and SIDS.
- Knowledge sharing and transfers of adaptation technologies are critical for enhanced action on adaptation.
- The UNFCCC must play the key role in enhancing adaptation and demonstrate greater leadership on mobilizing adaptation action both in the short and long term.

(viii) Enhanced Action on Technology

On a shared vision on enhancing technology, AOSIS is of the view that:-

- Technology development, transfer, diffusion and deployment must play a critical role in global efforts to adapt to, and mitigate against, climate change.
- The immediate and urgent delivery of technology development, deployment, diffusion and transfer to developing countries requires suitable responses, including a continued emphasis by all Parties, in particular Parties included in Annex 1 to the Convention, on enhancement of enabling environments, facilitating access to technology information and capacity-building, identification of technology needs and innovative financing that mobilises resources of the private sector to supplement public finance sources where appropriate.
- Adequate financial resources must be made available to facilitate the transfer of technologies for mitigation and adaptation to developing countries. Such financing should be made available to defray and/or pay for the cost of Intellectual Property Rights or pay for alternative access regimes.
- The rapid diffusion of energy efficient technologies and renewable energy technologies is essential for reducing emissions while contributing to sustainable development.
- Energy efficiency targets and renewable energy targets can form a useful mechanism for assessing progress. National renewable energy targets, accompanied by concessionary financing from the international community to assist in achieving these targets, can be helpful in addressing both climate change and sustainable development.

- Mitigation technologies that increase dependence on carbon intensive fuel sources should be discouraged. Technologies that generate hazards to human health, the environment or both should not be included in the energy mix.
- Adaptation technologies must be given the same prominence as mitigation technologies. SIDS and low-lying developing States are already experiencing the adverse effects of global climate change, and adaptation technologies applicable to SIDS and low-lying developing States are required now.
- The private sector must be encouraged to play a role in the development and transfer of adaptation technologies
- Indigenous technologies have a significant role to play and their documentation and dissemination should be encouraged

(ix) Enhanced Action on Finance & Investment

Enhanced action on the provision of finance to support adaptation should be guided by the following:

- New and additional – A significant injection of **new** money is required separate from traditional ODA and the 0.7% target, specifically devoted to adaptation and commensurate with projected adaptation needs.
- Predictability – The sources of this new financing must be stable and predictable including from mandatory or assessed contributions from developed countries and levies on the carbon markets and other emissions trading schemes.
- Grant-based – Consistent with the polluter-pays-principle financing to developing countries for adaptation should be in the form of grants rather than loans. SIDS are being forced to adapt to the adverse impacts of a phenomenon caused by the carbon intensive lifestyles and production patterns of others.
- Priority and simplified access for the most vulnerable – Particularly vulnerable developing countries especially the SIDS and LDCs should be given priority access to any financing for adaptation given their unique vulnerability, limited capacity to adapt and negligible contribution to climate change.
- A New Approach to the Governance of funds – new financing should be channeled through the Convention and new funding arrangements for addressing climate change shall be under the guidance and supreme authority of Parties to the Convention. The governance arrangements of the international financial institutions should not disadvantage SIDS and LDCs nor create burdensome conditionalities such as co-financing.
- Coherence – Coherence and coordination at the international level among all actors and utilizing the Convention as the fulcrum for action.

(x) Principles for Contribution by Different Groups of Countries

1. All Parties will be required to take action in keeping with the principle of common but differentiated responsibilities.

2. Developed country Parties, given their historical responsibility, should take the lead in actions to reduce GHG emissions, the provision of funding, and on activities related to technology transfer for adaptation and mitigation.
3. Developing countries will also need to take action to reduce their emissions trajectories, with assistance from developed country Parties, in line with their cumulative emissions, mitigation potential and opportunities, bearing in mind national circumstances and the principle of common but differentiated responsibilities and respective capabilities. These countries should be prepared to pursue a clean development path now up to and beyond 2012 through measurable and verifiable actions that result in the significant deviation of emissions growth from business-as-usual scenarios.
4. Consistent with Article 3, all Parties are urged to integrate the management of climate risks into their national development programs.

2. Long Term Global Goal for Emission Reductions

I. Need for a long term goal

The avoidance of climate change impacts on SIDS must be one of the key benchmarks for assessing the appropriateness of any long-term goal. The long term global goal must be sufficient to ensure that long-term temperature increases are stabilized well below 1.5^{o}C. A 2ºC increase compared to pre-industrial levels would have devastating consequences on SIDS due to resulting sea level rise, coral bleaching, coastal erosion, changing precipitation patterns, increased incidence and re-emergence of climate related diseases and the impacts of increasingly frequent and severe weather events.

II. Context of a long term global goal

Critical physical, environmental, social and economic thresholds exist for many SIDS and other particularly vulnerable countries and groups. The shared vision must aim to ensure that these thresholds are not breached. The best available scientific evidence also indicates that greenhouse gas emissions are increasing at an unprecedented rate, including in many Annex I Parties.

All Parties must be committed to reaching the target by addressing emissions from sources and removals by sinks. All Parties should also promote and cooperate in the development, application and diffusion of technologies, practices, processes and processes that control greenhouse gas emissions.

III. Nature of and principles for a long term global goal

Now is the time for concrete action, which must take two forms:

a) Deep and rapid reduction of greenhouse gas emissions by major emitters within the next 10 – 15 years in keeping with the principle of common but differentiated responsibilities and respective capacities, with appropriate financial and technical support to developing countries that take on reduction targets; and

b) Provision of assistance and support to vulnerable countries, in particular SIDS and LDCs, to adapt to the impacts of climate change.

The long-term target should be informed by the best available scientific assessment and the precautionary principle. In this context, minimizing further negative impacts of climate change

on SIDS must be one of the key benchmarks for assessing the adequacies of this long-term goal. It must be noted that even at ranges suggested by IPCC-AR4, all AOSIS countries will be challenged to survive and provide a livelihood for their population. The stabilization level must therefore be ambitious and respect the sovereignty and rights to survival of all countries.

IV. Level of stabilization or temperature increase

AOSIS therefore sees the long-term target as a stabilization of GHG gas concentrations well below 350 ppm CO_2e and temperature increases limited to below 1.5^{o}C above the pre-industrial level, in order to limit sea level rise to levels that that minimize adverse effects consistent with the principles above. Only emission pathways towards the lower end of the emission reduction identified in the lowest stabilization level reviewed in the IPCC-AR4 would begin to reduce GHG concentrations and ultimately, warming, consistent with these objectives. There are emissions pathways described by available studies that show support for this level of stabilization or temperature increase[1].

V. Peaking time of global emissions

There is a small window of opportunity for preventing runaway climate change. In order to reach the preferred AOSIS stabilization global CO_2 emissions must peak by 2015 and decline thereafter.

VI. Quantification of a long term goal

This stabilization level requires global CO_2 emissions to reduce by more than 85% by 2050. The cost of such action is readily manageable. The 4th Assessment Report of the IPCC has estimated that the cost of stabilization at the lowest emissions pathways analyzed (2.0-2.4) was – 0.12% of global GDP per year in the context of average growth of 3%. The low emissions pathways referred to above estimate the costs in the range of 1.0% - 1.7% of GDP by 2100. The Stern review of the economics of climate change has put the cost of inaction as being much higher than these estimates.

VII. Contribution by different groups of countries

To achieve this shared vision requires a legally-binding commitment to take appropriate national and international actions be taken to realize the above target by all Parties led by Annex I Parties. These actions should be consistent with the Convention and in particular Articles 2, 3 and 4, and the principle of common but differentiated responsibilities.

To be consistent with this target and to avoid further serious climate change impacts, Annex I countries, as a group, would need to reduce their GHG emissions by more than 40% to 1990 levels by 2020, and more than 95% by 2050.

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[1] IMAGE and MESSAGE Scenarios Limiting GHG Concentrations to Low Levels, REVISED DRAFT 25/7/2008, Shilpa Rao, Keywan Riahi and Cheolhung Cho (IIASA), Detlef van Vuuren, Elke Stehfest, Michel den Elzen, Jasper van Vliet and Morna Isaac (PBL);

Report of the First Assessment of Low Stabilisation Scenarios, Postdam Institut for Climate Impact Research, 2008; Stabilizing Green House Gas Concentrations at Low Levels, an Assessment of Reduction Strategies and Costs, Detlef P. van Vuuren & Michel G. J. den Elzen & Paul L. Lucas & Bas Eickhout & Bart J. Strengers & Bas van Ruijven & Steven Wonink & Roy van Houdt, 2007.

As a group, non-Annex I countries would need significant deviations from baseline over comparable periods. This will increase the probability of avoiding serious damage and catastrophic climate change impacts upon SIDS.

The availability of new and sufficient financial resources separate from the current ODA commitment to vulnerable countries, especially the SIDS and LDCs, to assist them in building their capacities in implementing appropriate mitigation measures. All countries should collaborate in the development, diffusion and transfer of environmentally sound technology for mitigation. All countries, in particular SIDS and LDCs, should have access to environmentally sound technology for mitigation that is adequate and appropriate to their needs.

3. Monitoring and Evaluation

This long-term target should be reviewed no later than 2015 and on a regular basis thereafter. Such a review must be informed by the experiences and observations of Parties, the findings of the IPCC-AR5 and other relevant scientific information.

The Conference of Parties will be tasked with the responsibility of setting interim short-term targets and monitoring the achievement of these targets. In these reviews, adaptive risk management strategies, to compensate for shortfalls, are encouraged as they allow for immediate progress and also permit for adjustment of strategies as actual outcomes and impacts in SIDS are observed. Where there are threats of serious or irreversible damage, the precautionary principle dictates that lack of full scientific certainty should not be used as a reason for postponing measures. In this context, the avoidance of further negative climate change impacts on SIDS must be one of the key benchmarks for assessing the adequacy of our long-term goal

PAPER NO. 4: ARGENTINA, CHILE AND URUGUAY

SUBMISSION PRESENTED BY ARGENTINA, CHILE AND URUGUAY ON AGENDA ITEM 3.b OF THE AWG-LCA

We consider that all countries must enhance their response to climate change. The effort at the multilateral level must be fair and equitable, with due respect to the principle of common but differentiated responsibilities and respective capabilities.

Developing countries Parties could take sustainable development policies and measures that contribute to mitigation and adaptation, adequately supported by the international cooperation. The issue of the means of implementation remains a major concern for us. We refer to effective technology transfer and international cooperation to develop existing and new mitigation alternatives. Also, new and additional funds and investment flows will be required to mitigate.

As Argentina and Uruguay stated in previous meetings, emissions from the agricultural sector represents a major share of GHG total emissions for our countries. In this regard, we would like to thanks the Secretariat for the Technical Paper on Opportunities and Challenges for the Agricultural Sector, which will certainly contribute to our discussions.

This paper addresses the relative mitigation potential of each mitigation practice presented, as well as methodological and technical challenges, such as difficulties in establishing a baseline due to the lack of the information needed in some countries or regions; high uncertainty in emissions estimates and lack of information for their assessment. Other barriers include high transaction costs, concerns about competitiveness, in some cases relatively high measurement and monitoring costs for emission reductions, availability of investment capital, and slow progress in technological development.

The document states that the materialization of the full mitigation potential for the agriculture (including the economic and the technical potential), is a complex issue and that there are limitations to emissions reductions in the agricultural sector particularly because of the role of the sector in providing food for a global population that is expected to continue to grow in the coming decades.

It provides a good basis for the exchange of ideas within the context of the AWG-LCA, by framing the discussion considering all the elements addressed by the Bali Action Plan, including through technology transfer and/or dissemination, investment and financial needs for the implementation of available and future practices; and the need for capacity-building to enable developing countries to implement relevant mitigation strategies and programs, as well as research and development.

Mitigation in the agricultural sector is an issue that should be tackled with due consideration of the regional and national circumstances related to the feasibility and applicability of the mitigation practices.

We welcome the paper and expect this item to be discussed in a meaningful way in this session of the AWG-LCA, in the workshop to be held in the 5th session of the AWG-LCA next year and in the coming negotiations, to contribute to achieve a shared vision to reach a fair and effective agreement in Copenhagen in 2009.

PAPER NO. 5A: AUSTRALIA

AUSTRALIA

Emissions Trading and the Project-based Mechanisms

Submission to the AWG-KP and the AWG-LCA

Australia welcomes the opportunity to submit further views to the AWG-KP and AWG-LCA on possible improvements to the flexibility mechanisms.

Carbon markets are an important means of achieving large-scale emissions abatement in a cost-effective and flexible way. A comprehensive and well-functioning carbon market will assist countries to commit to, and achieve, ambitious mitigation objectives. The expansion and improvement of the flexibility mechanisms are therefore a critical component of an effective post-2012 framework.

Australia submits that the flexibility mechanisms should be developed in line with the following core principles to ensure that they operate as effectively as possible. Specific comments on the proposals contained in annexes I and II of FCCC/KP/AWG/2008/5 are included in the attached paper.

Supportive of ambitious, differentiated mitigation actions

The flexibility mechanisms should be developed to accord with the more ambitious mitigation objectives of the post-2012 framework. To be effective, the post-2012 framework will need to reflect a range of differentiated responses from Parties according to their national circumstances and respective capabilities. The mechanisms will need to support these new commitment structures and provide incentives for enhanced mitigation action by all major economies. Approaches which facilitate national contributions to mitigation projects by host Parties may be one way of progressing such an outcome.

Comprehensive coverage

An effective response to climate change will require all countries and all sectors to be engaged in the task of emissions reduction. It is therefore important that the full range of abatement opportunities are available to the market through the flexibility mechanisms. Technological and methodological improvements since the adoption of the Kyoto Protocol mean there is now much greater scope for measurable, reportable and verifiable abatement through carbon capture and storage and reduced emissions from deforestation and forest degradation (REDD). There is also an opportunity to promote the uptake of land use, land-use change and forestry (LULUCF) activities through improving the rules and procedures associated with them.

Environmental effectiveness

If the flexibility mechanisms are to effectively support mitigation efforts, they must be environmentally effective. It will therefore be important to ensure the emissions reductions associated with them are genuine. This suggests avoiding multiplication factors on Kyoto units. Not only could multiplication factors distort the market, they could jeopardise the ultimate objective of the Convention.

Care must be taken to avoid perverse outcomes. In this regard, the merit of HFC-23 incineration projects under the CDM is a particular issue. If implemented properly, HFC-23 incineration projects deliver emissions abatement. However, there is some evidence that these projects have resulted in adverse climate and ozone impacts. The AWGs should remain conscious of the potential interaction of these projects with the Montreal Protocol.

Sound governance

Sound governance and institutional arrangements are critical to ensuring that the objectives of the flexibility mechanisms are delivered in an efficient, transparent and accountable way. In the interests of economic efficiency, the governance arrangements should provide as much certainty and predictability for the market as practicable, balanced with the flexibility to respond to changing circumstances and new technologies. In addition, every effort should be made to minimise administrative costs.

Market integrity

In considering improvements to the flexibility mechanisms, the AWGs should be mindful of preserving market integrity. A properly functioning market will facilitate abatement at a lower cost to the global economy because abatement will occur where and when it is most cost-effective. The broader the scope of the market, the more opportunities for emissions reduction will be available. This means that limitations regarding abatement sources and location should be avoided. In addition, increasing banking by eliminating carry-over restrictions on Kyoto units will increase the intertemporal flexibility of the carbon market, which is likely to improve its efficiency.

The flexibility mechanisms are a means of achieving our climate change mitigation objectives. It is essential that they are developed in a way that supports and promotes the broader post-2012 framework. Consideration of improvements to the post-2012 operation of the flexibility mechanisms should therefore not be carried out in isolation from the work being done in other work-streams and, in particular, the AWG-LCA.

To promote consistency and effectiveness, the post-2012 flexibility mechanisms should be available to the widest range of Parties, including those which are Parties to the Convention but not the Kyoto Protocol. Consideration of flexibility mechanisms by the AWG-LCA will facilitate contribution by any such Parties.

The attached paper sets out initial Australian views regarding the policy merit of specific proposals. It does not purport to discuss any potential legal implications of any of the proposals. Discussion of any such implications should be addressed in 2009, in accordance with the AWG-KP work program. In the meantime, it is important that the AWGs consider the policy merits of all proposals for improving the flexibility mechanisms, regardless of their eventual legal form. Prematurely limiting options will impact adversely on the effectiveness of the final post-2012 framework.

ATTACHMENT

Comments on the proposals in annexes I and II of FCCC/KP/AWG/2008/5

ANNEX I

I. A. Include other land use, land-use change and forestry activities

Australia draws attention to its submission to the AWGs on LULUCF. There is an opportunity to promote the uptake of LULUCF activities in the flexibility mechanisms by improving the rules and procedures associated with them. The use of robust, spatially-explicit estimation methodologies would deliver greater confidence in the measurability and verifiability of reductions from the LULUCF sector and, in turn, allow for greater equivalence of units generated from LULUCF activities. Australia recognises that transitioning to such robust methodologies will represent a significant challenge and is ready to assist countries with capacity building and technology transfer to reach this standard of estimation.

Reducing emissions from deforestation and forest degradation in developing countries (REDD) is included under proposal I.A (include land use, land-use change and forestry activities). Australia submits that REDD should be a separate item on the CDM list under Annex I. While related to LULUCF, REDD is a separate issue and is at a different stage of development. A market-based approach to REDD would award credits for avoided deforestation and forest degradation in non-Annex I Party countries, whereas LULUCF rules assign debits for emissions from deforestation in Annex I Parties. Conflating REDD and LULUCF may obfuscate the issues pertinent to each. Australia therefore proposes removing the - "reducing emissions from deforestation and degradation" dot point from the LULUCF note and replacing it with:

"A1. Include reducing emissions from deforestation and forest degradation in developing countries

Note: The following issues, inter alia, may be relevant to consideration of this element:
- *resolution of methodological issues;*
- *resolution of policy issues;*
- *modalities for the inclusion of REDD;*
- *environmental integrity.*

The AWG-KP should also take account of work being done in other processes on this issue, including the AWG-LCA."

I.B. Introduce a cap for newly eligible land use, land-use change and forestry activities

Australia does not support a cap on eligible LULUCF activities under the CDM. All genuine abatement activities should be included in the flexibility mechanisms without restriction. Placing undue limitations on particular activities will increase the cost of abatement to the global economy.

I.C. Include carbon dioxide capture and storage

Carbon dioxide capture and storage (CCS) is a key technology for reducing greenhouse gas emissions and should not be excluded from the flexibility mechanisms. Fossil fuels, especially coal, will remain major sources of the world's energy in the coming decades. All major models of how the world can achieve lower greenhouse gas emissions expect a significant part of the reduction to be achieved through the use of CCS. Australia supports discussing this item under both the SBSTA and the AWG-KP.

Australia has recently announced a proposal to establish a Global Carbon Capture and Storage Initiative which includes a Global Carbon Capture and Storage Institute. The Institute will aim to accelerate the

development and commercialisation of CCS technology by facilitating demonstration projects, leveraging and sharing experiences, and supporting necessary research. This Initiative will accelerate collective learning on CCS and help in the effort to realise commercial scale CCS plants as soon as possible.

Australia draws attention to its submission to the SBSTA (FCCC/KP/2006/MISC.2) regarding approaches to including CCS in the flexibility mechanisms.

I.E, I.F & I.G Sectoral and NAMAs: proposals

Moving beyond the project-based approach and considering approaches that enable sectoral activities to benefit from private sector investment may be a way of delivering broader technology benefits, as well as larger cuts in emissions. Sectoral approaches may also open up abatement opportunities in sectors which have not been readily accessible using a project-based approach.

Sectoral approaches have the potential to build capacity around national and sectoral inventory capabilities within host countries.

I.H & I.I Environmental integrity and additionality proposals

The requirement to demonstrate additionality has been identified as one of the most resource-intensive steps in the CDM process. Methods to assess additionality through the development of standardised, multi-project baselines and positive lists which grant automatic in-principle approval for technical aspects of well-recognised technologies may assist in improving the efficiency of the approvals process.

Assessment of additionality through negative lists of project activity types should be approached with caution. As noted above, in order to best achieve large-scale emissions reduction at least cost, the flexibility mechanisms should cover as many abatement sources as possible. In cases where the operation of the flexibility mechanisms give rise to perverse incentives, for example where HFC-23 incineration projects prolong the operation of existing HCFC-22 plants or lead to the construction of new HCFC-22 plants, which may affect other international environmental activities, it may be preferable to address these issues directly.

I.J Differentiate the eligibility of Parties through the use of indicators

The mechanisms will need to support new and differentiated commitment structures and provide incentives for enhanced mitigation action by all major economies. Consequently, it may be that purely offsetting approaches will remain most appropriate for certain developing countries and consideration should be given to approaches which facilitate national contributions by more advanced developing economies.

I.K Improve access to clean development mechanism project activities by specified host Parties

It is to be expected that CDM and JI projects will be concentrated in those countries where there is high potential for cost-effective mitigation. However, creating the right enabling environments (legal, social and economic policy frameworks) to promote private investment is of critical importance. It would be valuable for the AWGs to consider lessons learnt from successful host Parties, that could be adopted in other Parties. In addition, Parties may also wish to consider ways to reduce market barriers to the uptake of project-based activities in certain locations.

Expanding the scope of the flexibility mechanisms to include additional sectors, in particular those relating to LULUCF and REDD, may facilitate a wider geographical distribution of projects.
Mandating where project activities should occur would impede the efficiency of the market and raise the cost of abatement to the global economy.

I.L Include co-benefits as criteria for the registration of project activities

In line with the objective of the Convention, the flexibility mechanisms should remain tightly focused on emissions reduction. While projects should be allowed scope to contribute towards sustainable development and other co-benefits, the introduction of additional mandatory criteria may inadvertently detract from the emissions reduction objective. Host Parties are best placed to determine what constitutes sustainable development and which co-benefits are most appropriate to their circumstances.

I.M Introduce multiplication factors to increase or decrease the certified emission reductions issued for specific project activity types

Market-based approaches deliver least-cost abatement by providing incentives to reduce emissions where this is most cost-effective. It is therefore preferable to allow the market to determine which types of project activity to pursue.

The introduction of multiplication factors also risks undermining the environmental integrity of the mechanisms. It is important that each Kyoto unit accurately represent one tonne of CO2-e reduced or, given the offset nature of the CDM, emissions will rise.

IV.A Relax or eliminate carry-over (banking) restrictions on Kyoto units

Facilitating increased banking by relaxing carry-over restrictions on Kyoto units will improve intertemporal flexibility and therefore improve the economic efficiency of the market.

IV.B Change the limit on the retirement of temporary certified emission reductions and long-term certified emission reductions

It is important that the post-2012 agreement maximises the LULUCF sector's capacity to reduce emissions and increase removals. The rules regarding credits generated from LULUCF activities has discouraged projects in this sector. The use of robust, spatially-explicit estimation methodologies would deliver greater confidence in the measuring, verifying and monitoring of emissions reductions and potentially allow for greater equivalence among Kyoto unit types.

IV.C Introduce borrowing of assigned amount from future commitment periods

Like banking, borrowing would also improve intertemporal flexibility and therefore improve the economic efficiency of the market. However, long-term borrowing could lead to significant and potentially detrimental delays in the global abatement effort. Australia assesses that this risk outweighs the potential flexibility benefits of any form of long-term or unlimited borrowing. Depending on the eventual form of the post-2012 framework, there may be scope to consider some form of short-term, limited borrowing between commitment periods.

IV.D. Share of proceeds

The flexibility mechanisms are a key mitigation tool. Applying a share of proceeds to the flexibility mechanisms may distort international market price signals and reduce incentives to invest in mitigation projects, negatively affecting the role of the mechanisms in reducing greenhouse gas emissions.

It is important that the international community identify additional means to finance adaptation that are efficient, effective and equitable. However, a discussion on share of proceeds as a means of assisting developing countries to meet the costs of adaptation should not be considered in isolation from the broader discussion on financing adaptation which is to be taken up in the AWG-LCA.

ANNEX II

I.A Introduce a different supervisory structure and institutional arrangement in case of modification to the clean development mechanism

Significant amendments to the clean development mechanism or the introduction of additional mechanisms will require appropriate, and potentially different, supervisory structures and institutional arrangements. These structures and arrangements should be designed in light of the new mechanisms and detailed consideration should be deferred until the precise structure of the reformed flexibility mechanisms is settled.

The new structures should be designed to facilitate the core principles of market integrity, environmental integrity and economic effectiveness. There should be appropriate lines of accountability and processes should be as transparent as possible.

Given the ongoing and increasing importance of the flexibility mechanisms, there may be value in considering revising the governance and institutional arrangements to provide for full-time, professional appointments to the relevant supervisory bodies. Consideration should also be given to strengthening the eligibility criteria for members.

Australia also draws attention to its submission to the Article 9 review on how the current institutional arrangements, governance and rules of procedures of the CDM and joint implementation may be improved in the first commitment period.

I.I Introduce alternative accounting rules for afforestation and deforestation project activities in order to increase demand

Australia suggests this should read "Introduce alternative accounting rules for afforestation and reforestation project activities in order to increase demand". This was the wording from the proposal in the annex II list attached to the Report of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol on its resumed fifth session, held in Bonn from 2 to 12 June 2008.

III.B Enhance equivalence among Kyoto unit types

Australia notes its comments under I.A and IV.A and IV.B of the proposals in Annex II. Reducing unnecessary differences between the rules for carry-over and longevity of different types of Kyoto units would simplify accounting and improve market efficiency.

PAPER NO. 5B: AUSTRALIA

Enhanced action on adaptation

Submission to the AWG-LCA

This submission contains Australia's further views on enhanced action on adaptation, including risk management and risk reduction strategies. Australia's support for scaling up financing to support action on mitigation and adaptation is covered in a separate submission.

Role of the UNFCCC

Consideration by the AWG-LCA of the UNFCCC's role in supporting adaptation should focus on three key elements:

- Determining a mechanism for raising significantly increased financing for adaptation, and agreeing a method for prioritising support;
- Promoting coordination amongst those countries and agencies supporting adaptation efforts; and
- Catalysing action at the local level, including through facilitating the provision of appropriate and to-scale information on the scientific and technical aspects of adaptation to decision-makers.

Prioritising support for adaptation

The need for increased financing for adaptation is clear. But we also need to be clear about what we want to achieve from increased financing to support adaptation. The key objective should be to ensure strong support for those most vulnerable to climate change.

Determining what are effective responses to climate change depends on local circumstances and will vary greatly from one locality to another. Local communities therefore need to be closely involved in developing and implementing adaptation responses. Our challenge is to most effectively prioritise resources at an international level in a way that respects the local nature of adaptation activities.

The AWG-LCA should consider methods or broad criteria for determining Parties' vulnerability to climate change and prioritising multilateral support. Such prioritisation needs to be responsive to changing circumstances and capabilities of Parties.

The first step is to determine which Parties are most exposed to the adverse physical effects of climate change, based on information drawn from accepted authorities such as IPCC reports. The second step is to evaluate capacity to adapt. While no simple metric exists to measure capacity to adapt to climate change, there is a well-recognised link between adaptive capacity and level of human development. A capacity indicator could draw on widely-accepted measurements of development, including the OECD DAC data and the UNDP's Human Development Indicator.

Efforts to evaluate vulnerability to climate change have been questioned because they involve judgments about the relative harm of different climate change impacts and value of adaptation responses - for example, whether it is more important to protect coastal areas from sea-level rise or develop more drought-resistant crops. Such judgments should not be made in a multilateral setting such as the UNFCCC. Decisions about which adaptation activities have priority should rest primarily with individual countries and be aligned with their broader sustainable development strategies.

We also need to consider how to improve the capacity of vulnerable countries to identify and communicate their adaptation priorities. This could be done through appropriately tailored National Communications, or an enhanced NAPA-like process which is integrated within national development plans. More detailed information on adaptation needs in National Communications would also enable evaluation of the effectiveness of various adaptation strategies.

Coherence and coordination in implementing adaptation

Just as there is a strong link between a country's level of development and its adaptive capacity, significant cross-over exists between effective adaptation actions and sound development practices. It is important that in addressing adaptation actions, we draw on lessons learnt in the development field and recognise that most development activities result in reduced vulnerability to climate change impacts.

Even more important is the need to avoid creating a "silo" around adaptation activities. National adaptation priorities should form part of a country's broader national planning and budget processes.

At the international and regional level, many institutions working in adaptation-related fields (such as development and disaster risk reduction) have a high level of specific expertise and local knowledge. Effective links between such institutions will enable greater sharing of information and resources. It would not be effective to create another layer of international or regional architecture under an "adaptation" banner. Instead, deficiencies in existing coordination mechanisms should be addressed.

The technical paper on adaptation activities being undertaken by UN agencies will be useful in identifying linkages and remaining gaps. The UN system-wide coherence mechanism should be a key means of enhancing coordination. Regional centres, relying as far as possible on existing regional architecture, could also play an important role in addressing remaining gaps in coordination.

At the national level, further progress towards integrating adaptation considerations into national-level decision-making (particularly with respect to development priorities) is essential. The Pilot Program for Climate Resistance under the World Bank-administered Climate Investment Funds aims to develop more experience in integrating climate resilience into development plans and activities. Similarly, the Global Environment Facility's evaluation of its Strategic Priority on Adaptation should provide further lessons on how the UNFCCC's existing financial mechanism has addressed core adaptation requirements.

Facilitating adaptation at the local level

While adaptation is implemented primarily at the local level, local communities often lack the information required to address adaptation requirements. To make effective decisions about adaptation priorities, local communities need appropriate, locally targeted and useable information on the scientific and technical aspects of adaptation (eg climate modeling and socio-economic data). Actors at the national, regional and international level can facilitate adaptation by providing this information.

A great deal of adaptation will occur independently of government intervention. Providing relevant information about climate change, including the potential costs of impacts, can help communities and businesses take decisions which facilitate effective adaptation.

Recognising the value of relevant information in enabling adaptation, one of the key objectives of Australia's $150 million International Adaptation Initiative is to improve scientific information on and understanding of climate change impacts, to assist decision-makers in partner countries. This will involve engaging with and building the capacity of scientific communities in partner countries, including through cooperative research partnerships.

Risk sharing and transfer mechanisms

Given their lower levels of development, developing countries can be more vulnerable to severe climate impacts, and damages and response time can be proportionally greater than in developed countries. Risk sharing and transfer mechanisms such as insurance could be one of the options for better managing natural disasters and climate change impacts.

Australia welcomes discussion on this issue, including by supporting the costs of preparation of the UNFCCC technical paper on this topic. It is important to remember that insurance by itself only transfers risk, it does not reduce it. Care needs to be taken to ensure insurance does not present a "moral hazard" or lead to maladaptation.

PAPER NO. 5C: AUSTRALIA

Enhanced Action on Financial Resources and Investment

Submission to the AWG-LCA and the AWG-KP

This submission outlines the Australian Government's position on the development of appropriate financial architecture to support action on mitigation and adaptation under the Bali Road Map.

Comprehensive discussions on future financial arrangements will be a key issue in Poznan and beyond. It will be important that consideration of any Convention-based financing options are consistent with relevant discussions under the AWG-KP.

The Impact of the Global Financial Crisis

Australia considers that the current global financial crisis should not delay or undermine the provision of new and additional financing as part of the post-2012 outcome.

The current economic environment does underline the interdependent character of the global economy. According to the IMF, many of the major advanced economies are already in, or close to recession. While several major emerging economies are expected to register continuing strong growth, many are expected to experience slower growth.

The depth and duration of the global financial crisis is uncertain. Heightened economic uncertainty may reduce private and public tolerance for risk and uncertainty regarding the short-term costs and benefits of climate change policy. In spite of this, it is clear that financing will be an important foundation of the post-2012 outcome, and will in the long-term support business confidence in clean and low emissions solutions.

The Role of the Private Sector

Existing public financial resources are not sufficient to address the global challenge of climate change. The main source of funding for future mitigation activity will be the private sector.

The estimated additional investment and financial flows needed in 2030 to address climate change is a relatively small per cent in relation to estimated global GDP. The cost of not addressing climate change will be much greater. Australia anticipates that the private sector – which is currently responsible for 86 per cent of international finance and investment flows – will contribute the largest share.

The global financial crisis highlights the utility of targeted public funding that maximises the efficiency and effectiveness of all available and potential financial flows and leverages further private sector investment, particularly with respect to emissions reductions.

While recognising that public investment flows will have an important role in financing adaptation needs in the most vulnerable developing countries, consideration of this issue in the AWG-LCA must distinguish between the separate roles of public sector and private sector resources to support the different needs of mitigation and adaptation.

All Parties – developed and developing - will need to dedicate national resources to improve enabling environments, particularly in relation to robust and transparent governance arrangements. This will be essential to drive not only domestic investment, but critically, foreign investment and support from the public and private sectors.

Furthermore, Parties will need to work cooperatively to ensure public policies and resources are tailored to leverage private sector investment and innovation across their economies. In addition to allowing Parties to meet their targets in a flexible and cost effective manner carbon markets are an important means of securing private sector investment.

Australia will introduce a comprehensive emissions trading scheme (the Carbon Pollution Reduction Scheme) in 2010. In line with paragraphs 1(d) and 1(e) of the Bali Action Plan it will provide businesses and consumers with a market incentive to adjust their behaviour, invest in low-emission technologies and help Australia reduce emissions .

The AWG-LCA will need to consider how Parties can best utilise the full range of innovative financial instruments, to attract and leverage private investment flows. Where, for example, the private sector has a competitive advantage in developing and deploying innovative technology-based mitigation solutions, inappropriate financial instruments such as grants and subsidies have the potential to distort free-market approaches and to crowd-out private sector investors.

Encouraging private sector participation in climate change response measures will significantly increase the value of available financial flows, accelerate the development of necessary new technologies, ensure commercial viability and promote the achievement of the Convention's ultimate objective.

Public financial assistance should be tailored to address specific market failures that act as barriers to private sector investment. Lessons can be drawn from approaches currently being trialed, for example, through the Climate Investment Funds and the Prototype Carbon Fund.

The International Finance Corporation has also proposed several innovative instruments to enhance the participation of the private sector in low-carbon projects in developing countries, including:

- First loss or risk sharing instruments that support investors entering new and untested markets;
- Credit enhancement facilities used to guarantee future cash flows; and
- Highly concessional loans.

New International Financial Architecture

Australia has previously submitted views to the AWG-LCA on enhanced action on financial resources and investment to support an effective global climate change response. We welcome the views put forward by other Parties on possible measures to scale up finance for mitigation and adaptation activities and particularly note the submission from the G77 on a new multilateral financial mechanism.

Several elements of the G77 outline are central to the effective operation of any current or future financial mechanisms. In particular:

- increased international finance and investment should be equitable and sustainable;
- governance mechanisms should be transparent and efficient in the way they allow countries in need to access financial assistance; and
- equitable representation of relevant stakeholders in decision-making roles will be important to ensure support and ownership from both donors and partner countries.

Australia looks forward to considering further detail from the G77 on objective mechanisms to determine eligibility for financial assistance based on criteria that are fair, give priority to the most vulnerable developing countries, and can appropriately respond to future scientific, technological and economic developments.

Objective criteria measuring actual national capabilities should determine what financial resources Parties can reasonably be expected to contribute based on current economic realities. This will ensure future financial and investment flows remain adequate, sustainable, efficient and give priority to the most vulnerable developing countries.

Furthermore, any projection of required global financial flows will need to be backed by robust, transparent data based on internationally agreed methodologies. It is not appropriate to propose required funding levels, including specific levels of contributions from certain Parties, in advance of comprehensive examination of these elements.

In line with 1(e)(i) of the Bali Action Plan, the AWG-LCA must recognise that Parties do, and will continue to, provide financing for mitigation and adaptation through a variety of means. Consistent with Article 11.5 of the Convention, post-2012 support for mitigation and adaptation will not solely be governed by the decisions and priorities of the COP but may be provided and accessed through bilateral, regional and other multilateral channels. For example, Australia's A$150 million International Climate Change Adaptation Initiative provides financial support to vulnerable pacific islands and Timor Leste to take actions to adapt to climate change.

Donors will continue to utilise the full range of public financial instruments and purpose-built funds to target support, for example through the World Bank Climate Investment Funds. Any future multilateral financial architecture must take account of and facilitate linkages between the various funding sources. In this respect, Australia reminds Parties that if international climate change support can be classified as ODA, then it will be reported as such and expects the AWG-LCA to apply the principles of aid effectiveness set out in the *Paris Declaration on Aid Effectiveness* of March 2005.

PAPER NO. 5D: AUSTRALIA

Impact of Response Measures

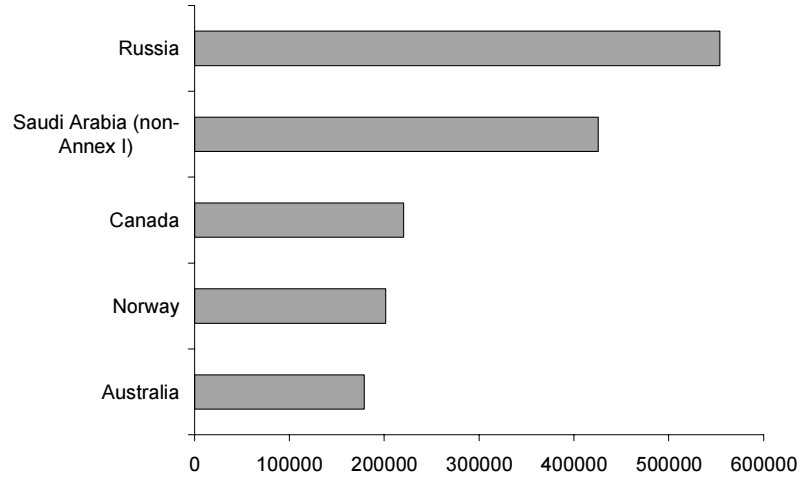
Submission to the AWG-LCA

The following are Australia's initial views on the Impact of Response Measures. This is the proposition that consideration should be given to compensating producers for a reduction in demand for their product as a result of an embodied carbon price.

The impact of response measures relates to mitigation. It is a separate issue to the adverse effects of climate change. This submission will focus on the impact on energy products, particularly oil, as some Parties have expressed particular concern in this regard. The carbon intensity of oil is higher than that for natural gas but lower than that for coal.

As one of the world's top five energy producing nations, Australia is sensitive to measures taken to alter energy patterns.

Fig 1: Top 5 Energy Exporters 2006 - Thousands of Tons of Oil Equivalent

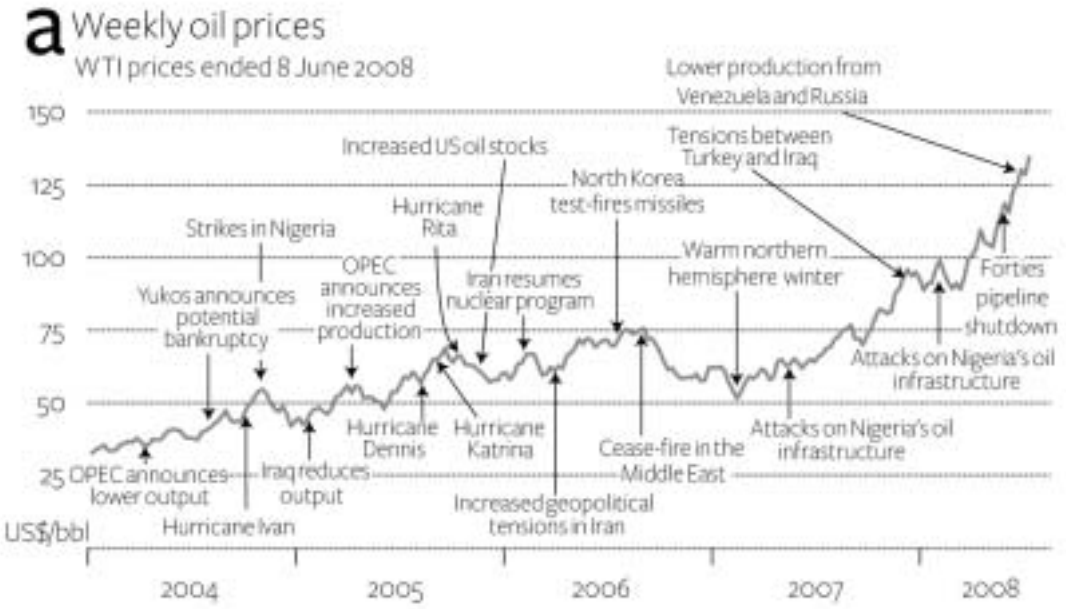


Source: IEA

Resource economies are cyclical in nature and require careful planning to absorb the significant fluctuations in demand. We traditionally respond to these pressures with national policies and measures designed to minimise these impacts and build economic resilience. Lessons that Australia has learned in this regard may be useful to other Parties with energy-intensive economies as per Articles 4.8 and 4.10 of the UNFCCC.

Figure 2 shows the impact of a number of factors on the price of oil. The nature of markets is such that energy producing countries are not compensated, nor penalised, for this or any other impact. Price variability is a natural, predictable and understandable aspect of the international resource market. There are a large number of factors that influence the demand for and price of energy exports. Influences on energy prices include political instability and increased supply. The global financial crisis will have a much larger and immediate impact on global energy prices than the longer-term impact of climate change response measures.

Fig 2: Impacts on oil prices

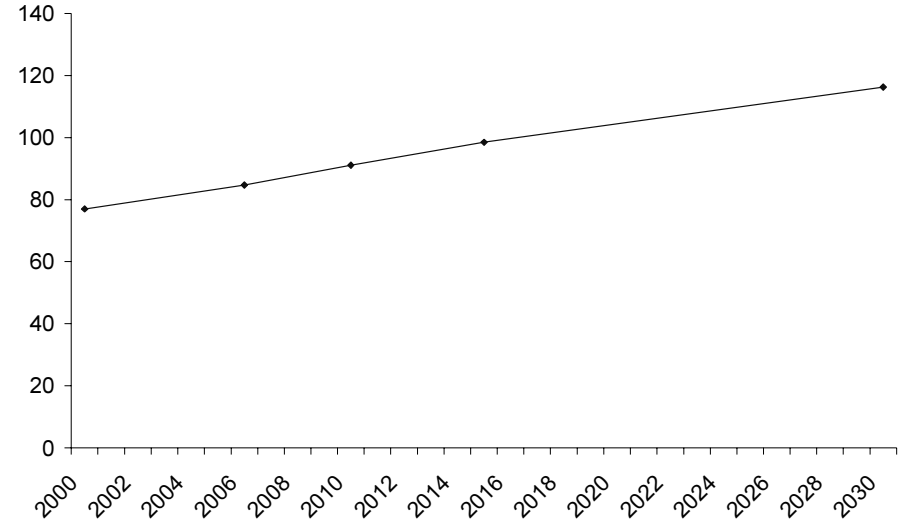


Source: Australian Bureau of Agricultural and Resource Economics (ABARE)

The costs of oil production vary significantly between Parties. Some Parties are able to produce oil at very low cost, whereas for others, the need to use alternative production techniques such as refining oil sands, mean that it is relatively more expensive. Those Parties with the lowest costs of production are the least affected by any reduction in demand. OPEC has the lowest average production costs in the global oil industry[1].

The outlook for oil demand is positive. The IEA forecasts that demand for primary oil will grow by 37.3% between 2006 and 2030 (Fig 3). Demand for oil, as with other energy sources, is relatively inelastic.

Fig 3: Forecast World Primary Oil Demand



Source: IEA World Energy Outlook Reference Scenario 2007

[1] Source: OPEC

Low emission technologies can reduce the impact of existing activities and lower the implicit carbon cost of using fossil fuels. Carbon capture and storage has the potential to play a critical role. In September 2008, the Australian Prime Minister announced a Global Carbon Capture and Storage Initiative, including annual funding of up to A$100 million for the establishment of an Institute to accelerate the development of carbon capture and storage technology. Through this institute, Australia aims to work cooperatively with other Parties to help reduce carbon dioxide emissions in energy production, especially with regard to coal (although much of the technology is relevant to other fossil fuels).

Given the difficulty in quantifying the impacts of response measures, and the long-term nature of any impact – both positive and negative - national policies and measures of the sort outlined above are the most effective way for Parties to address the impacts of response measures.

PAPER NO. 5E: AUSTRALIA

Land Use, Land-Use Change and Forestry (LULUCF) Sector

Submission to the AWG-KP and AWG-LCA

This submission represents Australia's initial views on the treatment of land-use, land-use change and forestry (LULUCF). Australia welcomes the opportunity to submit views on proposals for effectively accounting for greenhouse gas emissions and removals from the land sector toward mitigation commitments in a post-2012 international climate change outcome.

The potential of the land sector to contribute to mitigating climate change is well recognised. However, this potential is not fully realised due to limitations of current rules under the Kyoto Protocol. Parties have an important opportunity in negotiations on a post-2012 outcome to improve upon the current rules and provide a stronger, long-term basis for an international climate change response.

Importantly, the land sector needs to support the objective of the UNFCCC to mitigate climate change by addressing *anthropogenic* emissions by sources and removals by sinks of greenhouse gases. Current accounting rules and modalities for LULUCF do not match commitments under the UNFCCC and Kyoto Protocol to account for only anthropogenic emissions and removals.

Considerations for the treatment of the land sector post-2012

It is necessary to make changes to the current rules so that only human activities that can practicably be influenced are included in the LULUCF sector, as is the case for all other sectors. Otherwise, large variations in Parties' accounts from natural events, over which they have no control, can dictate whether a Party fulfils its commitment.

Methods exist to exclude non-anthropogenic emissions from accounts, and Australia submits that these should be made explicit in the LULUCF accounting rules adopted post-2012.

Accordingly, the treatment of the LULUCF sector in a post-2012 outcome should be based on the following set of core considerations.

1. Emissions and removals from anthropogenic sources only, consistent with the UNFCCC objectives and treatment of other sectors. LULUCF is the only sector with accounting rules that extend to non-anthropogenic emissions (for example, from wildfires and drought).

2. Emissions and removals reported and accounted for at the time and place that they occur: reflecting 'what the atmosphere sees'.

3. A rigorous, robust and comprehensive approach, which strikes a balance between scientific precision, practicality and policy relevance.

4. Cost-effectiveness of policy responses: recognising the need for a comprehensive suite of measures to support mitigation action.

5. Consistency across Parties, while reflecting Parties' national circumstances, and consistent, mutually supportive treatment of land sector issues across the AWG-KP and AWG-LCA.

6. Avoidance of perverse incentives that would lead to negative environmental outcomes in developed or developing countries.

Key issues for Australia

A number of factors, in addition to direct human-induced activities, can affect the changes in carbon stocks in the land sector. These factors can be categorised as: natural disturbance events; inter-annual climatic variability; indirect effects, including CO_2-fertilisation and nitrogen deposition; and legacy effects of pre-1990 activities, particularly age structure of forests.

Each of these factors is materially different, and different responses are needed to manage their implications. This submission elaborates Australia's views on major natural disturbance events (see (A) below) and inter-annual variability (see (B) below), which are of primary importance to Australia. Australia understands that indirect effects and age class structure will also form part of negotiations on a post-2012 outcome.

A more complete and balanced treatment for harvested wood products is also of importance (see (C) below). In addition, Australia would like to work with other Parties to consider improvements to the treatment of LULUCF in the flexibility mechanisms (see (D) below).

A. Major natural disturbance

Major natural disturbances are episodic events that can lead to massive variations in emissions and removals from the land sector. Examples include large wildfires, extensive windthrow and pest outbreaks.

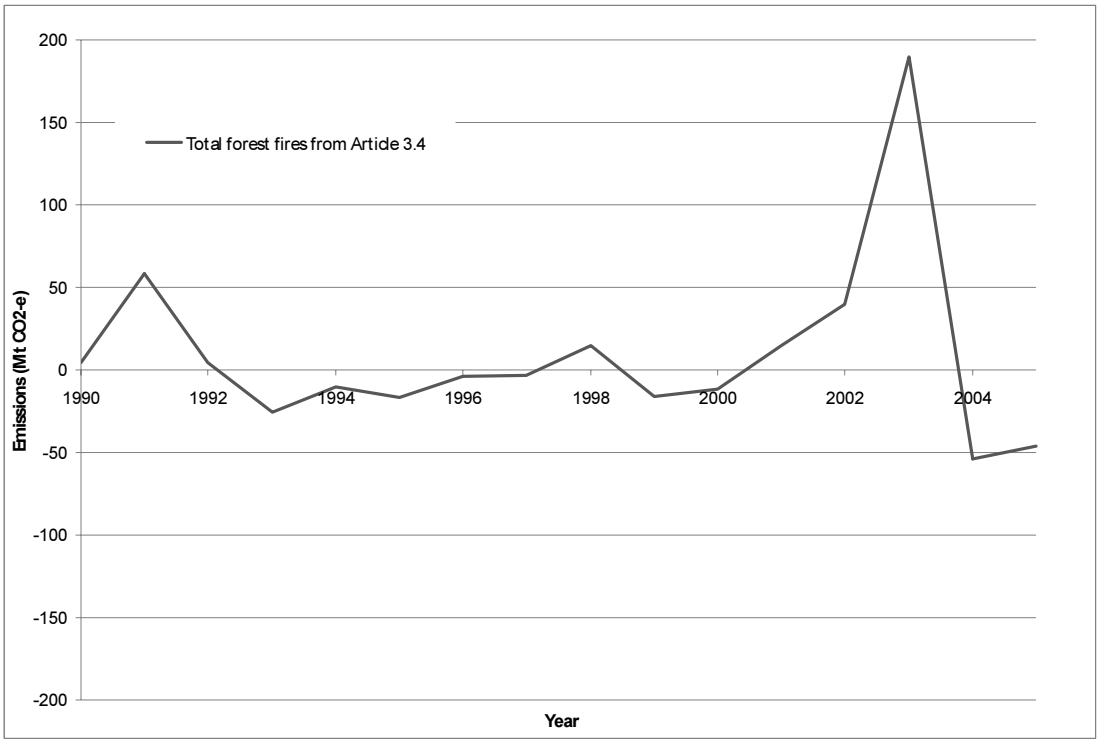
Major natural disturbance events differ from inter-annual climatic variability and require a different accounting approach. Inter-annual climatic variability, discussed later in this submission, is the variation in climatic conditions, such as rainfall, from year-to-year that leads to variations in the rate of net carbon emissions and removals. In addition, natural disturbances which form part of Parties' usual levels of variability, such as minor fires and pest activity should be accounted for and should be a part of Parties' emissions projections.

If the impacts of major natural disturbance events count towards Parties' emissions commitments, then Parties subject to such events may have no control over meeting or exceeding their commitments. The impacts of major natural disturbances can overwhelm emissions reduction efforts from all Annex A sectors, and Parties cannot create a policy response to address or ameliorate these impacts.

Major wildfires in Australia in 2003 caused 190 Mt CO_2-e emissions on Article 3.4 forest lands, overwhelming emissions reductions from all other sectors (Figures 1 and 2). The risk of a large wildfire event during 2008-2012 is why Australia did not elect Article 3.4 activities in the first commitment period. The impacts of natural disturbance and inter-annual variability are particularly evident on Australia's millions of hectares of lands that are subject to Article 3.4 activities (Figure 2).

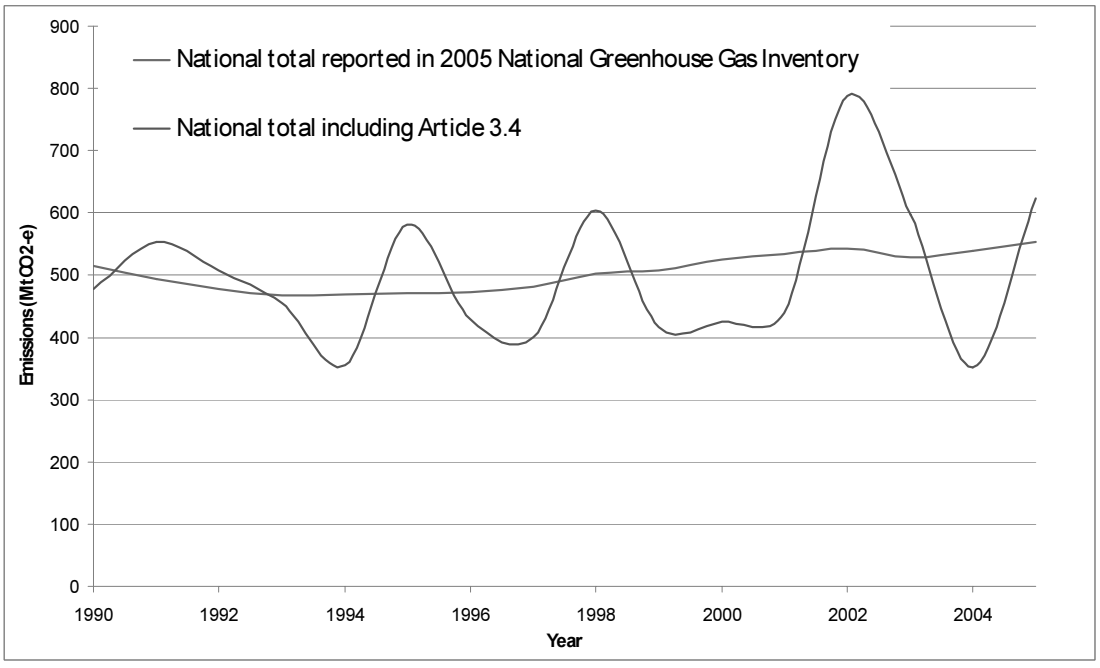
In the absence of approaches to address major natural disturbance in a post-2012 outcome, Australia would be in the same position as for the first commitment period. Australia would be unable to elect any activities under the current Article 3.4, including forest management, due to risk from emissions due to non-anthropogenic events. This would limit the mitigation potential available from Article 3.4 activities. Major natural disturbance effects would also be an issue for Article 3.3 afforestation and reforestation activities under a post-2012 outcome in the absence of continuation of the sub-rule on debits not being greater than credits on a unit of such land.

Figure 1. Carbon stock changes from wildfires on Article 3.4 forest lands in Australia



Source: 2005 National Greenhouse Gas Inventory, Department of Climate Change

Figure 2. Comparative national emissions of total greenhouse gases for Australia, with and without Article 3.4 emissions. Article 3.4 emissions include the impacts of major natural disturbance (from Figure 1) and inter-annual variability. Most of the variation in the line 'National total including Article 3.4' is from carbon stock changes.



Source: 2005 National Greenhouse Gas Inventory, Department of Climate Change

Rules under the first commitment period of the Kyoto Protocol require that we include all emissions and removals from natural disturbances in our national accounts. However, current inventory reporting under

the UNFCCC allows Parties to choose to symmetrically include or exclude carbon dioxide removals and emissions from natural disturbances, as per the 2003 Good Practice Guidance (GPG) for LULUCF[1].

We could address this discrepancy and address the impacts of major natural disturbance by applying the UNFCCC inventory reporting approach to national accounts in a post-2012 outcome. This would bring accounting for the LULUCF sector closer to the objectives of the UNFCCC and Kyoto Protocol, as carbon stock changes that are part of a natural cycle should not be credited or debited. In addition, over time, carbon stock losses are replaced by gains through regrowth. However, this cycle of major disturbance and recovery does not occur within a 5- to 10-year commitment period. The attachment provides further detail.

Furthermore, inter-annual averaging of emissions estimates is not an appropriate policy treatment for major natural disturbance events. The scale of such events would require the averaging period to extend over a number of decades, which would impact upon the policy relevance of the approach.

B. Inter-annual variability

Inter-annual climatic variability can significantly affect the rate of greenhouse gas emissions and removals from year to year. Examples include deviations from average temperature and rainfall.

Unless variability is addressed appropriately in national accounts, this can lead to estimates of emissions and removals during a commitment period that do not reflect the trend and over which Parties have no control. This would again undermine the policy relevance of the LULUCF sector.

The overall objective of the UNFCCC is stabilisation of atmospheric concentrations of greenhouse gases. It is therefore important that reporting reflects whether Parties are trending towards or away from such stabilisation, independent of inter-annual climatic variations.

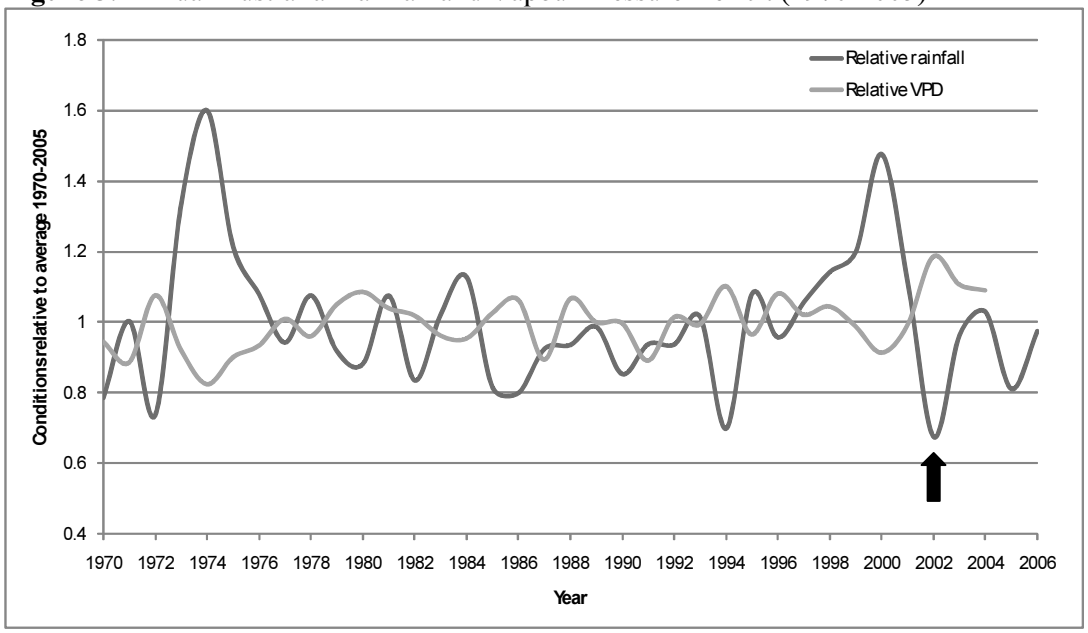
Rules should be agreed to allow Parties to report emissions estimates in a manner that more clearly reflects anthropogenic trends in LULUCF activities. There may be a number of solutions for this.

One option would be to allow Parties to report using a rolling average of annual greenhouse gas emissions estimates for the LULUCF sector where Parties use annual climatic data to produce such estimates. This approach would increase comparability between Parties reporting using annual climatic data and those using longer-term averages, as elaborated in the attachment. This would provide a solution for inter-annual climatic variability, as the impacts are able to be managed over a policy relevant period.

The potential impact of inter-annual variation on Australia's national accounts is another reason for Australia's decision not to elect Article 3.4 activities in the first commitment period. Figure 3 below shows the variation in Australia's annual rainfall from 1970-2005 compared to the mean for that period.

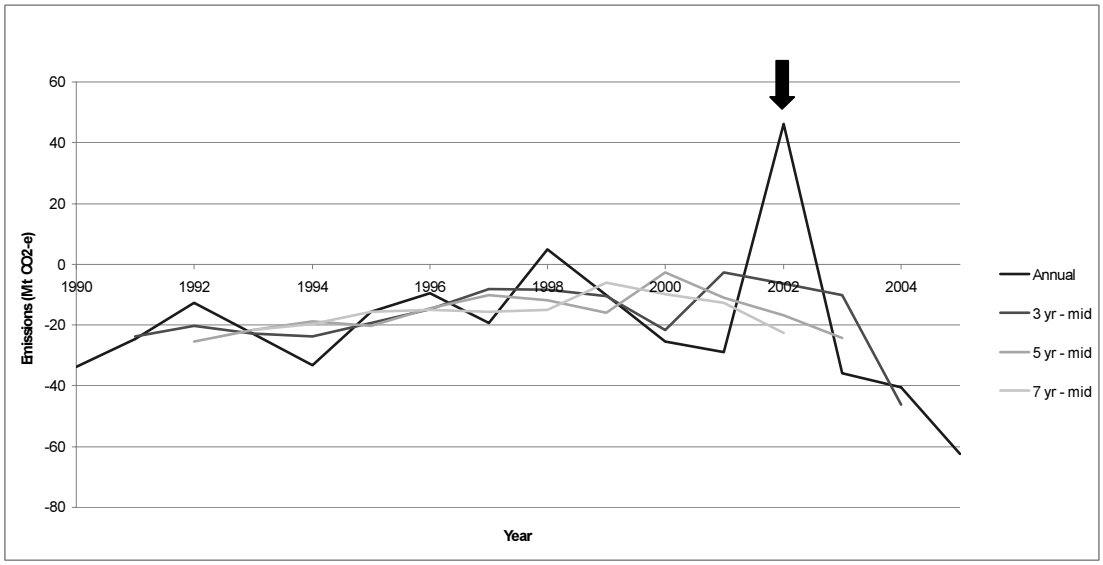
[1] IPCC (2003) Good Practice Guidance for Land Use, Land-Use Change and Forestry, Chapter 3 LUCF Sector Good Practice Guidance, Section 3.2.1.4.2.

Figure 3. Annual Australian rainfall and Vapour Pressure Deficit (1970-2005)



Source: Department of Climate Change

Figure 4. Carbon stock changes in cropland (1990-2005), showing both annual estimates and rolling averages (mid-point averages of 3-, 5- and 7-year periods)



Source: 2005 National Greenhouse Gas Inventory, Department of Climate Change

The change in rainfall alone led to around a 70 Mt CO_2-e spike in cropland emissions in 2002, which was recovered in 2003 (see Figures 3 and 4). This spike is significant – roughly 12 per cent of Australia's base-year emissions.

The effect of reporting using a 3-year, 5-year and 7-year rolling average is shown in Figure 4 to illustrate this approach. All averaging flattens the spike in 2002 by spreading its impact across a number of reporting years.

C. Harvested Wood Products

The current approach to harvested wood products assumes instant oxidation in the year of harvest. As part of the stepwise process we are taking in considering LULUCF issues, Australia will be seeking to review this current approach to better reflect the potential contribution harvested wood products can make in Parties' accounting.

Emissions and removals should be reported and accounted for at the time and place they occur. In addition, the presence of existing carbon stocks which store carbon but do not impact upon the atmosphere should be excluded from accounting. Accounting methodologies also need to be practical and avoid the potential to create incentives for deforestation in developed or developing countries.

Australia will be actively seeking a post-2012 outcome that includes a more complete and balanced accounting approach for harvested wood products. The driver for an improved accounting treatment is to ensure national inventories more accurately reflect *what the atmosphere sees*. Australia considers that changes to the approach to harvested wood products must be soundly based in science, support national policies that promote continuous improvements in forest management, and provide appropriate incentives to reduce emissions.

D. LULUCF in the flexibility mechanisms

The uptake of LULUCF activities in the clean development mechanism could be promoted through reviewing the restrictions on the permanence of Kyoto units related to the LULUCF sector. The use of robust, spatially-explicit estimation methodologies would deliver greater confidence in the measuring, verifying and monitoring of emissions reductions and potentially allow for greater equivalence among Kyoto unit types.

Australia's views on the flexibility mechanisms more broadly are provided in a separate submission.

ATTACHMENT

A. Major natural disturbance: symmetrical exclusion of emissions and removals from national accounts

Parties that report using robust, spatially-explicit estimation methodologies are able to clearly identify units of land subject to major natural disturbance events and the changes in carbon-stocks associated with such an event.

Given this capability, Australia submits that Parties using appropriate estimation methods should be able to choose whether to symmetrically include or exclude from their national accounts carbon dioxide emissions and removals from major natural disturbance on all Article 3.4 lands within their accounts. It may also be appropriate for Parties to be able to choose to symmetrically include or exclude emissions and removals from major natural disturbance on Article 3.3 lands, especially if the afforestation/reforestation credit/debit sub-rule is not continued post-2012. A similar approach is currently agreed for UNFCCC inventory reporting in the 2003 GPG for LULUCF[1].

Clarification would need to be provided around when Parties could appropriately exclude emissions and removals from national accounts. The following issues could be considered in developing an approach:

1. Parties using estimation methodologies with the capability to identify major natural disturbances on units of land could choose to access this provision.
2. Carbon stock changes on the unit of land could continue to be reported to enable transparent monitoring.
3. Credits for removals on a unit of land prior to a loss due to major natural disturbance could be maintained in the Party's national accounts.
4. The unit of land could re-enter a Party's national accounts once the carbon dioxide removals equalled the carbon stock losses from the disturbance event.
5. The provision may apply only to units of land which do not undergo a land-use change from a forest to a non-forest land use. Where a forest to non-forest land-use change occurs as a result of major natural disturbance or following major natural disturbance, the Party could account for the full amount of emissions and removals associated with the disturbance event.
6. The trigger for a reduction in carbon stocks due to a major natural disturbance could be the sum of all carbon pools for that unit of land, specifically:
    - If carbon moved from the above-ground biomass pool to the dead wood pool without a change in total carbon stocks (eg. due to a windthrow event in a forest) the temporary removal of the unit of land may not be triggered.
    - If subsequent decay in the dead wood pool reduced the total carbon stock on that unit of land, and this change was attributed to a major disturbance event, then a Party could exclude the carbon dioxide emissions and subsequent removals.
7. The provision could continue across commitment periods. Parties would need to agree on a year of disturbance before which these provisions would not apply.

B. Inter-annual variability: increasing comparability between inventories

Australia suggests that one approach to create greater comparability between Parties' national accounts is to allow those Parties that use annual climatic data to estimate emissions and removals on units of land, to report using a rolling average.

[1] IPCC (2003) Good Practice Guidance for Land Use, Land-Use Change and Forestry, Chapter 3 LUCF Sector Good Practice Guidance, Section 3.2.1.4.2

The IPCC 2003 GPG for LULUCF states that it is good practice for Parties to report estimates based on either annual climatic data or longer-term averages, such as average environmental conditions or growth functions[2]. These two good practice methods have very different impacts on the influence of climatic variations on Parties' accounts. Parties using an annual approach will have accounts with larger fluctuations from inter-annual climatic variability than Parties using longer-term averages. Not all estimation methods can use longer-term averages in climatic data. For example, spatially explicit, process-based models require at least annual climatic data.

Rules should be adopted to allow Parties to report estimates of emissions and removals using rolling averages over a period appropriate to ensure that a Party can establish a trend reflecting anthropogenic changes. In this way, Parties' national accounts would more comparably reflect changes in activity data and some of the artefacts of choosing different good practice estimation methods would be removed. Reporting using an average is provided for in the Revised 1996 IPCC Guidelines[3] for the Agriculture and Land-Use Change/Forestry categories.

[2] IPCC (2003) Good Practice Guidance for Land Use, Land-Use Change and Forestry, Chapter 4 Supplementary methods and good practice guidance arising from the Kyoto Protocol, Section 4.2.3.7.

[3] IPCC (1996) Revised IPCC Guidelines for National Greenhouse Gas Inventories. Volume 1 Greenhouse Gas Inventory Reporting Instructions, Chapter 2, Reporting the National Inventory, Table 2-1, page 2.3

PAPER NO. 5F: AUSTRALIA

Legal options for the post-2012 outcome. Submission to the AWG-LCA and AWG-KP

This submission provides initial Australian views on two possible legal options for the post-2012 outcome. The outcome will be the combined result of the AWG-LCA and the AWG-KP. Australia intends to provide further detailed proposals on possible legal approaches during the course of 2009.

Australia reiterates its commitment to both the United Nations Framework Convention on Climate Change (the 'Convention') and the Kyoto Protocol. The post-2012 outcome must necessarily build on the lessons learnt from the implementation of these two treaties. Australia will be among those countries moving decisively to address climate change, including through the full implementation of its commitments.

Australia considers that any post-2012 outcome should lead to an enhanced global commitment to mitigate and adapt to climate change, supported by greater cooperation on technology and assistance for clean development.

Australia presents the following views from the perspective that the strongest and most effective post-2012 outcome will be one that can be ratified by as many parties as possible, including by the major economies. The post-2012 outcome will only achieve its purpose if implemented. The climate change regime will be severely undermined if future agreements go unratified or fail to result in action in key countries.

Australia considers that there are two broad legal options for inscribing the commitments of parties to a post-2012 outcome. That is, the post-2012 outcome will consist of either (a) two protocols in the form of an amended Kyoto Protocol and a new protocol under the Convention; or (b) a single, new protocol that unifies action under the Convention and integrates the Kyoto Protocol. Under either option, the content of commitments would not differ in substance.

A post-2012 outcome consisting of two protocols would see an amended Kyoto Protocol detailing a set of commitments for developed countries prepared to take action under the Kyoto Protocol, as well as a new protocol to the Convention to inscribe commitments for all countries, including with regard to elements of the Bali Action Plan. Both protocols would be agreed together as a part of a whole and indivisible package and require appropriately connected entry into force provisions.

A single, new protocol to the Convention would consolidate all parties' commitments to further operationalise the Convention. This protocol would supersede and incorporate key elements of the Kyoto Protocol but in no way diminish Kyoto Protocol commitments. A new protocol would provide a more comprehensive and ambitious basis for future action and has precedent in international law.[1] A unified protocol would help streamline implementation and avoid interpretation difficulties likely to arise from having two protocols with similar provisions, such as on adaptation financing or flexibility mechanisms.

Under either option, the body of a new protocol to the Convention would detail the rules and mechanisms for achieving the Convention's objectives, including with regard to technology cooperation, support for clean development and flexibility mechanisms. Commitments for individual parties would be contained in separate national schedules designed to promote measurable, reportable and verifiable action, enhance flexibility and reflect differing national circumstances and capacities.

Either option for achieving the post-2012 outcome will require extensive legal consideration by Parties. The AWG-LCA's 2009 work plan will require a dedicated component addressing legal matters, which should complement on planned legal discussions in the AWG-KP. This will be a vital part of the work before Parties as the effort to achieve a comprehensive, effective and fair post-2012 outcome moves into full negotiating mode in 2009.

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[1] For example, in 1996 Parties agreed to modernise and replace the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* 1972 ("London Convention") with a more comprehensive and ambitious Protocol ("London Protocol").

PAPER NO. 5G: AUSTRALIA

Mitigation

Submission to the AWG-LCA and the AWG-KP

This submission provides the further views of Australia on the matter of mitigation of global greenhouse gas emissions. It addresses a number of policy matters pertinent to mitigation including the collective mid-term and long-term ambition; the approach of common but differentiated responsibilities and respective capabilities; comparability of effort; and measurable, reportable and verifiable national commitments and actions. It also addresses several technical matters that are central to defining the way forward, such as the application of assigned amounts, base years, and the possible length of a second commitment period.

A collective mid-term and long term ambition

It is desirable that countries agree on a mid-term ambition for constraining global emissions. An integral part of this goal should be a collective mid-term emission reduction goal for developed countries. Both should be expressed as a percentage by which Parties aim to collectively restrain their emissions by a certain date.[1]

Such collective mid-term goals would help define the trajectory for emissions reductions towards the long-term emissions reduction goal, a key part of the Bali mandate. As such these goals should be developed in conjunction with, and not in isolation of, work to define the long-term global goal for emissions reductions. Work on developing the mid-term and long-term goals should begin in earnest at Poznan.

In terms of collective effort, each collective goal should incorporate a single percentage ambition, a base year from which this ambition is measured against, and a target year by which this global aspiration may be achieved. This follows past precedent.[2]

A spectrum of effort

The approach of taking into account common but differentiated responsibilities and respective capabilities is an important part of a core principle of the Convention.

All countries have a common responsibility to address climate change. A key objective for the post-2012 outcome for all should be for as many countries as possible, including all major economies, to agree to deliver national mitigation actions. Such actions should be measurable, reportable and verifiable.

The participation of all major economies in an effective post-2012 outcome is particularly critical. The top six emitters (China, United States, EU, Indonesia, Brazil and Russia) account for some 60 per cent of global emissions. The top 20 emitters, including Australia, account for more than 80 per cent of global emissions.

The extent of individual commitments as part of a post-2012 outcome would naturally differ according to national circumstances. We should strive to achieve concerted global action with countries committing to individual actions in a way that is comparable across the spectrum of national circumstances. Broader participation is most likely if countries are able to adopt different types and levels of commitments.

Australia and other advanced economies should continue to take the lead in mitigating climate change. All developed countries should agree to economy-wide targets as part of the post-2012 outcome. These targets should represent a comparable mitigation effort taking into account national circumstances, such as population growth, economic growth, energy production structure and natural resource endowment. This follows the approach that underpins the Kyoto Protocol.

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[1] An example is Australia's pledge to reduce national emissions by 60 per cent by 2050 on 2000 levels.

[2] For example, in the first commitment period, Annex I Parties agreed to a collective goal of trying to reduce their overall emissions by five per cent over 1990 levels.

A significant number of advanced economies are currently not members of Annex I. Examples of such include Singapore, Malta and Korea among others. Australia invites all advanced economies to take comparable actions under item b(i) of the Bali Action Plan. It is desirable also for all advanced economies that have not yet nominated to join Annex I to do so.

In addition to the reduction commitments by advanced economies, many studies demonstrate that developing countries will need to soon put in place effective policies and measures to reduce emissions below business as usual if the climate is to be stabilised at moderate levels. Thus, as part of the post-2012 outcome, as many developing countries as possible should make policy commitments implementing a range of mitigation actions.

Many developing countries have already adopted national programs that address climate change. Australia welcomes these efforts and looks forward to seeing these, and other measures and further efforts reflected appropriately in the post-2012 outcome.

Australia thus supports the recognition in the post-2012 outcome of a broad range of policies and measures, and encourages those with the national capacity to do so adopting more ambitious commitments. While incentives for clean development will continue to be important, self-funded national actions by developing countries will be also necessary.

There are also a number of Parties whose circumstances allow them to make a substantive national contribution as part of a post-2012 outcome. These countries may wish to work towards committing to a blend of actions under both b(i) and b(ii).
These actions by non-Annex I countries should lead to a substantial deviation in emissions from what they would otherwise be to allow global emissions to peak and then decline steeply thereafter.

Comparability of effort

Mitigation will be best enhanced by countries making a comparable effort to others at a similar stage of development taking into account differing national circumstances.

Comparable effort would be represented by the entire portfolio of a country's effort. Mitigations commitments and actions could include:

8. economy-wide targets for advanced economies;
9. binding national actions by developing countries in a measurable, reportable and verifiable manner; cooperative sectoral approaches;
10. support for research, development and diffusion of clean technologies; and
11. support for clean development, including assistance to build capacity of less developed countries to implement climate change policies and measures.

For advanced economies, the most important component of their effort will be the nature of their individual economy-wide targets. For the Kyoto Protocol's first commitment period, it was agreed that what represented comparable effort by individual Annex-I Parties resulted in a spread of different national targets.

Discussion of a collective mid-term ambition will help guide Parties in their efforts to individually determine their ambitions. The individual effort by advanced economies would reflect national circumstances and when inscribed into commitments will be spread in a band above and below the collective ambition.[3]

[3] For example, the amount by which Annex-I Parties individually pledged to limit their emissions in the first commitment period ranged from 92 per cent below 1990 levels to 110 per cent above 1990 levels. This is a spread in national commitments of 18 percentage points. The 15 original members of the European Union (EU) later negotiated a bubble agreement that recognised the differing national circumstances of its members. In collectively meeting the EU target, some members pledged to take deeper cuts than others. As a result targets within the EU bubble for the first commitment period ranged from 72 per cent below 1990 levels (Luxembourg) to 127 per cent above 1990 levels (Portugal). This is a spread of 55 percentage points.

Measurable, reportable and verifiable mitigation

The Bali Action Plan calls for measurable, reportable and verifiable (MRV) mitigation by developed and developing countries.

(a) Measurement

MRV commitments and actions should focus on actions capable of achieving quantifiable emissions limitation or reduction outcomes. This includes actions for which outcomes are not directly measurable, but can be extrapolated or projected based on agreed methodologies. In many cases it would not be necessary to measure the quantifiable outcomes of individual actions; these could be combined to produce an aggregate result.

Actions that cannot easily be measured in terms of emissions limitation or reduction outcomes should not be ignored. For example, actions relating to technology research and development, capacity building, education, behaviour change or enabling environments can all deliver important mitigation benefits. In these cases it may be appropriate to consider measurement, reporting and verification as individual concepts (i.e. excluding "measurement" as a requirement) or to consider "measurement" in relation to alternative indicators, such as inputs or implementation.

(b) Reporting

The current reporting system under Articles 4 and 12 of the Convention provides a good foundation for the MRV of commitments and actions under 1(b)(i) and 1(b)(ii) of the Bali Action Plan.

Enhancements to strengthen Article 12 and the reporting guidelines for both developed and developing countries will be necessary, building on existing national communications and greenhouse gas inventories as mechanisms for Parties to fulfil their MRV requirements. Improving the quality, consistency and transparency of information communicated by Parties will be an essential step toward meeting Parties' MRV requirements under the Bali Action Plan. This will also allow national mitigation efforts to be better recognised and considered as part of the global effort.

Annual Annex I greenhouse gas inventories provide a reliable basis for tracking overall emissions and emissions trends of Annex I Parties. However these account for less than half of global emissions.

There is a clear need to move towards standardised reporting requirements across both developed and developing countries. In particular, more regular and comprehensive reporting of inventory data will be fundamental to enable mitigation potential to be better identified and assessed, to ensure progress towards the implementation of the Convention and towards our medium-term and long-term goals.

Moves towards more comprehensive, regular and reliable inventory reporting by all major and emerging economies will be necessary in the future multilateral regime. Those countries that lack the current capacity to prepare robust economy-wide greenhouse gas inventories should work to put such systems in place. In the first instance effort could focus on regular and comprehensive inventories of emissions in key sectors. Reporting requirements for LDCs should be light.

Continued technology, financing and capacity-building support to improve reporting will be necessary. In addition to Annex I Parties, a number of more advanced developing countries have significant experience through the development of their national communications, and will be well-placed to assist less capable countries to enhance their capacity. Similarly, international organisations with experience collating emissions data will be a useful source of expertise.

(c) Verification

Appropriate verification will be important to build confidence among Parties, as well as ensuring that the COP has adequate information to assess progress against the objectives of the Convention and the Bali Action Plan. In order for Parties to meet the "verifiable" element of their MRV requirements, third party review of MRV actions will be essential.

An approach that builds on the current 'in-depth review' for Annex I national communications will be necessary to enable all Parties to meet their MRV requirements. The standard of verification required for actions supported by MRV technology, financing and capacity-building, and for actions capable of generating credits, will be higher than for national actions. The overall verification requirements for LDCs would be lighter than the standard expected of others.

(d) International support

The current reporting system provides a good starting point for measuring, reporting and verifying technology, financing and capacity-building support for mitigation commitments and actions.

Annex I Parties are already required to report information on the "new and additional" financial resources provided by them, including through bilateral, regional and other multilateral channels, and steps they have taken to promote, facilitate and finance the transfer of technology and to support the development and enhancement of the endogenous capacities and technologies of developing countries.

The reporting guidelines for both developed and developing countries should be revised to ensure more comprehensive and consistent reporting to meet MRV support requirements. Parties should also provide information on efforts to encourage technology, financing and capacity-building support from non public sources.

Annex I and Annex II

Since the Convention was adopted in 1992 no work has been done to better differentiate the responsibilities of Parties beyond the simple list of Parties in Annex I and Annex II to the Convention. Annex II is based on which States were members to the OECD in 1992, and Annex I included additional States that were undergoing the process of transition to a market economy. Neither list reflects current realities (the attachments provide some sense of this).

Given the considerable variation in the circumstances of the 192 countries in the UNFCCC, there can be many different approaches to differentiating and grouping countries according to such circumstances. The development of a set of indicators would help assist Parties in applying the principle of common but differentiated responsibilities.

Base years and assigned amounts

For countries, like Australia, with mitigation commitments under the Kyoto Protocol, the critical obligation is a country's assigned amount. This is the total tonnes of carbon dioxide equivalent that a nation is allocated for the commitment period.

For the first commitment period a base year was used to help determine the assigned amount of emissions for each country. Although the base year used most commonly for this purpose was 1990, a number of Parties used different years for their base year. This was mainly to allow for the use of more accurate data.

Over time, and as part of the post-2012 outcome, more countries may assume obligations in the form of assigned amounts. For the purposes of measuring and reporting mitigation efforts, countries that are making commitments for the first time should use the latest comprehensive data possible to establish a base line. This will provide the highest confidence in the fidelity and robustness of the data. If the most accurate and robust data available is for 2005, for example, then this should be used in preference to earlier years.

For countries that already have assigned amounts the original base year is, in a sense, superfluous. The most important factor in judging comparable effort for the second commitment period will be the amount

by which individual countries strive to reduce their assigned amount relative to that provided in the first commitment period[4].

Australia will announce a national mid-term goal for reducing emissions by 2020 in December 2008 in advance of the AWG-LCA and AWG-KP moving into full negotiating mode in 2009. It will greatly assist the negotiations if individual countries nominate a national ambition early in 2009 in a similar fashion to Australia. To date very few countries have done this.

Indicators to guide comparable effort

The assigned amount by which a country nominates to be bound as part of the post-2012 outcome will be a national decision. It was agreed, as part of the Bali mandate, that economy-wide targets should represent comparable effort by all advanced economies while taking into account national circumstances.

A country's physical, economic and energy situation are key determinants of national circumstance. These structural factors are difficult to quantify in an easily comparable way as the data sets relate to individual aspects of country circumstances. For example, a country's physical size is an important natural determinant of how efficient its power distribution network can be made, or the amount by which road and rail transport emissions can be lowered. The amounts of heating and cooling days are also an important natural determinant.

Mitigation costs will vary widely across economies, both in terms of aggregate economic costs and the marginal cost of reducing each tonne of emissions. Aggregate costs and marginal costs have different determinants. Aggregate costs largely depend on the share of energy- and emission-intensive industries in the economy (as this determines the share of economic restructuring required). Marginal costs depend on the nature of emission reduction opportunities in the economy.

Two general factors that can provide general guidance on the matter of comparability of effort are:

Per capita effort (the amount that countries aim to reduce emissions per capita in the second commitment period over the first commitment period).

Aggregate economic costs (the aggregate economic costs of mitigation action that countries may face in the second commitment period over the first commitment period as expressed as a percentage of GNP).

The AWG-LCA and AWG-KP should address the above indicators and country circumstances as part of the ongoing negotiations in 2009. This should be reflected in the relevant work plans at Poznan.

Length of a second commitment period

A critical matter that has yet to be addressed by the negotiation is the length of the second commitment period. If the second commitment period is the same five-year length as the first it would run from 2013 to 2017, with the nominal target averaged to 2015. The assigned amount should continue to be expressed as covering the entire commitment period. The preferred length of the commitment period will depend on the breath and depth of commitments made by all major economies as part of the post-2012 outcome.

[4] Australia's assigned amount for the five years of the first commitment period is just under 3 billion tonnes CO^2-e.

Attachment A 'Ukraine' List

According to the IMF, the following 44 countries had a higher GDP per capita (PPP) in 2007 than the Ukraine, an Annex I country.

Antigua and Barbuda
Argentina
Bahamas
Bahrain
Barbados
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Chile
China
Colombia
Costa Rica
Cyprus
Dominican Republic
Equatorial Guinea
Grenada
Iran
Israel
Kazakhstan
Korea
Kuwait
Libya
Malaysia
Maldives
Malta
Mauritius
Mexico
Nambia
Oman
Panama
Qatar
Saudi Arabia
Seychelles
Singapore
South Africa
St Kitts and Nevis
St Vincent and the Grenadines
Thailand
Trinidad and Tobago
Tunisia
Turkmenistan
United Arab Emirates
Uruguay

Attachment B 'Portugal' List

When Annex II was drafted the Party that set the benchmark in terms of GDP per capita (current) for inclusion in Annex II was Portugal. 15 Parties in 2007 had a higher GDP per capita than Portugal, as follows:

Bahamas
Bahrain
Brunei Darussalam
Czech Republic
Cyprus
Israel
Korea
Kuwait
Malta
Oman
Qatar
Saudi Arabia
Slovenia
Singapore
United Arab Emirates

Attachment C 'Turkey' List

According to the United Nations Development Program, the following 43 non-Annex I Parties had a greater Human Development Index (HDI) in 2005 (latest year) than Turkey, an Annex I Party.

Albania
Antigua and Barbuda
Argentina
Bahamas
Bahrain
Barbados
Belize
Bosnia and Herzegovina
Brazil
Brunei Darussalam
Chile
China
Colombia
Costa Rica
Cyprus
Dominica
Dominican Republic
Grenada
Israel
Kazakhstan
Korea
Libya
Macedonia, FYR
Malaysia
Malta
Mauritius
Mexico
Oman
Panama
Qatar
Samoa
Saudi Arabia
Seychelles
Singapore
St Kitts and Nevis
St Vincent and the Grenadines
Tonga
Thailand
Trinidad and Tobago
United Arab Emirates
Uruguay
Venezuela

PAPER NO. 5H: AUSTRALIA

Reducing emissions from deforestation and forest degradation in developing countries (REDD)

Submission to the AWG-LCA, AWG-KP and SBSTA

This submission provides further Australian views on reducing emissions from deforestation and forest degradation in developing countries (REDD).

Deforestation accounts for almost 20 per cent of global greenhouse gas emissions, with around 13 million hectares of the world's forests being cleared each year. REDD can make a significant contribution to the global mitigation of climate change and should be included in a post 2012 climate change outcome. Recent modelling by Australia indicates that the inclusion of REDD and other forest-related activities in a post 2012 global climate change outcome could reduce global mitigation costs by 20-25 per cent.

REDD was not included in the first commitment period of the Kyoto Protocol because there was not sufficient technical expertise to ensure that emissions reductions from deforestation were genuine. Parties concluded at the Tokyo REDD workshop (25-27 June 2008) that the technical and methodological expertise now exists to deal with REDD and that there is no technical impediment to the inclusion of REDD. The challenge is for Parties to find solutions to policy challenges and ensure REDD is included in a post 2012 outcome on climate change.

There is currently no dedicated agenda item for detailed discussion on REDD policy in the UNFCCC negotiations. The AWG-LCA should provide a forum for this discussion, with negotiations on methodological issues proceeding concurrently in SBSTA.

A REDD mechanism will need to be structured in such a way as to promote equity, environmental effectiveness and economic efficiency. It must provide incentives for broad participation by relevant developing countries, but also encourage the participation of developed countries and the private sector—crucial funding sources for REDD.

Any mechanism established to facilitate REDD will need to be flexible to accommodate different national circumstances (including rates of deforestation, and institutional arrangements). Participation should be voluntary and respect national sovereignty. It should not penalise those Parties that are taking action on REDD now or will do so prior to 2013.

A priority should be placed on achieving emissions reductions from deforestation and forest degradation, whilst maximising its many co-benefits. Co-benefits include biodiversity conservation, air, soil and water pollution reduction and the improvement of rights of indigenous and forest dependent peoples.

Parties should, where relevant, consider information and lessons learnt in other international fora, including the Convention on Biological Diversity, the United Nations Forum on Forests, the Food and Agriculture Organization and the International Tropical Timber Organization.

Robust methodologies will be required to support policy approaches and show that REDD is real, measurable, permanent, additional and independently verifiable. The necessary carbon monitoring technologies exist to support a market based mechanism for REDD that can accurately monitor permanence and leakage. Accounting methodologies need to be agreed for REDD baselines and emissions reductions. National sustainable forest management frameworks will be required to support REDD.

Approaches to deal with REDD will need to be broadly consistent with those for reporting emissions and removals from the land-use, land-use change and forestry (LULUCF) sector. Depending on the policy approach that is adopted to address REDD, some differences may be required, for example on baselines or different methods to manage permanence for REDD as opposed to afforestation and reforestation activities.

Australia believes REDD is best achieved through a market based mechanism established under the UNFCCC as part of a post 2012 outcome on climate change. A market based mechanism will provide incentives for REDD, and will leverage private capital to mobilise investment on the scale that will be needed to effectively and efficiently deal with REDD. Currently, the UNFCCC supports the application of market based instruments to mitigate greenhouse gas emissions through its Kyoto Protocol. REDD should be treated in the same way as other sources and sinks, including afforestation and reforestation, that are included in existing market based mechanisms.

A phased approach may be warranted until a REDD market matures. In the first phase, support for readiness and capacity building for Parties to participate in REDD markets can be provided (and is being provided now) through bilateral support (for example Australia's International Forest Carbon Initiative) or funds (for example the World Bank's Forest Carbon Partnership Facility and Forest Investment Program). But the objective should be to transition to a market based mechanism with the full and independent participation of all relevant Parties.

More details on Australia's views on policy, technical and methodological REDD issues can be found in Attachment A. Lessons learned from our joint demonstration activities with the Government of Indonesia can be found at Attachment B.

Attachment A

Policy, technical and methodological approaches to REDD

Institutional and policy frameworks for REDD

It is not appropriate for the UNFCCC to mandate specific national institutional and policy frameworks for individual Parties. Parties to the UNFCCC should instead develop institutional and policy prerequisites that must be met for Parties to participate in REDD.

Australia proposes that participating Parties would need to demonstrate:

i. that REDD emissions reductions are real, measurable, permanent, additional and independently verifiable;

ii. implementation of a national forest carbon monitoring and accounting systems that provides robust, reliable, timely and transparent monitoring of changes in forest and carbon stocks, permanence and leakage;

iii. implementation of national and/or sub-national level policy, governance, enforcement and regulatory frameworks that are capable of ensuring that action to address REDD is real and sustained;

iv. implementation of national systems that ensure that income derived from REDD is directed in such a way as to ensure that benefits are maximised (for example that the local communities involved in REDD receive real benefits from their contribution to reducing greenhouse gas emissions); and

v. consultations and engagement of forest dependent communities.

At the international level, it will be necessary to establish a mechanism to administer REDD under the UNFCCC.

Leakage, permanence and additionality

In the negotiations on a future REDD mechanism, Parties will need to consider issues such as permanence, additionality and leakage. These issues should be considered with the broader activity of the UNFCCC and Kyoto Protocol in mind. It may not be appropriate for onerous requirements to be imposed for REDD where they are not imposed in other comparable areas.

In a REDD mechanism, risk management strategies will need to be in place to deal with leakage, permanence and additionality when and if they occur. One way to deal with these issues is to withhold a percentage of credits, which could be released if leakage does not occur and if permanence and additionality are ensured. Provision of incentives can also be structured in such a way as to provide a long term performance-based revenue stream. Another way to address these issues is to apply penalties if leakage occurs or if REDD activities are not permanent or additional—this could be difficult to administer and also deter or reduce incentives for action on REDD.

Broad incentives to address REDD will need to be provided to encourage action. If Parties are to prevent leakage and ensure additionality and permanence of REDD activities these incentives should discourage leakage by at least equating to the opportunity costs of not deforesting.

Leakage can occur within or across national boundaries. Leakage is best addressed through prevention, rather than penalties when it occurs. National systems for REDD will enable intra-national leakage to be

managed. A REDD mechanism should encourage broad participation by developing countries to assist reduce the risk of, and manage, international leakage.

Technical and Methodological Approaches for REDD

Carbon accounting and monitoring

Robust carbon accounting and monitoring methodologies will be required to support policy approaches and show that REDD is real, measurable, permanent, additional and independently verifiable. The necessary carbon monitoring technologies exist to support a market based mechanism for REDD that can accurately monitor permanence and leakage. Accounting methodologies need to be agreed for REDD baselines and emissions reductions.

It is not appropriate for the UNFCCC to mandate specific frameworks for individual Parties. The UNFCCC should instead develop independently verifiable minimum performance specifications that must be met for Parties to participate in REDD. These should be developed in the context of national sustainable forest management systems. Establishing robust national systems to meet these performance specifications will place a burden on developing countries—capacity building should be provided to assist countries in their efforts.

Carbon monitoring and accounting systems must provide robust, timely and transparent information to give certainty that emission reductions from forest activities are credible and genuine. It may be appropriate for specific performance specifications for REDD to be developed by the IPCC, based on its existing advice. To this end, SBSTA should request the IPCC to report on the applicability of its existing advice to REDD and make a request on further methodological guidance that might be needed.

Performance specifications for REDD should specify that systems:

i. are national level and spatially explicit;

ii. are real time (or near real time);

iii. covers border to border of a country;

iv. are certain, transparent and continuous in the areas of data acquisition, processing emissions estimation and accounting;

v. include an assessment of forest degradation to the extent possible; and

vi. have the capacity to assess permanence, leakage and additionality.

The development of a global carbon monitoring system through the UNFCCC may assist deal with issues such as leakage and could inform a comprehensive global approach to capacity building.

Baselines

Credible and robust baseline calculation can assist to identify leakage, permanence and additionality. Leakage, permanence and additionality can all be identified at the sub-national level through robust national carbon accounting and monitoring systems. They can be identified at the international level through broad adoption of these national-level carbon accounting and monitoring systems and communication of monitoring results between Parties (including through a global carbon monitoring system).

Credibility of baselines will be critical to the success of a market based approach. In order to be credible, baselines should take into account national circumstances and be designed to avoid the risk of perverse incentives. In order to be robust and effective, any approach to developing baselines will need to take into account an appropriately long time series of deforestation, emissions trends and carbon stock data (or selection of a sufficient number of base years) and climatic variability.

It is possible to calculate baselines on a purely historical basis. In order to ensure broad participation of countries in a REDD mechanism, it may be more appropriate for historical baselines to take national circumstances into account. The more recent the period used for the baseline, the more accurate data is likely to be. Another approach to baselines is for the REDD baseline to be the lowest level of deforestation and forest degradation that a country would like to achieve. Incentives can then be provided compared to business as usual. Baselines can also be negotiated. There may be potential for baselines that take a hybrid approach.

Emissions reductions should be measured against national baselines. Sub-national baseline approaches can also be developed, particularly since these baselines can provide critical inputs into the national baseline.

Leakage

Leakage can be identified at the sub-national level using 'Approach 3' IPCC methodologies (subsequent carbon accounting may be Tier 2 or 3) for national-level carbon monitoring systems. At the international level it can be identified through broad adoption of these national-level carbon monitoring systems and communication of monitoring results between Parties.

Leakage can also be monitored by the inclusion of reporting under the Convention for harvested wood products by Annex I countries that identifies imports from both Annex I and developing countries. This reporting is considered separate to any possible accounting rules for harvested wood products in a future international agreement and should not prejudice discussions in the relevant negotiations. Forest certification can also aid in the monitoring of leakage.

Definitions

Definitions for REDD should be consistent, both within REDD and with those developed for LULUCF and in the broader UNFCCC context. The development of definitions should build on existing work and should be pragmatic: they should focus on the 'material' and not let the 'perfect' (complete inclusiveness) defeat the 'good' (addressing most of REDD).

Workplan for REDD negotiations

REDD should be negotiated concurrently in the AWG-LCA and SBSTA. Policy discussions should be made in the AWG-LCA and methodological discussions in SBSTA.

Negotiating REDD in both the AWG-LCA and SBSTA will increase the negotiating obligations of Parties. Meetings in both bodies should be scheduled so as they do not clash with each other. The number of meetings should also be limited so as the combined meetings in the AWG-LCA and SBSTA together constitute a reasonable negotiating load.

Policy outcomes should drive methodological work, and that this should be reflected in the workplans for both the AWG-LCA and SBSTA.

Parties may require more time to discuss REDD. An additional workshop would provide an opportunity for further discussions. These discussions should focus on outstanding policy and technical issues, such as leakage, permanence and additionality.

Australia understands that this workshop would put pressure on the resources of some Parties, and reiterates willingness to consider options for supporting this workshop.

Issues should be divided between the AWG-LCA and SBSTA as outlined below.

Policy issues to be considered by the AWG-LCA

The following issues are policy issues and should be considered by the AWG-LCA:

i. provision of positive incentives and financing options for REDD;

(a) Market based

(b) Non market based

(c) Combination of market and non market based approaches

ii. means to address leakage;

iii. means to ensure additionality;

iv. means to address permanence;

v. early action for REDD;

vi. how issues such as forest conservation, sustainable management of forests, and enhancement of forest carbon stocks link to REDD;

vii. national and sub-national approaches;

viii. means to encourage capacity building requirements for REDD;

ix. participation of local communities and indigenous peoples; and

x. promotion of co-benefits.

Technical and methodological issues to be considered by SBSTA

The following issues are methodological issues and should be considered by SBSTA:

i. estimation and monitoring;

ii. baselines (reference emissions levels);

iii. means to identify and monitor leakage;

iv. means to monitor permanence and identify non-permanence;

v. lessons learned from demonstration activities;

vi. identification of capacity building needs;

vii. financial implications for implementing methodological approaches;

viii. institutional implications for implementing methodological approaches;

ix. comparability and transparency in assessment of carbon stocks;

x. implications of methodological approaches for indigenous people and local communities;

xi. implications of definitions for REDD;

xii. means to deal with uncertainty of estimates; and

xiii. effectiveness of actions.

Attachment B

A practical case study: the Kalimantan demonstration activity

As called for in Bali, the international community must act now to undertake activities to address deforestation in developing countries and to establish the necessary systems and financial mechanisms to ensure long term emission reductions. Australia is doing so through the International Forest Carbon Initiative.

In this Attachment, Australia provides some initial lessons learned drawn from our experience working with Indonesia through the Indonesia – Australia Forest Carbon Partnership. The Partnership operates in three key areas: strategic policy dialogue on climate change, increasing Indonesia's carbon accounting capacity and identifying and implementing incentive-based demonstration activities.

Indonesia and Australia are currently working on a demonstration activity in the carbon rich peatland forests of Central Kalimantan—the Kalimantan Forests and Climate Partnership (KFCP). This Partnership is the first, large-scale demonstration activity of its kind in Indonesia. It will trial an innovative, market-oriented approach to financing and implementing measures to reduce emissions from deforestation and forest degradation in Central Kalimantan, Indonesia. Australia has committed $30 million to establish the KFCP.

Selecting a location for a demonstration activity

In order to respect national sovereignty, and ensure support for a demonstration activity, the national government of the host country must be consulted on and agree the location of demonstration activities. In addition sub-national levels of government and local communities should also be consulted. The availability of experienced partners (such as other donors, academic institutions, national and international non-government organisations and private organisations already working in the area) is an important consideration in site selection.

It is also advisable to ensure that spatial planning for the location is adequate and that forest carbon rights are enforceable. Demonstration activities are best selected based on scientific considerations, potential to generate lessons on key themes (such as methodologies, payment mechanisms, land tenure issues) and calculations of potential emissions savings, rather than on purely political considerations. However, political considerations must also be taken into account to ensure adequate support from the host country government and stakeholders.

The KFCP will be located in degraded and partially degraded peat swamp forest in Central Kalimantan. These forests contain very high carbon stocks, mostly in below-ground biomass. The exposed peat degrades rapidly particularly where drainage has caused drying of the upper soil and makes them fire-prone. Land clearing and fires in Indonesia's peatlands are a major source of global greenhouse gas emissions. Thus, halting or reversing deforestation and degradation offers a large potential for emission reductions, not only in the demonstration area, but throughout the peatlands of the region.
The site for the KFCP is a single peat dome of around 100,000 hectares. Water flows outward from the dome into the surrounding rivers, so the hydrology dictates a 'whole of dome' (or whole-of-ecosystem) approach to managing and conserving the peat swamp forest. Similarly, ecological criteria may (or may not) favour a whole ecosystem approach to reducing emissions from deforestation and forest degradation (REDD) in other forest types. Clearly, site-specific biophysical characteristics are of key importance in designing REDD interventions.

Identification of drivers of deforestation and forest degradation

The causes of deforestation and forest degradation that need to be addressed through specific interventions or strategies in a REDD demonstration activity are often quite site-specific and cannot necessarily be predicted in sufficient detail from national-level data and models of drivers. Site-specific causes and their effects vary according to bio-physical conditions, social and economic factors in the local context and beyond it, and the history of forest exploitation in and around the site. Historical averages or trends may not be a reliable guide if they are overwhelmed by rare natural or anthropogenic disturbance.

If more general drivers of deforestation and forest degradation—such as illegal logging or agricultural expansion—are of interest, then sites and approaches for REDD demonstrations could also be selected with such drivers in mind.

For the KFCP, the current condition of forests and the levels of greenhouse gas emissions are predominantly caused by a unique historical event—the Mega Rice Project—that created a large but relatively brief burst of deforestation, forest degradation, and consequent greenhouse gas emissions. Historical averages or trends before that event are of little use in understanding the current state of the forest in areas directly affected by the Mega Rice Project, though they do help explain the condition of some residual forest patches that were logged before and after the Mega Rice Project.

Addressing specific drivers

Interventions can be grouped into two categories: those that address site-specific causes through direct mitigation measures and those that address more widespread or systematic causes through policy measures. Some threats need to be tackled in both ways.

For example in the KFCP, a direct, site-specific mitigation measure is canal-blocking to restore the hydrology of a peat dome that is suffering degradation from having been drained. Coordinated action by government agencies and others can address pervasive threats, such as preventing and suppressing illegal logging. Where small canals have been dug to illegally extract timber from the peat swamp forests, the two interventions (canal-blocking and prevention of illegal logging) need to work together.

Establishing national carbon accounting and monitoring systems

National carbon accounting and monitoring systems need to account for land use change both within and outside forest estates. This means that multiple agencies and all levels of government may need to provide inputs on a whole of government basis.

National carbon accounting and monitoring systems need to build on existing expertise and systems. They also must be designed to fit and serve national circumstances whilst satisfying international rules (that are yet to be designed for REDD) and meet market requirements. There is no ‘one size fits all system’ that can be imported from one country to another: each country needs to design their own system. For example, Indonesia possesses a great deal of technical expertise in the areas of remote sensing, geographic information systems, inventory taking and modelling. National systems should be developed in such a way as to build on the expertise of host countries.

Australia’s approach has been to provide scientific, technical and analytical support for Indonesia’s efforts to develop their own national carbon accounting and monitoring system. Australia is offering advice and assistance to Indonesia as they develop a blueprint on what the functions and performance characteristics should be for their system.

Australia is also offering Indonesia access to sources of data and specialist capability from around the world which Australia is brokering through its partnerships with key countries (such as Japan), international bodies (including the Global Earth Observation System Of Systems) and private organisations (such as the Clinton Climate Initiative). This is the model of partnership which Australia has with countries like Indonesia and China in developing their new generation forest monitoring and carbon accounting on which excellent progress has been made.

Leakage and demonstration activities

Leakage can be addressed locally in the area immediately surrounding the REDD activity, within a larger region such as a landscape or district, and nationally. To address leakage, the KFCP will trial investing locally in sustainable livelihoods that reduce dependence on the use of canals, fire, and land clearing. At a regional level the REDD activity will be implemented within a much larger development planning area covered by national and provincial spatial plans incorporating restrictions on forest conversion. At the national level, it will be designed to fit with national policies and frameworks. The National Carbon Accounting System for Indonesia will be able to identify leakage that may occur at local, regional and national levels.

Legal rights to forest carbon

Genuine and enforceable legal rights to forest carbon are fundamental to the success of a REDD demonstration activity. Rights can be established through a variety of systems, including carbon rights, land tenure arrangements or ownership of forest resources.

The KFCP is approaching this in the context of Indonesian forestry law, which grants or recognises particular types of forest use rights to landowners, forest-dependent communities, private companies, and other entities. This approach has the advantage of building on existing, well understood systems within a recognised legal framework (which is also the basis for the Indonesia's emerging policy on REDD).

Identification of capacity-building needs

The identification of capacity-building needs is best done in close consultation with the host country, at all levels of government.

In a remote area in a developing country, such as where KFCP will be implemented, local capacity is often severely limited. Conversely, local partners with strong ties to the land, such as indigenous community-based organisations, may play a key role in gaining acceptance for REDD, in applying local knowledge, and in ensuring sustainability beyond the initial stages of project development. Local organisations may be best placed to deliver the necessary capacity-building at a grassroots level, but they in turn are likely to need technical and managerial support.

Sharing of lessons learned from demonstration activities

Because REDD policy development is in its early stages internationally, the sharing of lessons learned will contribute greatly to the progress of REDD. It will be important that all countries share their experiences. Australia encourages other countries to also provide lessons learned from demonstration activities and REDD activities more broadly (such as capacity building efforts or analytical work) to the UNFCCC.

Learning during the design and testing of an innovative approach such as REDD is bound to be uneven and somewhat unpredictable. It is important to establish good communications from an early stage within the design team, with key partners, and with a broader set of stakeholders that will eventually be needed to support and sustain the activity (what can be called the 'REDD constituency').

At the beginning of a REDD activity, understanding among key stakeholders of climate change and the role forests play in the carbon cycle is likely to be limited. Therefore, education and outreach about REDD is important from an early stage of the design, leading to a communications strategy to support the REDD demonstration activity.

PAPER NO. 5I: AUSTRALIA

Technology Cooperation

Submission to the AWG-LCA

This submission outlines Australia's views on technology cooperation. It complements Australia's submission on technology transfer to the AWG-LCA in Accra in August 2008.

The development and diffusion of low emission technology is vital to global efforts to decouple emissions growth from economic growth. Australia fully supports the UNFCCC technology framework amended and adopted at COP 13 in Bali, 3/CP.13. The prime responsibility for delivering technology outcomes under the Convention and 3/CP.13 lies with Parties themselves. While pursuing the same objective, technology cooperation is a separate issue to scaling up financing for clean development.

The UNFCCC Secretariat has noted that the private sector is, and will continue to be, the overwhelmingly dominant driver of technology development and deployment[1]. The dispersion of technologies globally is put to effect by the private sector. Intellectual property, in particular, is the domain of the private sector. The attractiveness and efficiency of global and national markets will determine the success of technology cooperation. To date, the private sector has been under-represented in discussions and should be given a greater role.

The key to enhancing investment flows is the creation of appropriate and stable enabling environments, economic incentives and supportive national policy frameworks. Targeted public sector investment in technology cooperation can play an important role, particularly in areas with no market or where the market has failed.

Both developed and developing countries are involved in the production and distribution of low emission and adaptation related technologies at many different levels. Since 1990, many non-Annex I parties have dramatically improved their technological capacities and do not require the same forms or levels of assistance to support technology cooperation. For example, a number of rapidly industrialising non-Annex I countries have demonstrated that they can develop and deploy complex, costly and unique technologies, including highly advanced nuclear, defence and space programs.

Countries with a capacity to develop and deploy clean technologies should focus their efforts on cooperative research, development and the deployment of new clean technologies with others. International efforts to facilitate the deployment of clean technologies should prioritise those countries – in particular the least developed countries – that will benefit most.

In line with the objectives of Bali Action Plan subparagraph 1(d), Australia plays an active role in the Asia-Pacific Partnership on Clean Development and Climate. The Partnership supports the development of new and proven technologies for renewable energy, reducing emissions from fossil fuels and improving energy efficiency. It focuses on developing practical projects that involve a high level of cooperation between government and industry in and across developed and developing country partners in the Asia Pacific region – Australia, China, India, Japan, the Republic of Korea, the United States of America and Canada.

In September 2008 the Australian Prime Minister announced Australia's proposal to establish the Global Carbon Capture and Storage Initiative, the first stage of which will be to establish a Global Carbon Capture and Storage Institute. The focus of the Institute will be to accelerate the development of carbon dioxide capture and storage (CCS) technology globally by facilitating public private partnerships in flagship demonstration projects, leveraging and sharing experiences and identifying and supporting the necessary research.

[1] Investment and financial flows relevant to the development of an effective and appropriate international response to Climate Change, UNFCCC, 2007

A wide variety of processes, mechanisms and organisations outside the UNFCCC – such as the International Energy Agency, the Global Environment Facility and various national and international programs – have considerable experience and valuable expertise in implementing global technology cooperation. In order to make the most of our resources, we should use these existing processes and mechanisms rather than create new ones.

The UNFCCC can make its strongest contribution through facilitating, rather than attempting to be the focal point for implementing, enhanced global technology cooperation. Technology cooperation facilitated by the UNFCCC should be high impact and cost-effective and leverage as much as possible these external processes and structures.

Below are a broad set of factors that could guide Parties' discussions on technology cooperation. We propose that actions should:

- Enhance the global development and uptake of mitigation and adaptation related technologies, particularly through improved trade and investment flows
- Be cost effective, by using markets to the fullest extent possible
- Address clearly demonstrated needs, market failures and/or other identified policy/regulatory barriers
- Promote or enhance sustainable market-based outcomes where appropriate.
- Complement existing activities, processes and mechanisms both inside and outside the UNFCCC to maximise benefits, use existing resources and avoid creating unnecessary overheads.

Proposals to create a new Subsidiary Body for Technology would require major institutional change and risks duplication of work being undertaken elsewhere.

Attachment A

Suggested elements of a future work program

There are a range of areas where enhanced international cooperation could improve cooperation on clean technologies. A future work program could examine these areas:

1. Actions for enhanced capacity building and enabling environments

   (a) Developing actions to enhance capacity building at institutional and human level (e.g. improved technical and policy skills and training, assistance in developing national policies and measures), and national and sub-national enabling environments (improved social, economic and technology frameworks including transparent regulatory and legal frameworks). Skills development, particularly in accessing private financing and in project development, would be a high priority.

   (b) Consideration could also be given to enhancing the capacity of the Experts Group on Technology Transfer (EGTT) to provide technical advice.

2. Actions to enhance low emission technology and research and development

   (a) Governments and public sector organisations can promote greater cooperation on technology research and development, including in developing the skill sets needed for this support, and developing robust national systems of innovation.

   – For example, Australia has announced a proposal to establish of a Global Carbon Capture and Storage (CCS) Initiative, including a A$100 million Global Institute to work cooperatively with other countries and industry to accelerate the research, development, demonstration and commercialisation of CCS technology.

3. Enhancing Technology Needs Assessments

   (a) There is a need to re-evaluate the current Technology Needs Assessment (TNA) process in order to streamline the process and engage relevant stakeholders including within national governments. Lessons learned from the development and application of the National Adaptation Programmes of Action (NAPA) process – including its approach to mainstreaming climate change considerations into government and community decision-making – may be instructive.

4. Improving access to technologies

   (a) Smaller scale projects can sometimes be stranded below the scope of the major development or technology funds. A "technology leveraging facility" could assist matching TNA outcomes with available private/public carbon financing. This could include a facility similar to the Private Financing Access (PFAN) model developed by the Climate Technology Initiative (CTI) and promote closer collaboration with international financial institutions and multilateral development banks. Such a facility could be supported initially through a refocusing of existing technology-based funds under the GEF.

   (b) Ownership of intellectual property (IP) rights is not a significant barrier to technology cooperation or use. However, poor IP protection can deter investment and innovation. Work could be undertaken by the EGTT, in conjunction with relevant financial experts, to develop template models for IP licensing arrangements for use by Parties. Appropriate and accessible IP licensing models may improve IP protection and reduce project development costs.

   (c) Consideration could also be given to ways to improve information exchange on mitigation and adaptation related technology and access to suppliers and products for developing countries. This could build on the foundation of the UNFCCC Technology Transfer Clearing House (TT:Clear), which provides a web-based portal for this purpose.

PAPER NO. 5J: AUSTRALIA

View on the coverage of greenhouse gases and other relevant methodological issues

Submission to the AWG-LCA and AWG-KP

This submission provides Australia's views on the coverage of greenhouse gases and other relevant methodological issues, including on the application of guidelines and use of metrics under a post-2012 outcome. It builds on the initial views presented by Australia in *Views on the coverage of greenhouse gases* and *Estimation of greenhouse gases and global warming potentials*, submitted to the AWG-LCA and AWG-KP in August 2008.

Australia's views continue to be informed by the following overarching principles:

- Coverage of anthropogenic emissions and removals should aim to be rigorous, robust and comprehensive, while finding an appropriate balance between scientific precision, practicality and policy relevance;

- Approaches should facilitate activities that deliver real climate benefits within a timeframe appropriate to achieve the Convention's goal of preventing dangerous anthropogenic interference with the climate system;

- Methodologies should aim not to restrict the flexibility of policy responses, recognising the need for a comprehensive suite of mitigation measures to achieve required levels of abatement; and

- A coordinated approach should be taken across the two AWG processes, given their close interlinkages, to ensure the post-2012 outcome adopts consistent coverage of gases and other relevant methodological issues.

Gases

Australia maintains that there is a good case for including additional HFCs and PFCs, and also NF_3 (as listed in the IPCC's TAR and AR4). There is clear potential for mitigation in relation to these gases, and a number have current or projected uses as replacements for ozone depleting substances controlled under the Montreal Protocol and/or gases already covered under Annex A of the Kyoto Protocol.

Australia considers that achieving greater understanding of fluorinated ether and perfluoropolyether including their use, contribution to climate change, and mitigation potential is important. We would welcome further work by the IPCC on these gases and could support a decision, following a post-2012 outcome, to consider the inclusion of these gases.

More detailed consideration on inclusion of the above gases is provided in Australia's submission on *Views on the coverage of greenhouse gases* (August 2008).

Since Australia made its earlier submission, a number of additional gases have been proposed by Parties for coverage under the UNFCCC and Kyoto Protocol in the second commitment period. These include:

- Trifluoromethyl sulphur pentafluoride (SF_5CF_3); and

- Hydrocarbons and other compounds including dimethylether (CH_3OCH_3), methyl chloroform (CH_3CCl_3), methylene chloride (CH_2Cl_2), methyl chloride (CH_3Cl), dibromomethane (CH_2Br_2), bromodifluoromethane ($CHBrF_2$) and trifluoroiodomethane (CF_3I).

With one exception, Australia supports in-principle consideration of these additional gases, using the principle-based approach outlined above, where gases have been provided a GWP value by the IPCC and are not already controlled under the Montreal Protocol.

The exception is methyl chloroform, which is already controlled under the Montreal Protocol, and therefore should not be included in the second commitment period.

Other methodological issues

Australia welcomes the AWG-KP's conclusion in the first part of its sixth session to refer discussion on the application of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories to the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its thirtieth session.

Australia maintains that GWP remains the most appropriate metric for measuring the relative contribution of various greenhouse gases to climate change. We consider that, in the absence of compelling scientific or policy arguments for adopting alternative time horizons, the 100-year time horizon remains an appropriate and practical approach. Australia maintains that there is a strong case for adopting updated GWP values for the post-2012 outcome.

PAPER NO. 5K: AUSTRALIA

Work Programs for 2009. Submission to the AWG-LCA and the AWG-KP

This submission provides the Australian Government's views on the 2009 work programs of the Ad-hoc Working Group on Long-term Cooperative Action (AWG-LCA) and the Ad-hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP).

Parties have agreed that negotiations under the AWG-LCA and AWG-KP will intensify in 2009. Full negotiation mode will be necessary to ensure the post-2012 negotiations are prepared to deliver conclusions on what is required to achieve a comprehensive outcome to the 15th Conference of the Parties.

Intensified negotiations will be complex. It will be important to continue to balance the need for full participation with the need to make the most effective use of the time available in order to sustain progress.

The work plan of both AWGs and the subsidiary bodies should be carefully streamlined to ensure that time is used most efficiently and duplication of work avoided. Priority must be given to the post-2012 negotiations.

The 2009 work plans must be flexible to ensure Parties can dedicate sufficient attention to issues as appropriate. Some issues will require more time whereas others will be resolved more quickly. Establishing rigid and detailed work plans could limit time available for complex issues requiring in-depth analysis. For example, it will be important to ensure adequate time for detailed consideration of how deforestation and REDD should be treated in a post-2012 outcome.

It is desirable that the post-2012 outcome avoid multiple mechanisms and procedures, in order to streamline ratification and implementation of obligations. Much of the work on rules and mechanisms under the AWG-KP will be pertinent to future discussions in the AWG-LCA. It will be important to draw on, rather than repeat these discussions. One possibility in 2009 may be to hold joint sessions of the AWG-KP and AWG-LCA on issues of direct relevance to both forums.

Moving to full negotiation mode will necessitate detailed legal work to implement proposals. The AWG-LCA's 2009 work plan will require a dedicated component addressing legal matters, which can build on planned legal discussions in the AWG-KP.

Intensified negotiations will also require increased resources to support the work of the UNFCCC secretariat. Current resourcing is not commensurate with the work we will undertake throughout 2009. Other international organisations with comparable negotiating agendas have the benefit of greater staffing and financial resources. For comparison, the Secretariat of the World Trade Organization in Geneva has 629 regular staff[1] and a budget of CHF 180 million (approx US $150 million) in 2008[2]. Many are also located in capitals with permanent representation from Parties, which enables productive discussions to continue outside of formal negotiating sessions.

Australia acknowledges the significant ongoing efforts of the UNFCCC secretariat to support Parties and service the negotiating regime, particularly given the constrained conditions under which it operates. Parties should be receptive to reasonable increases in the UNFCCC budget to ensure the secretariat is most effectively and appropriately structured and resourced in the future.

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[1] Regular budget posts including posts not yet filled.

[2] By comparison, the UNFCCC's intended 2008 staffing level is 325, of which 140 positions are funded from the core budget. As at 30 June, 235 positions were filled. The UNFCCC's 2008 operating budget is US $23.8 million.

PAPER NO. 6: AUSTRALIA AND INDONESIA

Reducing emissions from deforestation and forest degradation in developing countries

Joint submission to the AWG-LCA, AWG-KP and SBSTA

Indonesia and Australia are both strongly committed to including reducing emissions from deforestation and forest degradation in developing countries (REDD) in a post 2012 outcome on climate change under the UNFCCC. REDD is best included through a market-based mechanism, as international carbon markets offer the best means to provide financial incentives at the scale required to effectively address emissions from deforestation and forest degradation. There is certainly a need for funds in providing resources for capacity building and market readiness activities including in addressing drivers of deforestation and forest degradation.

The leaders of Australia and Indonesia have committed to work together on REDD through the Indonesia – Australia Forest Carbon Partnership. Under the Partnership, our joint activities are designed to support the UNFCCC process on REDD policy and methodological issues, as well as Indonesia's national REDD framework. The Partnership operates in three key areas: strategic policy dialogue on climate change, increasing Indonesia's carbon accounting capacity, and identifying and implementing incentive-based demonstration activities.

The Indonesia – Australia Forest Carbon Partnership is an example of how developed and developing country partners can work together to take ongoing, practical action on climate change. Collaborative partnerships such as this one are crucial to finding innovative solutions to the challenges posed by climate change and to successfully addressing the almost 20 percent of global emissions from REDD.

Parties concluded at the Tokyo REDD workshop (25-27 June 2008) that there is now the technical and methodological expertise to allow REDD to be included in a post 2012 outcome on climate change. The immediate challenge for Parties is to find solutions to REDD's policy challenges. The negotiations on methodological issues should continue concurrently in SBSTA. A priority for Poznan is to ensure that an effective process is established to progress the policy negotiations under the AWG-LCA.

Kalimantan Forests and Climate Partnership

Indonesia and Australia are demonstrating leadership in giving effect to the call in the Bali Action Plan for demonstration activities to be developed that will generate lessons learned to inform both policy and methodological issues. We are currently working together on a REDD demonstration activity in Central Kalimantan—the Kalimantan Forests and Climate Partnership (KFCP). The KFCP is the first, large-scale demonstration activity of its kind in Indonesia. It is located in the carbon rich peatland forests of Central Kalimantan. Central Kalimantan is a biodiversity rich region containing one of the world's largest areas of intact peatland forest.

The KFCP aims to demonstrate how REDD can be incorporated in a post-2012 outcome on climate change. It trials innovative, market-oriented approaches to REDD financing and REDD implementation measures. Australia and Indonesia will provide lessons learned from the KFCP into the UNFCCC negotiations on REDD. Attachment A provides some initial lessons learned from the KFCP. We have also committed to developing on a second demonstration activity that will be in a different location within Indonesia and focus on different forest and soil types.

Roadmap for Access to International Carbon Markets

When they met in June 2008, the leaders of Indonesia and Australia agreed to jointly develop the Roadmap for Access to International Carbon Markets. The Roadmap is a multi-phased strategy to support Indonesia participate in international carbon markets for REDD. The Roadmap extends cooperation beyond existing activities under the Indonesia-Australia Forest Carbon Partnership by assisting Indonesia establish the necessary technical, system and financial pre-requisites to participate in international carbon markets.

Attachment A

The Kalimantan Forests and Climate Partnership: cooperative action on REDD

This attachment provides some initial lessons learned drawn from the experience of Indonesia and Australia in working together on the Kalimantan Forests and Climate Partnership (KFCP).

Selecting a location for a demonstration activity

In order to respect national sovereignty, and ensure support for a demonstration activity, the national government of the host country must be consulted on and agree the location of demonstration activities. In addition sub-national levels of government and local communities should also be consulted. The availability of experienced partners (such as other donors, academic institutions, national and international non-government organisations and private organisations already working in the area) is an important consideration in site selection.

It is also advisable to ensure that spatial planning for the location is adequate and that forest carbon rights are enforceable. Demonstration activities are best selected based on scientific considerations, potential to generate lessons on key themes (such as methodologies, payment mechanisms, social issues) and calculations of potential emissions savings, rather than on purely political considerations. However, political considerations must also be taken into account to ensure adequate support from the host country government and stakeholders.

The KFCP will be located in degraded and partially degraded peat swamp forest in Central Kalimantan. These forests contain very high carbon stocks, mostly in below-ground biomass. The exposed peat degrades rapidly particularly where drainage has caused drying of the upper soil and makes them fire-prone. Land clearing and fires in Indonesia's peatlands are a major source of global greenhouse gas emissions. Thus, halting or reversing deforestation and degradation offers a large potential for emission reductions, not only in the demonstration area, but throughout the peatlands of the region.

The site for the KFCP is a single peat dome of around 100,000 hectares. Water flows outward from the dome into the surrounding rivers, so the hydrology dictates a 'whole of dome' (or whole-of-ecosystem) approach to managing and conserving the peat swamp forest. Similarly, ecological criteria may (or may not) favour a whole ecosystem approach to reducing emissions from deforestation and forest degradation (REDD) in other forest types. Clearly, site-specific biophysical characteristics are of key importance in designing REDD interventions.

Identification of drivers of deforestation and forest degradation

The causes of deforestation and forest degradation that need to be addressed through specific interventions or strategies in a REDD demonstration activity are often quite site-specific and cannot necessarily be predicted in sufficient detail from national-level data and models of drivers. Site-specific causes and their effects vary according to bio-physical conditions, social and economic factors in the local context and beyond it, and the history of forest exploitation in and around the site. Historical averages or trends may not be a reliable guide if they are overwhelmed by rare natural or anthropogenic disturbance.

If more general drivers of deforestation and forest degradation—such as illegal logging or agricultural expansion—are of interest, then sites and approaches for REDD demonstrations could also be selected with such drivers in mind.

Addressing specific drivers

Interventions can be grouped into two categories: those that address site-specific causes through direct mitigation measures and those that address more widespread or systematic causes through policy measures. Some threats need to be tackled in both ways.

For example in the KFCP, a direct, site-specific mitigation measure is canal-blocking to restore the hydrology of a peat dome that is suffering degradation from having been drained. Coordinated action by

government agencies and others can address pervasive threats, such as preventing and suppressing illegal logging. Where small canals have been dug to illegally extract timber from the peat swamp forests, the two interventions (canal-blocking and prevention of illegal logging) need to work together.

Establishing national carbon accounting and monitoring systems

National carbon accounting and monitoring systems need to account for land use change both within and outside forest estates. This means that multiple agencies and all levels of government may need to provide inputs on a whole of government basis.

National carbon accounting and monitoring systems need to build on existing expertise and systems. They also must be designed to fit and serve national circumstances whilst satisfying international rules (that are yet to be designed for REDD) and meet market requirements. There is no 'one size fits all system' that can be imported from one country to another: each country needs to design their own system. For example, Indonesia possesses a great deal of technical expertise in the areas of remote sensing, geographic information systems, inventory taking and modelling. National systems should be developed in such a way as to build on the expertise of host countries.

Australia's approach has been to provide scientific, technical and analytical support for Indonesia's efforts to develop their own national carbon accounting and monitoring system. Australia is offering advice and assistance to Indonesia as they develop a blueprint on what the functions and performance characteristics should be for their system.

Australia is also offering Indonesia access to sources of data and specialist capability from around the world which Australia is brokering through its partnerships with key countries (such as Japan), international bodies (including the Global Earth Observation System Of Systems) and private organisations (such as the Clinton Climate Initiative). This is the model of partnership which Australia has with countries like Indonesia and China in developing their new generation forest monitoring and carbon accounting on which excellent progress has been made.

Leakage and demonstration activities

Leakage can be addressed locally in the area immediately surrounding the REDD activity, within a larger region such as a landscape or district, and nationally. To address leakage, the KFCP will trial investing locally in sustainable livelihoods that reduce dependence on the use of canals, fire, and land clearing. At a regional level the REDD activity will be implemented within a much larger development planning area covered by national and provincial spatial plans incorporating restrictions on forest conversion. At the national level, it will be designed to fit with national policies and frameworks. The National Carbon Accounting System for Indonesia will be able to identify leakage that may occur at local, regional and national levels.

Legal rights to forest carbon

Genuine and enforceable legal rights to forest carbon are fundamental to the success of a REDD demonstration activity. Rights can be established through a variety of systems, including carbon rights, land tenure arrangements or ownership of forest resources.

The KFCP is approaching this in the context of Indonesian forestry law, which grants or recognises particular types of forest use rights to landowners, forest-dependent communities, private companies, and other entities. This approach has the advantage of building on existing, well understood systems within a recognised legal framework.

Identification of capacity-building needs

The identification of capacity-building needs is best done in close consultation with the host country, at all levels of government.

In a remote area in a developing country, such as where KFCP will be implemented, local capacity is often severely limited. Conversely, local partners with strong ties to the land, may play a key role in

gaining acceptance for REDD, in applying local knowledge, and in ensuring sustainability beyond the initial stages of project development. Local organisations may be best placed to deliver the necessary capacity-building at a grassroots level, but they in turn are likely to need technical and managerial support.

Sharing of lessons learned from demonstration activities

Because REDD policy development is in its early stages internationally, the sharing of lessons learned will contribute greatly to the progress of REDD. It will be important that all countries share their experiences. Australia and Indonesia encourage other countries to also provide lessons learned from demonstration activities and REDD activities more broadly (such as capacity building efforts or analytical work) to the UNFCCC.

Learning during the design and testing of an innovative approach such as REDD is bound to be uneven and somewhat unpredictable. It is important to establish good communications from an early stage within the design team, with key partners, and with a broader set of stakeholders that will eventually be needed to support and sustain the activity.

At the beginning of a REDD activity, understanding among key stakeholders of climate change and the role forests play in the carbon cycle is likely to be limited. Therefore, pro-active education and outreach about REDD is important from an early stage of the design, leading to a communications strategy to support the REDD demonstration activity.

PAPER NO. 7: BELARUS

SUBMISSION TO THE AWG-LCA

CONTACT GROUP ON A SHARED VISION FOR A LONG-TERM COOPERATION ACTION

Belarus welcomes the opportunity to submit its views on activities to be included in LULUCF activities. Belarus wishes to make the following submission in response to request by the Chair of the AWG-LCA expressed at the working group meeting on December 2, 2008.

Belarus considers projects on wetlands restoration, degraded peatlands in particular, to be an important measure among other mitigation projects. We would like to express our concern regarding the important role of wetlands in the global GHG balance. Peatlands serve as a valuable carbon store. However, draining or otherwise degrading peatlands results in high emissions of GHG. According to a number of recent studies drained and degraded peatlands are responsible for 9-15% of global anthropogenic GHG emissions. Significant reduction of GHG emission can be achieved through rehabilitation of wetlands and the emissions can be not only halted, but also reversed by restoration activities. Moreover, restoration of wetlands provides additional benefits for the biodiversity.

Proposal: wetlands restoration activities should be considered as an option for carbon sequestration in mitigation regime under LULUCF rules for post-Kyoto period. A LULUCF regime should strive for inclusion of all significant sources and sinks both for countries of JI and CDM mechanisms.

PAPER NO. 8: BOLIVIA

Contribution to the AWG-LCA and to the Chair's Note entitled "Ideas and proposals on paragraph 1 of the Bali Action Plan"

Introduction

The Republic of Bolivia's vision is of a world in which all people live well in harmony with other human beings and with our Pachamama (Mother Earth) - that is the Suma Qamana "vision". This vision calls on us to abandon the mindless pursuit of living better, and seek to Live Well, in harmony with each other, the Earth and its climate system.

To realize this vision, Bolivia believes we must address the structural causes of climate change. Competition and the thirst for profit without limits of the capitalist system are destroying the planet. Under Capitalism, we are not human beings but consumers. Under Capitalism, Mother Earth does not exist, instead there are raw materials. Capitalism is the source of the asymmetries and imbalances in the world. It generates luxury, ostentation and waste for a few, while millions in the world die from hunger in the world. In the hands of Capitalism, everything becomes a commodity: the water, the soil, the human genome, the ancestral cultures, justice, ethics, death ... and life itself. Everything, absolutely everything, can be bought and sold and under Capitalism. And even "climate change" itself has become a business.

As long as we do not change the capitalist system for a system based in complementarity, solidarity and harmony between the people and nature, the measures that we adopt to address climate change will be palliatives that will be limited and precarious in character.

Our efforts to tackle climate change must address these structural causes of climate change, including our engagement in the UNFCCC process, and the discussions in the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA).

As a contribution to this goal, this note sets out Bolivia's preliminary views on relevant elements of the Bali Action Plan including the ideas and proposals set out in the Chair's Note entitled "Ideas and proposals on paragraph 1 of the Bali Action Plan" (FCCC/AWGLCA/2008/16). As this is a relatively new item, Bolivia will have further elaborations.

Bolivia insists that the Assembly Document should be structured to reflect the reality of the climate crisis. In the first instance, it is imperative that the climate harms that are being done must stop, and that those liable for producing harm are held to account. Bolivia holds that the developed countries which are responsible for the climate change problem since the industrial revolution should be held liable for the damage caused by climate change to countries and peoples. The developed countries should pay compensation for the past, present and future damage caused by the impacts of climate change.

Second, the victims must be provided with the means to adapt in a manner that allows for survival and addresses the real origins of harm. Third, those harmed must be compensated, in a

manner and a level that fully recognizes historic responsibility and the imperative of getting on to the path of Living Well.

Bolivia does not accept the inclusion of language relating to differentiation, graduation and related issues and calls for sections in the document on these issues to be deleted.

I. Enhanced action on adaptation

Bolivia is not responsible for the harmful and real effects of climate change, and those which are must shoulder their responsibility. In 2007, Bolivia lost an estimated 4% of GDP owing to the effects of climate change. Adaptation financing must fully cover the damages incurred as a product of adapting to climate change.

The resources for climate change at present are unfairly distributed. More resources are directed to reduce emissions (mitigation) and less to reduce the effects of climate change that all the countries suffer (adaptation). The vast majority of resources flow to those countries that have polluted the most, and not to the countries which have preserved the environment most. Around 80% of the Clean Development Mechanism projects are concentrated in a few developing countries.

We call on efforts to promote equitable adaptation actions that recognize historic responsibility, with programs and plans with the participation of local communities and indigenous people in the framework of full respect for and implementation of the United Nations Declaration on the Rights of Indigenous Peoples.

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

The provision of finance and technology needed to address climate change is compensatory. Acknowledging the historical ecological debt that the developed countries owe to the planet, Annex I Parties must create an Integral Financial Mechanism for Living Well to support developing countries in covering the full costs of implementing their plans and programmes for adaptation to and mitigation of climate change; the innovation, development and transfer of technology; in the preservation and improvement of the sinks and reservoirs; response actions to the serious natural disasters caused by climate change; and the carrying out of sustainable and eco-friendly development plans.

Financing from developed countries must be sufficient to provide developing countries with compensation for lost development opportunities under capitalism, and full financing for national actions, technologies and other efforts taken to address the climate crisis caused by the over-use by developed countries of our shared atmospheric resource. In other words, it has to finance the "passage" from a failed capitalist system that is the root cause of climate change, to a new economic system of Living Well, which is based on complementarity, solidarity and harmony between the people and nature.

Financing must be equitable, and give priority to the countries that have contributed less to greenhouse gas emissions, those that preserve nature and are suffering the impact of climate change.

This Integral Financial Mechanism for Living Well, in order to be effective, must count on a contribution of resources commensurate to the task at hand. Recent events have demonstrated that when a crisis arises, political will and resources can be found. Financial rescue packages of over 4 trillion dollars were assembled in less than 2 months in 2008. The climate crisis deserves at least this level of commitment. In order to be effective, the Mechanism must count on a contribution of at least 1% of the GDP in developed countries and other contributions from taxes on oil and gas, financial transactions, sea and air transport, and the profits of transnational companies.

Contributions from developed countries must be additional to Official Development Assistance (ODA), bilateral aid or aid channelled through organs that are not part of the United Nations. Any finance outside the UNFCCC cannot be considered as the fulfilment of developed country's commitments under

the Convention. Finance has to be directed to the plans or national programmes of the different States and not to projects that follow market logic.

The Integral Financial Mechanism must be under the coverage of the United Nations, and in no case under the Global Environment Facility (GEF) and other intermediaries such as the World Bank and regional development banks; its management must be collective, transparent and non-bureaucratic. Its decisions must be made by all member countries, especially by developing countries, and not by the donors or bureaucratic administrators.

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

Developed countries cannot treat knowledge and innovation crucial for survival as private property through the existing intellectual property system, and as something "sacred" that has to be preserved at any cost.

Technology related to climate changes must be fully within the public domain, not under any private monopolistic patent regime that obstructs and makes technology transfer more expensive to developing countries.

Products that are the fruit of public financing for technology innovation and development must be placed within the public domain and not under a private monopolistic regime of patents, so that they can be freely accessed by developing countries.

The system must also be changed to recover and promote indigenous peoples practices in harmony with nature which have proven to be sustainable through centuries.

As we move towards a new global system for innovation and technology transfer, Bolivia proposes a number of specific mechanisms to ensure that intellectual property rights are not a barrier to development and transfer of technologies:

- In-depth study of issues and proposals through an UNFCCC Commission on Innovation and Access to Climate Technologies and a follow-up working group and action plan, including a global strategy and global initiatives (along the lines of the WHO Commission) and the G77 and China proposal for an enhanced technology mechanism under the UNFCCC.
- Clarification and possible expansion of flexibilities in the intellectual property rights system on compulsory licensing, parallel imports and a waiver of the requirement that production be "predominantly for domestic market" to allow diffusion of technologies in developing countries with insufficient manufacturing capacity.
- Clarification or expansion of exemptions for climate-friendly technologies, using existing or new provisions in the intellectual property system including the use of exemptions and implementation periods in developing countries vis-a-vis developed countries.
- Non-voluntary and mandatory/voluntary licensing such as those used by some developed countries which empower courts to compel patent holders to provide licenses to other technology users or producers at a specified royalty for technologies that prevent/reduce air pollution (e.g. components in cars).
- Patent pooling, for example, through one-stop centers for obtaining licenses for technologies at specified and discounted rates to facilitate cheaper and easier licensing for products that either reflect multiple patents or for which there are multiple users especially in developing countries.
- Expansion of public domain for technologies that have been publicly funded by governments or through international cooperation or agencies.

Technologies must be in the public domain and available to all people without monopolistic requirements that inhibit access and undermine efforts to tackle climate change. To promote access to

and transfer of technologies, we also call for so-called enabling environments to promote the transfer of technologies from developed countries to be improved, in order to ensure the availability of full funding for the transfer of all relevant technologies and know how to developing countries.

IV. Enhanced action on mitigation of climate change

Nationally appropriate mitigation commitments by all developed countries

In relation to the quantification of national commitments by developed countries this is an issue to be addressed within the Ad-Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) through a second and subsequent commitment periods, and has no role in the AWG-LCA.

Bolivia confirms that Annex I Parties must take on emissions reductions under the Kyoto Protocol that are significantly deeper than those proposed by the IPCC in its Fourth Assessment Report, on the basis of: a) emerging scientific information; b) equity and historical responsibility; c) carbon embedded in infrastructure and other assets; d) national levels of capital, technology and capabilities; and e) the need for guarantees that financing and technology will be provided and transferred to developing countries in an adequate, predictable and transparent manner.

On the basis of these factors, including the principles of equity and historical responsibility (commencing with the industrial revolution), developed countries must undertake commitments for deep emissions reduction (e.g. by reducing emissions and enhancing sinks in their territories). These must be sufficient in order to guarantee access by developing countries to the atmospheric resources or carbon space required to achieve fundamental rights, to allow for demographic and economic growth while overcoming poverty, to provide an adequate, predictable and transparent basis for the provision of financing and technology, as well as to ensure access to compensation for restricted opportunities and for adaptation impacts.

These commitments must be met internally in developed countries and not through flexible market mechanisms that allow for the purchase of certified emissions reduction certificates to continue polluting in their own country. Likewise, monitoring mechanisms must be established for measuring, reporting and verifying that are transparent and accessible to the public, to guarantee the compliance of commitments.

In relation to the comparability of national actions and commitments by developed countries, any Party included in Annex I of the Convention which is not a Party to the Kyoto Protocol must recognize time wasted and undertake all necessary efforts to make up for lost time, and undertake comparable efforts in the form of quantified emission limitation and reduction obligations as part of an agreed outcome in the form of a decision adopted at the fifteenth session of the Conference of Parties.

Nationally appropriate mitigation actions by developing countries

The Bali Action Plan clearly states that the purpose of addressing nationally appropriate mitigation actions by developing countries in the context of sustainable development is to ensure the "full, effective and sustained implementation of the Convention". This includes the principle of common but differentiated responsibilities and respective capabilities, and the provisions of Article 4.1 which identifies the commitments under the Convention applying to all Parties, taking into account their common but differentiated responsibilities, and their specific national and regional development priorities, objectives and circumstances.

Regarding the contributions by different groups of countries Bolivia confirms that nationally appropriate mitigation actions are addressed in order to ensure the "full, effective and sustained implementation of the Convention", which includes the requirement that "the extent to which developing country Parties will effectively implement their commitments under the Convention will

depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties" (Article 4.7).

As stated in the Bali Action Plan, nationally appropriate mitigation actions, where being carried out by developing countries, must be fully enabled and supported by enhanced financing, technology and capacity building. In light of the principle of equity, Bolivia calls on developed countries to pay full compensation to developing countries for lost development opportunities as well as the full cost of financing, technology and capacity building. Financing must cover both financial and non financial costs on a measurable, reportable and verifiable basis in order to support and enable any nationally appropriate mitigation actions undertaken by developing countries.

Bolivia affirms that recent obvious and massive market failures, and the constant damage caused by private appropriation of nature and common goods, show that there can be no role for the market and market-based mechanisms in addressing climate change.

The best mechanism to confront the challenge of climate change are not market mechanisms, but conscious, motivated, and well organized human beings endowed with an identity of their own.

Reduced emissions from deforestation

The reduction of the emissions from deforestation and forest degradation must be based on a mechanism of direct compensation from developed to developing countries, through implementation by sovereign countries that ensures broad participation of local communities, and a mechanism for monitoring, reporting and verifying that is transparent and public. Programs and projects must operate within the United Nations Declaration on the Rights of Indigenous Peoples.

V. A shared vision for long-term cooperative action

Bolivia believes that a shared vision for long-term cooperative action is already embodied in the Climate Convention and its Kyoto Protocol and is addressed as part of the Bali Action Plan in order to "enable the full, effective and sustained implementation of the Convention". We call on all Parties to acknowledge this shared vision as expressed in the Convention's ultimate objective set out in Article 2, in the preamble to the Convention, and in its principles and provisions.

The already agreed upon vision is for the "full, effective and sustained implementation of the Convention". This vision must not be misused to seek a revision of the provisions of the Convention. This conclusion is confirmed by the reference in paragraph 1(a) of the Bali Action Plan which calls for a shared vision to achieve the ultimate objective of the Convention "in accordance with the provisions and principles of the Convention".

The purpose of a shared vision is for long-term cooperative action commencing "now" and extending "up to and beyond 2012". It is addressed in order to reach an "agreed outcome" in the form of "a decision" at the fifteenth session of the Conference of Parties in Copenhagen. Its scientific basis must include a full analysis of social, economic and environmental conditions (including the right to water, the protection of human rights, poverty eradication, etc.) in developing countries, taking into account that "economic and social development and poverty eradication are the overarching priorities of developing country Parties". In particular, it must reflect the latest scientific information, including recent findings on the potential for non-linear climate changes that threaten life and civilization on Earth.

In relation to principles for contribution by different groups of countries to long-term cooperative action Bolivia considers that developed countries are historically responsible for threatening the planet with climate change and owe the world an ecological debt. They must therefore accept responsibility for addressing the crisis and its consequences. There is no basis in the Bali Action Plan or elsewhere for

the enumeration of new principles for contributions by different groups of countries other than those identified in the Convention - i.e. the principles of equity and of common but differentiated responsibility.

A long-term global goal for emission reductions

Bolivia's long-term global goal for emissions reduction is to change the capitalist system for a system based on complementarity, solidarity and harmony between the people and nature. Until then, the measures that we adopt will be palliatives that will be limited and precarious in character.

Bolivia calls for a long-term global goal for emissions reduction focusing on changing the structural (economic, trade, financial) causes of climate change, on measurably changing the unsustainable consumption practices of people and developed countries, while enhancing the livelihoods and prospects of all peoples in a way that his harmonious with nature.

In relation to the nature of and principles for a long-term global goal, a global goal must acknowledge the developed countries' historical responsibility for emissions since before 1750 and be consistent with the principle of equity including the principle that all human beings have equal rights to the common atmospheric resource. Any global goal must fully respect the right to Live Well, including the fact that economic and social development (including the protection of human rights and the right to water) and poverty eradication are the overriding priorities for developing countries. Developed countries are historically responsible for threatening the planet with climate change and owe the world an ecological debt.

Rather than focusing only on levels of stabilization or temperature increases, Bolivia calls for a long-term global goal for emission reductions to be quantified also in terms of the changes in the structural economic system, consumption patterns in developed countries, volumes of technologies to be transferred free and unencumbered by intellectual property rights to developing countries, and compensation to be paid to developing countries for lost opportunities to Live Well associated with over-use by developed countries of the Earth's atmospheric space and the increasingly devastating effects of climate change.

In relation to the contribution by different groups of countries to the achievement of the long-term goal, developed countries bear full responsibility to reduce their emissions in order to guarantee access by developing countries to the atmospheric resources or carbon space required to achieve their fundamental rights, provide an adequate and predictable basis for the provision of financing and technology, as well as ensure compensation for restricted opportunities and for adaptation impacts, as described in Section II. No harm must be done to the implementation of human rights protection, in particular the right to water and food.

Finally, Bolivia calls on all Parties, the Secretariat and the media to dispense with the terms "post-Kyoto" and "post-2012" climate regime, which are inconsistent with the requirements of the Bali Action Plan, which calls for long-term cooperative action commencing "now, up to and beyond 2012". The period 2012 has no relevance to discussions in the AWG-LCA but rather merely identifies the end of the first commitment period under the Kyoto Protocol.

The next Conference of Parties Meeting on Climate Change in Copenhagen must allow us to make a leap forward if we want to ensure the full, effective and sustained implementation of the Convention and to save Mother Earth and humanity.

Conclusion: institutions and accountability

In conclusion, we need a World Environment and Climate Change Organization that puts sustainable development (and developing countries' interests) at its core, to which multilateral trade and financial organizations are subordinated, so as to promote a different model of development -to Live Well- that is environmentally friendly and resolves the profound problems of impoverishment. This organization

must have effective follow-up, verification and sanctioning mechanisms to ensure that the present and future agreements are complied with.

It is fundamental to structurally transform the World Trade Organization, the World Bank, the International Monetary Fund and the international economic system as a whole, in order to guarantee fair and complementary trade, as well as financing without conditions for sustainable development/Living Well that avoids the waste of natural resources and fossil fuels in the production processes, trade and product transport.

PAPER NO. 9: CANADA

Ideas and proposals on paragraph 1 of the Bali Action Plan
Comments by Canada

Canada is pleased to provide comments in document FCCC/AWGLCA/2008/16. Canada looks forward to working with all Parties to achieve an ambitious and comprehensive agreement at Copenhagen in order to ensure the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012.

A SHARED VISION FOR LONG-TERM COOPERATIVE ACTION

- All Parties should commit to build a low-carbon global economy that ensures continued growth and sustainable development and strengthens capacity to adapt to the impacts of climate change.
- All Parties should commit to a long-term global goal for emissions reduction of at least 50% by 2050, which implies a peak in global emissions around 2020. This will require cooperative action to increase global supplies of secure, and affordable clean energy. Canada has set an objective that 90 percent of its electricity needs be provided by non-emitting sources by 2020.

ENHANCED ACTION ON MITIGATION OF CLIMATE CHANGE

- All Parties should adopt binding, measurable, reportable and verifiable mitigation commitments consistent with the principle of common but differentiated responsibilities and respective capabilities.
- Developed countries should commit to comparable economy–wide emissions reduction goals by 2020, based on their mitigation potential and national circumstances. Canada is committed to an economy-wide emissions reduction goal of 20% by 2020. We will meet this goal while also ensuring that Canada's actions going forward remain comparable to what our partners in the United States, Europe and other industrialized countries undertake.
- Developing countries, with the exception of the least-developed, should commit to mitigation actions that, at a minimum, lead to a significant slowing of their emissions growth, leading to a substantial deviation from business-as-usual by 2020, based on their mitigation potential and national circumstances.
- Submission of national inventories of anthropogenic emissions by sources and removals for all Parties must take place on a regular and consistent basis, and all mitigation commitments and actions should be subject to regular, systematic and transparent review.
- All Parties should adopt rules and practices on managed forests and agricultural lands, including through REDD, that incentivize emissions reductions and removals, recognizing the significant mitigation potential that exists in these areas.
- Sector-specific agreements and approaches should be explored as a potentially valuable means of achieving national mitigation commitments in a measurable, reportable and verifiable manner while avoiding carbon leakage.

ENHANCED ACTION ON ADAPTATION

- Cooperative action on adaptation should focus on the poorest and most vulnerable countries, including through the timely implementation of national adaptation programs.
- Enhanced action on adaptation should include the following: integrating adaptation into all relevant national and international programs and policies; improving capacity building efforts; and expanding support for strengthened climate resilience.

ENHANCED ACTION ON TECHNOLOGY DEVELOPMENT AND TRANSFER TO SUPPORT ACTION ON MITIGATION AND ADAPTATION

- Parties should cooperate to review and strengthen existing international technology mechanisms to support the global development and deployment of the clean technologies needed to achieve our shared vision of a low-carbon economy.
- Strengthened domestic enabling environments, including appropriate policy, legal and regulatory frameworks, should provide the foundation for increased flows on financial resources and investment in support of mitigation and adaptation.

ENHANCED ACTION ON THE PROVISION OF FINANCIAL RESOURCES AND INVESTMENT TO SUPPORT ACTION ON MITIGATION AND ADAPTATION AND TECHNOLOGY COOPERATION

- Mobilizing and leveraging private sector investment will be paramount in achieving our shared vision of a low-carbon economy. The global carbon market should play a key role, provided that existing and new market mechanisms meet a high standard of environmental integrity.
- Adequate, predictable and sustainable financial support is necessary to build the capacity of the poorest and most vulnerable countries to adapt to the impacts of climate change.
- Parties should cooperate to maximize the effectiveness of existing international financial mechanisms and institutions in order to support timely action on adaptation, mitigation and the global development and deployment of clean technologies.

THE COPENHAGEN AGREEMENT

- The Copenhagen agreement will need to build on the lessons learned since Rio and ensure that the major developed and developing economies assume commitments commensurate with their global responsibilities and national capabilities.
- An environmentally effective agreement should be a single undertaking that includes measurable, reportable and verifiable commitments, covering the vast majority of sources of emissions in developed and developing countries, thereby placing the world on the pathway to achieve at least a 50% reduction in global greenhouse gas emissions by 2050.

PAPER NO. 10: CHILE

SUBMISSION CHILE ASSEMBLY DOCUMENT

La magnitud del calentamiento global y su condición de problema común de la humanidad exige el compromiso en su solución por parte de toda la comunidad internacional. Enfrentar esta problemática requiere la firme voluntad y coordinación de diversos actores, medidas y acciones tanto a nivel nacional como internacional y la adopción de una perspectiva de derechos humanos. Es preciso además reconocer las especificidades de las prioridades nacionales y las respectivas capacidades permitiendo conjugar adecuadamente la responsabilidad y solidaridad internacional con la soberanía de los países. La Convención de Naciones Unidas sobre Cambio Climático, con sus disposiciones y principios, enmarca el actuar internacional y la finalidad de este proceso de negociación es lograr su plena, eficaz y sostenida implementación mediante la cooperación a largo plazo. Chile aspira a que el acuerdo global que se logre como resultado del Plan de Acción de Bali (PAB) sea coherente con el mandato consensuado de fortalecimiento de la Convención y esté a la altura de la urgencia y relevancia que el desafío del cambio climático demanda.

Tenemos además la oportunidad de enfrentar un grave problema guiados por los principios del desarrollo sustentable, equilibrando y potenciando sinérgicamente los elementos sociales, económicos y ambientales que lo constituyen.

Chile considera que es posible y apropiado crecer económicamente y lidiar con el cambio climático. Además, sabemos que el costo de no actuar nos será demasiado caro; tanto económica, como social y ambientalmente. Las medidas que se adopten para mitigar las emisiones no deben ser usadas como obstáculos encubiertos al comercio lo que impactaría fuertemente a los países No Anexo I que requieren adaptarse al cambio climático. Debemos seguir creciendo y superando la pobreza, pero de un modo armónico, sensato y amigable con el medio ambiente. Este nuevo escenario demandará medidas y acciones de corto, mediano y largo plazo que no tan sólo influenciarán cambios en la producción y el consumo, sino modificaciones culturales.

En la adopción de soluciones es crucial contar con una base sólida de conocimiento que a través de la evidencia científica permita tener los elementos necesarios para encarar el tema con perspectiva y seriedad.

Nuestra contribución en la generación de este fenómeno es limitada. Sin embargo, tenemos una vocación de solidaridad internacional y deseamos participar constructivamente en su solución. Como ha sido expresado por la Presidenta de la República, Michelle Bachelet: “El cambio climático es la gran causa ética de la humanidad en este siglo, como lo fuera la Paz en el siglo XX”.

Si bien reconocemos el rol del mercado, el objetivo último de la Convención requiere de la crucial tarea que compete a los Estados y sus gobiernos así como del compromiso de la sociedad toda en la búsqueda e implementación de soluciones.

La trascendencia y transversalidad del cambio climático nos exige incorporar, según corresponda, los esfuerzos y lecciones aprendidas bajo la CMNUCC y aquellos que surgen de otros instrumentos internacionales de modo de potenciar su objetivo último. Chile reconoce además la interrelación de las temáticas de adaptación y mitigación, y la relevancia de sus correspondientes medios de implementación, lo que exige que el aporte en ellos por los países Anexo I esté a la altura del desafío. Toda la arquitectura multilateral global debe considerar el cambio climático para orientar la ayuda internacional al desarrollo para acelerar y hacer posible la adaptación, para promover y facilitar el cambio de tecnología y promover un sistema de comercio internacional justo.

VISION COMUN

El PAB estableció un proceso global para llegar a una conclusión acordada respecto a la aplicación plena, eficaz y sostenida de la Convención mediante una cooperación a largo plazo, desde ahora y que se prolongue más allá de 2012. La visión común, desde la perspectiva de Chile, debe ser guiada por las normas fundamentales y principios recogidos en la Convención Marco de Naciones Unidas sobre Cambio

Climático y reflejar la más sólida y actualizada información científica disponible, en especial, la aportada por el IPCC. En particular, la visión común debe:

1) Ser guiada, en particular, en los principios de: equidad; responsabilidades comunes pero diferenciadas y respectivas capacidades y consideración de las específicas necesidades y circunstancias de los países no Anexo I. El derecho al desarrollo sustentable y la superación de la pobreza tienen que permanecer como prioridades insoslayables.

2) Facilitar los medios de implementación necesarios para intensificar la labor relativa a la mitigación y la adaptación. Dichas medidas incluyen el desarrollo y transferencia tecnológica, los recursos financieros e inversiones, la creación y fomento de capacidades y los arreglos institucionales correspondientes de modo de avanzar efectivamente en la implementación de la Convención.

3) Relevar la urgencia del establecimiento de metas para los países Anexo I no tan sólo a largo plazo sino a mediano término respecto a la mitigación.

4) Involucrar a todos los países en un esfuerzo global y conjunto para responder adecuadamente a los desafíos del cambio climático. Los países Anexo I, considerando su responsabilidad histórica, deben mostrar liderazgo mediante profundas reducciones de emisiones, mientras que los países no Anexo I deben implementar acciones de mitigación apropiadas nacionalmente en el marco del desarrollo sustentable, apoyados en la tecnología, financiamiento y creación y fomento de capacidades que les permita aportar en forma significativa y constructiva.

5) Priorizar la reducción de vulnerabilidad y la adopción de medidas de adaptación en aquellos países en desarrollo particularmente vulnerables al cambio climático.

MITIGACION

En relación con los esfuerzos globales urgentes por parte de toda la comunidad internacional respecto a la reducción en emisiones globales, Chile reafirma que la manera en que los países Anexo I y no Anexo I contribuyen a la mitigación, necesariamente difiere en naturaleza como claramente lo afirma el PAB. Los países Anexo I, considerando su responsabilidad histórica, deben mostrar liderazgo mediante profundas reducciones de emisiones incrementado sustancialmente sus compromisos domésticos no tan sólo en el largo plazo. La aplicación de la responsabilidad del conjunto de los países no Anexo I, debe darse en un marco de decidido apoyo tecnológico y financiero, por parte de los países Anexo I y de construcción de capacidades en los propios países no Anexo I, conjugando las circunstancias y capacidades nacionales. Estas últimas serán evidentes en la medida en que existan estudios que posibiliten una adecuada toma de decisiones.

Es primordial reconocer y valorar adecuadamente las medidas y acciones ya adoptadas en mitigación y en la identificación de oportunidades en este ámbito en los países no Anexo I, teniendo en cuenta sus propias circunstancias nacionales.

Chile aporta sólo un 0.2% al total mundial de emisiones de gases de efecto invernadero. Aunque su contribución al problema es entonces muy baja, su Plan de Acción Nacional en Cambio Climático contempla como uno de sus tres ejes fundamentales la mitigación. Chile continuará aportando a este objetivo pero podrá profundizar sus esfuerzos para reducir el crecimiento de sus emisiones, mediante medidas apropiadas nacionalmente en el marco del desarrollo sustentable, si cuenta con un adecuado apoyo y transferencia tecnológica y financiamiento por parte de los países Anexo I. Emprenderemos acciones adicionales para impulsar una economía más baja en carbono, en un marco de crecimiento sustentable y contribuyendo a los esfuerzos mundiales.

ADAPTACIÓN

Los países no Anexo I, no obstante su ausencia de responsabilidad en la generación de este problema, son los más afectados. Chile, pese a su estabilidad económica y crecimiento , presenta una gran vulnerabilidad al poseer la mayoría de las características identificadas en la Convención para estar en dicha categoría. Parte de las consecuencias que se prevé derivarán del cambio climático ya están ocurriendo en el país, como lo indican tanto los estudios de orden internacional como nacional disponibles.

En coherencia con la Convención, y con el proceso acordado en Bali de fortalecimiento de la misma, se requiere de un apoyo internacional que permita eficaz y efectivamente el desarrollo y acceso a mejores tecnologías, financiamiento y desarrollo y fortalecimiento de capacidades. Además, la urgencia de la temática requiere la adopción de estrategias y medidas de corto, mediano y largo plazo para hacer frente a los impactos adversos del cambio climático.

Es fundamental la definición de escenarios futuros de vulnerabilidad en sectores prioritarios y la evaluación de los impactos del cambio climático en todas sus dimensiones, permitiendo con esta información definir medidas de adaptación y fomentar la resiliencia frente a sus efectos adversos.

En consecuencia, se debe abordar la adaptación con mayor decisión y eficacia, orientando la información y conocimiento a acciones concretas tanto respecto de la prevención, la preparación, la respuesta anticipada y temprana y la recuperación. Es crucial que en la planificación nacional se incorporen: la vulnerabilidad tanto ambiental como socioeconómica; los objetivos y prioridades de adaptación considerando los impactos ambientales sociales y económicos del cambio climático; la identificación de medidas de respuestas, incluyendo las urgentes, y sus costos asociados; la creación y fomento de capacidades y el fortalecimiento institucional para una gestión adecuada así como la conciencia y educación ambiental.

DESARROLLO Y TRANSFERENCIA DE TECNOLOGIA y FINANCIAMIENTO

El desarrollo tecnológico y su efectiva transferencia así como un adecuado financiamiento, son medios que deben ser accesibles para que los países No Anexo I puedan lograr un desarrollo sostenible que permita un crecimiento equitativo que no replique los errores cometidos en procesos de industrialización en algunas naciones y que posibilite una modificación en los patrones de producción y consumo consistente con el objetivo último de la Convención.

La tecnología y financiamiento no deben sólo dirigirse a la limitación y reducción de gases de efecto invernadero sino también a las urgentes necesidades de adaptación, en especial, de los países en desarrollo particularmente vulnerables al cambio climático.

El fortalecimiento del desarrollo y transferencia de tecnología para apoyar la mitigación y adaptación debe abarcar todo su ciclo, procurando medidas de incentivo y costo efectivas que permitan superar las barreras existentes y proporcionar respuestas apropiadas para las necesidades de los diversos sectores relevantes.

De manera de avanzar en el financiamiento, se requieren arreglos institucionales eficientes y transparentes; el involucramiento del país receptor de manera que respondan eficientemente a sus particulares necesidades y capacidades; y ser predecible, estable, adicional y consistente con el objetivo último de la Convención.

PAPER NO. 11: CHINA

China's Further Submission on the Shared Vision for Long-term Cooperative Action
December 6, 2008

In addition to the views submitted as contained in FCCC/AWGLCA/2008/MISC.5, China would like to make a further submission on the shared vision for long-term cooperative action as follows:

1. The shared vision for long-term cooperative action is an exchange of views or ideas about how to enable the full, effective and sustained implementation of the Convention, addressing cooperative and enhanced action on mitigation, adaptation, technology, finance and capacity building, guided by the principle of common but differentiated responsibilities between developed and developing countries, with developed countries taking the lead in reducing their GHG emissions, while ensuring developing countries the right and space for development. Discussions on the shared vision should focus on how to implement the long-term cooperative action.
2. The shared vision in itself shall not be a final result or anything that would be reflected in the textual language in the agreed outcome to be reached at COP15 in Copenhagen, but rather to provide general and clear guidance for actions to enable the full, effective and sustained implementation of the Convention.
3. The shared vision for long-term cooperative action shall also be guided by the ultimate objective of the Convention in its Article 2 that consists of three aspects: 1) to stabilize the GHG concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system; 2) to allow ecosystems to adapt naturally to climate change; 3) to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.
4. The shared vision shall also follow the principle of equity and take into full consideration of the development needs of developing countries. The per capita accumulative emission convergence is a reflection of principle of equity. The emission of Annex I parties (excluding EIT countries) has grown 11% from 1990 to 2004. By the end of 2004, developed countries contribute to 75% of the accumulative GHG emissions with only 20% of the world population. The GHG emissions of developed countries are still growing even after their industrialization. The overall level of economic development of developing countries is far below that of developed countries. Developing countries need carbon space to their industrialization and urbanization. Developed countries should deeply reduce their emission in order to make carbon space for developing countries.
5. A long-term global goal is not a single-dimension quantitative mitigation objective, but a multi-dimension objective including all the four building blocks of the BAP. The consideration of long-term goal for mitigation should be based on sound science and take into account the techno-

economic feasibility of achieving the goal, and ensuring equitable allocation of carbon space. The discussion of a long-term global goal is helpful to achieve consensus among parties to cope with climate change, but more urgent work is for developed countries to fulfill their near-term commitments and take mid-term mitigation actions. Developed countries should reduce their GHG emissions by at least 25-40% by 2020 compared to their 1990 level while ensuring comparability of efforts among them.

6. It is the common responsibility of developed and developing countries to take mitigation and adaptation measures. Developed countries are responsible for causing climate change due to their high historical accumulative and current per capita emissions. They are obliged to undertake deeper cuts of their GHG emissions, and provide financial resources, technology transfer and capacity building to developing countries in a measurable, reportable and verifiable manner. Although developing countries are less responsible for climate change, they are victims of climate change. They will take nationally appropriate mitigation and adaptation actions in the context of sustainable development, supported and enabled by the provision of financing, technology and capacity building by developed countries in a measurable, reportable and verifiable manner.

PAPER NO. 12A: FRANCE ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES

This submission is supported by Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro and Turkey

Paris, 21 November 2008

Subject: Enhanced action on adaptation

4th session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA 4)

Poznan, 1-12 December 2008

Enhanced adaptation action by developed and developing countries must be guided by and consistent with the shared vision of getting the world on a pathway to ensure development towards a safe and sustainable low-carbon economy, sustainable production and consumption, and resilience in the face of climate change.

Keeping the 2°C objective within reach requires urgent action on mitigation. But even limiting global warming to not more than 2°C implies climate change impacts that affect sustainable development in all countries. Therefore the EU believes that the shared vision also has to guide our concrete short and medium-term enhanced mitigation and adaptation actions.

Adapting to climate change impacts will require responses that are tailored to the particular impacts on and circumstances of the country or region affected, and measures should be implemented at the local, regional or national level. The EU is of the view that enhanced action on adaptation should strive for consistency and coherence with national development priorities and strategies and requires partnerships between different stakeholders in countries and between countries. Herein, the UNFCCC can play a key role and demonstrate greater leadership on mobilising adaptation action. It is in this light that the EU proposed a Framework for Action on Adaptation (FAA).

As stated in previous EU submission (FCCC/AWGLCA/2008/MISC.2), the proposed FAA would be a partnership between developed and developing country Parties to enhance the implementation of adaptation measures in order to strengthen resilience and reduce vulnerabilities to the negative impacts of climate change, while making full use of the opportunities for sustainable development. The FAA would provide the arena to mobilise and incentivise actions of Parties and stakeholders in the public and private sector help ensuring effectiveness of adaptation actions. In addition the FAA could guide the financial mechanism operating within the context of the UNFCCC, and be considered by multilateral and bilateral organizations. The FAA would provide the scope of adaptation action and areas. Particular attention should be given to the needs of the developing countries that are particularly vulnerable to the adverse impacts of climate change.

In this submission, the EU elaborates on some of the proposed elements of the proposed FAA, drawing on the discussions in Accra and on ideas put forward by other Parties.

Development and integration of adaptation actions into national and sectoral planning processes.

Several Parties have highlighted that despite the shortcomings in the implementation of projects under the National Adaptation Plans of Action (NAPAs), the process of preparing NAPAs has made an important contribution to building capacity and experience in preparing for adaptation. However, as NAPAs are focused on urgent and immediate adaptation needs of least developed countries, they tend to concentrate on projects that do not always result in general resilience building. For the NAPA process to be more effective, it should be nested in a policy and regulatory context in order to trigger or contribute to the development of an adaptation process that is integrated in the development process. The EU is of the view that there is a need to reconcile a project based approach with one that integrates adaptation needs into development plans and processes in order to factor in climate change risks into all decision making at all levels.

The EU notes that some Parties have proposed expanding the NAPA process to other developing countries. The EU supports and will continue to support the implementation of the NAPAs that have been prepared or are under preparation. However, the EU believes that what is needed is a longer term and broader approach to adaptation, and the integration of adaptation actions into planning processes at all levels, rather than extending the project-oriented NAPA approach. The EU thus proposes exploring with other Parties how the proposed FAA can bridge the gap between the present project-based approach to adaptation, to an adaptation process that contributes to and results in resilience building in the context of national and sectoral planning.

Knowledge, information and capacity building to implement adaptation strategies.

In Accra, several Parties underscored the important role that regional centres and networks play and could play in providing knowledge, information and capacity building which is necessary for effective adaptation action. The EU shares this view that this is one way to enhance knowledge, information and capacity building to implement adaptation strategies. The EU underlines the need to work through existing centres to mobilise their efforts in, e.g. capacity building, data and information collection and dissemination as well as in providing technical and other support for policy making and other decision processes. It is thus a priority that attention should be given to strengthening existing regional centres and networks, to enable them to provide the necessary analytical, technical, policy and capacity support to communities and the efforts of Parties. The EU proposes to mobilize support for this purpose under the proposed FAA and that an arena could be provided for such regional centres to share their experiences, knowledge and expertise as a way of building capacity within and between regions and to support adaptation efforts at all levels.

Risk management approaches.

Risk management approaches are varied and range from capacity building to ensure institutional disaster preparedness (including to enhance the information base for risk assessment) to mitigation actions which in themselves are an essential long term risk reduction measure (to reduce the risk of dangerous climate change). In many countries, disaster risk reduction efforts are being made in the context of the implementation of the Hyogo Framework for Action. However, the interaction between the disaster risk management communities and the climate change communities would benefit from strengthened coordination. The proposed FAA would provide the basis for cooperation between the two communities in order to realise mutual benefits and synergies related to implementation of disaster risk reduction in order to promote climate change adaptation, especially in countries that are particularly vulnerable to climate change. It would promote further cooperation between the two communities and its relevant actors like NGOs, Red Cross/Red Crescent Societies, research institutions, and the private sector, in order to enable the identification of measures that could guide efforts to prepare for disasters and for climate change. Furthermore, under the proposed FAA coordination and cooperation between the ISDR system as well as the IASC and UNFCCC process would be promoted, not only in the area of information exchange but also in terms of the optimisation and effective use of resources in preparing institutions to plan and address future impacts of climate change.

An element that is often singled out in relation to risk management is the issue of risk sharing and transfer mechanisms. One such mechanism, insurance has been proposed as a way of addressing some of the risks posed by climate change. The EU is of the view that while insurance schemes do have a role to play in sharing the financial risk associated with climate change, they do not directly address the impacts of climate change. Such schemes should be seen as an element of a more comprehensive risk management approach, and should be established as a way of complementing and promoting overall risk management. Furthermore, the EU recognises the role of the private sector in the implementation of insurance solutions. In this regard, the EU would like to explore how the proposed FAA could serve as a basis to provide signals to the private sector and catalyse their engagement in the development and implementation of insurance schemes in developing countries, while calling on governments to promote the necessary enabling environment through regulation, provision of information and capacity building.

Enhancing technologies for adaptation.

It is critically important to actively engage public and private sector organisations at the local, national and regional level to accelerate the development, transfer and deployment of appropriate adaptation technologies. The proposed FAA could foster cooperation to support the identification of priority technology needs for adaptation, by engaging relevant public and private organisations to enable the identification of priority technology needs, development, deployment and diffusion of technologies for adaptation and to promote and facilitate technology research. Particular attention should be given to the needs of the developing countries that are particularly vulnerable to the adverse impacts of climate change, inter alia in relation to their needs for technologies to facilitate systematic observation (for example through the Global Climate Observation System (GCOS), modelling, forecasting and access to climate information. In this context and on the basis of the partnerships fostered by the FAA, the EU looks forward to exploring further how the existing technology framework (4/CP.7) can be enhanced to advance efforts to develop, transfer and deploy technologies that would enable effective adaptation action.

Provision of adequate and predictable financial flows to assist developing countries that are particularly vulnerable.

The EU looks forward to the quick operationalisation of the Adaptation Fund so that it can play its full role in the financial architecture of the Copenhagen agreement.

Meeting the costs of adaptation, will require an international financial architecture to optimise and mobilise predictable, sustainable and new, additional and adequate investment and financial flows from various sources (including the private sector, the carbon market, public sector and innovative instruments). The EU believes that there is a need for developing a broad toolbox which can leverage private and public financial flows. Governments will have a critical role to play in both adjusting their public spending to take account of climate risks and in providing the tools, climate information and enabling environments to help their citizens and private sector factor in climate risks, attract investments and optimise use of resources. It must be ensured that support for adaptation action is provided, in particular to the poorest and most vulnerable countries. This is clearly set out in the EU's AWG-LCA Submission on Finance

The EU also believes that international support to manage the effects of climate change will be significantly more effective if it fits with international development assistance practice (as enshrined in the Paris Declaration and more recently in Accra High-Level Forum on Aid Effectiveness). The design of adaptation delivery channels could usefully draw on the core principles of country ownership, alignment, harmonisation, mutual accountability and a focus on results. The experience of and lessons learned from international development assistance have shown that these are essential approaches for achieving long-term change.

With this in mind, the proposed FAA could underscore the importance of simplified, transparent and straightforward procedures to ensure access by developing countries to adaptation support; include guidance on effective means of delivery, for example to support programmatic approaches to adaptation; promote a delivery model that can operate at scale and that incorporates a new type of relationship between contributors and recipients, based on common purpose, shared values, equitable and global representation by all Parties and mutual accountability. Overall, the EU believes that an effective, efficient, equitable and well governed international financial architecture, has strong synergies with national and international policies and poverty reduction efforts will be critical to ensuring the achievement of adaptation objectives . The EU looks forward to receiving an update of the UNFCCC Secretariat's technical paper on investment and financial flows that we understand will address options for, generation of, and delivery of adaptation financing.

Mobilisation and cooperation of relevant organisations.

In order to realise the partnerships to support actions around the elements elaborated above, there is a need to mobilise and cooperate with a wide range of actors, relevant organisations and processes at the international, regional and national levels. One of the important contributions the UNFCCC can undertake is to encourage the actions of other relevant organisations, private and public actors, and strive for consistency and synergies between relevant UN agencies, international processes and organisations

such as, the UNFCCC, its sister Rio conventions, UNISDR, FAO and WMO, just to name a few. Thus, the EU would like to discuss how the UNFCCC, through the proposed FAA, could play a catalytic role in promoting and shaping partnerships between public and private organisations and other stakeholders operating at different levels, across sectors and regions that would work towards the common objective of enhanced and effective adaptation action.

Follow up on effectiveness of adaptation action

Effort to monitor progress on adaptation with the aim of incentivising and advancing effective adaptation at the local, national and regional level will be needed. The EU believes that the present reporting and communication mechanisms that exist within the Convention, such as National Communications, could be used as a basis to communicate information on efforts made by Parties to prepare, develop and implement adaptation measures. An area warranting further work, and one which the EU is open to discuss, is how the proposed FAA could provide an impetus to efforts to monitor the progress made at the local and national levels, in order to inform and advance the process of preparing and implementing adaptation actions.

TAKING THIS WORK FORWARD IN POZNAN

In Poznan, the EU looks forward to discussing and exchanging views with Parties on the above elements in order to develop the further framework for action on adaptation. This work should be informed and draw upon the assessment of the status of implementation of the adaptation related decisions and the work undertaken in the first phase of the Nairobi Work programme.

PAPER NO. 12B: FRANCE ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES

This submission is supported by Albania, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey and Ukraine

Paris, 21 November 2008

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

The EU welcomes the invitation by the AWG-LCA to provide further input on the implementation of a coherent international financial architecture in the context of the Bali Action Plan.

The current worldwide financial crisis will have effects on the economies of all Parties. In this context, the EU stresses that **such crisis cannot be an excuse to deviate from climate protection policies, which are a decisive element of long term sustainable economic development**. Parties should consider this as a challenge to take urgent actions to address longer-term challenges and therefore adequate **financing actions to address climate change must not be delayed: it should remain a priority on the international agenda, now, up to, and beyond Copenhagen**.

The EU reaffirms its commitment to do more to mobilise the necessary finance as part of a global and comprehensive future agreement. In that respect the EU affirms that an effective, efficient, equitable and well governed international financial architecture based on a combination of sources and instruments is of fundamental importance in ensuring the achievement of ambitious mitigation and adaptation objectives. The EU looks forward to receiving an update of the UNFCCC Secretariat's technical paper published first in August 2007 on investment and financial flows to better understand the financial needs and instruments that may help to address climate change.

The EU underlines its commitment to its respective financial obligations under the UNFCCC and its Kyoto Protocol. In addition, Member States have honoured, and gone beyond, some specific previous financial commitments.

The EU considers that the international financial architecture to be agreed in Copenhagen should respond fully to the Bali Action Plan in order to enable global temperature increase to be limited to not more than 2°C above pre-industrial levels. The architecture should optimise and mobilise predictable, sustainable and new, additional, and adequate investment and financial flows from various sources. It must be ensured that this financing is measurable, reportable and verifiable to support nationally appropriate mitigation actions by developing countries as well as that these mitigation actions are measurable, reportable and verifiable and that effective support for adaptation actions is provided, in particular to the poorest and most vulnerable countries to climate change.

The EU considers it crucial that all Parties commit to implement an international financial architecture according to the cornerstone principle of common but differentiated responsibilities and respective capabilities.

To realise these objectives, the EU proposes that the international financial architecture be based on three core principles, which should be applied to sourcing (meaning the mobilization of finance), delivery (meaning the instruments to deliver finance), allocation (meaning the actions the finance should be used for, including a precise identification and prioritization on needs) and governance (meaning the decision-making components of the architecture).

- **Effectiveness** – delivering and demonstrating concrete, positive outcomes, and results on climate change, in a timely manner and complying with mutual accountability, thereby fully responding to the objective to enable global average temperature increase to be limited to not more than 2°C above pre-industrial levels;
- **Efficiency** – achieving the outcomes by the most cost-effective means, including by ensuring coherence and avoiding duplication of efforts;

- **Equity** – ensuring the responsibility for these actions is shared fairly between Parties, minimising the burden on the poor and vulnerable, and that governance is legitimate and transparent as well as ensuring acceptance by all Parties.

Financial sources of the international financial architecture

The international financial architecture has to catalyze various sources (private/public) and mechanisms (e.g. carbon market, innovative instruments) both at national and international level.

The EU believes there will be a central role for national governments to implement regulatory and market-based incentives to attract public and scale-up, redirect and optimize private finance towards the deployment of low greenhouse-gas-emitting technologies and investment in infrastructure for clean and climate resilient development.

Private investment will, however, be the bulk of the scaled-up finance, particularly for mitigation, and will play a major role in driving economic and technological changes. The EU therefore reaffirms that a key objective of the international financial architecture will be to scale up and orient private investment and financial flows to combat climate change in an effective, efficient and equitable way. Ensuring a shift towards low carbon investments requires engagement of the private sector. The architecture needs to focus on tools, notably market-based instruments, which can ensure this engagement. The response of the private sector will depend on the level of ambition of the future climate policy and on the price of carbon.

Nevertheless, the EU considers that even though public funding will remain subsidiary, the mobilization of the private sector alone will not be sufficient. Support will be needed for delivering scaled-up mitigation actions that are not economically viable on their own in a transitional period and for adaptation in helping developing countries, in particular the poorest and most vulnerable. In this regard the EU highlights the role of the Global Climate Change Alliance to assist the most vulnerable poor countries, in particular the Least Developed Countries and the Small Island Developing States.

Public finance will be essential and should, wherever possible, spur and catalyse the involvement of the private sector leveraging private flows. It should focus on areas that can not be adequately financed by the private sector alone. It should correct market failures, address costs and risks not met by the carbon market, and promote enabling environments and building capacity to create policies that promote low-carbon and climate resilient growth strategies. In this respect, the EU also affirms its commitment to continue to stimulate investments in energy efficiency and renewable energy in developing countries using bilateral and multilateral channels, inter alia, through the Global Energy Efficiency and Renewable Energy Fund (GEEREF).

- **Expanding the carbon market must be at the heart of the Copenhagen agreement:** the EU is committed to contribute to the development of a liquid global carbon market with a broad coverage and deep emission cuts to create sufficient demand and a robust carbon price signal as a key mean to deliver cost-effective GHG emission reductions and a transition towards a sustainable low carbon economy. In this regard, the EU highlights that the perspectives of the EU climate and energy package negotiations will further contribute to its efforts to provide finance for actions to mitigate and adapt to climate change, in the context of a wider international agreement, in particular through the carbon market. In this regard, the EU:
  - Calls for the **development of robust emissions trading systems** in developed countries as well as an increased involvement of developing countries in the global carbon market, through their introduction of domestic emissions trading systems.
  - Reiterates its **support for the International Carbon Action Partnership (ICAP) initiative**.
  - **Stresses the need to ensure the environmental integrity and the efficiency of the Clean Development and Joint Implementation Mechanisms**, and, after 2012, the need to introduce new approaches to scale up sustainable low carbon investments beyond what is possible with project-based, offsetting mechanisms, and in this respect, proposes to explore how to link

developing countries further mitigation action to the carbon market such as sectoral crediting based on no-lose targets and sectoral trading.

- Considers it is essential to give priority to investment and sources of finance which **minimize the distortions of the markets** and which influence individual behaviour by internalising external costs to the benefit of all.
- Considers that it should be a priority to implement carbon-market related domestic policies that can **usefully prepare countries for full integration within the global carbon market**.

- **The international financial architecture should optimise and mobilise predictable sustainable and new, additional and adequate finance from various sources.** In this regard, the EU:
  - Before considering the creation of new instruments, considers preferable to assess and reform the existing instruments, if necessary.
  - Affirms that the international financial architecture should look to **implement a range of instruments** for private or public finance, combining their respective advantages to ensure predictability and adequacy.
  - Recognizes **the importance of international innovative financing instruments** that could be useful to generate public finance, taking into account prominent suggestions from different Parties. The EU notes that the revenues of such mechanisms must be used in line with sound principles of public finance and be fully explored and analysed, using the criteria of equity, efficiency and effectiveness. In relation to such instruments, the aspect of budget allocation rights of national governments and parliaments have to be respected.
  - Notes that **relevant national and regional innovative financial instruments can also play a role**. In this regard recalls that it is for the Member States to determine, in accordance with their constitutional and budgetary provisions, how the revenues generated by the auctioning, from 2012 onwards, of 15 % of the EU ETS allowances for aviation should be used. In this context, they undertake to combat climate change in the EU and third countries, inter alia to reduce greenhouse gas emissions, to adapt to the impacts of climate change, especially in developing countries, and to fund measures to avoid deforestation.
  - **Notes the crucial need for predictable funding for adaptation** should be considered in the light of estimated funding needs, and take account of equity concerns between Parties, other funding requirements and mitigation efforts, and the need to mobilize investments, especially from the private sector. The EU is available to explore and critically analyze with other parties different approaches to finance adaptation in the broader context of the finance and adaptation discussions under the AWG-LCA, while considering it essential to give priority to sources of finance which do not distort carbon markets and which internalise external costs to the benefit for all.
  - **Recognises that climate change poses an additional burden on developing countries**, especially on the poorest and most vulnerable. While development cooperation is aimed at poverty eradication and the achievement of the Millennium Development Goals, national and international efforts in this regard will be threatened unless climate change is taken into account. Thus **the EU believes that integrating nationally appropriate mitigation and adaptation policies into development strategies** will contribute to combat climate change impacts.

- **In terms of ensuring that the public financing is equitable – and thus balanced both within and between countries, the EU:**
  - Considers that it is essential to **promote collective responsibility of all Parties in financing the protection of the climate**, which is a global public good. **Approaches mobilising contributions from all Parties should be explored in accordance with the principle of common but differentiated responsibilities and respective capabilities**. This means that the poorest and most vulnerable countries could be exempted or could make small or negligible contributions to global financing mechanisms.

- **Considers that contributions should be dynamically assessed** and regularly updated, to reflect the changing level of the criteria of contribution.

Delivery instruments for the international financial architecture:

Financial flows will need to be delivered through a variety of instruments. However, given that several delivery instruments covering a broad range of needs for climate finance already exist, **the EU considers that the improvement and the possible reinforcement of existing instruments should be a cornerstone of the international financial architecture**. There is a specific need to improve their coordination and to achieve a financial architecture to adequately address climate change.

- **Delivery instruments should be implemented in a coherent manner. In this regard, the EU:**
  - Considers that creating new instruments should be carefully assessed in terms of their added value to the existing ones and their adequacy as a part of the envisaged financial architecture. Improving and **reforming existing instruments and reinforcing their coordination are preferable**. The EU agrees with other Parties that efficiency of the Copenhagen agreement financial architecture may be hindered by a proliferation of new instruments.
  - Thus **reaffirms the role of the Global Environment Facility (GEF) as the financial mechanism of the UNFCCC and the Kyoto Protocol and the importance of improving its mechanisms** so that it can reinforce its effectiveness and efficiency. The EU notes that such reforms would allow the GEF to play a key role in the implementation of the Copenhagen agreement and would contribute to achieving an adequate and successful replenishment.
  - Calls for **a quick operationalization of the Adaptation Fund**, exploring different options while ensuring appliance of appropriate fiduciary standards **that enable the Adaptation Fund to play its full role in the financial architecture** of the Copenhagen agreement as a reliable and accountable fund.
  - Recalls that **the role of all potential instruments that tackle the objectives of the Convention should be recognized by Parties**, and notes in this perspective that a number of international financial institutions like the World Bank, and also potentially the European Investment Bank and the European Bank for Reconstruction and Development, but also bilateral initiatives will need to play a role in financing climate protection in line with the Convention's objectives and according to their own comparative advantages. In this perspective, and **without prejudice to the future international architecture to be agreed in Copenhagen agreement, the EU welcomes the establishment at the World Bank of the Climate Investment Funds**, which will help to gain experience of mobilising finance and investment to support transformational low-carbon, climate-resilient activities in developing countries.
- **Instruments should deliver finance in a manner which is legitimate, transparent to all Parties and should have solid governance.** In this regard, the EU:
  - Stresses the need for transparency and **calls for more exchanges of information** and coordination between actors.
  - Considers that the governance of the delivery mechanisms of the financial architecture should aim to **full transparency, openness and global representation by all Parties as well as mutual accountability**, and must allow for effective and efficient decision-making, oversight, evaluation and follow-up.
  - Considers that **the Conference of the Parties should give its view on progress and results achieved** and stresses the need to facilitate exchange of best practices and lessons learned, tracking progress both in funding and in delivery of results. For example, the COP should consider periodically the functioning of the financial architecture and adopt conclusions aimed at suggesting the improvement of the financial architecture.
- **The delivery mechanisms should ensure the most cost effective possible results.** In this regard, the EU:

- **Stresses the need for result-based approaches and accountability in all delivery channels and institutions.** The EU recalls the need to ensure that the different instruments are properly managed, in particular to minimise administrative burdens and make implementation procedures clear, simple and transparent in line with environmental objectives of the Convention while at the same time ensuring accountability to all Parties. Another important element in enhancing the delivery of finance could be to scale-up approaches by further developing programmatic approaches, while continuing a project based approach where needed.
- Recognizes **the benefit of mechanisms which support country ownership** and the implementation of locally defined development strategies providing synergies with adaptation and mitigation measures responding to country specific circumstances and needs.

Priorities for finance in the international financial architecture

As stated in the Bali Action Plan the enhanced action on the provision of financial resources and investment should support action on mitigation and adaptation.

The EU considers that financial support for targeted actions on climate change should be delivered taking into account the nature and scope of the measures and actions required.

The EU considers that the specific situation of the poorest and most vulnerable countries should be fully taken into account.

Adaptation

The Bali Action Plan stresses the need for international cooperation to support urgent implementation of adaptation actions, risk management, disaster reduction strategies, and economic diversification to build resilience. It should be focused around a model that can operate at the scale and pace required, and a bottom-up, country-driven approach. International public financial support for adaptation must be used in line with internationally accepted standards for public financial management. In line with the principle of mutual accountability, that contributors demonstrate they have fulfilled agreed financial commitments and recipients demonstrate that agreed results have been achieved.

Increased financing for adaptation should aim to boost development and implementation of national strategies aimed at meeting the challenges of adapting to climate change. Therefore, the EU considers that financial support, based on national priorities and strategies could be provided, for, inter alia:

- Development and integration of adaptation actions into national and sectoral planning.
- Mobilising and improving cooperation with relevant organisations.
- Supporting **research, knowledge, information** and capacity building at local, national and regional levels to implement adaptation strategies.
- Supporting **development of risk management approaches,** including insurance mechanisms to ensure institutional preparedness, by reinforcing observation systems or early-warning, risk prevention and risk insurance.
- Implementing **priority projects identified in National Adaptation Plans of Action**.

Mitigation

The Bali Action Plan recognises that developing country Parties will undertake nationally appropriate mitigation actions in the context of sustainable development supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.

The EU is of the view that the overall level of ambition for developing countries for 2020 defined by the Copenhagen agreement should be consistent with global emission pathways in line with keeping the 2°C objective within reach. On the basis of information provided by the IPCC, keeping the 2°C objective within reach implies that developing countries in many regions will need to make a substantial deviation

of their emissions from baseline by 2020. The EU already notes that financial support could be provided, for national appropriate mitigation actions and other activities, inter alia:

- **Support to developing countries in relation with their nationally appropriate mitigation actions** (cf. our submission on mitigation for more detailed views). In this context, we invite developing countries to indicate what additional nationally appropriate mitigation actions they could implement unilaterally, what further actions they could take with the support of the international community under the Copenhagen agreement, including through linking sectors to the global carbon market.
- **Creation of enabling environments for low carbon development** in particular in order to tap potentials of emission reductions at negative or zero abatements costs.
- **Capacity-building for the use of international carbon crediting mechanisms** and emissions trading in developing countries.
- Improvement and creation of **national emission inventories and for international registry** and reporting needs. The EU proposes the development of a cooperative partnership to help ensuring the elaboration of a robust system to measure, report and verify both the results of nationally appropriate mitigation actions in developing countries and support in terms of technology, financing and capacity-building, building on lessons learned with the implementation of the Convention and the Kyoto Protocol, including for emissions inventories and policy development.
- **Supporting policy approaches to reduce emissions from deforestation and forest degradation**.

Technology

The EU is of the opinion that there is a need for urgent scale-up of deployment research and development of existing, new and emerging technologies to halve global emissions by 2050 and reduce them further in the latter part of this century (cf. our submission on technology for more detailed views). Financial support for mitigation and adaptation technology should primarily focus on market gaps and removing barriers to technological development, deployment, diffusion and transfer consistent with the need to provide long-term signals for R&D and technology deployment. Therefore, the EU considers that financial support could be provided for inter alia:

- Supporting the efforts of developing countries for building the necessary capacities, including for the definition and **implementation of Technology Needs Assessments**, technology-related policies and measures, as well as technology deployment strategies.
- **Supporting the implementation of Technology-Oriented Agreements**, for sectoral cooperation, (e.g., on energy efficiency, renewable energy and environmentally safe Carbon Capture Storage) and leveraging RD&D.
- Supporting **the implementation of technology information platforms**.
- Supporting capacity building for the use of international carbon market **in particular the Clean Development Mechanism.**

PAPER NO. 12C: FRANCE ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES

Poznan, 6 December 2008

Subject: EU ideas on elements contained in paragraph 1 of the Bali Action Plan, for the purpose of the assembly document

Introduction

The EU has submitted, in the weeks before COP14, a comprehensive set of submissions on the elements contained in paragraph 1 of the Bali Action Plan:

- A shared vision for long-term cooperative action (14 November 2008)
- Enhanced national/international action on mitigation of climate change (14 November 2008)
- Reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forest and enhancement of forest carbon stock, in the context of the AWG-LCA and the SBSTA (19 November 2008)
- Enhanced action on adaptation (21 November 2008)
- Enhanced action on technology development and transfer to support action on mitigation and adaptation (14 November 2008)
- Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation (21 November 2008)

The present submission aims at making public some additional ideas of relevance to the work of the AWG-LCA:

- EU ideas on REDD, as expressed in the Conclusions of the EU Environment Council on 4 December, 2008;
- EU ideas on response measures;
- Recollection of EU ideas on various elements of paragraph 1 of the Bali Action Plan – ideas that were used as a basis for EU interventions in the sessions of the AWG-LCA contact groups in 2008.

The present submission is intended as a complementary contribution to the Assembly Paper under preparation by the AWG-LCA Chair.

1. **EU ideas on REDD, as expressed in the Conclusions of the EU Environment Council on 4 December, 2008**

The aim of the EU is to halt global forest cover loss by 2030 at the latest and to reduce gross tropical deforestation by at least 50% by 2020 compared to current levels;

The EU reaffirms the synergies between the Rio Conventions, as well as with other related instruments and processes such as the Non-Legally Binding Instrument on All Types of Forests, and the opportunities for co-benefits of actions to mitigate and adapt to climate change, and preserving biodiversity; stresses that concerns regarding conservation and sustainable use of biodiversity and ecosystems should be taken into account when formulating and implementing activities aimed at tackling deforestation and forest degradation; and welcomes the establishment by the Convention on Biological Diversity of a process to take this forward, and looks forward to its outcomes;

The EU supports the objective, within the United Nations Framework Convention on Climate Change, of developing financing mechanisms, taking into account existing arrangements, as part of an effective, efficient, equitable and coherent financial architecture within the post-2012 climate agreement to be reached in Copenhagen, to support developing countries to reduce emissions from deforestation and forest degradation; stresses that complementary ways to assist developing countries to preserve and

sustainably use their forests and to reduce the risk of international leakage are needed, such as promoting the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks; looks forward to continuing a constructive dialogue with partners, in particular developing countries, on reducing emissions from deforestation and forest degradation;

The EU advocates that any financial mechanism 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 conservation, sustainable forest management, and enhancement of forest carbon stocks. Nationwide implementation involving the entire forestry sector would be required so as to minimise the risk of in-country leakage; stresses that such a mechanism should take account of the need to secure co-benefits, such as protecting biodiversity and eradicating poverty, to the greatest extent possible; furthermore, holds that, at the national level, effective implementation should require that effective forest governance structures are in place, that the rights of forest-dependent local communities are respected, and that the principles of common but differentiated responsibilities and respective capabilities should be taken into account when designing the financial support instruments under such mechanisms;

2. <u>EU ideas on response measures</u>

The EU understands the concerns some countries may have about the challenges that a global transition to a low greenhouse gas emitting economy may present to their economies and societies. The EU is of the view that this transition should be congruent with sustainable development processes in all countries..

The EU is making significant efforts to understand the needs and concerns of developing countries arising from the impacts of the implementation of response measures. However, it is important to emphasise that wider economic and political factors do play a role on the vulnerability of social economic sectors and these should not be overlooked.

While important work has been undertaken to address the concerns arising from the impacts of response measures, the EU is of the view that some further work would need to be done to better understand this issue. The EU notes the need to enhance the exchange of information among all Parties and in particular from developing countries in order to get a better understanding of the issue**.**

For the EU it is of utmost importance that all Parties continue to develop and implement policies and measures to mitigate climate change according to their commitments under the Convention. Effort to assess potential effects of such response measures should not constrain nor hinder progress in addressing climate change.

The EU is of the view that attention should be given to needs and concerns of the least developed countries, whose situations are compounded by poverty and development challenges.

The EU is of the view that we should avoid duplicating efforts. It is important that the discussion on response measures under the AWG-LCA and the AWG-KP is conducted in an efficient way.

3. <u>Recollection of EU ideas on shared vision, as expressed in Poznan session</u>

Elements of convergence between Parties:

- Climate change is a global problem that requires a global solution and all parties to act according their respective capabilities to put the world on a **pathway towards a low-carbon society.**
- Shared vision is an **overarching element** essential to ensure safe and sustainable and climate resilient low-carbon development, sustainable production and consumption, climate-safe paths and reduced vulnerabilities. This includes seizing opportunities for sustainable development.
- Sustainable development was mentioned as part of the solution to climate change. But we also recognise that Climate Change itself threatens sustainable development, including the achievement of Millennium Development Goals.
- We need a shared vision including a long-term goal that will
    - **guide** our short- and medium term **mitigation** and **adaptation** action,

- should be **science based**;
- recognise **scale and urgency** of challenge,
- and aim at **avoiding dangerous climate change impacts** in particular for **the most vulnerable** countries/regions/people

- The shared vision is **relevant for all building blocks:**
    - It underpins our action on adaptation, in the context of a **framework for action on adaptation**
    - The shared vision includes the recognition the need for scaling up **finance** and investment both for mitigation and adaptation. It should guide investment decisions and drive innovation, encourage new **technology** development and accelerate the deployment and diffusion of existing technologies, as you reflected in the summary of the workshop.

On long-term goal:

- Need for a long-term goal to provide **guidance** – as an **aspiration** and a **yardstick** for establishing concrete and measurable short- and midterm actions.
- Establishing this long-term goal, we need to take into account the **principles** of equity and common but differentiated responsibilities and respective capabilities.
- Many have stated the need to define a **peaking year** and the **deep cuts** needed subsequently, to reflect the **urgency** as shown by science.
- Need for **leadership** from **developed countries**, reflected in clear and ambitious **mid-term targets** for developed countries
- As you pointed out in the summary of the workshop, we all recognise the balance of the Bali Action Plan with regard to the action taken by developed and developing countries, and that **developing countries also need to take action** including on the basis of **support** from developed countries, in order that their emissions significantly deviate from business as usual and thus contribute to achieving the global goal.

4. <u>Recollection of EU ideas on mitigation, as expressed in Accra sessions</u>

EU reconfirms principle of common but differentiated responsibilities and respective capabilities. **Key issue to explore** :

- what does this principle mean **for national appropriate mitigation action between and within groupings**, so that:
    - we can enhance fairness and effectiveness of the climate regime under changing national and international circumstances.

All developed countries have to take the lead:

- Action in the order of 30% by 2020, consistent with the IPCC range of 25-40% by 2020, compared to 1990,
- issue of **comparability**

The EU would like to discuss:

- how further action could be put forward by different developing countries,
- how actions can be measured, reported and verified.
- how actions will be differentiated between countries and among sectors

This action should be appropriately supported:

- in terms of technology, financing and capacity building by developed countries, by the global carbon market and by other means
- it should focus action on those countries most in need of financial and technical support (capacities currently vary significantly in DCs)

In respect to action by **advanced developing countries and major emerging economies**, we should explore how this could lead to a substantial deviation from baseline emissions by 2020 in line with the assessment of the IPCC.

Due to their special circumstances and limited capabilities and responsibility for GHG emissions **Least Developed Countries** should not have to take on any mandatory action:

- in addition to existing instruments such as an improved CDM,
- voluntary contributions such as SD-PAMs should be encouraged and supported.

Technology in relation with mitigation

Two key starting points:

1. Developed country parties would **do more to support existing and new financing** instruments **and tools**, including assistance to human and institutional capacity
2. Developing country parties would **adopt appropriate policies and measures** to create enabling environments, in particular for attracting domestic and international investment.

In addition, **need for an effective institutional and organizational arrangement coordinating, supporting, enabling and managing the activities related to technology**, including the recognition of activities and commitments undertaken by Parties and other actors, both within and outside the Convention.

Elaboration on differentiation

In the previous session we talked about differentiation extensively and I noted different views. I would just like to point out that it would be helpful if would not just refer to the first part of the CBRD principle but also to the second part, which you all know refers to **respective capabilities.**

In my intervention today I will make some points on the types of actions that developing countries could take considering their respective capabilities.

Countries are already undertaking actions. In Accra, for example, we had useful side events about the **national low carbon development plans** of some countries. Also in this contact group we heard about these plans. South Africa, for example, mentioned that they have made an analysis of what measures they could take leading to substantial deviations.

As everyone will know these plans are a commitment for **all Parties** under Article 4.1.b of the Convention.

As countries have different capabilities it is evident that they will not all look the same. Some can cover a broad set of sectors and extensive range of actions, while this is different for others.

The debate in the LCA could benefit from looking in detail on the type of policies such plans could include, to ensure sufficient appropriate action. Also it seems clear Parties can learn from each other.

We also need to address the method to measure, report and verify them.

A specific type of action appropriate for some Parties could be **Sustainable Development Policies and Measures.**

Several presentations and interventions in this setting have already given examples of SD-PAMS, such as energy efficiency measures or measures to promote renewables.

For other countries with more capabilities it might be appropriate to Increase their participation **in the carbon market** through, for instance sectoral crediting mechanisms and sectoral trading.

One type of sectoral crediting mechanism could be **no-lose targets** with voluntary and non-binding targets. It would credit sectoral emissions reductions within a country against a sectoral baseline which is established below business as usual. As such it goes beyond mere offsetting while still giving an incentive for appropriate national action in that sector.

Some developing countries might even want to consider **sectoral trading systems** as a national policy tool to achieve efficient mitigation. This could eventually be linked to other existing trading systems.

These are just a few examples. I would hope though that in our next session we could become much more concrete and explore the capabilities of countries and related appropriate actions. We fully recognise that this discussion is also linked to the type of support that can be given.

5. Recollection of EU ideas on mitigation, as expressed in Poznan sessions

Developed countries have to continue to take the lead:

- overall (as a group) and individual country targets for 2020
- collectively reducing emissions by 30% by 2020 at 1990 levels
- comparability (capability, responsibility, mitigation potential and national circumstances). Also cost-effectiveness to enable ambitious targets – link here to use of flexible mechanisms
- link to AWG KP
- build on current system for reporting of national communications and annual inventories to the UNFCCC with the independent review structures for MRVed mitigation targets by developed countries.

Developing countries – recognise important action is already taken (link to use of MRV)

- Copenhagen agreement should also specify level of ambition of developing countries as a group:
  - ✓ IPCC says: substantial deviation from baselines by 2020
  - ✓ Recent scientific research suggests: developing countries, in particular the most advanced among them, would have to reduce emissions by 15 to 30% below business as usual (obviously respecting common but differentiated responsibilities and capabilities)
- *How could this happen?*
- We should build on current rules (articles 4.1b and 12.4 UNFCCC) – national mitigation programmes could become underpinning structure of:
  - ✓ enhanced contributions by developing countries.
  - ✓ **And** tool to identify needs for support to enable implementation of actions

6. Recollection of EU ideas on adaptation as expressed in Accra sessions

From the discussions in this contact group, the EU has identified a number of areas where we feel there is some common understanding emerging.

We know you will prepare a report of this session and we would like to highlight some areas that you could consider in your report. In our view, these are some of the areas of agreement that could be a basis **to develop details on elements of a framework for action on adaptation in Poznan**.

We agree that there is a need to accelerate efforts and there is a common understanding on what will be needed to advance adaptation.

For example, **sharing of knowledge and best practices**, **building capacity at local and regional levels**, ensuring that there is **integration of** that **knowledge and capacity at all levels** including in **national planning and strategies**.

Adaptation action should be **country driven** meaning that it is a priority for **national governments who have a special role in incentivising adaptation.**

There seems to be agreement that the integration of adaptation into all decision making and planning is essential to **ensure effective and sustainable adaptation actions**.

We do recognise that **there is an added cost** when adaptation is mainstreamed, which will feature particularly in the short term. On the other hand, there are also benefits of such integration, not least as the costs of losses due to climate change would be reduced in the long term.

There is also agreement on the **need to significantly scale up resources** for adaptation.

On the issue of enhanced knowledge sharing, the EU recognises that **ALL countries** are faced with the challenge of addressing climate change. There is a need to **improve the means of sharing of experiences**. We need to **build on the work of the NWP** and make **use of existing institutions** and **network**s, in particular at the regional level.

Regional centres have been mentioned as a **means of catalysing activity** at a **local, national and regional** levels. Important elements could be capacity building, coordinating research activities, exchange of information, experiences and best practices and to link different communities and decision makers at local regional and national level. We need to **explore how to strengthen** and **enhance their role.**

There was a general agreement on **the need to streamline access to adaptation support**. The EU is of the view that we need to find ways to **facilitate access** to the means of implementation at the local national and regional levels.

There is a need to explore how **to support the LDCs** to **enable them to formulate adaptation plans and programmes** consistent with their national priorities and strategies.

We also recognised that there are technologies **that are sector specific** such as water management and agriculture, and here its important to recognise and seek the contribution that such international sectoral organisations can make such as the Consultative Group of International Agricultural Research (CGIAR) and seek ways to engage them.

In the continued discussions, we propose that we focus on **how the elements outlined here can be facilitated by the UNFCCC process**.. We look forward to exploring how we can build on and enhancing the existing institutions within and outside the Convention process to scale up resources and deliver these in an effective and efficient manner.

Finally the EU is committed **to scaling up its support to adaptation** and to **working in partnership with other Parties** and **stakeholders both in the public** and **private sectors** to mobilise adaptation actions **within and outside the UNFCCC process**.

7. Recollection of EU ideas on adaptation as expressed in Poznan sessions

- In respect of the risk management workshop yesterday – I was encouraged to hear about efforts being made in countries. We recognise the challenges faced by many Parties in trying to link action on disaster risk management and climate change.
- In the EU's view effective adaptation requires three things:
  - Knowledge of what the impacts of climate change will be in a particular country
  - Capacity and tools to use that knowledge to plan for and address those impacts.
  - Resources, including financial and technical, to implement adaptive measures.
- The EU has been listening carefully to the points made by Parties over the course of our meetings in 2008. We understand Parties' concerns on adaptation, especially those of the most vulnerable countries. In particular, we recognise concerns in relation to improved access to adequate, predictable, sustainable and additional financial resources for adaptation. We aim to discuss a strategy for scaling up finance and investment flows for mitigation and adaptation in response to the Bali Action Plan at the Spring 2009 European Council in late March, just before the first negotiating session of 2009.

- Since Bonn the EU has talked about its proposal for a Framework for Action on Adaptation.
    - At its heart, this is about a **country-led approach** to adaptation, which recognises the **mutual responsibilities of developed and developing countries** and facilitates coherent responses from a range of actors.

The EU would like to highlight 3 points that capture our proposal and many of the ideas that have been presented by other Parties.

1. **First** is the concept of mutual responsibility and partnership.
    - Addressing climate change is the objective for all of us
    - Meeting the challenge of adaptation is only possible if ALL countries work together. We all agree on the need to support the countries that are particularly vulnerable to climate change to address the challenges.
2. **Second**, as adaptation is a process, we need a longer term and broader approach.
    - Adaptation actions must be integrated into planning processes at all levels. We would like to explore how to bridge the gap between the present project-based approach and an adaptation **process** that results in climate resilient development.
3. The **third** and final issue I would now want to highlight is the role of the UNFCCC.
    - There is agreement that its role will be catalytic.
    - What does that mean in adaptation context?:
        - A framework of action on adaptation agreed under the UNFCCC could provide the arena to **mobilise and incentivise** actions of Parties and stakeholders in the public and private sector, and help ensure the effectiveness of adaptation actions. For example – thinking about what we were discussing in the LCA workshop yesterday – the Framework for Action on Adaptation could provide the basis for cooperation between the risk management and climate change communities.

8. Recollection of EU ideas on technology as expressed in Accra sessions

We need a vision for how we could ensure that within the climate change regime we deal with technology diffusion effectively. Therefore the EU has developed a proposal for a "Framework for International Technology Cooperation" under the UNFCCC as part of the Copenhagen agreement.

At the heart of our proposal there are four elements we want to further develop in cooperation with all Parties. These are:

1. Institutional and organisational arrangements
    - The question of structures needs to follow question of what needs to be done and the EU is keen on discussing all these issues in the next steps. These arrangements should assist in particular:
        - Support to the delivery of technology national programmes and Technology Needs Assessments (TNAs);
        - support to capacity building programmes;
        - information and awareness building;
        - measuring and monitoring the actions of all the parties *(both within and outside the convention)*
2. Enabling environment
    - We feel strongly that all parties should assess their technology needs and implement supportive domestic policies and measures, including national programs
    - Particular support should be provided to LDCs on capacity building

3. Technology-oriented agreements
   - These agreements could guide and facilitate technology cooperation as a concrete means of implementing our differentiated actions on technology. They could address the areas such as:
     - Country specific sectoral deployment schemes
     - international R&D and demonstration cooperative projects
     - energy efficiency programmes
4. Financial mechanisms and tools
   - We think that the market and the private sector will deliver much of the finance for technology-related needs. Some tools and incentives however is necessary to facilitate private investment.

- We are very encouraged that many other Parties also believe that these elements are central to the issue of technology diffusion and I see many possible communalities. We would like to further take this up in Poznan to add more detail to these crucial elements. To this end, the EU will propose a full submission related to technology issues prior to Poznan.

9. Recollection of EU ideas on finance as expressed in Accra sessions

General:

The EU is committed to **scale-up and mobilise financial and investments flows and optimise existing ones** as part of a global and comprehensive Copenhagen agreement. We need to deliver **new, adequate, predictable and sustainable** financial resources.

The EU suggests that the AWG-LCA focuses its work on **developing a toolbox to deliver finance for mitigation and adaptation –** see our submission for details. We are also considering with interest and are happy to discuss **proposals** that Parties have put forward.

Adaptation:

Public resources will play an important role in financing adaptation. For many countries the costs of adaptation will be borne domestically. This will need to be supported by international finance, especially for the poorest and most vulnerable countries, where ODA will remain essential.

Private investments can be expected to cover a portion of the adaptation costs in several sectors, especially in sectors with privately owned physical assets.

(Adaptation finance toolbox:)

For adaptation, the EU suggests the following main elements of the **toolbox** to leverage public and private finance to be considered in our future work:

● **Existing mechanisms:** it will be important to continue with the existing mechanisms that channel finance and investment towards adaptation - such as the CDM levy.

● **National policies and private-public partnerships** will play a key role in attracting private investments and optimizing use of resources.

Mitigation:

(Mitigation finance toolbox:)

For mitigation, the EU suggests the following elements of the **toolbox** to leverage public and private finance to be considered in our further work:

- The **carbon market** has the potential to and should become a key vehicle for financing mitigation for all Parties. In the EU we are working on the EU energy and climate package that is designed to strengthen this market and may leverage considerable resources that can finance mitigation.

- **Innovative financing mechanisms** can assist in creating and strengthening the price on carbon. We should identify and further develop innovative schemes which leverage particularly private investments and enhance mitigations efforts in developing countries. An **example**: A part of the revenues of 15% of the EU-ETS allowances for aviation that will be auctioned from 2012 onwards should be used to finance mitigation actions in the EU and third countries, especially developing countries.

PAPER NO. 13: GUATEMALA ON BEHALF OF EL SALVADOR, HONDURAS, NICARAGUA, COSTA RICA AND PANAMA

Climate Change has turned into one of the main threats for the Central American Region.
Only for the last eight years, 9.2 million people have been affected by climate related disasters.

Because we are an isthmus, with high density population and socio-environmental degradation, our territorial vulnerability has increased poverty, especially in women and children of rural and urban marginal areas.

50% on average of Central Americans are in poverty. Central America shares the same geographic, ocean environment and climate related risks with the Caribbean islands. In spite of its vulnerability, it is lacking the appropriate treatment, recognition and support given to other vulnerable Parties, due to climate related risks. For some of the reasons exposed, Central America requires an "insular treatment."

Already the region is engaged with strong commitment to reduce the risks, promoting community resilience and invigorating an effective culture of prevention. However, in order to rise to climate change challenges, financing, capacity building, transfer and development of technology, use and respect of traditional knowledge, and ecosystem based adaptation, we need to intensify large scale commitments from all parties.

Copenhagen agreement must address these issues in an effective manner, because **climate-related disasters** have been undoubtedly increasing in magnitude and frequency. Our people must not wait any further.

PAPER NO. 14A: ICELAND

A shared vision

Submission to the AWG-LCA , 5 December 2008

A shared vision is needed on how to forge a path towards a low-carbon society, where developed countries reduce greenhouse gas emissions and assist developing countries forging a cleaner path towards economic development. A central element of the shared vision is a clearly defined long-term global goal. The 4th Assessment of the IPCC gives enough comfort to translate the ultimate objective of the Convention to a quantitative goal. Iceland has stated that global temperature increase should stay within 2^{o}C above pre-industrial levels.

In addition to the central task of setting a long-term aspirational goal, a shared vision will set the frame for decisions on enhanced action, which must include decisive steps for limiting and reducing net greenhouse gas emissions, increase action for adaptation to climate change, and stepping up efforts to develop and disseminate climate-friendly technology and practices. The shared vision should also state and restate the principles upon which to base action. Emphasis should be placed upon effectiveness in reaching the long-term global goal and forging a pathway towards that goal. Fairness in sharing burdens and allocating assistance on that pathway towards truly sustainable development are integral components of a successful agenda.

Iceland agrees with those that emphasise the need for a deep cut in global emissions. A shared vision towards that end must chart a pathway towards a low-carbon society, that is ambitious and achievable. For this a political will and active participation of all actors of the relevant sectors of society is needed, be they governmental, private business or civil society. In this context, Iceland underlines the importance of gender considerations and balanced gender participation.

It is also imperative that climate awareness be an integral part of economic policies and development plans. Thus climate friendly investment decisions must be a priority, especially regarding energy. Technology is also a priority. Public private partnership is needed to build international cooperation for innovative technology development.

Lastly but not the least, the path has to be viable and support sustainable development. The measures selected should be as cost-effective as possible and ensure continued economic and social development. Iceland supports measures to make the carbon market global, as an effective instrument in that regard. Also, we welcome the various proposals on how to cover emissions from all major emitting countries.

PAPER NO. 14B: ICELAND

Mitigation of climate change

Submission to the AWG-LCA and the AWG-KP, 5 December 2008

Mitigation is at the heart of enhanced implementation of the Convention; actions to avoid harm lower the cost of adaptation to adverse effects of climate change. Mitigation has to take place within the context of a shared vision of long-term action, including a global goal.

A collective ambition

Effectiveness and fairness are central features of an enhanced climate mitigation regime. It must provide a guide towards a long-term goal, with robust backing for effective technology development and cooperation. Also it has to include provisions for guiding financial flows and investments towards climate-friendly technologies and clean development.

Fairness is a valid principle in itself. Also, a regime that is transparent, fair and balanced has more chance to succeed. The principle of common but differentiated responsibilities should guide the work ahead. Developed countries should take the lead in mitigation actions, including QELROs, and developing countries should take nationally appropriate action in line with their capabilities and state of development, with necessary support.

Comparability of efforts

The Bali Action Plan calls for ensuring comparability of efforts among developed country Parties, taking into account differences in national circumstances. It is difficult to craft an objective formula for comparability of efforts, but the AWG-LCA should consider what parameters are relevant in this respect. A number of relevant and useful parameters have been listed in a technical paper[*], which was produced to aid the work of the AWG-KP. The point of reference should be the commitments assigned to Parties for the first commitment period of the Kyoto Protocol. Iceland believes that two additional issues should be addressed in this context, notably (i) the comparability of efforts between large and small Parties, and (ii) the benefits of sectoral mitigation potentials based on comparable methodology employed across Annex-I countries.

Comparability of efforts between large and small Parties

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

Sectoral approaches and sector-specific actions

A number of Parties have pointed to sectoral approaches and sector specific actions as practical methodology to limit and reduce net emissions. Focusing on key sectors provides a potential to set up programmes for highlighting best practices and identifying and spreading low-GHG technologies. Sectoral approaches can be helpful in increasing cooperation with industry, which is key in constructing an effective climate change mitigation regime.

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

Every country that aims to limit and reduce greenhouse gas emissions has to look at individual industries and sectors to identify mitigation potentials and practical mitigation options. Sector-specific actions are an inherent part of domestic mitigation action. There are also examples of bilateral and regional sectoral cooperation arrangements and instruments that already exist or are being planned.

UNFCCC is the key global venue for collective action to curb climate change, and should be actively engaged in discussions of new ideas and promising approaches for climate change mitigation. The UNFCCC should serve as a forum for an ongoing discussion about sectoral approaches and practical examples thereof, and help foster cooperation between countries and between government and industry.

PAPER NO. 14C: ICELAND

Adaptation to climate change

Submission to the AWG-LCA, 5 December 2008

There is a strong link between adaptation to the adverse impact of climate change and sustainable development objectives. Diverse consequences of climate change can halt sustainable development in various ways. Sustainable development helps to build resilience towards climate change impact. Adaptation planning and implementation is therefore an integral factor in achieving the goals of sustainable development and vice versa.

If an adaptation framework would be established, the mutual interlinkage between adaptation and sustainable development should be reflected in policy guidelines of different actors at the local, national, regional and international level.

Building up knowledge in the field of adaptation is important and presents good opportunities for countries to work together to tackle climate change drawing up on the experiences of each other. This can and should be done through partnerships at the bilateral and multilateral level. Cooperation in training professionals could be facilitated through existing or new programmes. Another important factor is raising public awareness and utilizing the expertise that exists within multilateral organizations, governments, NGOs, development agencies and the private sector.

Good coordination of adaptation efforts by different actors is required and it should take place within the UN fora. Synergies needs to be ensured and duplications avoided.

In the context of adaptation to climate change, Iceland would like to underline the importance of gender considerations and balanced gender participation.

The Framework Convention on Climate Change is the guide and path in tackling climate change. Iceland concurs with those that have expressed ways to enhance the role of the UNFCCC in engaging multilateral bodies, the public and private sector and civil society in supporting adaptation activities.

PAPER NO. 14D: ICELAND

Technology cooperation.

Submission to the AWG-LCA, 5 December 2008

Technology development and cooperation are crucial for mitigation efforts and adaptation. Iceland shares such views as expressed by AOSIS, that invigorated efforts to develop and diffuse the use of renewable energy, energy efficiency and other related clean technologies are a priority. In considering such actions, cooperative sectoral approaches and sector-specific actions hold much promise. Towards that end, possible technology development and cooperation arrangements and transnational market-based instruments in specific sectors need to be developed. Financing is a necessary element in a strengthened regime for technology transfer and development. Private financing is a crucial element for climate-friendly investment and actions, and ways must be found for the UNFCCC to leverage an increase in clean investment by the private sector.

Renewable energy

According to the 2007 World Energy Outlook, a global estimate of $22 trillion of energy sector investments will be made by 2030 to meet projected energy demands. At least half of this investment is expected to occur in developing countries. It is imperative that these investments be directed to climate friendly energy technologies. Renewable energy is a viable alternative.

Geothermal Power could benefit an additional 750 million people around the world. At least 70 countries have utilizable geothermal energy potential. With today's technology, more than 140.000 MW of electric power can additionally be harnessed in high temperature geothermal fields. These areas are for example in the African Rift Valley and the Pacific Ring of Fire (including the archipelagos of East Asia, Central and South America, and the Western United States). Vast low-temperature areas, as for example in China and Europe, can provide heat for district heating and other direct use. Deep drilling projects, currently underway, and enhanced geothermal systems are likely to greatly increase power production. Switching from coal to geothermal energy can reduce CO_2 emission by 97%.

Hydropower already saves burning the equivalent of 4.4 million barrels of oil every day. Yet only 1/3 of potential hydropower resources have been developed worldwide. Hydropower projects that are developed and operated in an economically viable, environmentally sound and socially responsible manner represent sustainable development. Hydropower already produces one sixth of the world's power and is one of the most important sources of renewable energy. Much of the remaining potential is in countries where the need for energy is the greatest, for example, only 7% of the hydropower potential in Africa has been harnessed.

Innovative technology solutions for energy savings and clean energy

Innovative solutions for further utilization of clean energy and energy savings will play an important role in mitigation efforts. In that respect it is important to focus on best available practises. This will require increased cross sectoral international collaboration. The private sector has been and will continue to be the primary driver of the technology development. Public-private-partnerships are also important in that regard.

A distinction needs to be made between short term actions that can produce immediate results by deploying already available technologies - and long term actions that involve innovative technologies that are not yet proven.

It is to be expected that solutions need to be tailored to different requirements. In the same manner the contributing countries will have different capabilities to develop and deploy new and proven technologies. It is thus important that there exists a mechanism that collectively evaluates, approves and promotes technology development and diffusion. For this purpose existing instruments should be deployed, to the extent possible.

In order to accelerate the adoption of clean technologies economic incentives are required, as well as elimination of cross border barriers to technology development and diffusion. A long term goal should be to establish a common or well harmonized global emission trading system.

PAPER NO. 14E: ICELAND

Land Use, Land-Use Change and Forestry (LULUCF)

Submission to the AWG-LCA and AWG-KP, 5 December 2008

Iceland is of the view that sinks as well as sources should be included in a climate mitigation regime. The LULUCF sector should be strengthened in the international climate regime, given its important mitigation potential and possibility for win-win projects supporting climate goals, conservation of biodiversity and sustainable development.

There is considerable untapped mitigation potential in the LULUCF sector, including in avoided deforestation and degradation of forests and other carbon stocks. This should lead to continued work in providing positive incentives to reduce emissions by halting deforestation and land degradation, and increase carbon sequestration in forests, other vegetation and soil.

The LULUCF sector is more complex than most others in terms of methodological issues, accounting rules etc. This means that increased effort should be made to improve accounting rules in LULUCF and address questions relating to permanence of gains, factoring out and other methodological issues. While caution should be employed in constructing new incentives for climate mitigation in the LULUCF sector, this should not deter Parties to proceed to develop such incentives. The experience gained from the implementation of the Kyoto Protocol with regard to LULUCF has led to much more robust science and methodology, which will help further work in this field. Iceland sees climate change mitigation achieved by LULUCF activities as complementary to mitigation achieved by cuts in greenhouse gas emissions, especially from the burning of fossil fuels, not as substitution to such cuts.

Wetland restoration as a new activity

Wetlands, especially peatlands, are the biggest store of carbon on land. The draining and degradation of wetlands turns them into a net source of greenhouse gas emissions, while the restoration of degraded wetlands can halt emissions of carbon dioxide and even reverse them. Wetland conservation and restoration also has significant co-benefits on biodiversity, water regulation etc. Iceland has made a proposal in the AWG-KP on wetland conservation and restoration as an eligible activity for Annex-I parties to meet their commitments in the next commitment period. The proposal would provide incentives for wetland restoration and disincentives for wetland degradation. Credits from wetland restoration (and debits for degradation) could be based on evaluation of change in GHG emissions due to anthropogenic activities.

Iceland has significant mitigation potential in wetland restoration, having drained much of its lowland wetlands in the 20th Century, mostly in order to convert them to agricultural use and less intensively managed grazing areas. Recent studies have showed considerable emissions of CO2 from these drained wetlands from underlying peat stocks. A project on restoration of wetlands has shown that blocking draining ditches and raising water levels can restore the biodiversity and functions of the original wetlands to large extent, and be a cost/effective measure to stop or significantly reduce CO2 emissions.

Iceland has in some ways more limited mitigation potential overall than most Annex-I countries, given the fact that almost all stationary energy for electricity and space heating comes from renewable sources. In contrast, Iceland has significant mitigation potential in the LULUCF-sector, and including wetland restoration would enhance that potential. The issue of wetlands and peatlands is, however, by no means only of interest to Iceland. There is a big potential climate change mitigation gain on a global scale to provide incentives for wetland conservation and reclamation. The technical mitigation potential for drained and damaged wetlands, including peatlands, is perhaps equivalent of up to 10% of global emissions. Feasible mitigation by wetland restoration would be a lot smaller, taking into account that much of degraded wetlands are used for food production, habitation and other use, but it would still be significant.

PAPER NO. 15A: INDIA

Government of India Submission to UNFCCC on enhancing action on adaptation

Background

The UNFCCC has given equal importance to both adaptation and mitigation as part of the response to climate change. Articles 4.1(e), 4.4, 4.8 and 4.9 provide the basic framework and outline the responsibilities of the different Parties. The Marrakech Accords at COP7 (2001) brought the need and urgency for adaptation to the foreground in the UNFCCC negotiations. They identified the need for predictable and adequate levels of funding for Parties not included in Annex I and the need to develop appropriate modalities for burden sharing among Parties included in Annex II[1]. Three new funds[2] were established under COP7 to support adaptation activities. 18[3] areas of assistance on adaptation were identified, including for GEF funding and process of development of National Adaptation Programmes of Action (NAPAs) for LDCs were also achieved under COP7.

The Adaptation Fund created as a part of the Marrakech Accords was finally operationalized at CMP3 in Bali. The process involved decisions regarding the basic elements of the fund (28/CMP.1), principles underlying operation and management (5/CMP.2) and giving specific form to these arrangements (1/CMP.3) under which the Adaptation Fund Board is serviced by a Secretariat and a Trustee. GEF would provide the Secretariat services and World Bank would serve as the trustee, both on an interim basis. This outcome was the result of sustained and concrete efforts by Parties to set up a new approach for managing the Funds, recognizing the very different way in which money is being sourced (as opposed to typical donor contributions).

Adaptation issues are also considered in two separate agenda items under the COP and its subsidiary bodies. Decision 10/CP.9 requested the SBSTA to "initiate its work on scientific, technical and socio-economic aspects of impacts of, and vulnerability and adaptation to climate change" and to facilitate exchange of information and practical experiences among the Parties[4]. A five-year programme of work was adopted at COP11 through decision 2/CP.11 and was renamed as the Nairobi Work Programme at COP12.

COP 10, 2004, also adopted the "Buenos Aires programme of work on Adaptation and response measures"[5] which seeks to support the implementation of concrete adaptation activities. At COP 13, 2007, Parties continued to consider progress on the implementation of decision 1/CP.10 and at SB 28 in June 2008 agreed on a set of specific activities up to COP 14 in Poznan, Poland to address the adverse effects of climate change, article 4.8, decisions 5/CP.7 and 1/CP.10.

Adaptation is one of the pillars of the Bali Action Plan and further action on adaptation is being considered under the AWG-LCA. Decision 1/CP.13 paragraph (c) identifies the following areas for consideration under enhanced action on adaptation - International cooperation to support planning and implementation; Risk management and reduction, including through insurance and disaster reduction

[1] Article 1(b) and 1(d) of Decision 7/CP.7
[2] SCCF and LDCF were established by decision 7/CP.7; Adaptation Fund was established by decision 10/CP.7
[3] Decision 5/CP.7
[4] Decision 10/CP.9
[5] Decision 1/CP.10

strategies; Economic diversification; Strengthening catalytic role of the Convention in enhancing and integrating action by other entities, in developing countries that are particularly vulnerable to the adverse effects of climate change, LDCs and SIDS.

PAPER NO. 15B: INDIA

Government of India Submission on

Financing Architecture for Meeting Financial Commitments Under The UNFCCC

Background & the Legal Basis

1. Addressing the impact of climate change and climate variability by raising adaptive capacity i.e. protecting people from climatic adversity; and avoiding the large scale world-wide climate hazards linked to anthropogenic activities i.e. protecting the climate from the production and consumption patterns of people by mitigating GHG emissions are the two major public goods challenges of our time. The current global architecture for delivering and financing these public goods is mandated under the multilaterally negotiated United Nations Framework Convention on Climate Change (UNFCCC).

2. Specifically with respect to financing, the framework provides for new, additional, adequate and predictable financing by developed country Parties to developing country Parties to implement the UNFCCC (hereafter the Convention). In this regard, Article 4.3 (provision of new and additional financial resources to meet the obligations of the developing country Parties under clause 12 paragraph 1 and to meet the agreed full incremental outlays, including for the transfer of technology, required by the developing country Parties for implementing measures included under Article 4.1); Article 4.4 (assistance to meet the costs of adaptation); and Article 4.5 (promotion, facilitation and financing of the transfer of, or access to, environmentally sound technologies and know-how) of the Convention, all lay down legally binding commitments on the part of developed country Parties to provide such financing. Article 4.8 (on funding for response measures especially in vulnerable developing country Parties); and Article 4.9 (on funding for least-developed countries) of the Convention also detail legally binding commitments of developed country Parties to provide funding to developing country Parties.

3. The foregoing commitments by developed country Parties are at the core of the balance of commitments between developed and developing country Parties as reflected in Article 4.7, which states that "The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties". And precisely the same balance is captured under section 1b(ii) of the Bali Action Plan.

Additionality of Resources & Financing Instruments

4. The financial resources committed under the Convention cannot be new and additional if they merely divert any existing or likely resources, including ODA and other net foreign inflows, available for economic and social development and poverty alleviation to developing country Parties.

5. Further, to the extent that the incremental lifetime costs of investment in adaptation and mitigation are positive, they would have to be fully recompensed if economic and social development and poverty alleviation are not to suffer. This is true for both private and official sources of such new and additional funding. Only a grant that results in a resource transfer can truly recompense such

positive incremental costs[1] in full without impacting social and economic development and poverty alleviation – the recognized first priority of the developing country Parties under the Convention. As an example, carbon markets under CDM actually pay for such positive incremental costs in full and thereby preserve the socio-economic viability of the underlying investments despite the higher costs of mitigation. While incremental lifetime costs must only be funded through new and additional grants and resource transfers, the base costs of economic and social development can be funded by a range of current or new financial instruments offered by bilateral, multilateral or domestic/foreign market sources. And indeed Article 11.5 of the Convention specifically refers to such bilateral, regional and multilateral channels being sources for resources for implementation of the Convention. Instruments that fund these base costs can include traditional equity and loan investments, concessional loans, loan guarantees or other risk mitigation structures, and a range of funds for acquisition, development, deployment and diffusion of technologies.

Projected Funding Needs

6. The UNFCCC has estimated a requirement of US$ 200-210 billion in additional investment in 2030 to return GHG emissions to the current level. Further, additional investment needed worldwide for adaptation is estimated to be US$ 60-182 billion in 2030 by UNFCC, inclusive of an expenditure of US$ 28-67 billion in developing countries. Incremental investment needed by developing countries for adapting to projected impacts of climate change is estimated as US$ 10-40 billion per annum by the World Bank and Oxfam estimates this number to be US$ 50 billion per annum. The UNDP estimates that incremental investment needed for adaptation alone could amount to US$ 86 billion per annum by 2015. Not only do these numbers vary widely among themselves, they are a fraction of UNFCCC's own estimate that peg the incremental cost of addressing climate change at 0.3-0.5% of global GDP or Lord Stern's revised estimate of 2% of global GDP. At current levels of global GDP this range translates to US$ 165 billion to US$ 1.1 trillion.

7. The above broad range of estimates is not surprising for we are still struggling to fully understand the science of climate change. Hence, we need to learn by doing and not wait for elimination of all uncertainty because costs of impacts from climate change will be a multiple of the estimates made if we fail to act immediately.

Funding Sources

8. Clearly the magnitude of funding needs is enormous compared to what is available under the current financial mechanism of the Convention. The funding committed to GEF, for various funds managed by it, is US$ 1.3 billion for the period 2007-10. The funds managed by GEF for adaptation total about US$ 275 million and since 2005 GEF has provided US$ 110 million for adaptation projects. The Adaptation Fund to be built up from 2% of CDM flows is expected to amount to US$ 100-500 million by 2012. Tapping other flexibility instruments will, at best, add increments of similar magnitude. The carbon markets have the potential for raising larger sums. However, this requires very deep emission reduction targets (potentially negative emission obligations for some developed country Parties) that are legally enforceable. And while carbon markets may be able to fund incremental costs of mitigation under certain scenarios, funding for incremental costs of adaptation would require resource transfers or grants.

[1] Incremental costs hereinafter refer to both the incremental investment cost and the incremental lifetime costs where applicable. Such incremental costs will need to be fully recompensed through resource transfers (typically under bilateral arrangements) or grants (typically multi-lateral arrangements) that effectively result in resource transfers to the developing countries.

9. It is stressed that the proposed funding sources cannot be voluntary providers of funds because voluntary contributions are not predictable and cannot service legal commitments under the Convention. Further, the commitments under the Convention to fund the incremental costs of addressing climate change cannot be treated as aid or assistance under a donor-recipient platform. Finally, as already stated, agreed incremental costs of combating climate must be funded with resource transfers or grants. Keeping these requirements in mind, the following funding sources are proposed (as stated above, the base costs would continue to be funded through normal channels in accordance with current practices):

a) Annual contributions equal to 0.5% of the total GDP of the developed world for funding full agreed incremental costs of adaptation and mitigation through resource transfers or grants. Individual country contributions may be decided multilaterally on the basis of historical responsibility for GHG concentration, current emission levels, per capita GDP etc. Each developed country Party or any grouping of developed country Parties would be free to decide the means for raising these contributions through country specific or region specific auctioning of emission rights, carbon taxes, and specific levies on sectoral emissions or any other means considered feasible within their borders.

b) Any levies on international travel or use of marine haulage that are negotiated under the Convention.

c) Any private sources of grant funding on a voluntary basis.

d) Any other grant funding or contributions on a voluntary basis.

Institutional Base/Governance of the Financial Architecture

10. Although the Convention is silent on the choice of an Institution to manage the funds made available, it is quite explicit in stating under Article 11.1 that the proposed financial mechanism "shall function under the guidance of and be accountable to the Conference of the Parties, which shall decide on its policies, programme priorities and eligibility criteria". Article 11.2 further states that the "financial mechanism shall have an equitable and balanced representation of all Parties within a transparent system of governance". While creating the Adaptation Fund (AF) the foregoing provisions were fully adhered to. At Nairobi the second meeting of the CMP actually decided that the AF should be under the 'authority' of the COP in addition to the requirement of 'being under the guidance and accountable to'. The Nairobi decision also adopted "a one country one vote" rule in relation to the operation of the AF and a majority representation for developing countries on the governing body (Decision 5/CMP.2.para 3). CMP.3 at Bali created the Adaptation Fund Board with a majority of members from developing countries and designated representatives from the two main recipient interest groups i.e. Group of Least Developed Countries and the Alliance of Small Island States. Moreover, it was decided that Parties should have direct access to the funds, and the involvement of the GEF and the World Bank in the running of the AF was reduced to an interim provision of secretariat and trustee services respectively. The AF structure succeeded in developing an equitable and balanced representation of all parties within a transparent system of governance as required under Article 11.2 of the Convention. The same is true for the Multilateral Fund under the Montreal Protocol.

11. Anything short of the above precedents would be a step backwards and, hence, the proposed financial architecture must be under the direct control of COP as detailed in paragraph 10. An Executive Board, with an equitable and balanced representation of all Parties, appointed by COP must manage the proposed financial architecture. A professional secretariat and appropriate technical committees that establish eligibility, evaluation and compliance criteria, in conformance with the Convention, would assist the Executive Board. Direct access to funding by developing country Parties and their involvement in every stage of the process, through the COP, will make

the architecture demand driven. A Trustee selected through open competitive bidding among reputed and pre-qualified institutions would administer the funds.

12. It must be recognized that any funding that is pledged or becomes available outside the governance structure foreseen under the Convention and highlighted above, cannot be counted towards the fulfilment of the commitments made by developed country Parties under the Convention. The Convention would be undermined if parallel initiatives outside the governance structure foreseen by the Convention are considered towards fulfilment of commitments of developed country Parties under the Convention

Eligible Countries/Entities

13. Although establishing detailed and formal country eligibility criteria is outside the scope of this note, it is conceivable that differentiated criteria could be established for different developing country Parties or groups of developing Country Parties to match their differing needs and vulnerabilities. In general all developing country Parties would be eligible with special emphasis being laid on the needs of Vulnerable States and Least Developed Countries. For eligible Parties, funds could be made available to national or sub-national governments, private entities within the eligible country or other private or national/sub-national entities (for example, holders of intellectual property rights).

Target Investments For Funding Support

14. The proposed financial architecture should target multiple sectors and support a range of activities that could include though not be limited to the following:

    a) Incremental costs of mitigation across all economic and social sectors.

    b) Incremental costs resulting from deployment and diffusion of commercially available low carbon technologies.

    c) Incremental costs of research and development of clean energy or low carbon technologies

    d) Incremental cost of building capacity and institutional framework in recipient countries.

    e) Full costs of preparing national communications and national action plans and implementation of the same.

    f) Full cost of technology patents and license fee for IPRs covering low carbon technologies.

    g) Full cost of adaptation to climate change.

Funding Verticals and Funding Criteria

15. Establishing various verticals along which funding could be made available under the proposed financial architecture or the various criteria that warrant funding is also beyond the scope of this note. Suffice it to say that the proposed financing architecture should be organized into functional windows to address specific requirements such as a Technology Acquisition and Technology Transfer Fund for available climate friendly technologies, a Venture Capital Fund for emerging climate technologies, Collaborative Climate Research Fund, Adaptation Fund etc. The financing architecture could integrate other funds operating under the Kyoto Protocol to avoid duplication. It might be argued that the proposed financial structure would be unwieldy and ineffective because of concentration of all activities under one umbrella. It is pointed out that the only unifying force is a common architecture of governance, funding and investment policies

under the direct control of and accountable to COP. Each vertical will be operated and will grow independently under this common architecture.

16. The criteria established for funding specific investments would largely be linked to outcomes and shall not enforce co-financing from certain specified sources or harsh conditionalities that go beyond the objectives that address climate impacts as laid down under the Convention. The assessment criteria could, among other measures, include the following:

    a) Impact on adaptive capacity and mitigation beyond business as usual.

    b) Adaptive capacity realized or emissions mitigated per unit of investment.

    c) Conformity to a host country's national program.

    d) Contribution to the host country's sustainable development objectives.

Ability to fund the base costs directly or through other sources subject to the proposed financial architecture providing grants or resource transfers to fund all agreed incremental costs related to addressing climate change.

PAPER NO.15C: INDIA

Government of India Submission on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) through Reduced Deforestation (RD), and Conservation (C), Sustainable Management of Forests (SMF), and Increase in Forest Cover (IFC), under the Bali Action Plan (BAP)

1. **Introduction**: This paper sets forth a conceptual basis for treatment of the issue of Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) comprising Reduced Deforestation (RD), Conservation (C), Sustainable Management of Forests (SMF), and Increase in Forest Cover (IFC), under the Bali Action Plan (BAP). It also outlines a possible approach towards provision of "positive incentives" for all four categories of actions related to forestry under BAP, based on this comprehensive conceptual treatment.

2. **Statement of the Problem**: GHG emissions from deforestation in some developing countries are estimated by the IPCC AR4 as contributing to c. 17% of current global emissions. However, several of these countries, have put in place policies and regulations to reduce, and progressively stabilize deforestation, incurring both direct and opportunity costs. At the same time, several developing countries, have both strong regulatory regimes to prevent diversion of forests to non-forest use (e.g. agriculture, industry, human settlements, infrastructure), as well as large, nationally funded programs for afforestation of degraded forest land as well as non-forest lands, reclaiming them from non-forest use. Once again, these measures involve significant direct and opportunity costs, arising from costs of monitoring, enforcement, and protection; and non-use in the best alternative economic use, from the country perspective, respectively. These costs must be met, at least in substantial part, by the global climate change arrangements, since the major benefits of these actions lie in global climate protection, and are not specific to the countries concerned.

   Under the UNFCCC and Kyoto Protocol, REDD actions, while exhorted (e.g. Preamble, Art. 4.1, 4.2, 7.2, 12.1, 12.2, etc. of UNFCCC, and Art 2.1, 3.3, 3.4, etc. of KP), do not qualify for any kind of compensation or incentives. Similarly, under the UNFCCC and Kyoto Protocol, while SMF does not qualify for any compensation or incentives, A&R or IFC *projects* may qualify for CDM benefits. However, this incentive for CDM benefits in respect of A&R projects is extremely weak, since much of the A&R activity is actually implemented, not on the basis of clearly delineated projects, but on country (or subnational entity) wide programs by local communities, which typically involve small scale, dispersed activity which cannot afford to incur the large due diligence and transaction costs associated with the CDM. Further, the EU policy of not procuring carbon credits from A&R CDM projects for compliance with the EU-ETS has meant that such projects are not being significantly pursued (in fact as on date only one A&R project has been registered by the CDM EB). This lacuna has been recognized in the Bali Action Plan, which, in para 1 b (iii) identifies the need to provide "*positive incentives*" to REDD, as well as recognize "*the role of C, SMF and enhancement of forest carbon stocks.." (IFC or A&R)*. These terms underline the same climate change objectives, and accordingly must be treated similarly under the global climate change arrangements.,.

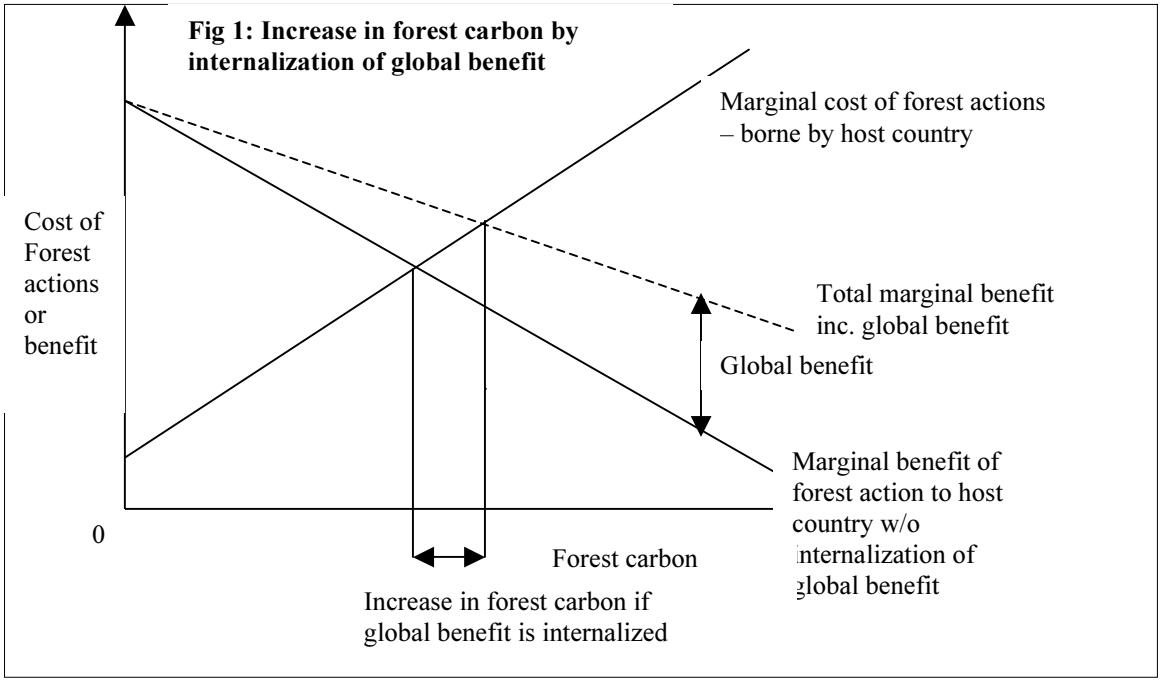
   In the rest of this paper, it will be assumed that measurement and verification of forest carbon stocks, flows, and their changes, can be carried out by agreed measurement protocols, and no significant ambiguity or error would arise on this account.

3. **The Conceptual Basis of Compensation and Positive Incentives for RD, C, SMF, and IFC**: In terms of elementary economic theory, an agent (assuming that s/he conforms to certain defined tenets of rationality) undertaking any activity involving costs to be borne by her/him, would in the face of diminishing marginal product, undertake the activity till the point at which the marginal cost of the activity *to her/him*, equals the marginal benefit (e.g. unit price) received *by her/him.*

3.1 **Internalization of Global Benefits**: However, in the event that part of the costs of the activity (negative externalities) are borne by others, the level of activity undertaken increases. Similarly, to the extent that part of the benefits are captured by others (positive externalities), the level of activity decreases. The *socially optimal* ("efficient") level of the activity is when the agent responsible for undertaking the activity experiences the full costs as well as full benefits of the activity, (termed "internalizing the externalities"). Accordingly, the argument is that, in respect of RD, C, SMF, and A&R, assuming that countries responsible for undertaking these activities (or at least, through regulation and policy deciding on the level of these actions to be carried out in their territories) are rational in the economic sense, since a major part of benefits are global, and not captured by the country concerned to any significant extent, the overall level of these forest activities are below the optimal level, from the perspective of the global society.

From the above, it follows that the levels of RD, C, SMF, and A&R, would increase towards global optimality, if the global benefits could be internalized to the countries concerned, through "positive incentives". This is illustrated in Fig. 1:

Fig 1: Increase in forest carbon by internalization of global benefit



3.2 Positive Incentives for RD: In respect of RD, host countries clearly have legal rights to maintain, or clear fell their forests. In case of clearfelling, the forest carbon services of the felled area are lost, through emissions of forest carbon, while the host country realizes the incremental economic benefits from clearfelling. In the event of reduction in rate of deforestation, there is a *reduced flow* of carbon emissions from felled forest, while the host country loses the incremental economic benefits from clearfelling. In respect of the remaining forest area *at any time*, a *stock* of forest carbon is maintained and not emitted, but the host country encounters direct and opportunity costs of keeping the area under forest.

In this situation, an appropriate scheme of Positive Incentives for RD would be as follows:

(i) In respect of remaining forest area at any time, annual payments to compensate the host country for the *avoided global annual damage* from maintaining the forest carbon.

(ii) In respect of change in the annual rate of deforestation, annual payments to compensate the host country for *lost incremental economic benefits of not clearfelling the forest area corresponding to the reduced deforestation (RD).*

These are illustrated in Fig. 2:

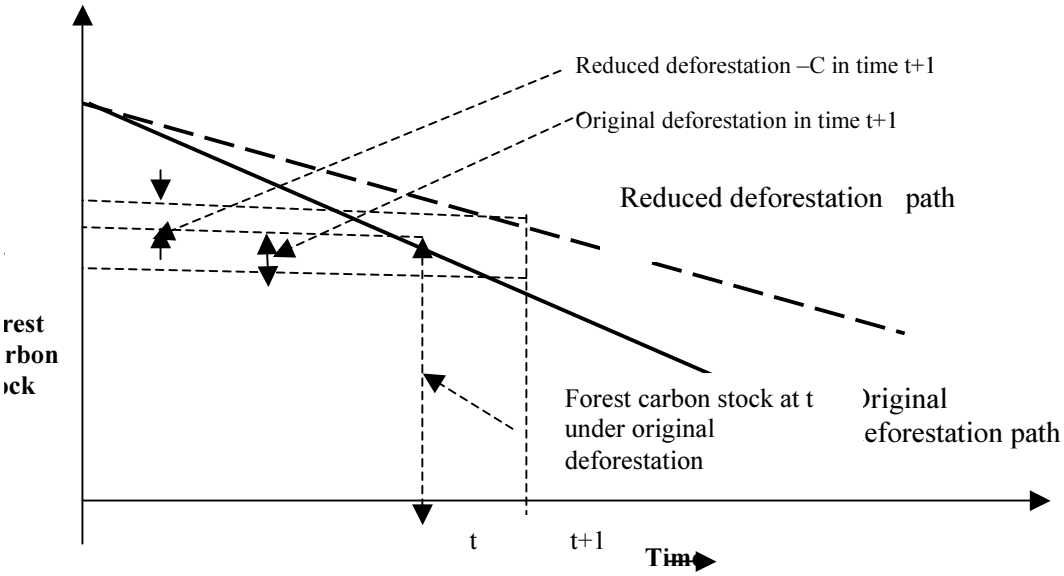


Fig. 2: Reduced Deforestation (RD) –C and forest carbon stock Under REDD

3.3. Positive Incentives for C, SMF[1] and A&R/IFC: Under C/SMF, the host country incurs direct costs on forest protection, improvement, monitoring, and enforcement, and opportunity costs in not clearfelling the forest to the best alternative economic use. Under C/SMF accordingly, the host country refrains from forest carbon emissions through clearfelling and conversion, which legally it may do, by maintaining the stock of forest carbon.

On the other hand, under A&R or IFC, resulting in increased carbon sequestration, the host country incurs additional direct costs in forest plantation, besides opportunity costs in not using the additional forest area in the best alternative economic use. There is thus an increased flow of carbon sequestration from A&R.

In this situation, an appropriate scheme of Positive Incentives for SMF and A&R would be as follows:

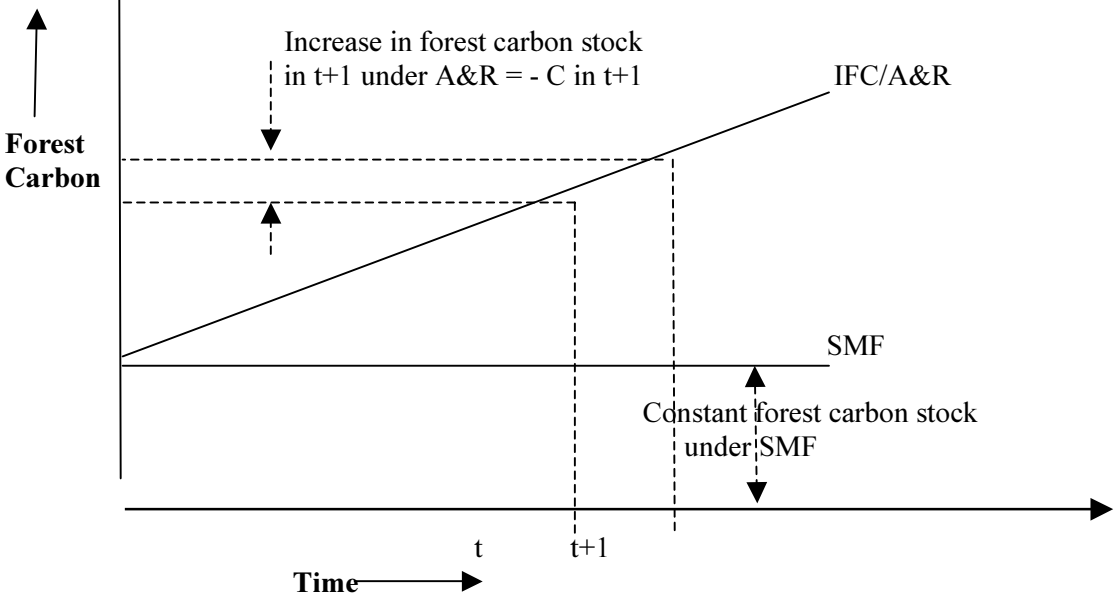
(i) In respect of remaining forest area at any time under C/SMF, annual payments to compensate the host country for the *avoided global annual damage* from maintaining the *stock* of forest carbon.

(ii) In respect of increased *flow* of carbon sequestration due to A&R or IFC and/or SMF, annual payments to the host country corresponding to the direct costs of afforestation, and opportunity costs of refraining from the alternative best economic use of the land under A&R.

[1] SMF in general would mean maintenance as well as improvement/expansion of forest cover. It would, therefore, comprise baseline stocks as well as incremental stocks (as part of IFC).

This is illustrated in Fig. 3:

Fig. 3: Forest Carbon Stock under C/SMF and –C Flow under IFC



4. **Modalities for Provision of "Positive Incentives"**: Various modalities for providing "Positive Incentives" in respect of all activities, i.e., RD, C/SMF & A&R/IFC could, in principle, be considered under a comprehensive umbrella of REDD. These may include:

(i) Trade benefits: such as reduced tariffs for forest product exports, or even exports more generally, from host countries undertaking RD, C/SMF & A&R/IFC action in line with the forest carbon stock maintained and change in flow of forest carbon (emissions under RD and sequestration under A&R/IFC/SMF).

(ii) Increased level of ODA and/or MFI funding for development generally.

(iii) Financial Compensation: to host countries undertaking RD, C/SMF & A&R/IFC actions in line with the forest carbon stock maintained and change in flow of forest carbon (emissions under RD and sequestration under A&R/IFC/SMF).

These are discussed below:

(i) Trade benefits: This approach would require coordination with the WTO negotiations, which are complex enough, without loading on them this additional dimension. There are likely to be implications in terms of deviation from MFN treatment, permissible subsidies, as well as possible infringement of approaches set forth in WTO Council Decisions. It would also be very difficult to scale the level of trade benefits from year-to-year which would be necessary for scaling to the varying levels of forest carbon stock and flows.

(ii) Increased level of ODA and/or MFI Funding: The principal implication of this modality would be to place decision-making, both in level of enhanced benefits provided, as well as what the additional resources may be used for, besides possible policy and political conditionalities, in the hands of developed country donors and the MFI Boards. This would reduce the autonomy of decision-making by the host developing countries and the funding provided may be inappropriate

(e.g. loans rather than non-repayable payments, see below), and too low to substantially cover the direct and opportunity costs incurred by the developing country (see below).

(iii) Financial Flows: There are two, not mutually exclusive, possibilities:
(a) Loan funding
(b) Non-repayable Financial Flows

Since the provision of "Positive Incentives" is in the nature of payments for environmental services provided to the global community, it is difficult to argue for the loan modality. On the other hand, non-repayable financial flows may be easily scaled to the level of actions to be compensated (constant forest carbon stock and/or changes in forest carbon flows), does not infringe on WTO mandates, and retains autonomy of decision-making with respect to what the resources may be used for, with the host country.

5. **Raising Resources for "Positive Incentives"**: Two possible ways of raising resources for these "Positive Incentives" are:

(i) "Assessed" Contributions by Developed Countries; and

(ii) Supply Side Linkage to the Global Carbon Compliance Market.

With respect to constant forest carbon *stocks*, it is not possible to link actions to the Global Carbon Compliance Market through supply of carbon credits, because GHG emissions are carbon *flows* to the atmosphere, and reductions in net GHG emissions can, similarly, be effected only by negative carbon *flows*. Accordingly, this means of compensation for maintained carbon stocks under C/SMF (and remaining forest carbon stock at a given time under RD) is not feasible.

Compensation for maintaining forest carbon stocks, in terms of rates of compensation, say, per million tons of forest carbon stock, or quantum of total payments, cannot be a voluntary matter for individual developed countries. This would place this payment in the realm of "donor" funding, rather than compensation, and sever linkages with level of responsibility for climate change, and possibly respective capabilities, of each developed country. It would, judging by the history of climate change actions since the coming into force of the UNFCCC, also lead to serious under compensation, leading to reduced levels of maintenance of forest carbon stocks. Accordingly, the compensation payments should be on some norms for assessment, agreed under the BAP, related to both responsibility and capabilities of each developed country.

On the other hand, given sound monitoring and assessment of changes in forest carbon flows, it would seem feasible to provide "Positive Incentives" for RD and A&R/IFC/SMF by including them among the sources of supply of carbon credits for the global carbon compliance market. To the extent that GHG mitigation actions or commitments by developed countries are scaled in terms of responsibility and capabilities, this means of compensation for changes in forest carbon flows would also relate to respective responsibility and capability.

As a practical matter, however, it needs to be kept in mind that potential changes in forest carbon flows from RD and A&R/IFC/SMF actions could be very large, with lower incremental costs (as defined above), than in other GHG mitigation actions involving new technologies, such as in the energy supply and demand sides. The promotion of such technologies should also be a global policy imperative, and in order that sufficient carbon credit supply side space is available for such technologies, there may be need to place limits on the extent to which a developed country may source RD and A&R/IFC/SMF credits in order to meet its GHG mitigation commitments. Possible numerical limits in this respect would have to be considered only after review of the available empirical literature, and modeling results.

PAPER NO. 15D: INDIA

Government of India Submission on Mitigation Actions of Developing Countries under the Bali Action Plan (Paragraph 1(b)(ii)

The Bali Action Plan seeks to "urgently enhance implementation of the Convention in order to achieve its ultimate objective in full accordance with its principles and commitments". The Action Plan must, therefore, be elaborated in full conformity with the provisions of the UN Framework Convention on Climate Change. No proposal that is inconsistent with the Convention may be entertained in elaborating or interpreting the provisions of the Action Plan.

Mitigation actions to be taken by developing countries are set out in paragraph 1(b)(ii) of the Action Plan. In conformity with the Convention, these actions are clearly differentiated from the commitments or actions required of developed countries set out in the preceding sub-paragraph. In particular:

* Emission limitation objectives are excluded in the case of developing countries.

- Corresponding to paragraph 4.7 of the Convention, mitigation actions to be taken by developing countries are only those that are "nationally appropriate…in the context of sustainable development".

- Such actions should be "supported and enabled by technology, financing and capacity-building", in keeping with the requirements of paragraphs 4.3, 4.5 and 4.7 of the Convention.

- The term "measurable, reportable and verifiable" (MRV) appears in a totally different context in paragraphs 1(b)(i) and 1(b)(ii), respectively, as shown below.

Paragraph 1(b)(i), referring to developed countries, requires "measurable, reportable and verifiable…mitigation commitments or actions". In contrast, in the next sub-paragraph, dealing with developing countries, MRV applies only in the case of mitigation actions that are "supported and enabled by technology, financing and capacity-building". In these cases, it applies equally to the provision of technology, finance and capacity-building and to the "supported and enabled" mitigation actions. This is abundantly clear not only from the text of the Bali Action Plan itself but also from its negotiating history. It will be recalled that paragraph 1(b)(ii) was amended before adoption and the phrase "measurable, reportable and verifiable" was shifted from the beginning to the end of the sub-paragraph, so as to make it clear that developing countries are not required to adopt a new commitment to implement measurable, reportable and verifiable mitigation actions in the absence of enabling financial and technological support from developed countries. For developing countries, MRV applies only in the context of *contractual arrangements* under which they receive financial, technological and capacity-building support to enable them to implement specific mitigation actions.

The Convention does not permit a review of mitigation measures adopted by developing countries. Consistently with the Convention, the verification process foreseen in paragraph 1(b)(ii) of the Bali Action Plan does not apply to mitigation actions of developing countries other than those implemented under a contractual agreement between a developing country and a developed country (or a UNFCCC financial entity) in terms of which the latter 'supports and enables" the developing country, through transfers of finance and/or technology, to take specified mitigation actions. In such cases, it would be reasonable to incorporate into the contract a provision requiring verification of compliance by both parties. The contractual agreement itself would spell out the MRV procedures. These might vary depending upon the precise nature of the financial or technological support and the "enabled" mitigation actions.

Finally, it must be emphasized that the Bali Action Plan, in conformity with the Convention, differentiates between the mitigation measures required of developed and developing countries, respectively. The terminology is consistent with that of the Convention, which distinguishes between two categories of parties, 'developed' and "developing". The "agreed outcome" to be adopted through a decision at COP-15 can have no other basis of differentiation in regard to mitigation.

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