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

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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

Revised negotiating text

Note by the secretariat

Summary

The Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) at its sixth session, had before it a negotiating text (FCCC/AWGLCA/2009/8) prepared by its Chair as requested by the AWG-LCA at its fourth session. During the sixth session Parties provided general comments on its structure and content, stated reservations and objections to elements of the text, and proposed additions and modifications. This resulted in a revised negotiating text, which is contained in the annex to this document. The numbering of the paragraphs in the original text has been maintained, with additional paragraphs numbered between the original paragraphs and alternatives to original paragraphs so indicated. Objections and reservations concerning elements of the original text are reflected using square brackets. The document also contains suggestions made by Parties related to the structure of the negotiating text and the placement of elements within it.

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Suggestions related to structure and placement¹

A. Enhanced action on adaptation

- Revise the structure of the chapter to reflect all aspects of adaptation actions, support and institutions in an integrative manner
- Organize provisions according to paragraph 1 (c) (i–v) of the Bali Action Plan
- Organize provisions according to, and referring back to, relevant Articles of the Convention
- Move overarching objectives and principles to chapter I on shared vision
- Distinguish common responsibilities on adaptation of all Parties from differentiated responsibilities taking account of respective capabilities and according to national circumstances
- Consolidate all provisions related to support for adaptation into chapter II section B on Implementation of adaptation action
- Move aspects related to adaptation finance to chapter IV section A on finance
- Move chapter II section D on Risk reduction, management and sharing to chapter II section B on Implementation of adaptation action
- Move aspects related to institutional arrangements to chapter II section E on Institutional arrangements
- Move aspects of micro insurance and risk pooling currently included in chapter II section B on Implementation of adaptation action to chapter II section D on Risk reduction, management and sharing

B. Enhanced action on mitigation

- Introduce a general section under the main chapter heading
- Organize provisions according to, and referring back to, relevant Articles of the Convention
- Reflect overlaps/relationship/coherence with the AWG-KP
- Improve balance between the sections on 1b (i) and 1b (ii)
- Introduce a preambular paragraph that provides a stronger link between actions on mitigation and adaptation
- Move aspects related to financing and institutional arrangements to the respective sections of the negotiating text
- Define and explain new terms
- Add Annexes to reflect proposals from Parties
- Revise the text to ensure coherence between the sections on measurement, reporting and verification of actions, including those on REDD-plus, and support, with the structure of the financing mechanism being conceived within the Convention in other parts of the text
- Maintain the section on REDD-plus as a separate section

These suggestions were presented in the course of the first reading of the negotiating text. The first reading did not address chapter I on shared vision and chapter III sections D, E and F on paragraphs 1 b (iv), (v) and (vi) of the Bali Action Plan. Therefore, no particular structural suggestions relevant to those sections are presented here. Suggestions related to structure and placement that were presented in the course of the second reading of the negotiating text, including suggestions made in relation to the above mentioned chapters, are included in the revised negotiating text contained in the annex.

• Integrate common elements of measurement, reporting and verification related to REDD-plus into chapter III section B.3 and B.4 on Measurement, reporting and verification.

C. Enhanced action on financing, technology and capacity-building

- 1. Enhanced action on the provision of financial resources and investment
- Consolidate all provisions related to finance into this chapter
- Consolidate all provisions related to finance, technology and capacity-building into this chapter
- Focus on raising funds. Provisions related to the allocation of funds should be moved to chapters II and III, on mitigation and adaptation, respectively
- Present functions first followed by principles
- Distinguish common responsibilities on finance of all Parties from differentiated responsibilities taking account of respective capabilities and according to national circumstances

2. Enhanced action on development and transfer of technology

- Consolidate all provisions related to technology into this chapter
- Integrate provisions related to technology into chapters on mitigation, finance, adaptation and shared vision
- Organize provisions according to, and referring back to, relevant Articles of the Convention
- Structure the chapter to reflect stages of technology development cycle and link them with support
- Distinguish common responsibilities on technology of all Parties from differentiated responsibilities taking account of respective capabilities and according to national circumstances
- Distinguish international actions from domestic commitments
- Add section on research, development and demonstration
- Add section on performance assessment and effectiveness; compliance and penalty provisions
- Relate technology to impact of response measures on developing countries and economic diversification

3. Capacity-building

Capacity-building should be a component of all sections

Annex

Revised negotiating text

I. A shared vision for long-term cooperative action¹

Note: This section of the negotiating text (paragraphs. 1–9 below) illustrates how elements from Parties' proposals could be woven into an introductory statement on a shared vision.

Structural proposal:

Review process to be consolidated in a proposed new chapter for cross-cutting issues

Proposals for preambular paragraphs:

Proposal 1

The shared vision is expressed:

Option 1

As a COP decision

Option 2

As part of the COP decision that adopts an implementing agreement

Option 3

As a chapeau to the implementing agreement

Option 4

As the first section of the implementing agreement

Proposal 2

Recalling the Bali Action Plan adopted by decision 1/CP.13 of the Conference of Parties to the Convention at its thirteenth session, and the need for Long-Term Cooperative Action among all Parties to enable the full and sustained implementation of the Convention now, up to and beyond 2012, in order to achieve its ultimate objective,

Acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change and more recent scientific information, that delay in reducing emissions significantly constrains opportunities to achieve low stabilization levels and increases the probability of severe climate change impacts and the consequent need for, and cost of, adaptation,

Acknowledging the important role of the Kyoto Protocol in contributing to the ultimate objective of the Convention, and the need to broaden the legal commitments under the Convention,

Recognizing the importance of early action and emphasizing the urgent need to accelerate both mitigation and adaptation actions,

Renewing the political determination to ensure that the equitable development needs of present and future generations are properly addressed,

Intending to renew and strengthen the global partnership through the creation of new levels of cooperation among Parties, according to the principles of the Convention,

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

Proposal 3

Recalling the Bali Action Plan adopted by decision 1/CP.13 of the Conference of Parties to the Convention at its thirteenth session, and the need for Long-Term Cooperative Action among all Parties to enable the full and sustained implementation of the Convention now, up to and beyond 2012, in order to achieve its ultimate objective,

In its paragraph 1 (a), the Bali Action Plan calls for a shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention, in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, and taking into account social and economic conditions and other relevant factors.

Parties referred to the following Articles of the Convention in submissions related to this section: Article 4, Article 7.

Acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change and more recent scientific information, that delay in reducing emissions significantly constrains opportunities to achieve low stabilization levels and increases the probability of severe climate change impacts and the consequent need for, and cost of, adaptation,

Recognizing the importance of early action and emphasizing the urgent need to accelerate both mitigation and adaptation actions,

Renewing the political determination to ensure that the equitable development needs of present and future generations are properly addressed,

Intending to establish a new and equitable global partnership through the creation of new levels of cooperation among Parties, according to the principles of the Convention,

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

Proposal 4

Recognizing that sustainable development is the first priority for developing countries. Therefore, that our commitment to a low carbon society would have to be linked to our development priorities, in accordance with the provisions of the Convention,

Recalling that the Rio principles, particularly the principles of equity, common but differentiated responsibilities and respective capabilities should guide the debates on shared vision,

Recalling the Bali Action Plan adopted by decision 1/CP.13 of the Conference of Parties to the Convention at its thirteenth session, and the need for Long-Term Cooperative Action among all Parties to enable the full and sustained implementation of the Convention now, up to and beyond 2012, in order to achieve its ultimate objective,

Emphasizing that it is fundamental that Annex I countries comply fully with the provisions as set out in 4.3, 4.4, and 4.5 as well as commitments on technology transfer and capacity-building,

Further emphasizing that a Shared Vision does not include commitments for developing countries. It does, entitle technology transfer, capacity-building and financial resources for project implementation regarding mitigation national programs,

Recognizing that sustainable development that ensures capacity for adaptation to the adverse effects of climate change is the most important issue for all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, as stated in preambular text 19 of the UNFCCC,

Acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change and more recent scientific information, that delay in reducing emissions significantly constrains opportunities to achieve low stabilization levels and increases the probability of severe climate change impacts and the consequent need for, and cost of, adaptation,

Acknowledging the important role of the Kyoto Protocol in contributing to the ultimate objective of the Convention, and the need to broaden the legal commitments under the Convention,

Recognizing the importance of early action and emphasizing the urgent need to accelerate both mitigation and adaptation actions,

Renewing the political determination to ensure that the equitable development needs of present and future generations are properly addressed,

Intending to establish a new and equitable global partnership through the creation of new levels of cooperation among Parties, according to the principles of the Convention,

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

Recognizing that current and potential climate change impacts require a shift in the global investment patterns and that criteria for financing allocation shall clearly respond to the priorities identified by the international community, being climate change stabilization one of these priorities.

Proposal 5

Acknowledging that current atmospheric concentrations are principally the result of historical emissions of greenhouse gases, the most significant share of which has originated in developed countries.

Further acknowledging that Developed countries have a historical responsibility for their disproportionate contribution to the causes and consequences of climate change, reflecting their disproportionate historical use of a shared global carbon space since 1850 as well as their proposed continuing disproportionate use of the remaining global carbon space.

Proposal 6

Sustainable development is the first priority for developing countries. Therefore, our commitment to a low carbon society would have to be linked to our development priorities, in accordance with the provisions of the Convention.

The Rio principles, particularly the principle of common but differentiated responsibilities and respective capacities should guide the debates on shared vision.

It is fundamental that Annex I countries comply fully with the, as set out in 4.3, 4.4, and 4.5 as well as commitments on technology transfer and capacity-building.

Substantial reductions of GHG emissions from Annex I countries should be agreed.

A Shared Vision does not include commitments for developing countries. It does, entitle technology transfer, capacity-building and financial resources for project implementation regarding mitigation national programs.

A shared vision recognizes that adaptation to the adverse effects of climate change is the most important issue for all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.

A shared Vision recognizes that the most vulnerable countries are all developing countries, low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, as stated in preambular paragraph 19 of the UNFCCC.

Additional paragraph

- x.1 The discussion on a shared vision for long-term cooperative action is an exchange of views or ideas about how to enable the full, effective and sustained implementation of the Convention, focusing on the way to implement long-term cooperative action under the framework of the Convention. A shared vision is for long-term cooperative action, such a vision should be guided by the ultimate objective of the Convention, which consists of the following three aspects: to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system; to adapt to the impacts of climate change; and to realize sustainable development. A shared vision for long-term cooperative action should be comprehensive and include mitigation, adaptation, finance, technology as well as sustainable development.
- 1. [[[As assessed by the Intergovernmental Panel for Climate Change (IPCC) in its Fourth Assessment Report] [Warming of the climate system, as a consequence of human activity, is unequivocal. [As assessed by the Intergovernmental Panel for Climate Change (IPCC) in its Fourth Assessment Report,] Current atmospheric concentrations are principally the result of historical emissions of greenhouse gases, the largest share of which has originated in developed countries. Current per-capita emission in developed countries remain relatively high compared to those in developing countries, as noted in the Convention and by the IPCC. [the serious adverse effects of climate change, notably those on crop production and food security, marine and coastal ecosystems, coastal livelihood, water resources

and human health, ecosystems as well as on housing and infrastructure,] as well as insufficient access to a global atmospheric resource [climate change is having significant deleterious effects on the composition, resilience and productivity of natural and managed ecosystems, on the operation of socio-economic systems and on human health and welfare, including crop production, fisheries and food security, water resources, as well as on housing and infrastructure. These effects [notably the effects on ecosystems, on the operation of socio-economic systems and on human health and welfare, including crop production, fisheries and food security, water resources, as well as on housing and infrastructure are] are [becoming] a major obstacle to efforts to promote [sustainable] economic and social development and to [[reduce] poverty] [eradication] [promote poverty aliviation], [which are the first and overriding priorities of all developing countries]. In order to build up their coping or adaptive capacity, developing countries must pursue these overriding priorities to the best of their abilities. The maintenance of healthy ecosystems and their services is necessary to maintain the life support system on earth in the face of climate change, providing food and livelihoods, contributing to human welfare and enabling sustainable economic development.

Alternative to paragraph 1:

[Warming of the climate system, as a consequence of human activity, is unequivocal. As assessed by the Intergovernmental Panel for Climate Change (IPCC) in its Fourth Assessment Report, global atmospheric concentrations of greenhouse gases have increased significantly because of human activities since 1750.

Current atmospheric concentrations are principally the result of historical emissions of greenhouse gases, originating from the developed countries Parties. Current per-capita emissions in developed countries remain relatively high compared to those in developing countries, as noted in the Convention and by the IPCC.

The developing countries face not only the additional challenge of adaptation but also the need to put their economies on a sustainable path. All Parties agree that the developing countries face serious adverse effects of climate change as well as threats to their future economic potential due to insufficient access to shared global atmospheric resources.]

2. Recalling that [Besides adversely affecting all developing countries, climate change pose significant challenges to] [The adverse effects of climate change will be felt most acutely by [those segments of the] [vulnerable countries and] population particularly in developing countries who have contributed least to climate change but [who are already in vulnerable situations [owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability]]. These adverse effects also [undermine the equitable development needs of present and future generations]], and have a range of direct and indirect implications for the full and effective enjoyment of human rights including the right to self determination, statehood, life, food and health and the right of a people not to be deprived if its own means of subsistence, particularly in developing countries [demand a more equitable utilization of the global atmospheric resource to reflect the needs of present and future generations]. The AR4 demonstrates clearly that negative impacts of climate change are already evident and widespread, in particular in vulnerable regions of the world, and are increasingly posing a risk to ecosystems, food productions, the attainment of sustainable development and of the Millennium Development Goals as well as to human health and security.

Alternative to paragraph 2:

[The adverse effects of climate change will be felt particularly in low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change and by the most fragile ecosystems those segments of the population within developing countries who are already in vulnerable situations owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability. These adverse effects further undermine the equitable development needs of present and future generations.]

2.1 The adverse effects of climate change will be felt most acutely in developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and

semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.

- 2.2 With land use being linked to sustainable development, adaptation, and mitigation, agriculture plays an important role, especially in the context of food security and poverty reduction. Therefore, adaptation as well as mitigation efforts in the AFOLU sector are required to enable substantial increase in production and productivity needed for ensuring food security. Reducing GHG emissions in agriculture is a challenging task and may thus require attention in the context of any shared vision for long-term cooperative action.
- 3. Deep cuts [by developed countries] [by all Annex I country Parties] [by all developed countries] in global emissions by Parties in accordance with their historical responsibilities, as well as the principles of equity and common but differentiated responsibilities, and realistic changes in emission patterns [will be] [are urgently] required to prevent dangerous interference with the climate system and achieve the ultimate objective of the Convention. Early and urgent action by all countries according to their common but differentiated responsibilities and respective capabilities to this end is necessary on the basis of equity and in accordance with the principle of common but differentiated responsibilities and respective capabilities of Parties. [A] [Further] delay by Parties [in implementing their commitments to reduce] [reducing] emissions will increase their climate debt to the developing countries and significantly constrain opportunities to achieve lower stabilization levels of greenhouse gases (GHGs) and increase the risk of more severe climate change impacts. Avoidance of damage to SIDS and LDCs as a primary benchmark for assessing the adequacy of long-term cooperative action.
- 4. Led by developed country Parties, [An economic transition is needed [that shifts] [in order to adjust] global economic growth patterns towards a sustainable [low-emission economy] based on development of innovative technologies, more sustainable production and consumption, promoting sustainable lifestyles and [climate-resilient] [sustainable] development [while ensuring a just transition of the workforce]. The active participation of all stakeholders in this transition should be sought [, be they governmental, including subnational and local government private business or civil society, including the youth and addressing the need for gender equity].]] Those developing countries that were and are low carbon economies need sufficient financial incentives and appropriate technology transfer to keep avoiding GHG emissions in their path to sustainable development and to prevent adopting the high GHG emission trajectories of developed countries.

Alternative to paragraph 4:

[In the face of the grave challenge of harmonizing sustainable development with mitigation of climate change, all the Parties are in need of a paradigm shift towards low carbon development. However, there still is no model for low carbon paradigm shift. As mitigation is a result of paradigm shift towards low carbon development, a concrete roadmap for low carbon development, especially for developing country Parties, is urgently needed]

4.1 The structure of the global economy has undergone profound changes since the entry into force of the Convention, and Parties' individual responsibilities and capabilities with it. Emissions and sources of capital are increasingly global, necessitating that all countries take action to achieve a low-emissions trajectory in order to meet the objective of the Convention.

Alternative to paragraphs 1–4:

[Recognizing the need to further enhance the implementation of the Convention through long-term cooperative action and that deep cuts in global emissions will be required in order to achieve its ultimate objective.

Noting the need to take account of future changes in the economic and social circumstances of Parties, as well as the constant evolution of scientific knowledge relating to climate change its causes and effects.]

5. All Parties should take mitigation actions under an enlightened sense of solidarity in accordance with their common but differentiated responsibilities and respective capabilities. All countries will need to develop comprehensive climate response strategies, in line with their individual responsibilities and capabilities, that achieve an emission trajectory to a low emission economy. In reflection of their

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historical responsibility for the accumulation of greenhouse gas emissions in the atmosphere, [Developed country Parties and other Parties included in Annex I of the Convention [must] [should] show leadership [in] [by] [mitigation] [in taking on ambitious economy-wide quantified emission limitation and reduction] commitments [or actions] [through deep reductions in their emissions, Developed country Parties and other developed Parties included in Annex II of the Convention should also and in supporting developing country Parties in undertaking [adaptation measures and] enhanced nationally appropriate mitigation actions (NAMAs),² as well as in supporting developing country Parties, particularly the most vulnerable, in undertaking adaptation measures, and in [assisting] [providing support] [enabling] them through the transfer of technology and financial resources [to move towards a low-emission development path. Developing countries whose national circumstances reflect greater responsibilities and capabilities must contribute to the effort to address climate change, including for limitations of emissions and enhancement of removals of greenhouse gas emissions and in assisting the most vulnerable Parties and populations to adapt to climate change.]]]

Alternatives to paragraph 5:

Alternative 1

[Developed country Parties shall take the lead in combating climate change, in particular on taking corresponding measures in mitigation commitments or actions.

Developed country Parties shall fulfill their commitments under the Convention in supporting developing country Parties in undertaking adaptation measures and nationally appropriate mitigation actions (NAMAs) [and the provision of] transfer of technology and financial resources to move towards a low-emission development path.]

Alternative 2

[Developed country Parties should show leadership in the global effort to build a low-carbon economy that ensures continued growth and sustainable development and strengthens capacity to adapt to the impacts of climate change.]

Alternative 3

[Developed country Parties should take the lead in combating climate change and the adverse effects thereof.

All Parties should contribute to the global effort to combat climate change, in accordance with their common but differentiated responsibilities and respective capabilities – a spectrum of effort is envisaged. All Parties should aim to undertake a similar level of effort to others at a similar level of development and with similar national circumstances.

Those Parties whose national circumstances reflect greater responsibility or capability should make a greater contribution to the global effort.]

Alternative 4

[Because of their historical responsibility, developed country Parties must show leadership in mitigation commitments or actions, immediately implementing ambitious and legally binding emissions reductions. Developed countries must also support all developing country Parties through the provision of financial resources, technology cooperation and transfer, and capacity-building required to undertake adaptation measures and nationally appropriate mitigation actions (NAMAs) that help these countries to move towards a low-carbon development path].

Alternative 5

[In this context, developed country Parties have committed to demonstrate that they are taking the lead in modifying long-term trends in emissions consistent with the objective of the Convention and in accordance with its provisions and principles. Developing countries will also contribute to a global mitigation effort in accordance with the Convention, including through nationally appropriate mitigation actions. The extend to which developing country Parties will effectively implement their commitments

² In this document, the acronym "NAMA" is used only in the context of nationally appropriate mitigation actions by developing countries.

under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to finance and transfer of technology.]

Alternative 6

[Developed country Parties should demonstrate that they are taking the lead in modifying the long-term trends in emission reduction consistent with the objective of the Convention. In doing so, Annex-I Parties pledge to meet their targets fully, effectively and in a measurable, reportable and verifiable manner.

All Annex-I countries also agree to present a Carbon Neutral Strategies (CNS) containing their vision to meet their quantified targets by 2020. This plan by all Annex-I Parties, will act as a transparent modality in meeting the Annex-I country individual targets to reduce greenhouse gas emissions. It will outline a mitigation policy in totality as well as measures how it will meet its targets and stay on track.

All Parties agree that to the extent developing countries are expected of taking nationally appropriate mitigation actions would hinge on the extent to which they are provided financial resources aided by vital technology transfer and development and that the NAMAs by the developing country Parties and the provision of finance and technology shall both be measureable, reportable and verifiable.]

- 5.1 The financial crisis should not constitute an obstacle to the provision of financial and technical assistance to developing countries in accordance with the Convention.
- 5.2 Developed country Parties should support and promote developing country Parties in undertaking adaptation measures and nationally appropriate mitigation actions (NAMAs) in a measurable, reportable and verifiable manner, through the transfer of technology and financial resources to move towards a low-emission development path.
- Developing country Parties over riding priority remains sustainable economic growth and poverty 6. eradication, an effort which have been complicated by the effects of climate change. Special attention should be given to the [Urgent and immediate adaptation needs of all developing countries, especially those that are [particularly] vulnerable to the adverse effects of climate change as stated in preambular 19 of UNFCCC and the adverse effects of response measures, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems, and SIDS and LDCs [require special attention] [must be met]. The healthy marine and terrestrial ecosystems and their services are required to sustain the life supporting system on earth, providing food and livelihoods, contributing to human welfare and enabling sustainable economic development. [[Countries] [Developing country Parties] lacking sufficient capacity to respond to the challenges of climate change require access [to opportunities to obtain this capacity [to resources] in a timely sustained and cooperative manner.] [Measurable, reportable and verifiable financing, technology transfer and compensation must be provided by developed countries to address the full costs of adaptation in developing countries, supported by appropriate institutional arrangements under the Conference of Parties.] It is also particularly important to provide adequate, predictable, stable, sufficient and timely funding for adaptation purposes particularly by developed countries. Developed country Parties shall support these developing countries in meeting costs of adaptation.

Alternatives to paragraph 6:

Alternative 1

[Those Parties whose national circumstances reflect the least capability and the most vulnerability to the adverse effects of climate change should be prioritised for support in their efforts to adapt to the adverse effects of climate change.]

Alternative 2

[Urgent and immediate adaptation needs of developing countries that are particularly vulnerable to the adverse effects of climate change require special attention, necessitating a shared vision for actively promoting sustainable community-based ecosystem management, conservation and restoration activities, where appropriate to support adaptation. Countries lacking sufficient capacity to respond to the challenges of climate change require access to opportunities to obtain this capacity in a timely manner.]

Alternative 3

[Urgent and immediate adaptation needs of all developing countries, particularly those lacking sufficient capacity to respond to the challenges of climate change and requiring access to opportunities to obtain this capacity in a timely manner.]

- 6.1 Urgent and immediate adaptation needs of developing countries that are particularly vulnerable to the adverse effects of climate change, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change require special attention. Countries lacking sufficient capacity to respond to the challenges of climate change require access to opportunities to obtain this capacity in a timely manner.
- 6.2 Among adaptation actions are those necessary to restore the resilience of ecosystems and their productivity to enable sustainable economic development.
- 6.3 It is important to stress the need for sustainable coastal and marine ecosystems that will increase the resilience to climate change. An integrated coastal and ocean management approach is a key in promoting resilience, and thus fundamental to preparing for and adapting to the effects of climate change on the ocean.
- 7. [The urgent need to confront dangerous climate change requires [political determination] [leadership] to [continue building an inclusive, fair and effective [climate regime] [implementation of the Convention], one that takes into account the integrity of the climate regime and the [need of developing countries' need] [needs of developing countries and their need] for adequate and equitable sustainable development [space] and the particular vulnerability of SIDS and LDCs, and is based on a [[new and] equitable] [genuine] global partnership that [drives] [enhances] long-term cooperative action to] [address existing implementation gaps, ensure effective implementation by all Parties with their commitments and] [address the existing implementation gaps especially in the implementation of commitments taken under Article 4 of the Convention] enable the full, effective and sustained implementation of the Convention now up to and beyond 2012.] Scientific evidence shows that the global costs of mitigation and adaptation to the adverse effects to climate change will soar if mitigation efforts are timid, fragmented and restricted. Furthermore, it shows that the economics of ambitious and bold mitigation action pays better than shy efforts, both at a global and domestic level in developed and developing country Parties.
- 7.1 The shared vision for long-term cooperative action shall be guided by the ultimate objective of the Convention and its principles. The urgent need to prevent dangerous climate change requires political determination to continue building an inclusive, fair and effective climate regime, one that is based on strengthened global partnership that drives cooperative action to enable the full, effective and sustained implementation of the Convention.
- 7.2 Developing countries could adopt bolder measures of mitigation if developed countries make even deeper cuts in their own domestic emissions and provide the adequate means of implementation. Furthermore, deeper cuts would create a demand for expanded carbon markets that should go hand in hand with a significantly increased access to the project mechanisms to carbon trading schemes, and an early and enhanced role of forestry in the carbon markets.
- 7.3 In order to fulfill this shared vision, Parties have agreed to establish coherent, cohesive, and integrated system of financial and technology transfer mechanisms under the Convention and a follow up/compliance mechanism. These institutions are robust and effective.
- 8. [The shared vision [for] [is of] long-term cooperative action, including the long-term global goal for emission reductions, [shall be guided by the ultimate objective of the Convention and its provisions and the principles] [to achieve the ultimate objective of the Convention and ensure its full, effective and sustained implementation, in accordance with its provisions and principles] therein, recognizing that their application as regards individual Parties should evolve, in particular the [principles of [equity and of common but differentiated responsibilities and respective capabilities, as well as the precautionary principle and state responsibility [, that are enshrined in the Convention] [common but differentiated responsibilities and respective capabilities, and on the basis of equity] to guide the international community in addressing climate change], in particular articles 3.2, 3.3 and 3.5 of the Convention. [It

also] [takes] [taking] into account environmental, evolving national circumstances, including social and economic and political conditions [, the specific needs and special circumstances of developing countries, precautionary approaches, the right to development and sustainable economic growth] [and other relevant factors]]] [, taking into account social and economic conditions and other relevant factors as reflected in the Convention], and ensuring that global crises, such as the financial crisis, should not constitute an obstacle to the provision of financial and technical assistance to developing countries in accordance with the Convention.

Move paragraph 8 to paragraph 2

9. [The shared vision for long-term cooperative action [shall guide short- and midterm urgent and enhanced action on adaptation and mitigation, including support through finance, technology, and capacity-building] [aims to address climate change and achieve the mutually supportive and intertwined pillars of sustainable [and climate-resilient] development, that are economic development, social progress and the protection of the environment, as well as the survival of all states [and] to enhance action on adaptation, mitigation, technology, finance and capacity-building, integrating the means of implementation needed to support action in developing countries on adaptation and mitigation], in order to achieve the ultimate objective of the Convention and to achieve sustainable and climate resilient development.]]

Move paragraph 9 to paragraph 1

Alternative to paragraphs 8–9:

[The shared vision shall also be guided by the precautionary principle, that are enshrined in the Convention to guide the international community in addressing climate change and take into account social and economic conditions and other relevant factors. The shared vision for long-term cooperative action aims to achieve sustainable and climate-compatible development and to enhance action on adaptation, mitigation, technology, finance and capacity-building, integrating the means of implementation needed to support action on adaptation and mitigation, in order to achieve the ultimate objective of the Convention.]

Alternative to paragraphs 1–9:

[The "shared vision for long-term cooperative action, including a long-term global goal for emissions reductions", integrates the four building blocks of the Bali Action Plan in a comprehensive and balanced manner, that would enhance the full, effective and sustained implementation of the Convention, and achieve its objective as set out in Article 2 of the Convention, including its ultimate objective and the parameters for the achievement of this ultimate objective, that is "to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner" and to this end, shall:

- (a) fully recognize that the shared vision is to be pursued "in accordance with the provisions and principles of the Convention" (para. 1 a of the BAP), as contained in its Article 3, in particular Articles 3.1 (protection of the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities) and 3.3, and shall take into account "social and economic conditions and other relevant factors", through the full consideration of the economic and social impacts on developing countries, including impacts on the eradication of poverty, of any long-term global goal for emissions reductions;
- (b) recognize the right to, and the promotion of sustainable development, as stated in Article 3.4 of the Convention, "taking into account that economic development is essential for adopting measures to address climate change";
- (c) address all the implementation gaps to enable to full, effective and sustained implementation of the Convention, now, up to, and beyond 2012, on mitigation and adaptation commitments, and in particular those related to the provision of financial resources (Article 4.3), and to the promotion and transfer of technology (Article 4.5), in the context of Article 4.7 of the Convention;
- (d) give urgent and equal weight to action on adaptation and mitigation and fully implement all relevant Articles of the Convention recognizing that as developed country Parties fail to meet their

mitigation commitments, the costs of adaptation for developing country Parties would significantly increase, and fully implement Article 4.4 of the Convention;

- (e) envision a long-term goal which successfully integrates the means of implementation (technology, financing and capacity-building) to enable and support mitigation and adaptation actions of developing country Parties (Article 4.7), and one that would demonstrate "that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention" (Article 4.2-a) through effective mechanisms and institutional arrangements.]
- 9.1 The agreement on the shared vision for long-term cooperative action should address all aspects of the BAP and form the basis of a framework decision by the Conference of Parties (COP), the scope of which should include:
- (a) The guiding principles and objective of the agreed outcome, including the scientific basis for decision making,
- (b) The quantified global goal of greenhouse gas emissions reductions agreed upon, for the short (2020) and the long (2050) terms, with the associated stabilization levels of greenhouse gases and global mean temperature rises. As well, the year of maximum global emissions and the differentiated contribution to the goal of all the groups of countries, Parties to the Convention and lead by developed countries.
- (c) The institutional framework and the contribution of the different groups of countries to the integration, implementation, monitoring and evaluation of the cooperative action on mitigation, adaptation, technology and financing.
- 9.2 The guiding principles of the Convention should support items b) and c) of the previous paragraph, in terms of common but differentiated responsibilities and respective capabilities; historical responsibilities in greenhouse gas emissions and the related historical ecological debt generated by the cumulative greenhouse gas emissions since 1750 and the most recent scientific information.
- 9.3 The objective of the shared vision should be expressed as guidance to integrate the global cooperative action to enable the full, effective and sustained implementation of the Convention, from now, up to and beyond 2012. The previous should be linked to a series of more specific and mutually coherent agreements on the mitigation, adaptation, technology and financing issues, which should be respectively included in a series of COP decisions so as to complement the framework decision on the shared vision.
- 9.4 The shared vision is to establish a global approach to addressing climate change through enhancing action by all countries to mitigate emissions of greenhouse gases and to provide adequate support for vulnerable countries to the impacts of climate change. Actions taken shall play a significant role in ensuring that global greenhouse gas concentrations in the atmosphere must be stabilized as far below 350 parts per million of carbon dioxide equivalent as possible, with temperature increases limited to as far below 1.5 degrees celsius above pre-industrial levels as possible. Action taken shall be a major contribution towards moving to a low greenhouse gas emission society that is compatible with sustainable development objectives and consistent with the principle of common but differentiated responsibilities and respective capabilities. The right to survival of all nations is a paramount objective.
- 9.5 The role and importance of agriculture, especially with respect to food security, must be recognized in both adaptation and mitigation efforts.
- 9.6 The shared vision for long-term cooperative action recognizes the strong link between adaptation and mitigation as well as the cross-cutting role played by financing, technology transfer and capacity-building. Failure to implement ambitious and immediate mitigation actions by developed countries will increase the need for adaptation in developing countries and therefore for financial support. At the same time, increased financial support and technological transfer to developing countries will help these countries in their implementation of NAMAs, reducing the risk of crossing tipping points that could result in abrupt climate change.

Enhanced action on adaptation, mitigation, technology and financing

Note: Parties have expressed the view that a statement on a shared vision for long-term cooperative action should express their political resolve to achieve their goals for enhanced action on adaptation,

mitigation, technology and financing. The integration of these interrelated goals in a shared vision statement will thus result in due time from the pursuit of negotiations on these building blocks of the Bali Action Plan. For the time being, proposals by Parties referring specifically to the integration of substantive outcomes under the four building blocks are reflected in the chapters of this text dealing with the respective elements of the Bali Action Plan. A text integrating goals on adaptation, mitigation, technology and financing in the shared vision could be prepared at a later stage.

The exception to this deferral is that the section below (paras. 11–17) presents proposals by Parties concerning a long-term global goal for emission reductions. In accordance with the Bali Action Plan, such proposals have been considered in the context of a shared vision for long-term cooperative action. These proposals include references to the medium-term goals, peaks and pathways considered necessary to achieve a long-term global goal, as well as to review processes. The placement of such material in a statement on shared vision, that is, whether it should be a distinct element or integrated in the statement of mitigation goals, remains to be considered.

10. [[...]

- 10.1 There must be consistency between the global goal, mitigation commitments and actions by all developed country Parties and the provision by developed country Parties of technology, financing and capacity-building to support and enable nationally appropriate mitigation actions by developing country Parties. Should such enabling support be significant and consistent with needs, nationally appropriate mitigation actions by developing country Parties could achieve a substantial deviation from baseline and thus contribute to achieving the global goal. Should such enabling support remain insignificant, nationally appropriate mitigation actions by developing country Parties would remain limited, their greenhouse gas emissions would therefore accordingly increase and mitigation commitments and actions by all developed country Parties should then be increased to achieve the global goal without the contribution of developing country Parties.
- 10.2 The shared vision for long-term cooperative action recognizes the strong link between adaptation and mitigation as well as the cross-cutting role played by financing, technology transfer and capacity-building. Failure to implement ambitious and immediate mitigation actions by developed countries will increase the need for adaptation in all developing countries particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change and therefore for financial support, At the same time increased financial support and technological transfer to developing countries will help these countries in their implementation of NAMAs reducing the risk of triggering/crossing tipping points that could result in abrupt climate change.

A long-term global goal for emission reductions [(with related medium-term goals and review process)]

11. Taking into account of the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, [The shared vision includes a long-term [aspirational] global goal for emission reductions that [is based on best available [science] [scientific evidence]] [and economic analysis] [takes into account robust scientific findings of the IPCC as accepted by the Parties] [recognizes the scale and urgency of the challenge as outlined in the IPCC AR4,] and [provides direction] intended to inspire long-term cooperative action, [making it sufficiently effective] to bring about the deep cuts in global emissions as well as realistic changes in emission patterns are urgently required to achieve the ultimate objective of the Convention [and minimize further climate change impacts on [vulnerable] developing countries as mentioned in preambular 19 of the Convention]], that are particularly vulnerable to the adverse effects of climate change, especially the LDCs and SIDS particularly low-lying and other small island countries, countries with low-lying coastal, and and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, with flexibility and diversity of nationally appropriate actions. The global goal for the reduction of greenhouse gas emissions should be based on the most recent scientific knowledge, incorporating the ecological rationality of natural systems as one of its guiding principles, as this ultimately affects the dynamics of planet Earth and his climate, and to which

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the economic rationality should be subordinated. The emission reduction goals set for the short and medium term should enable the fulfillment of this long-term goal.

12. [[The long-term global goal for emission reductions {shall}[should] reflect all elements of the Bali Action Plan, including mitigation, adaptation, finance and technology. It should be set] [In order to achieve the ultimate objective of the Convention as contained in its Article 2, the Parties shall work towards] [The shared vision may include a long-term goal for global GHG emissions reductions of at least halving global emissions relative to 1990 levels by mid-century, underpinned by ambitious mid-term targets, based on sound science and in accordance with the principles and provisions of the Convention].

Option 1

[as a stabilization of GHG concentrations in the atmosphere at [400] [450 or lower] [not more than 450] [450] [least 450] ppm carbon dioxide equivalent (CO_2 eq) [and a temperature increase limited to] [so that there is a very low or low level of risk that the global mean temperature rise will be] 2 °C or below above the pre-industrial level. For this purpose, the Parties {shall} [should] collectively [reduce global emissions by at least [50] [85] [81-71] per cent {from 1990} levels by 2050.] [set an emission reduction objective on the basis of historical responsibility and national circumstances]

Alternatives to Option 1:

Alternative 1

[keeping the increase in global mean surface temperature below 2 °C compared with preindustrial levels, which requires reversing the trend of increasing global greenhouse gas emissions by 2020 at the latest, reducing these emissions by at least 50 per cent as compared with 1990 levels by 2050, and continuing the decline thereafter.]

Alternative 2

[as a global emission reduction by at least 50 per cent from its current level by 2050.]

Alternative 3

[To keep the global temperature increase below 2 °C with respect to the pre-industrial level with a probability greater than 50per cent. For this purpose, all Parties shall collectively reduce global emissions by at least 85 per cent from 1990 levels by 2050.]

Option 2

[as a stabilization of GHG concentrations in the atmosphere well below 350 ppm CO_2 eq and a temperature increase limited to below 1.5 °C above the pre-industrial level. For this purpose, the Parties {shall} {should} collectively [reduce global emissions by {81–71} {more than 85} per cent from 1990 levels by 2050.] [set an emission reduction objective on the basis of historical responsibility and national circumstances]

Option 3

[as a global temperature increase limited to 2 °C above the pre-industrial level.]

Option 4

[as a reduction in global average GHG emissions per capita to about 2 t CO₂.]

Option 5

[on the basis of

Option 5.1

historical responsibility and capacity and national circumstances .

Option 5.2

[emissions debt.]

Option 5.3

[per capita accumulative emission convergence.]

Option 5.4

[an equitable allocation of the global atmospheric resources.]]]

Option 5.5

The long-term global goal for emission reductions should be set as a statistically robust ceiling for the average global temperature increase strictly attributable to anthropogenic interference having global effect, of [x] degrees Centigrade above mid-19th century levels, with per capita accumulative emission convergence between all Parties.

Option 5.6

The long-term global goal for emission reductions shall be set as a stabilization of GHG concentrations in the atmosphere at 350ppm carbon dioxide equivalent ($\rm CO_2$ eq) with a probability greater than 50per cent of a temperature increase of less than 2 °C from pre-industrial level. For this purpose, the Parties shall collectively reduce global emissions by at least 95 per cent from 1990 levels by 2050.

Option 5.7

Sound science;

Option 5.8

Economic and technological feasibility;

Option 5.9

Supported and enabled by adequate technology, financing and capacity-building.

Alternatives to paragraph 12:

Alternative 1

[The shared vision shall take the form of preambular text that encapsulates both the long-term global goal and pulls together the other elements of the agreed outcome, in the following form:

The Conference of the Parties,

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

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

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

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

Hereby adopts [an implementing agreement].]

Alternative 2

[The global goal guiding the commitments and actions of all Parties under the Convention towards the achievement of its ultimate objective shall be the stabilization of greenhouse gas concentrations in the atmosphere at not more than 450 parts per million of carbon dioxide equivalent.] Alternative to paragraphs 11–12: Propose separating these paragraphs into a subsection titled Objective:

[The objective of this Agreement is to achieve an environmentally sound response to climate change through effective implementation of the Convention, with a view to achieving its ultimate objective as provided in its Article 2, by:

- (a) stabilising atmospheric greenhouse gases at 450 parts per million carbon dioxide-equivalent or lower, through unified long-term action that sets the world on a path to peak global emissions by [X] and then reduce global greenhouse gas emissions by [X] per cent by [X] on [X] levels; and
- (b) galvanizing greater attention and efforts towards adaptation at all levels to minimise the adverse impacts of climate change, to assist in building climate resilient communities and to enhance sustainable development.]
- 13. Developed Parties agree that they will, through their Carbon Neutral Strategy identify [Emission pathways towards the long-term global goal for emission reductions require that global GHG emissions peak [between 2010 and 2013] [by 2015] [by 2020 at the latest] [in the next 10–15 years] [in the next

- 10–20 years]] and decrease thereafter, and the annual maximum reduction rate should be up to 4-5per cent between 2015 and 2020 Developed country Parties should peak their emissions by 2015 and developing country Parties should peak their emissions by 2025.
- 13.1 All Parties should aim at a long-term goal of achieving at least fifty per cent reduction of global emissions of greenhouse gases from its current level by 2050, with a reference to scientific knowledge of the Intergovernmental Panel on Climate Change through realization of a low carbon society and development of innovative technologies. In order to achieve this goal, peaking-out of the global emissions of greenhouse gases in the next ten to twenty years, 2015 for developed countries and 2025 for developing countries, should be pursued and all Parties should share the vision on how to pave the way to reduce global emissions by 2050 with flexibility and diversity of nationally appropriate actions.
- 13.2 To this end, Annex I Parties shall ensure that their emissions do not exceed their assigned amounts calculated to reflect the full extent of their historical responsibility and an equitable allocation of the global atmospheric resource.
- 13.3 The Annex-I Parties have agreed to clearly delineate their historical responsibilities and their respective contribution to the anthropogenic increase in the greenhouse gas emission. All Parties agree that this was crucial in our collective effort to combat the adverse effects of climate change. All Parties have further agreed that assigned amount calculated must reflect this historical contribution of the Annex-I Parties in order to determine an equitable allocation of global atmospheric resources between the developed and the developing countries. To this end:
- 13.4 To this end, Annex I Parties shall ensure that aggregate anthropogenic carbon dioxide equivalent emissions do not exceed their assigned amounts, calculated to reflect the full extent of their historical climate debt taking into account:
- (a) Responsibility of Annex I Parties, individually and jointly, for current atmospheric concentrations of greenhouse gases;
 - (b) The historical and current per-capita emissions originating in developed countries;
 - (c) Technological, financial and institutional capacities; and
- (d) The share of global emissions required by developing countries in order to meet their social and economic development needs, to eradicate poverty and to achieve the right to development.
- 14. [To this end, [developed country Parties] [Parties included in Annex I to the Convention (Annex I Parties)] [developed country Parties and other Parties included in Annex I to the Convention] [developed country Parties included in Annex II to the Convention (Annex II Parties)], as a group, {shall} [should] [reduce their GHG emissions] [deeply cut their GHG emissions] [reduce their domestic GHG emissions]:
- (a) [By at least 25–40] [By 25–40] [By more than 25–40] [In the order of 30] [By at least 40] [by 45] [by at least 45] per cent from 1990 levels by [2020] [2017], through domestic and international efforts; [with further reductions to be achieved through policies and measures that promote sustainable lifestyles];
- (b) [And [by more than 95] [by at least 90] [by at least 85] [in the range of 75–85] per cent by 2050.]]

Alternative to subparagraph 14 (b):

[should transform their economies over the coming decades in order to collectively reduce their greenhouse gas emissions by 80-95per cent by 2050 compared to 1990 levels.]

- 14.1 The difference between the assigned amounts of Annex I Parties and their actual greenhouse gas emissions shall be quantified as an input for the consideration of fulfillment by Annex I Parties of their commitments to provide financing, technology and compensation to developing countries for mitigating and adapting to climate change.
- 14.2 The difference between the assigned amounts of Annex I Parties and their actual GHG emissions shall be quantified {as an increase in their emissions debt/accumulated per capita emissions/use beyond their equitable allocation of the global atmospheric resources} and shall provide the basis of fulfillment by Annex I Parties of their commitments to provide financing, technology and compensation to developing countries for mitigating and adapting to climate change.

- 14.3 In light of a shared vision based on historic responsibility and an equitable allocation of a shared atmospheric resource, and in accordance with the provisions of the Convention, Annex I Parties shall provide new and additional financial resources to meet the full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1, and the full incremental costs of implementing measures that covered by Article 4, paragraph 1. They shall also provide new and additional funding to cover the full incremental costs incurred by developing countries in implementing nationally appropriate mitigation actions undertaken in the context of sustainable development. Conference of Parties shall periodically review the adequacy of levels of financing required to support mitigation and adaptation actions in developing countries, including a comprehensive review not later than 2011
- 14.4 In light of a shared vision based on historic responsibility/emissions debt/per-capita emissions convergence/an equitable allocation of a shared atmospheric resource, Annex I Parties shall provide new and additional financial resources to meet the full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1, and the full incremental costs of implementing measures that are covered by Article 4, paragraph 1. They shall also provide new and additional funding to cover the full incremental costs incurred by developing countries in implementing nationally appropriate mitigation actions undertaken in the context of sustainable development. Annex I Parties commit the amount of { } billion {Euros/dollars} in order to enable mitigation and adaptation actions in developing countries for the period now up to 2012. The Parties shall periodically review the adequacy of levels of financing required to support mitigation and adaptation actions in developing countries, including a comprehensive review not later than 2011.
- 14.5 In light of a shared vision based on historic responsibility/debt Annex I Parties shall provide new and additional financial resources to meet the full costs incurred by developing country Parties, particularly the most vulnerable countries including LDCs and SIDs, of meeting their commitments, towards the full, effective and sustained implementation of the Convention.
- 15. [Supported and enabled by technology, financing and capacity-building from developed country Parties, the GHG emissions of [developing country Parties][Parties not included in Annex I to the Convention (non-Annex I Parties)], as a group, [shall] [should] [could] realistically change their emission patterns by:
- (a) [{{Significantly deviate from the baseline by 2020} [Deviate in the order of 15–30 per cent below the baseline by 2020]} [Deviating from the baseline by 2020];
 - (b) [And] be reduced by 25 per cent from 2000 levels by 2050}.]]

The range of emission reduction in para 14(a) and 15(a) should be removed from shared vision chapter and treated in the mitigation chapter

Alternative to paragraph 15:

[Developing Country Parties as a group, in particular the most advanced among them, shall achieve a substantial and quantifiable deviation in the order of 15-30 per cent below business as usual by 2020, respecting the principle of common but differentiated responsibilities and respective capabilities, supported and enabled by technology, financing and capacity-building.]

15.1 Non-Annex I Parties should formulate and implement NAMAs in the context of sustainable development, in order to moderate the growth of GHG emissions to the extent commensurate with support provided, in terms of technology and finance, by developed countries.

16. Option 1

[The Parties shall periodically review the implementation by Parties of their commitments under the Convention, overall progress towards the ultimate objective of the Convention and actions related to mitigation, adaptation, finance, technology transfer and other means of implementation, in the light of [the best available scientific information] [, including an assessment of climate change and its impacts] [intergovernmental scientific] [the most up-to-date information released by the IPCC] [[as well as relevant technical, social and economic information,] [the most recent scientific information provided by the intergovernmental mechanism] and taking account of observed impacts and efforts made to adapt to climate change], bearing in mind the changes of circumstances of the Parties, including [a]

comprehensive review [not later than 2016] [at least five years before the end of the commitment period], incorporating consideration of future emission reduction requirements and targets in the light of the [Fifth Assessment] [findings of the latest assessment] Report of the IPCC.]

17. Option 2 (in the case of a long-term global goal as defined in paragraph 12, option 3, above)

[The long-term global goal for emission reductions {shall}[should] be updated to reflect
[progress in scientific knowledge] [inter-governmentally accepted scientific assessment of anthropogenic global climate change and its impacts]. [To allow for these updates, the 2 °C goal {shall} {should} be broken down into partial targets: initially, a 0.2 °C temperature increase per decade over 10 decades. Every 10 years, the partial target {shall} {should} be evaluated, with a view to possibly redefining it, taking into account [advances in scientific knowledge] [recommendations of the IPCC as agreed by the governments] and the reduction of uncertainties. In all cases, the probability of achieving the temperatures goals should be greater than 50per cent.]]]]

Alternative to paragraph 17:

[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, should be utilized 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.]

Review process in paragraphs 16 and 17 should be removed from the shared vision chapter and be consolidated into a new chapter for cross-cutting issues, including:

- x.1 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall undertake reviews of this Protocol, including the consideration of commitments of the Parties for subsequent periods, in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information, bearing in mind the changes of circumstances of the Parties. The first review shall take place at least five years before the end of the commitment period, and further reviews shall take place at regular intervals and in a timely manner. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action, which may include the adoption of amendment to Annexes B(commitments by developed country Parties) and Annex C (actions by developing country Parties).
- x.2. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, identify elements, including the economic development stages, response capabilities and shares of greenhouse gas emissions in the world, to be considered as criteria for changes of circumstances of the Parties.
- 17.1 The new agreed post-2012 institutional arrangement and legal framework to be established for the implementation, monitoring, reporting and verification of the global cooperative action for mitigation, adaptation, technology and financing, should be set under the Convention. It should include a financial and a facilitative mechanism drawn up to facilitate the design, adoption and carrying out of public policies, as the prevailing instrument, to which the market rules and related dynamics should be subordinate, to assure the full, effective and sustained implementation of the Convention.
- 17.2 The new institutional arrangement will provide technical and financial support for developing countries in the following areas: (a) preparation, implementation and follow-up through monitoring, reporting and verification of nationally appropriate mitigation actions (NAMAs) by developing countries. These activities could include options to reduce emissions from deforestation and forest degradation (REDD); (b) preparation, implementation and follow-up of national adaptation programmes of action (NAPAs) or national communications (NC) in developing countries; (c) technology needs assessments (TNAs) for adaptation and mitigation under the NAMAs and the NAPAs or NC of developing countries;

- (d) capacity-building and enabling environments for adaptation and mitigation in developing countries; (e) education, awareness raising and public participation, focused on youth, women and indigenous peoples; (f) design and implementation of adaptation programmes and projects; (g) support for all technological cycle phases: research and development (R&D), diffusion and transfer, including acquisition of technologies for adaptation and mitigation, including the purchase or flexibility of patents.
- 17.3 The scheme for the new institutional arrangement under the Convention will be based on three basic pillars: government, facilitative mechanism and financial mechanism, and the basic organization of which will include the following:
- (a) The government will be ruled by the COP with the support of a new subsidiary body on adaptation, and of an Executive Board responsible for the management of the new funds and the related facilitative processes and bodies. The current Convention secretariat will operate as such, as appropriate.
- (b) The Convention's financial mechanism will include a multilateral climate change fund including 5 windows: (a) an Adaptation window, (b) a Compensation window, to address loss and damage from climate change impacts, including insurance, rehabilitation and compensatory components, (c) a Technology window; (d) a Mitigation window, and (e) a REDD window, to support a multi-phases process for positive forest incentives relating to REDD actions.
- (c) The Convention's facilitative mechanism will include: (a) work programmes for adaptation and mitigation; (b) a long-term REDD process; (c) a short-term technology action plan; (d) an expert group on adaptation established by the subsidiary body on adaptation, and expert groups on mitigation, technologies and on monitoring, reporting and verification; and (e) an international registry for the monitoring, reporting and verification of compliance of emission reduction commitments, and the transfer of technical and financial resources from developed countries to developing ones. The secretariat will provide technical and administrative support, including a new centre for information exchange.

II. Enhanced action on adaptation and its means of implementation³

Structural proposals:

Proposal 1

Adaptation chapter should be structured into six sections as follows:

- 1. A section on objectives
- 2. A section on the role of the UNFCCC
- 3. A section on guiding principles
- 4. A section on implementation of adaptation actions
- 5. A section on institutional arrangements
- 6. A section on monitoring and review of adaptation action and support.

The bulk of the current section D on risk reduction, management and sharing would be moved into the section on implementation of adaptation actions. The current section C "means of implementation" would not be included as a section under the adaptation chapter. This section would be considered under the financing, technology and capacity-building chapter.

<u>Proposal 2</u>

Include a section on 'Research and Systematic Observation'

The Bali Action Plan, in its paragraph 1 (c) (i–v), calls for enhanced action on adaptation, including consideration of international cooperation to support urgent implementation of adaptation action; risk management and risk reduction strategies; 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; economic diversification to build resilience; and ways to strengthen the catalytic role of the Convention.

Parties referred to the following Articles of the Convention in submissions related to this section: Articles 3.4, 4.1, 4.3, 4.4, 4.5, 4.7, 4.8, 4.9, 5, 6, 8.2(e), 9, 9.2, 11, 11.5 and 12.1.

Proposals for preambular paragraphs:

Proposal 1

Recognizing that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change,

Bearing in mind the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing countries Parties that would have to bear a disproportionate or abnormal burden under the Convention, Should be given full consideration,

Noting that adaptation and mitigation efforts should be given equal consideration, Taking into account that although adaptation needs are already an urgent necessity, it is clear that early and ambitious emission reduction by developed country Parties will decrease needed efforts and funding for adaptation. Poor mitigation commitments and actions will impose a higher demand on adaptation measures and will require additional funding.

Proposal 2

The Parties,

Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as "the Convention"

Recalling the provisions of the Convention,

In further pursuit of the ultimate objective of the Convention as stated in its Article 2,

Being guided by Articles 3.2, 3.3, 4.3 and 4.4,

Being further guided by the Barbados Programme of Action and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States,

Recalling the Bali Action Plan adopted by decision 1/CP.13 of the Conference of Parties to the Convention at its thirteenth session.

Further acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change that warming of the climate system is unequivocal, and that delay in reducing emissions significantly constrains opportunities to achieve low stabilization levels and increase the rise of more severe climate change impacts,

Recognizing that deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasizing the urgency to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,

Acknowledging the need to accelerate action to address the adverse effects of climate change.

Proposal 3

Recalling Article 4.1 of the Convention, stating all countries have a responsibility to cooperate in preparing for adaptation to the impacts of climate change.

Recognizing that adaptation occurs at local, regional, and national levels and is an inherent part of development planning and implementation;

Recognizing existing commitments and agreements concerning development responsibilities, including the Monterrey Consensus on financing for development and the Paris Declaration on Aid Effectiveness;

Noting that there are major differences among the different regions of the world, and the States which they comprise, in terms of environmental, economic and social conditions and level of development which will lead to different judgments on priorities in addressing problems related to adaptation to climate change;

Recognizing that the UNFCCC can serve as a catalyst for actions on adaptation and the value of leveraging the work of existing organizations and institutions already involved in addressing climate-related risks and opportunities;

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

- (a) The Parties agree to further enhance the implementation of their common obligations under Article 4.1(e) of the Convention; and
- (b) The Parties adopt the robust adaptation framework, which includes an overarching policy strategy designed to stimulate actions to support domestic adaptation

Proposal 4

Recognizing that climate change poses a serious threat to social and economic development of all Parties and noting that the LDCs and SIDS are particularly the most vulnerable to the adverse impacts of climate change and that these groups of countries will suffer disproportionately;

Recognizing also the urgency and the immediacy of the climate change problem the Parties agreed on a legally binding Adaptation Framework as set out in subsequent sections.

Proposal 5

Recognizing that special adaptation needs of the economically vulnerable developing countries that are particularly dependent on fossil fuel production, use, and exportation, and that would have to bear a disproportionate or abnormal burden, should be given full consideration.

Proposal 6

Recognizing responsibilities of Parties under Principle 21 of the Stockholm declaration, which stipulates that activities within their jurisdiction or control shall not damage the environment of other States or areas beyond national jurisdiction, and recognizing their responsibilities to urgently mitigate emissions that are, through causing climate change, damaging, and will continue to damage, areas beyond their national jurisdiction.

A. Objectives, scope and guiding principles

- x.1 The objectives of the framework are:
 - (a) To catalyze greater action on adaptation at all levels;
 - (b) To galvanize national and international support for adaptation priorities in a range of sectors;
 - (c) To help Parties build a robust approach in their respective adaptation efforts; and,
- (d) To promote climate-resilient development in a manner that is practical, informed by the best science, environmentally sound, and economically efficient, and that promotes on-the-ground results.
- x.2 Least Developing Country adaptation actions will be supported by financing, technology, and capacity-building. Issues relating to finance and technology are discussed in their respective sections elsewhere in the text.
- x.3 Adaptation to the adverse effects of climate change is aimed at reducing the vulnerability and increasing the resilience of ecological, social and economic systems to present and future climatic changes, in order to minimize the threats to life and livelihoods, assets, amenities, ecosystems and sustainable development.
- x.4 Adaptation to the adverse effects of climate change is an urgent global problem that requires long-term and coordinated actions, based on solidarity, and a shared responsibility for facilitating and mobilizing support and action on adaptation.
- x.5 International cooperation should galvanize greater attention and efforts towards adaptation at all levels to minimize the adverse impacts of climate change, to assist in building climate resilient communities and to enhance sustainable development.
- 18. [International adaptation action and cooperation [shall][should] be enhanced with a view to facilitating, [supporting and implementing] [and supporting the implementation of] [urgent and immediate, medium-and long-term] adaptation action by [all] [developing countries] Parties at local, subnational, national, regional and global levels, [enabled by means of implementation] [enabled and supported by developed country Parties] [assisted, where appropriate, by means of implementation] to respond effectively, coherently and in a timely manner to current and future impacts of climate change, and impacts of response measures. Such cooperation [shall] [should] [take into account] [be prioritised for] the asymmetries and the [urgent and immediate] specific needs and special circumstances of

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[developing] [the least developed] countries, especially those that are [[particularly] vulnerable to the adverse effects of climate change] [that are least able to adapt], and countries whose economies are highly dependent on income generated from production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products (Article 4.8 h); and be consistent with national priorities and development objectives at the national level and coordinated at the regional level, where appropriate, especially between countries with shared natural resources, with a view to enhancing coordinated and collective adaptation actions. Such cooperation should also take into account medium and long-term needs.

Alternatives to paragraph 18:

Alternative 1

[International cooperation shall be enhanced with a view to:

- (a) Implement urgent and immediate, medium- and long-term adaptation action in all Developing Parties, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, at local, subnational, national, regional and global levels, enabled by means of implementation, to respond effectively, coherently and in a timely manner to current and future impacts of climate change.
- (b) Facilitate and support implementation of adaptation action of all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, by financial, technological and capacity-building support by developed countries considering their historical responsibility.
- (c) Such cooperation shall take into account the urgent and immediate needs of all developing countries that are particularly vulnerable, as stated in the preambular paragraph 19 and Article 3.2 of the UNFCCC.]

Alternative 2

[As elaborated in the Bali Action Plan paragraph 1(c), to mobilise action on adaptation at all levels that responds to the impacts that are already occurring and is sufficient to address the impacts that are expected to occur in the future, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods.]

Alternative 3

[International cooperation should be enhanced with a view to facilitating the implementation of actions on adaptation to the adverse effects of climate change in an effective, efficient, equitable, transparent, coherent and timely manner, by all Parties, at local, regional and global levels. Such cooperation should prioritise the needs of developing countries that are particularly vulnerable to the adverse effects of climate change, including by taking their urgent and immediate needs into account.]

Alternative 4

[A comprehensive adaptation programme is established, to enable, support, facilitate, and implement urgent and immediate, medium- and long-term adaptation actions, by ensuring the predictable, stable, adequate and timely flow of new and additional financial resources, and the development, deployment, diffusion, and transfer of technology to support national, sub-regional and regional adaptation projects and programmes in all developing country Parties, particularly LDCs and SIDS.]

Alternative 5

[International cooperation on adaptation is urgent shall be accorded the same level of priority and emphasis as that given to mitigation. Such cooperation must be enabled by means of implementation

from developed country Parties with a view to facilitating, supporting and implementing urgent and immediate, medium and long-term adaptation action in developing countries so as to respond effectively, coherently and in a timely manner to current and future impacts of climate change. Such cooperation {shall} {should} take into account the urgent and immediate needs of Africa and other developing countries that are particularly vulnerable to the adverse effects of climate change. Such cooperation should be consistent with national priorities, and development objectives, at the national level, and coordinated at the regional level where appropriate, especially within countries with shared natural resources with a view to enhance coordinated and collective adaptation actions.]

Alternative 6

[Adaptation strategies and measures/programmes/framework should be adopted to prevent, reduce or minimize the adverse effects of climate change, particularly on the most vulnerable developing countries, namely: the least developed countries, the small island developing states and the African countries affected by drought, as well as the poorest and most vulnerable populations in other developing countries as central America.]

Alternative 7

[A comprehensive framework for adaptation and its means of implementation shall be adopted under the guidance of the Convention, and based on the principles and obligations acquired under it due to their historical GHG emissions. The framework should enable, support, facilitate and implement adaptation actions, by ensuring the predictable, stable, adequate and timely flow of new and additional financial resources and the development, deployment, diffusion, and transfer of technology to support national, subnational, regional, and sub-regional adaptation projects and programmes to address the adverse effects of climate change in all developing countries, in accordance with the preambular of the Convention (preambular paragraphs 19 and 20) and its Article 4.4, 4.8 and 4.9.]

- 18.1 [The objective of the adaptation framework is to enhance long-term cooperative action on adaptation in a manner that reduces the adverse effects of climate change and builds resilience to its impacts.
- 18.1.1 Adaptation is a challenge shared by all Parties.
- 18.1.2 In their actions to achieve the objective of the adaptation framework, Parties should be guided, inter alia, by the following considerations:
- (a) Priority should be given to those most vulnerable to the adverse effects of climate change and least able to adapt;
- (b) Adaptation efforts should be country-driven where national governments identify and communicate needs, priorities, and responses that are aligned with national priorities and that will enhance their capacities to adapt;
- (c) Adaptation should be based on a solid foundation of scientific and technical knowledge, including traditional knowledge;
- (d) Strong enabling environments include appropriate policy, legal and regulatory frameworks, and well-functioning markets that provide a foundation for increased flows of investment; and
 - (e) Risk reduction should be pursued to build resilience to climate change impacts.
- 18.1.3 The UNFCCC should play a catalytic role and continue to work cooperatively with other organizations on the broad range of initiatives required to address adaptation. Particular effort should be taken to enhance cooperation amongst intergovernmental organizations on disaster risk reduction, poverty reduction, and development with the goal of maximizing synergies and avoiding duplication of efforts.
- 18.1.4. Parties, working collectively and taking into account their common but differentiated responsibilities and respective capabilities, should:
- (a) Exchange information and knowledge at the local, regional, and international level in a manner that allows for sharing of best practices and lessons learned to facilitate scaled up action on adaptation;
 - (b) Enhance data collection and availability to inform adaptation planning;

- (c) Build capacity for enabling environments in a manner that leads to progress on adaptation; and
- (d) Enhance coherence and facilitate linkages with other international, regional and national organizations, programmes, and bodies that are implementing adaptation-related actions.
- 18.1.5. In furthering the implementation of the adaptation framework, Parties should be guided, inter alia, by the following, in the context of national adaptation planning processes and activities:
- (a) Consideration of adaptation during national and sectoral planning, through an integrated and programmatic approach;
- (b) Adaptation to climate change impacts be addressed at the local, subnational, national and regional level, as appropriate.
- (c) Inclusive dialogue with all relevant stakeholders be promoted in the identification of priorities.]
- 18.2 For the purposes of this agreement, the definitions contained in Article 1 of the Convention shall apply. In addition:
 - (a) "Conference of the Parties" means the Conference of the Parties to the Convention.
- (b) "Convention" means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.
- (c) "Particularly vulnerable developing countries" are developing country Parties that are particularly vulnerable to the adverse effects of climate change, especially least developed countries and small island developing States and countries in Africa affected by drought, desertification and floods;
 - (d) "Party" means, unless the context otherwise indicates, a Party to this agreement.
- 18.3 The objective of the Adaptation Framework is to enhance climate resilient development, including enhancing resilience of most vulnerable communities, particularly in most vulnerable countries through implementation of concrete, integrated and practical adaptation programmes.
- 18.4 International cooperation on adaptation shall be accorded the same level of priority and the emphasis given to mitigation. Such cooperation must be enabled by developed country Parties with a view to facilitate support, implement urgent and immediate medium and long-term adaptation actions in developing countries so as to respond effectively, coherently and in a timely manner to current and future impacts of climate change.
- 18.5 Articulation of vulnerability should be consistent with the Bali Action Plan, and be consistent throughout the text.
- 18.6 The COP shall adopt:
- 19. [A comprehensive, robust, flexible, cooperative and action-oriented adaptation [framework] [programme] [implementation framework/strategy/programme] [mechanism] [shall] [should] be established to [enable, support and implement] [guide] adaptation action, [and] [in order] to reduce vulnerability and build resilience for all populations to the adverse impacts of climate change in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change. It (framework/strategy/programme) [shall] [should] encompass provisions for:

Alternative to the chapeau of paragraph 19:

[The comprehensive adaptation programme should be flexible and country-driven. It {shall} {should} encompass provisions for:]

(a) Implementation of adaptation action in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, including:

⁴ Other formulations proposed include the establishment of a "mechanism" or an "instrument".

⁵ Other formulations proposed include "stimulate" and "facilitate".

- (i) Enabling [activities][environments] to support adaptation action, including the insertion of climate change considerations into national development plans, and but not limited to the preparation of national, regional and local adaptation plans⁶ and projects (as referred to in para. 23 below) to promote robust, resilient economic growth to benefit societies at all levels of development;
- (ii) [Adaptation actions, [including those] identified in the national adaptation plans;] *Alternatives to subparagraph 19 (a)(ii):*

Alternative 1

[Adaptation actions, including those identified in national development plans, and in national, regional and local adaptation plans and projects.]

Alternative 2

[Adaptation actions, including but not limited to, as outlined in Decision 1/CP.10 and 5/CP.7, those identified in the national adaptation plans; support for the implementation of NAPAs;]

Alternative 3

[Adaptation actions, including economic diversification among others especially those identified in the national adaptation plans (refer to decisions 1/CP.10 and 5/CP.7);]

- (ii).1 Risk reduction and management
- (ii).2 Implementation of urgent and immediate, medium- and long-term adaptation actions in all developing country Parties, particularly LDCs and SIDS, supported by developed country Parties
- (b) [[Means of implementation, including] [support, in terms of] finance, technology and capacity-building;]

Alternative to subparagraph 19 (b):

[Means of implementation to be provided to developing countries by developed countries, including finance, development and transfer of technology and capacity-building;]

- (c) [Risk reduction, management, prevention and sharing, including insurance [and addressing loss and damages] that do not simply distribute the risk among the already vulnerable;]
- (d) [Institutional arrangements]
- (d).1 Reducing the impact of response measures on developing countries through inter alia-economic diversification;
- (e) Monitoring and review of adaptation [action and] support.]]
- (e).1 Reduce vulnerability at local level

Alternative to paragraph 18 and the chapeau of paragraph 19:

[A strategic (framework)(mechanism) for adaptation and its means of implementation shall be adopted, based on the principles and obligations under the Convention. The (framework)(mechanism) shall provide a comprehensive and structured approach to enable, support, facilitate, and implement adaptation actions, including through the provision of adequate, predictable and timely flow of new and additional financial resources, and the transfer of technology to enable urgent and immediate national, sub-regional and regional adaptation activities and programmes in all developing countries. It shall encompass provisions for:]

Alternatives to paragraph 19:

Alternative 1

[The Adaptation Framework shall consist of both the development and implementation of short, medium and long-term National Adaptation Programmes.]

Other formulations proposed include "programmes" or "strategies" and retaining the term "national adaptation programmes of action" in an initial phase, with the second phase being termed "national adaptation plans".

Alternative 2

[Establish a comprehensive and action oriented programme on the implementation of adaptation action. This programme should provide support and facilitate urgent and immediate adaptation action that reduces vulnerability and builds resilience of developing countries to impacts that are already occurring, including impacts of droughts and increasing numbers of extreme weather events, and impacts that are expected to occur in the future by:

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

Alternative 3

[To develop and implement a structured but flexible country-driven approach to adaptation that provides for:

- (a) International cooperation to support urgent implementation of adaptation actions, including:
 - (i) Adaptation actions, including those identified in national adaptation plans, national communications, national adaptation plans of action, technology needs assessments and other relevant national strategies;
 - (ii) Enabling activities to support adaptation action, including the preparation of national adaptation plans;
 - (iii) taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods;
- (b) Institutional arrangements under the Convention process that co-ordinate adaptation efforts at the international and regional levels to support country-driven priorities;
- (c) 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 national adaptation plans of action, as appropriate;
- (d) New, additional and predictable financial resources separate and apart from ODA that are supported by appropriate institutional mechanisms;
- (e) A dedicated funding mechanism for adaptation;
- (f) Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance through a mechanism to address loss and damage from climate change impacts,
- (g) Enhanced capacity at all levels in developing country Parties that are particularly vulnerable to the adverse effects of climate change, especially least developed countries and small island developing States and countries in Africa affected by drought, desertification and floods:
- (h) Priority actions under adaptation targeting the needs of the developing country Parties that are particularly vulnerable to the adverse effects of climate change, especially least developed countries and small island developing States and countries in Africa affected by drought, desertification and floods;
- (i) Knowledge sharing and transfers of adaptation technologies;

(j) Adaptation actions that incorporate ecosystem strategies where appropriate.] *Alternative 4*

[A Framework for Action on Adaptation to the adverse effects of climate change is hereby established to facilitate and mobilise support and actions on adaptation, to guide the Parties and to provide a basis for their activities to adapt to the adverse impacts of climate change. Parties are encouraged to take the Framework into account in their cooperation with and support to relevant intergovernmental, regional and non governmental organisations as well as the private sector. The Framework for Action on Adaptation should be guided and informed by Convention Articles 4.1 (b), (e) and (f), and will facilitate the implementation of adaptation action that should:

- (a) Be country driven and context specific, responding to local needs, and ensuring that decisions are taken in line with the principle of subsidiarity;
- (b) Promote climate-resilient development;
- (c) Be undertaken within a nationally coordinated approach and be consistent with and integrated into local, national and regional development objectives, plans, and policies;
- (d) Be flexible, bottom-up, and involve all relevant stakeholders, with a view to enhancing ownership of the implementation of adaptation actions at local, national and regional levels;
- (e) Be informed by the best available scientific research, observation and assessment on climate change, impacts and vulnerabilities, and adaptation, be environmentally sound, economically efficient, effective and promote on-the-ground results;
- (f) Be supported by improved access to adequate, predictable and sustainable financial resources and technical support;
- (g) Be supported by coherent international support;
- (h) Take into account the urgent and immediate needs of the particularly vulnerable developing country Parties, especially, least developed countries (LDCs), small island developing States (SIDS) and countries in Africa affected by drought, desertification and floods;
- (i) Prioritise the adaptation needs of the most vulnerable communities and groups, such as women and children.

The Framework for Action on Adaptation should cover areas for enhanced action including, inter alia:

- (a) Supporting the implementation of immediate priorities and needs as identified in NAPAs and other relevant documents;
- (b) Improving the knowledge and information bases including research and systematic observation;
- (c) Integrating adaptation into development and sectoral policies and practices, to ensure their effectiveness and sustainability;
- (d) Establishing and strengthening enabling environments (policy, legislative and institutional) to support, enable, enhance and incentivise adaptation planning and actions;
- (e) Strengthening synergies and coherence with other adaptation related efforts, such as the Hyogo Framework for Action, for example with measures to prevent, reduce, manage and share risk, including early warning systems, spatial planning and insurance-related activities;
- (f) Mobilising means of implementation including finance, technology and capacity-building for adaptation;
- (g) Monitoring and review of effectiveness of adaptation actions.]

Alternative 5

[A comprehensive adaptation framework shall enable, all Parties to reduce vulnerability and build resilience to the adverse impacts of climate change. The adaptation framework shall guide adaptation processes by all Parties. The adaptation framework shall be catalytic and established based on following assumptions:

- (a) Be country-driven;
- (b) Promote coherence and facilitate linkages with other international, regional and national programmes, bodies and stakeholders that are implementing adaptation and related activities;
- (c) Adopt a learning-by-doing approach;
- (d) Coordination and integration with risk assessment and management, recognizing the Hyogo Framework for Action as the main vehicle for disaster risk reduction.]

Alternative 6

[A comprehensive, robust, cooperative and action-oriented adaptation framework of implementation, flexible, structured and country-driven shall be established to enable, support and implement adaptation action, and to reduce vulnerability to the adverse impacts of climate change and to recognize and honour the adaptation debt of developed countries. It should encompass provisions for:

- (a) Implementation of adaptation action, including:
 - (i) Enabling activities to support implementation of adaptation action, including the preparation of national adaptation plans (as referred to in para. 23 below);
 - (ii) Adaptation actions, including those identified in the national adaptation plans;
- (b) Means of implementation, including finance, transfer of technology and capacity-building;
- (c) Risk reduction, management and sharing, including insurance and addressing loss and damages;
- (d) Institutional arrangements on adaptation under the Convention, which shall include a facilitative mechanism, with an expert panel, a permanent programme on adaptation, as well as a financial mechanism;
- (e) Monitoring and review of the financial support to adaptation implementation such as transfer of financial resources for technology transfer, capacity-building and systematic research observation.]
- 19.1 The framework/strategy/programme for adaptation shall, be consistent with the provisions of the UNFCCC, and build upon existing processes and mechanisms, including the Nairobi Work Programme (NWP), and the National Adaptation Plans of Actions (NAPAs), the Technology Needs Assessments (TNAs), and the financial needs assessments under the NEEDS project conducted by the secretariat, for those developing countries that have undertaken, or will undertake these actions, and promote coherence in the way that adaptation is addressed under the Convention.
- 19.2 The action oriented framework should provide access to means of implementation, and include those enabling activities/environments that directly support adaptation projects and program.

20. <u>Option 1</u>

[Adaptation should encompass only action to respond to the adverse effects of climate change.] *Alternatives to paragraph 20:*

Alternative 1

[Adaptation should encompass only action to respond to the adverse effects of climate change in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.]

Alternative 2

[Adaptation should encompass only action to respond to the adverse effects of climate change in all developing countries, particularly low- laying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountains ecosystem are particularly vulnerable to the adverse effects of climate change. Priority should be given to vulnerable groups and vulnerable sectors based on national circumstance in developing countries as informed by the best available science, based on scientific and traditional knowledge as appropriate, environmentally sound, and economically efficient socially acceptable, and that promotes on-the-ground results in line with environmentally, economically and social sound development.]

21. <u>Option 2</u>

[Adaptation also encompasses adaptation to the impact of the implementation of response measures.]

Alternative to paragraph 21:

[Adaptation also encompasses actions to respond to the adverse effects of climate change as well as to the impact of the implementation of response measures.]

Alternatives to paragraphs 20–21:

Alternative 1

[Adaptation actions should encompass action to respond to the adverse impacts of climate change, reducing vulnerability to climate variability and climate change, and mitigating adverse impacts of response measures.]

Alternative 2

[Adaptation should encompass the adverse impacts of climate change on vulnerable developing and the least developed countries (Article 4.8 and 4.9) as well as the impact of response measures (Article 4.10).]

21.1 The Convention should assume a catalytic role in guiding adaptation activities at the international level, including cooperative action by all Parties and by relevant international, regional and national organisations and institutions. The Convention process can facilitate the provision of appropriate information on the scientific and technical aspects of adaptation, the sharing of experiences and knowledge in implementing adaptation activities, and the linking of national entities and implementing agencies with necessary expertise.

Proposed new subheading: Guiding principles

22. [The implementation of the adaptation [framework][programme] [shall][should]:]

Alternatives to the chapeau of paragraph 22:

Alternative 1

[The implementation of the adaptation framework/programme/ strategy shall apply for all developing countries low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change:]

Alternative 2

[National programmes and activities shall be consistent with the particulars provided under the international framework of adaptation. The National Adaptation Programmes shall be developed through broad and wide consultations of stakeholders, taking into account gender consideration and most vulnerable groups. The national adaptation programme shall be country driven and approved by the highest political levels within the country and communicated to the COP:]

Alternative 3

[The following principles should guide the implementation of adaptation action:]

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Alternative 4

[The implementation of the adaptation framework shall be consistent with the Articles of the Convention:]

(a) [Be undertaken in the context of the following:]

Alternatives to subparagraph 22 (a):

Alternative 1

[Be guided by principles and commitments of the Convention]

Alternative 2

[Be country driven]

Alternative 3

[Address the concerns of all vulnerable groups whose adaptive capacity is low, and in particularly gender and youth concerns, recognizing that women and children are particularly affected by the impacts of climate change]

Alternative 4

[Reflect indigenous knowledge and practice]

(i) [[Subsidiarity, with adaptation] respond[ing] to local needs, and decisions being taken at the [lowest] appropriate level;]

Alternatives to subparagraph 22 (a)(i):

Alternative 1

[Subsidiarity, with adaptation responding to local needs, and decisions being taken at all required levels, including the lowest possible appropriate level]

Alternative 2

[Subsidiarity, with adaptation responding to local needs and taking into account the country-driven approach, especially the indigenous peoples' and the local communities' views and the most vulnerable groups, such as indigenous peoples, the artisanal fishermen, women, children, and elderly, among others.]

- (i).1 Facilitate direct access to finance
- (ii) [The international application of [The polluter pays principle considering historical emissions];]
- (iii) [Promoting [climate-resilient] [sustainable] development [in a manner that is practical, informed by the best available science and traditional knowledge as appropriate, environmentally sound, and [economically efficient] socially acceptable, and that promotes on-the-ground results in line with environmentally, economically and socially sound development];]
- (iii).1 The precautionary principle
- (iii).2 Public financing for adaptation shall be assessed contributions of developed country Parties to the Convention, taking into account historical contribution to concentrations of greenhouse gases in the atmosphere
- (iii).3 Access to Adaptation funds by Parties shall be inversely proportional to their contribution to greenhouse gases in the atmosphere
- (iii).4 The respect for, protection and promotion of fundamental human rights and basic rights as outlined in the Universal Declaration of Human Rights, International Covenant on Economic, Social and Cultural Rights, International Covenant on Cultural and Political Rights and other relevant conventions and treaties
- (a).1 Be strictly guided by the principles of the Convention;
- (a).2 The financial and technology support are commitment of developed country Parties under UNFCCC;

(b) [[[Be legally binding, and] include] [Include legally binding] provisions for ensuring the compliance of Annex II Parties with their financial commitments to support enhanced action on adaptation in developing countries;]

Alternative to subparagraph 22 (b):

[Provisions for ensuring the compliance of developed country Parties with their financial and technology transfer commitments shall be legally binding;]

(c) [Be supported by new, predictable, sustainable, timely, adequate sufficient and stable financial resources [provided by developed country/Annex II Parties] [from developed countries and] [additional to official development assistance (ODA)] through a coherent institutional mechanism established under the Convention to channel financial and technical resources;]

Move subparagraph 22 (c) to chapter IV.A on Finance.

Alternative to subparagraph 22 (c):

Alternative 1

[Financial provided by developed countries Parties to enhance adaptation actions in developing countries shall be predictable, adequate, new and additional to ODA in timely manner;]

Alternative 2

[Be supported by new, predictable, sustainable, timely, adequate and stable financial resources which are additional to resources provided by developed country Parties to meet their existing official development assistance (ODA) targets;]

- (d) [Be flexible, [bottom-up], [results-based] and country-driven, involving all relevant stakeholders, including women and especially indigenous peoples and local communities, with a view to enhancing [ownership] [joint robust governance] of the process of building resilience, [at local, subnational, national and regional levels] [, of the implementation of adaptation actions, including ownership of the means of implementation provided];]
- (e) [Be undertaken in a holistic, programmatic and [integrative manner, avoiding [fragmentation of] [stand-alone] adaptation action and support thereof]];
- (f) [[Promote coherence [and] facilitate linkages] with other international, regional and national programmes, bodies and stakeholders that are implementing adaptation and related activities;]
- (f).1 Adaptation planning should integrate land and water resource management at the ecosystem, watershed, or other appropriate scale
- (g) [Facilitate and promote an integrated cross-sectoral and best [practice approach] including coastal and ocean management;]

Alternative to subparagraph 22 (g):

[Promotes cross sectoral priorities especially integrated land and water resource management]

(h) [Be [consistent with] [inserted into] [integrated with] local, subnational, national and [regional development objectives], programmes and plans;]

Alternative to subparagraph 22 (h):

[Be consistent with local, subnational, national development objectives, programmes and plans, and coordinated with regional programmes without compromising the countries' sovereignty;]

- (h).1 Enhance bilateral and regional cooperation in accordance with existing legal frameworks, where appropriate, especially between countries with shared or trans-boundary resources
- (h).2 Enable regional assessments of vulnerability and of impacts of adaptation actions and measures between countries with shared natural resources
- (i) [[Be consistent with the principles under] [Take into account, where possible principles of other relevant Conventions such as] the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, [and] the United Nations Declaration on the

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Rights of Indigenous Peoples and the Convention on the Elimination of all forms of Discrimination Against Women;]

Alternatives to subparagraph 22 (i):

Alternative 1

[Recognize the need to respect indigenous rights and be consistent with relevant international instruments, obligations and laws;]

Alternative 2

[Promote synergies with other relevant international agreements such as the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, the United Nations Declaration on the Rights of Indigenous Peoples and the Convention on the Elimination of all forms of Discrimination Against Women, among others;]

Alternative for subparagraphs 22(f), (g), (h) and (i):

[Facilitates linkages with:

- (i) Other international, regional and national programmes, bodies and stakeholders that implementing adaptation and related activities;
- (ii) Local, sub national, national and regional development objectives where possible;
- (iii) Similar activities being undertake, if any, in pursuance of the Convention on Biological diversity, the UNCCD and relevant Declarations including UN Declaration on the Rights of Indigenous Peoples]
- (j) [Address the concerns and/or build the resilience of all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change [, inter alia] all countries:]

Alternatives to chapeau of subparagraph 22 (j):

Alternative 1

[Prioritizing the most vulnerable to climate change impacts that are least able to adapt]

Alternative 2

[Be consistent with the specific needs and concerns of the developing country Parties arising from the adverse effects of climate change arising out of]

Alternative 3

[Address the needs to implement adaptation actions in:]

- (i) [Particularly vulnerable developing country Parties, [especially] [including]:]
 - [Least developed countries (LDCs), and small island developing States
 (SIDS) [and countries in Africa and Asia affected by drought,
 desertification and floods and landslides];
 - [Poor developing countries;]
 - [Low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, landslides, drought and desertification, [archipelagic countries,] and developing countries with fragile mountainous and highland ecosystems and landlocked countries;]
 - [Countries with unique biodiversity, [tropical] and mountainous glaciers and fragile ecosystems, including coral reefs;]
 - Countries with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil -intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives

Alternatives to subparagraph 22 (j)(i):

Alternative 1

[Taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the LDCs, the small island developing states and further taking into account the needs of African countries affected by drought, desertification and floods.]

Alternative 2

[Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and particularly vulnerable developing country Parties, especially]

Alternative 3

[Particularly vulnerable developing country Parties, as defined in the preambular 19 and the Bali Action Plan and taking into account Article 3.2 of the UNFCCC]

Alternative 4

[Developing countries, especially those identified as the most vulnerable, as is stated in Convention, in paragraphs 19 and 20 of the preambular, as well as in Article 4.4, 4.8 and 4.9]

Alternative 5

- (a) [Small island countries;
- (b) Countries with low-lying coastal areas;
- (c) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;
- (d) Countries with areas prone to natural disasters;
- (e) Countries with areas liable to drought and desertification;
- (f) Countries with areas of high urban atmospheric pollution;
- (g) Countries with areas with fragile ecosystems, including mountainous ecosystems;
- (h) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and
- (i) Land-locked and transit countries.]
 - (ii) [[Particularly vulnerable populations, groups and communities] [Groups requiring special protection], especially women, children, the elderly and indigenous peoples, local communities, rural populations, subsistence fishermen and coastal communities and critical infrastructure including through promoting a gender perspective and a community-based approach to adaptation, if appropriate;]
 - (iii) [Particularly vulnerable ecosystems and species, including through promoting an ecosystem-based approach to adaptation understood as sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation;]

Alternatives to subparagraph 22 (j) (iii):

Alternative 1

[Particularly vulnerable populations, groups and communities, ecosystems and species, including through promoting sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation;]

Alternative 2

[Particularly vulnerable ecosystems and species, including through promoting a gender perspective and a community-based and ecosystem approach to adaptation;]

Alternative 3

[Countries with areas with fragile ecosystems, including mountainous ecosystems, estuaries, coastal wetlands, mangroves, coral reefs, sea-grass beds, and sand dunes with particular attention to sedimentations as well.]

- (k) [Be guided and informed by [sound scientific and technological knowledge][, including] [emerging] scientific findings, by [continuous learning and] [[evidence-based vulnerability] assessment processes] [, and by traditional knowledge];]
- (l) [Build upon experiences and lessons learned from past and ongoing adaptation actions, including national, regional and local policies, measures and strategies, national adaptation programmes of action (NAPAs), the Nairobi work programme on impacts, vulnerability and adaptation to climate change, and traditional practices;]
- (m) [Adopt a learning-by-doing approach].

Alternatives to subparagraph 22 (m):

Alternative 1

[Take into account the learning-by-doing approach and replicated it.]

Alternative 2

[Adopt a learning-by-doing approach on adaptation planning and implementation, recognizing the urgency to adapt in the absence of complete information and the need to develop and implement flexible plans and programmes that can be updated on the basis of new information and learning.]

- (m).1 Enhance, support and promote the local traditional adaptation methods which have been experienced historically and successfully.
- (m).2 Be consistent with priorities and development objectives at the national level and coordinated at the regional level, where appropriate, especially between countries with shared natural resources aimed at enhancing collective adaptation actions;
- (m).3 Plan and implement adaptation actions in a transparent and well documented way that is open to public scrutiny and discourse. Ensure the representation of key stakeholders, especially representatives of vulnerable communities, marginalized groups, women, and indigenous peoples at every stage of the process as appropriate including in the governance and disbursement of adaptation finance, planning, implementation, monitoring and reporting;
- (m).4 Protect and sustainably manage the natural resource base and recognise that ecosystems and the goods and services they provide (such as water, food, soil protection and carbon capture etc.) underpin resilience and are fundamental to support human adaptation and sustainable development;
- (m).5 Adhere to the precautionary principle, agreed upon in Principle 15 of the Rio Declaration and Article 3.3 of the UNFCCC, in adaptation planning, decision-making and implementation, with regard to the scale and nature of adaptation actions and to prevent maladaptation. Any lack of full scientific certainty should not be used as a reason to postpone or scale down action on adaptation;
- (m).6 Ensure adaptation actions deliver no-regret and multiple-benefit measures and avoid mal-adaptation and conflict, and supports documentation and the scaling up of good practices of implementation in community and national adaptation projects;
- (m).7 Support the establishment of flexible long-term processes and mechanisms for adaptation in recognition of the long-term nature of climate change impacts, respective adaptation and climate-resilient development. Adaptation should be consistent with local, subnational, national and regional development objectives, programmes and plans, and consider ecosystem feedbacks to promote poverty reduction and long-term resilience;
- (m).8 Encourage the engagement of a wide range of stakeholders, including the private sector and civil society, in supporting and implementing adaptation action in developing country Parties.

Alternatives to paragraph 22:

Alternative 1

[Principles

Enhanced action on adaptation now, up to and beyond 2012 should:

- (a) Be country driven;
- (b) Give priority to particularly vulnerable developing countries, especially the least developed countries and small island developing states and further taking into account the needs of countries in Africa affected by drought, desertification and floods.
- (c) Be based on the polluter pays principle.]

Alternative 2

[Adaptation planning and implementation by all Parties shall be guided by principles of:

- (a) Subsidiarity, with adaptation responding to local needs, and decisions being taken at the lowest appropriate level;
- (b) Integration, of adaptation into existing and future planning and decision making structures, tools and budgets
- (c) Accountability, effectiveness, efficiency and transparency should guide all adaptation actions]

Alternative 3

[Adaptation planning and implementation by all Parties shall be:

- (a) Flexible, bottom-up, results-based involving all relevant stakeholders, with a view to enhancing ownership, at local subnational and national levels, of the implementation of adaptation actions, including ownership of the means of implementation provided;
- (b) Facilitate and promote an integrated best practice approach and in particular build upon experiences and lessons learned from past and ongoing adaptation actions, including national adaptation programmes of action (NAPAs), the Nairobi work programme on impacts, vulnerability and adaptation to climate change, and traditional practices;
- (c) Undertaken in a holistic and integrative manner, avoiding fragmentation of adaptation action and support;
- (d) Consistent with local, subnational, national and regional development objectives, programmes and plans;
- (e) Guided and informed by sound scientific and technological knowledge, including emerging scientific findings, by continuous learning and evidence-based vulnerability assessment processes, and by traditional knowledge;
- (f) Take into the account:
 - (i) Particularly vulnerable populations, groups and communities, especially women, children, the elderly and indigenous peoples, including through promoting a gender perspective and a community-based approach to adaptation;
 - (ii) Particularly vulnerable ecosystems and species.]

Alternative 4

[Recognize that, and give full consideration to, adaptation represents as an additional burden to developing countries and must address the specific needs and special circumstances of all developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change.]

B. Implementation [of adaptation action]

- x.1 Adaptation actions. Parties should commit to promote adaptation to climate change by:
- (a) Setting as their common goal sustained and effective action to address adaptation to the impacts of climate change;

- (b) Taking immediate no regrets adaptation actions, wherever possible, using existing knowledge, resources, plans and processes;
- (c) Integrating adaptation concerns into national, subnational, and sectoral development programs and priorities;
- (d) Developing, reviewing, and reporting on national action programs on adaptation within [X] years on the basis of national priorities and strategies; and,
- (e) Cooperating to build capacities and mobilize resources for the development and implementation of such programs, in particular for the least developed countries.
- x.2. Adaptation planning. Parties should promote adaptation planning by:
 - (a) Identifying major vulnerabilities to climate change;
- (b) Implementing planning that is multi-sectoral, includes prioritization of adaptation actions, gives priority to the most vulnerable, and makes use of the best available scientific information and analytical tools;
- (c) Integrating adaptation into development planning processes, strategies, and tools at multiple levels and across sectors, developing national adaptation plans as appropriate, and reviewing and reporting on these activities;
- (d) Undertaking assessment of impacts, vulnerability and adaptation (including costs and benefits);
- (e) Promoting involvement, coordination and communication across a range of institutions, agencies, private sector, and civil society;
- (f) Enhancing or developing the needed information and knowledge base (both biophysical and socioeconomic), including improving scientific research, data systems and data collection, to support adaptation and catalyze adaptation investments. This includes enhancing observations and data, and making that data available, to inform assessment and planning for adaptation and provide inputs for approaches such as parameterized insurance; and
- (g) Integrating knowledge, experiences and lessons learned from existing activities, including those carried out at the community level as well as activities from ongoing initiatives such as the Nairobi Work Programme into adaptation planning.
- x.3 A comprehensive, robust, cooperative and action-oriented adaptation framework should be established to enable and support the implementation of adaptation action, and to reduce vulnerability and build resilience to the adverse impacts of climate change. It should encompass provisions for:
 - (a) Implementation of adaptation action, including:
 - (i) Enabling environments to support adaptation action, including the preparation of national adaptation plans (as referred to in para. 23 below);
 - (ii) Adaptation actions, including those identified in the national adaptation plans;
 - (b) Means of implementation, including finance, technology and capacity-building;
 - (c) Institutional arrangements:
 - (d) Monitoring and review of adaptation action and support.
- x.4 Adaptation action should encompass only action to respond to the adverse effects of climate change. The adaptation framework should support and enhance the implementation of national adaptation plans. Adaptation action includes:
- (a) Specific adaptation programmes, projects, and actions for implementation at local, subnational and national levels, including activities identified in the national adaptation plans, and cross sectoral and sector based activities;
- (b) Strategies and measures to reduce, manage and share risk, including early warning systems and insurance-related activities;
 - (c) Strategies and measures to build resilience, including through economic diversification;

(d) R&D, deployment, diffusion and transfer of adaptation technologies, including capacity-building, taking into account sector-specific adaptation technologies, ecosystem-scale intersectoral linkages and endogenous adaptation technologies.

[[Enabling [activities] [environments]] [International cooperation and support] to support adaptation action]

- x.1 Developing country Parties shall be assisted by developed country Parties to implement adaptation activities, projects, programmes, strategies, actions identified through various national processes, including in National Communications.
- 23. [LDCs and SIDS [Parties] All developing country Parties} {Particularly vulnerable developing country Parties} [shall] [should] formulate [and report on] their [national adaptation plans] [national adaptation planning] [national adaptation programmes of actions (NAPAs)], assessing, identifying, [costing] and prioritizing their urgent and immediate, and medium and long-term, adaptation needs, [including needs related to risk management, reduction and [sharing],] that are consistent with national and sectoral priorities. These plans [should] [could] be a component of low emission develop strategies and:]

Alternatives to the chapeau of paragraph 23:

Alternative 1

[All developing country Parties, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change may formulate and report on their national adaptation plans and its implementation, assessing, identifying, costing and prioritizing their urgent and immediate, and medium and long-term, adaptation needs, including needs related to risk management, reduction and sharing, that are consistent with national and sectoral priorities. These plans should:]

Alternative 2

[All developing country Parties, with the support of financial resources from Convention Adaptation Fund, technical and capacity-building, should formulate and update their national adaptation plans, through assessing current and potential impacts of climate change, identifying and prioritizing their urgent and immediate, and medium and long-term, adaptation actions and needs.]

Alternative 3

[Adequate finance must be provided for the implementation of NAPAs. In addition finance must be provided to all developing country Parties to enable the formulation of their national adaptation plans, inter alia assessing, identifying, costing and prioritizing their urgent and immediate, and medium and long-term, adaptation needs, including needs related to risk management, reduction and sharing, that are consistent with national and sectoral priorities. These plans should:]

Alternative 4

[All developing country Parties may, on voluntary bases, formulate and report on their national adaptation plans and its implementation, assessing, identifying, costing and prioritizing their urgent and immediate, and medium and long-term, adaptation needs, including needs related to risk management, reduction and sharing, that are consistent with national and sectoral priorities. These plans should:]

- (a) [[Catalyse] [Support] actions [in and across different sectors], promoting efficient [and effective] use of the financial resources for adaptation provided by developed countries under the Convention;]
- (a).1 Indicate areas of immediate actions and support in terms of means of implementation
- (b) [Emphasize [programmatic approaches], while also recognizing a place for adaptation projects [under certain circumstances];]
- (c) [Inform domestic action and the [provision] [allocation] of increased international financial support, possibly forming a component of a country's sustainable development plan;]

- (d) [Be used to report on the effectiveness of adaptation actions in meeting stated objectives;]
- (e) [[Consider the synergy between and the multiple benefits of, adaptation and mitigation measures,] including those within which options concerning reducing emissions from deforestation and forest degradation in developing countries (REDD) are particularly relevant;]

Alternative to subparagraph 23 (e):

[Take into account the composition, resilience and productivity of natural and managed ecosystems, and the support they provide to adaptation.]

(f) [Take into account the [dynamics of natural systems] [natural systems and their dynamics].] *Alternative to subparagraphs 23 (e) and (f):*

[Parties should indicate, where possible, potential synergies between adaptation and mitigation measures, and indicate if the adaptation actions may have positive or negative consequences on mitigation.]

- (f).1 Impact assessment of actions undertaken in the context of shared and trans-boundary resources
- (f).2 Take into account relevant social and economic conditions, which should be consistently defined and include gender considerations in order to enhance women's capacity to act and to contribute to adaptation actions effectively
- (f).3 Integrate a gender perspective and community-based and participatory approach to adaptation
- (f).4 Consider land degradation

Alternatives to paragraph 23:

Alternative 1

[All Parties should:

- (a) Put in place enabling environments (policy, legislative and institutional) and integrate adaptation into sustainable development policies and strategies at the local, national, regional and international level;
- (b) Prioritize the needs and specific circumstances of the poorest and most vulnerable people and indigenous groups in planning and development processes at local, sectoral and national levels.
- (c) Support capacity-building efforts;
- (d) Support the supply and availability of adaptation technologies, climate information (including through research and systematic observation), tools, methods and models, particularly in the most vulnerable countries;
- (e) Identify, on a continuous basis, their country-specific adaptation needs, options and priorities, taking into account their existing capacities and past and current adaptation activities;
- (f) Share experiences, knowledge and data, including utilizing the services of relevant institutions:
- (g) Promote the participation of a wide range of stakeholders including, national and international organizations, civil society and the private sector;
- (h) Promote the co-ordination and sustainability of activities undertaken within this framework including the efforts of national co-ordinating mechanisms and entities and focal points.]

Alternative 2

[All developing country Parties shall formulate and report on their national and/or thematic areas adaptation plans, assessing, identifying, costing and prioritizing their urgent and immediate, and medium

and long-term adaptation needs, including needs related to risk management, reduction and sharing, that are consistent with national priorities. The national adaptation plans should include at least:

- (a) Vulnerability assessments;
- (b) Prioritization of actions;
- (c) Capacity-building strategies;
- (d) Means for integrating adaptation actions into thematic areas and national planning;
- (e) Identification of specific projects and programmes;
- (f) Identification of means to incentivize the implementation of adaptation actions;
- (g) Disaster risk and management strategies.]

Alternatives for subparagraphs of paragraph 23:

- (a) [Vulnerability assessments;
- (b) Prioritization of actions:
- (c) Financial needs assessments;
- (d) Capacity-building and response strategies;
- (e) Means for integrating adaptation actions into sectoral and national planning;
- (f) Identification of specific projects and programmes;
- (g) Identification of means to incentivize the implementation of adaptation actions;
- (h) Ways to enable climate-resilient development and reduce vulnerability;
- (i) Disaster risk management strategies;
- (j) Means to diversify the economy as an adaptation strategy.
- 24. [To promote the enabling [activities] [environments] to support adaptation action, [all Parties] [Parties] [all developing country Parties] [shall][should]:]

Alternatives to the chapeau of paragraph 24:

Alternative 1

[Adequate predictable and sustainable finance must be provided to promote enabling activities to support adaptation action and implementation, all developing country Parties should:]

Alternative 2

[To promote enabling activities to support adaptation action in all developing country Parties particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change may:]

Alternative 3

[To promote the enabling activities to enhance adaptation action, with the support of financial resources from Convention Adaptation Fund, technical and capacity-building, all developing country Parties should:]

Alternative 4

[To promote, enable and support the implementation of adaptation actions in all developing country Parties:]

(a) [[Promote the integration of][[Integrate] adaptation into development, disaster risk] [Coordinate adaptation and disaster risk reduction and integrate these into development] and poverty reduction plans, strategies, tools and policies at multiple levels [and across sectors] recognising that climate change is an additional burden to development;]

Move subparagraph 24 (a) to paragraph 25

Alternative to subparagraph 24 (a):

[Integrate adaptation into public policies, strategies and tools, at multiple levels and across sectors;]

(a).1 Integrating sustainable development in economic diversification strategies

(b) [[Provide incentives to] [Promote] adaptation through inter alia [regulatory policies], legislative changes, removal of barriers, involving women as active participants, and other supportive approaches;]

Move subparagraph 24 (b) to paragraph 25

- (b).1 Build resilience to climate variability and change into economic development activities and institutions
- (c) [Build capacity, including institutional capacity[, through providing financial [and technical support for]] [resources and technology development and transfer for]:]
 - (i) [Operational planning of adaptation, including for detailed project design, costing of adaptation, and increasing adaptive capacity;]
 - (i).1 Implementation of Adaptation actions
 - (ii) [Systematic observation, data collection and archiving, analysis, modelling [and] dissemination and application;]
 - (ii).1 Improved emergency response capabilities, including governance structures that encourage efficient use and coordination of local, national, and international resources;
 - (ii).2 Develop capacity for applying climatic information in sectoral planning as well as cross-sectoral planning such as integrated water resources management;
 - (ii).3 Analyze institutional vulnerabilities in developing countries in order to build national capacities in specialized areas, such as modelling, adaptation planning and implementation, and strengthen the relevant institutional capacities;
 - (ii).4 Promote local and needs-oriented capacity-building activities for adaptation at all levels, including through specific targeted training and technical support; including building expertise to run and interpret complex models;
- (c).1 Recognizing that climate change is an additional burden to development
- (d) [Undertake [sound] vulnerability and adaptation assessments including those at the local, national and regional level, employing a range of decision-making tools and methodologies;]
- (e) [Share knowledge, information and experience at local, national, regional and international levels, consistent with international agreements;]
- (f) [[Engage in] [Enhance] education and training programmes, research and public awareness-raising, including public and stakeholders education and continued outreach;]
- (f).1 Elaborate best practices that can guide immediate actions with an eye to building long-term resilience to extreme events and disasters, including through implementation of the Hyogo Framework for Action
- (f).2 Undertake activities to improve risk management and risk reduction through strategies that link development, climate adaptation and disaster risk reduction
- (g) [Encourage pilot projects to increase and create synergy and champions related to microinsurance and risk pooling, where appropriate;]

Alternatives to subparagraph 24 (g):

Alternative 1

[Encourage pilot projects related to microinsurance and risk pooling; inform and involve the most vulnerable groups in the decision making process and management of adaptation activities;]

Alternative 2

[Encourage pilot projects related to microinsurance and risk pooling as appropriate within a country-driven approach to adaptation;]

Alternative 3

[Encourage pilot projects related to microinsurance and global risk pooling that do not impose additional burdens to the already vulnerable;]

Alternative 4

[Encourage pilot projects related to improve adaptive capacity]

- (g).1 Minimize incentives that encourage mal-adaptation
- (h) [Engage in [a [three-year] pilot phase of] adaptation activities implemented cooperatively, to catalyse rapid learning about adaptation good practice by supporting enhanced implementation of demonstration projects, programmes and policies in vulnerable countries, as well as regions, and communities groups, sectors, and ecosystems within all developing countries;]
- (i) [[Establish a short-term work programme up to and beyond 2012 in order to support the preparation and implementation of NAPAs, and to] support the strengthening of observation systems, the creation of databases for climate data, downscaling and targeted capacity-building for long-term planning.]

Move subparagraphs 24 (h) and (i) to paragraph 25

Alternative to paragraph 24:

[Developed countries shall:

- (a) Improve access to new, additional and predictable financial flows;
- (b) Deliver on mitigation commitments to reduce the scale and costs of adaptation.]

Alternative to paragraphs 23–24:

Alternative 1

- [x.1 All Parties shall develop, periodically update and make available to the Conference of Parties national adaptation plans as a means of assessing current and potential impacts of climate change and developing strategies to reduce these impacts through the implementation of adaptation action;
- x.2 National adaptation planning procedures should build on existing processes and methodologies where available and appropriate, e.g., national communications, national adaptation plans of action, and technology needs assessment;
- x.3 National adaptation plans could include, inter alia:
 - (a) Vulnerability assessments;
 - (b) Prioritization of actions;
 - (c) Financial needs assessments;
 - (d) Capacity-building and response strategies;
 - (e) Means for integrating adaptation actions into sectoral and national planning;
 - (f) Identification of specific projects and programmes;
 - (g) Identification of means to incentivise the implementation of adaptation actions;
 - (h) Ways to enable climate-resilient development and reduce vulnerability;
 - (i) Disaster risk reduction and management strategies;
 - (j) Means to diversify the economy as an adaptation strategy;
- x.4 National adaptation plans may be developed and implemented at different time scales depending upon national circumstances,
- x.5 Developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods shall be provided financial and technical assistance to develop and implement national adaptation plans.
- x.6 Access to funds to implement priority adaptation activities identified by Parties shall not be conditional on the completion of national adaptation plans.]

Alternative 2

[In the implementation of adaptation actions by all Parties should consider to:

- (a) The synergy between adaptation and mitigation measures, including those within which options concerning reducing emissions from deforestation and forest degradation in developing countries (REDD) are particularly relevant;
- (b) Catalyse actions in different sectors, promoting efficient and effective use of the financial resources for adaptation;
- (c) Share knowledge, information and experience at local, national, regional and international levels:
- (d) Promote climate-resilient development in a manner that is practical, informed by the best science, environmentally sound, and economically efficient, and that promotes on-the-ground results;
- (e) Engage in education and training programmes, research and public awareness-raising;
- (f) Undertake sound vulnerability and adaptation assessments employing a range of decision-making tools and methodologies;
- (g) Provide incentives to adaptation through regulatory policies, legislative changes, removal of barriers and other supportive approaches;]
- 24.1 To promote the enabling activities to enhance adaptation actions in all developing countries, the developed country Parties should:
 - (a) Provide support to developing country Parties for the integration of adaptation into sustainable development, disaster risk and poverty reduction plans, strategies, tools and policies at multiple levels and across sectors;
 - (b) Provide incentives to adaptation through regulatory policies, legislative changes, removal of barriers and other supportive approaches;
 - (c) Providing financial and technical support for building capacity, including institutional capacity in developing country Parties;
 - (d) Provide technical support to developing country Parties to undertake sound vulnerability and adaptation assessments;
 - (e) Share knowledge, information and experience at regional and international levels;

Implementation of adaptation actions

25. [The adaptation [framework][programme] [shall] [should] support and enhance the implementation of national adaptation programmes, projects, actions and plans. [Adaptation action] [National Adaptation Plan] includes:]

Alternative for the chapeau of paragraph 25:

[The adaptation implementation framework shall support and enhance the implementation of national adaptation plans in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change. Adaptation action includes:]

(a) [Specific adaptation programmes, projects, and actions for implementation at local, subnational and national levels, including activities identified in the national adaptation plans, [and cross-sectoral and sector-based activities] from the household up through macro-level to ensure adaptation actions respond to needs of entire communities;]

Alternative to subparagraph 25 (a):

[Specific adaptation programmes, projects, and actions for implementation at all levels, including local, subnational and national levels, activities identified in the national adaptation plans, and integrated climate territorial plans as well as cross-sectoral and sector-based activities, including NAPAs;]

- (b) [Programmes, projects, actions, strategies and measures to reduce, manage and share risk, including early warning systems, insurance-related activities [and activities addressing loss and damage from climate change impacts, including those arising from extreme weather events] and gradual changes;]
- (b).1 Implementation of short-, medium- and long-term adaptation actions, projects and programmes identified in national adaptation plans
- (c) [Programmes, projects, actions, strategies and measures to [build resilience] [enhance adaptive capacity], [including through economic diversification];]
- (c).1 Strategies and measures geared to minimize adverse social, environmental and economic impacts on developing countries identified in Article 4, paragraphs 8 and 9 of the Convention;
- (d) [R&D, deployment, diffusion and transfer of [adaptation technologies] [technologies for adaptation], including capacity-building, taking into account [sector-specific adaptation technologies, ecosystem-scale intersectoral linkages and] endogenous national or regional adaptation technologies in a voluntary manner and consistent with relevant international agreements;]
- (e) [Activities related to national and international migration/planned relocation of climate [refugees] [migrants] [displaced persons by extreme climate events].]

Alternatives to subparagraph 25 (e):

Alternative 1

[Activities related to national and international responses to people displaced by the impacts of climate change]

Alternative 2

[Activities related to national and international migration and displacement or planned relocation of persons affected by adverse impact of climate change]

Alternative 3

[Activities related to national and international migration/planned relocation of displaced individuals and peoples due to the adverse effects of climate change]

- (e).1 Improve knowledge of the socio-economic aspect of climate change and promote the integration of socio-economic information into impact and vulnerability assessments.
- (e).2 Exchange experience and opportunities on the Development and dissemination of measures, methodologies and tools aimed at increasing economic resilience.
- (e).3 Exchange experience and lessons learnt in economic diversification, including ways to develop institutional capacity, and improve understanding on how economic diversification can be integrated into Sustainable development plans, especially those that promote Sustainable economic growth and eradication of poverty.
- (e).4 The Adaptation Framework shall encourage the development and implementation of modalities of inter-State cooperation to respond to the needs of affected populations who either cross on international frontier as a result of or find themselves abroad and are unable to return due to the adverse effects of climate change
- (e).5 Operationalize adaptation through existing and proven institutions and process including ecosystem-based management and integrated coastal and ocean management and processes at local, national, and regional scales

Alternatives to paragraph 25:

Alternative 1

- [x.1 All Parties shall undertake adaptation actions to reduce vulnerability and to build their resilience to the impacts of climate change.
- x.2 Developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into

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account the needs of countries in Africa affected by drought, desertification and floods shall be provided with financial and technical assistance to support the implementation of adaptation actions as a means of building resilience to the impacts of climate change, including inter alia:

- (a) Project level adaptation actions;
- (b) Sectoral level adaptation actions;
- (c) Administrative and legislative actions to build resilience;
- (d) Means to protect people displaced by the impacts of climate change;
- x.3 Proposals for funding support for adaptation in developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, shall be:
 - (a) Country-driven;
 - (b) Guided by indigenous knowledge;
 - (c) Funded in an expeditious manner;
 - (i) Funded directly to governments and community organisations in accordance with national policies or legislation.]

Alternative 2

[All Parties are encouraged to engage a wide range of stakeholders, including the private sector and civil society, in supporting and implementing adaptation action in developing country Parties.]

26. [National adaptation plans [are to be] [should] [reviewed and] updated {every three to four years}. National adaptation plans could be [reported] [included] as part of a country's national communication.] The developed country Parties shall provide new and additional financial resources - above what is now provided for National Communications - to meet the agreed full costs incurred by developing country Parties in compliance with their obligations under Article 12, paragraph 1. (Art 4.3 of the Convention)

Alternatives to paragraph 26:

Alternative 1

[Implementation of national adaptation plans and actions could be reported as part of a country's national communication.]

Alternative 2

[National adaptation planning processes should be ongoing and iterative, and activities should be reported as part of a country's national communication.]

Alternative 3

[National adaptation plans are to be updated, under the financial support from Convention Adaptation Fund mentioned below, every four years.]

Alternative 4

[National adaptation actions should be reported as part of a country's national communication.]

27. [[All] [Annex I] Parties are encouraged to engage a wide range of their stakeholders, including R&D institutions, Universities, research centers; local communities, the private sector and civil society, indigenous peoples, women and children in supporting and implementing adaptation action [in developing country Parties], bearing in mind that the involvement of the private sector and other stakeholders should supplement and not substitute the role of the developed country Parties related to the provision of financial resources and transfer of technology under the Convention.]

Move paragraph 27 and insert it as subparagraph 22 (m).9.

C. Means of implementation

Move section C to section B and change it into a subsection

Move section C to chapter IV.A on Finance

- x.1 Commitments of support from Annex I Parties for implementation of Adaptation Framework through financial and technology transfer shall be legally binding, with provisions of ensuring compliance mechanism/monitoring, reporting and verification mechanisms.
- x.2 Commitments of support from Annex I Parties for implementation of Adaptation Framework through financial and technology transfer should be legally binding, with provisions of ensuring compliance mechanism
- x.3 Public financing for adaptation shall be assessed contributions of developed country Parties to the Convention, taking into account historical contribution to concentrations of greenhouse gases in the atmosphere.
- x.4 For developing countries, climate change imposes an additional burden to development, and finance for adaptation must therefore be additional to finance for development (ODA)
- (a) The provision of financial and technical support by developed country Parties for adaptation programmes in developing countries is a commitment under the Convention that must be urgently fulfilled, recognizing that climate change is an additional burden to sustainable development, and a threat to achieving the Millennium Development Goals.
- (b) The Adaptation Programme must provide scaled up new, additional, adequate, predictable and sustainable financial, technological and capacity-building support to address all key areas of the Adaptation Programme in a manner that is holistic, and consistent with national and regional development objectives, programmes and plans.
- (c) By 2020 the scale of financial flows to support adaptation in developing countries must be at least USD 67 billion / year.
- (d) Finance for adaptation is a commitment by developed countries. There should be regular reporting through national communications on the implementation by developed country Parties and other developed Parties included in Annex II of their commitment under Article 4.4 of the convention to assist vulnerable developing countries in meeting the cost of adaptation (may be better in reporting monitoring section.
- (e) The financial mechanism of the Convention should support all stages of adaptation activities and should therefore have commensurate resources.
- x.5 The provision of financial resources, including technology transfer and capacity-building shall be in accordance with Article 4.3, 4.4 and 4.5 of the Convention, and must provide scaled up new, additional, adequate, predictable and sustainable financial, technological and capacity-building support to address all key areas of the Adaptation Action Programme in a manner that is holistic, and consistent with national and regional development objectives, programmes and plans. By 2020 the scale of financial flows to support adaptation in developing countries must be in the range of USD 70-140 billion per year.
- x.6 Developing country Parties, giving priority to the most vulnerable, shall be supported in their adaptation actions, including adaptation planning and implementation, and support to adaptation action {shall}{should} encompass provisions for:
 - (a) Implementation of adaptation action;
 - (b) Means of implementation, including finance, technology and capacity-building;
 - (c) Institutional arrangements;
 - (d) Monitoring and review of adaptation action and support.
- x.7. Parties should commit to:
- (a) Promoting the full range of available management tools and financing options in implementing local, national or regional adaptation actions, including innovative managerial and financial techniques;

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- (b) Encouraging financial flows for adaptation to least developed countries and the poorest and most vulnerable communities within countries;
- (c) Promoting the conditions that will encourage private sector investment to build resilience in sensitive sectors; and,
- (d) Promoting access to appropriate technologies, knowledge and expertise to address adaptation, in particular for least developed countries, and including creation of enabling environments for the successful adoption of such technologies.
- 28. [Taking into account the provisions of paragraphs 31–33 below, developing country Parties [and Parties with economies in transition] [shall] [should] receive access⁷ to finance, technology and capacity-building,⁸ to support adaptation action at local, subnational, national, regional and global levels, including:]

Alternatives to the chapeau of paragraph 28:

Alternative 1

[Taking into account the provisions of paragraphs 31–33 below, developing country Parties {and Parties with economies in transition} {shall} {should} be provided with finance, technology and capacity-building by at least 0.5per cent of GDP of developed countries, to support adaptation action at local, subnational, national, regional and global levels, including:]

Alternative 2

[Taking into account the provisions of paragraphs 31–33 below, developing country Parties, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change shall be provided with finance, technology and capacity-building, to support adaptation action at local, subnational, national, regional and global levels, including:]

Alternative 3

[Developed country support for adaptation actions in developing countries, in accordance with the provisions of the Convention. Such actions may include:]

Alternative 4

[Taking into account the provisions of paragraphs 31-33 below, developing country Parties shall be provided with finance on a continuous basis, technology and capacity-building, to support adaptation action at local, subnational, national, regional and global levels, including:]

Alternative 5

[Taking into account the provisions of paragraphs 31–33 below, developing country Parties – those Parties eligible to borrow from the World Bank (IBRD and/or IDA) or eligible recipients of UNDP technical assistance through its country Indicative Planning Figure (IPF) – shall receive access to finance, technology and capacity-building to support adaptation at local, subnational, national, regional and global levels, including:]

Alternative 6

[The developed country Parties in order to pay their adaptation debt to the developing country Parties should give finance, transfer technology and capacity-building, to support adaptation action at local, subnational and national as well as for stand-alone projects/actions:]

- (a) [Activities referred to in section B above and paragraph 30 below relating to the implementation of adaptation actions and enabling [activities] [environments] to support those actions;]
- (b) [Identified adaptation programmes, projects or actions, such as those arising from [national sustainable development strategies],] risk reduction strategies, [poverty reduction strategies,] national communications and NAPAs and other relevant instruments;]

⁷ Principles and criteria proposed for access to financial resources are indicated in paragraph 166 below.

⁸ Criteria proposed for the scale and the nature of financial support are reflected in paragraph 171 below.

Alternatives to paragraph 28:

Alternative 1

[Means of Implementation

- (a) Adaptation actions identified and prioritised by developing country Parties in their national adaptation plans may be submitted to the Adaptation Committee for publication. Adaptation actions submitted for publication should be consistent with national policies, plans and programmes.
- (b) The Adaptation Committee shall provide guidance and expertise to developing country Parties in the identification and prioritisation of adaptation actions for urgent and immediate implementation.
- (c) The Adaptation Committee shall assist with matching these prioritised adaptation actions to financial and technological support provided by developed countries. The Adaptation Committee will facilitate the review of new and additional developed country commitments under the Convention.
- (d) Developing countries may seek financial and technological support for adaptation actions through other means.]

Alternative 2

[Support for adaptation shall be adaptation actions should be supported through the provision of new, adequate, predictable and sustainable financial resources.]

- 28.1 Establishment of a "Convention Adaptation Fund", based on assessed contributions from Annex I countries and other possible sources of financial. "Adaptation Fund" must ensure sufficient financial resources for all developing countries to:
- (a) Enhance capacity-building, including data collection, climate scenarios, assessment on vulnerability and adaptation, including assessment of adaptation cost; Promote education, training and public awareness related to climate change;
- (b) Cover full cost for preparation of national adaptation plans, identify priority activities/projects intended to address urgent and immediate adaptation needs, and incorporation adaptation considerations into sectoral and national development planning:
 - (c) Implement adaptation actions, projects and programmes, in particular those urgent ones;
- (d) Implement risk management and risk reduction strategies, including establishment of the early warning system;
 - (e) Build climate resilience through economic diversification;
- (f) Enhance institutional capacity, for preventive measures, planning, preparedness of disasters relating to climate change;
- (g) Access to adaptation technologies, promote research, development and diffusion of adaptation technologies, taking into account sector specific adaptation technologies; develop and enhance endogenous capacities for technologies; have adequacy of funds for accessing transferred technology.
- 28.2 Adaptation financing must be substantially scaled up and must be sufficient to:
- (a) Meet the financial requirements for adaptation programmes at national, sub-regional, regional, and international levels;
- (b) Meet the required financial resources, technologies and capacity-building for the implementation of action on adaptation in accordance with the commitment of the developed country Parties;
- (c) Provide adequate, predictable, stable and timely financing at full-cost and grant based with direct, simplified and expeditious access;
 - (d) Cover different stages of adaptation from identification of actions to implementation;
 - (e) Provide new and additional resources, that is, additional to ODA financing; and
 - (f) No requirement of co-financing in terms of additionality;

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Financial resources should be provided through the enhanced financial architecture, and under the authority, guidance, and fully accountable to the COP.

Mandatory contributions from developed country Parties and other developed Parties included in Annex II should form the core revenue stream for meeting the cost of adaptation in conjunction with additional sources including share of proceeds from flexible mechanisms.

Coherence should be maintained in funding adaptation through the Convention, and outside the financial mechanism of the Convention, in accordance with the guidance provided by the COP.

Development of an adaptation strategy and programme should be enabled if its not available at country level.

Means should be provided, on a continuous basis, to enable, support and enhance national capacity to incorporate adaptation in planning and designing adaptation activities.

Funding should go beyond integration of adaptation to sustainable development plans, and to include stand-alone adaptation.

29. [The adverse effects of climate change and response measures constitute an additional burden on developing country Parties in reducing poverty and attaining sustainable development and the United Nations Millennium Development Goals. Developed countries shall provide Financial support [shall][should] be provided on a grant basis [and as concessional loans] to meet the {agreed full {incremental}} cost of adaptation action in developing countries.]

Alternatives to paragraph 29:

Alternative 1

[The adverse effects of climate change constitute an additional burden on developing country Parties in reducing poverty and attaining sustainable development and the United Nations Millennium Development Goals. Financial support {shall} {should} be provided on a grant basis to meet the agreed full and full incremental cost of adaptation action in developing countries and must provide finance for standalone adaptation programmes.]

Alternative 2

[The adverse effects of climate change constitute an additional burden on all developing country Parties particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, in reducing poverty and attaining sustainable development and the United Nations Millennium Development Goals. Financial support shall be provided on a grant basis to meet the {agreed full {incremental}} cost of adaptation action in developing countries.]

Alternative 3

[Financial support shall be provided on a grant basis to meet agreed full cost and agreed full incremental cost of adaptation action in developing countries with special consideration to LDCs and SIDS.]

Alternative 4

[Financial support should be provided both on a grant basis and as concessional loans to assist in meeting the agreed full incremental costs of adaptation in developing countries. Provision of financial support shall be country driven and follow a programmatic approach where possible, but also allow for using a project approach when appropriate.]

Alternative 5

[The adverse effects of climate change constitute an additional burden on developing country Parties in reducing poverty and attaining sustainable development and the United Nations Millennium Development Goals. Financial support shall be provided on a grant basis to meet the agreed full costs of adaptation action in developing countries.]

Alternative 6

Alternative 7

[Support for adaptation shall seek to strengthen the countries in their adaptation efforts by support to country-driven adaptation planning processes and implementation, emphasizing programmatic approaches, while also recognizing a place for adaptation projects under certain circumstances.]

[The adverse effects of climate change, due to historical cumulative GHG emission of developed countries, constitute an additional burden on developing country Parties in reducing poverty and attaining sustainable development and the United Nations Millennium Development Goals. Their economical and social development and poverty eradication are the first and overriding priorities of the developing countries as is stated in the Article 4.7 of the Convention. Therefore, the financial support additional to ODA for the implementation to the adaptation actions should be covered in a full manner by developed

countries.] Alternative 8

[The adverse effects of climate change and response measures constitute an additional burden on developing country Parties in reducing poverty development strategies to address social vulnerabilities and attaining sustainable development and the United Millennium Development Goals. Developed countries shall provide financial support on a grant basis to meet the {agreed full costs and agreed full {incremental}} cost of adaptation action in developing countries.]

30. [Developed countries shall provide] [{Agreed} full {incremental} cost coverage, as stated in Article 4.3 (meet the full incremental costs of implementing measures that are covered in paragraph 1 of this Article) should be provided for:]

Alternatives to the chapeau of paragraph 30:

Alternative 1

[Agreed full cost and agreed full incremental cost coverage should be provided for:]

Alternative 2

[Agreed full incremental costs cost coverage should be provided for, inter alia:]

Alternative 3

[Agreed full cost and agreed full incremental cost coverage should be provided for:]

Alternative 4

[Agreed full costs coverage should be provided for:]

Alternative 5

[Full cost coverage should be provided for inter alia:]

(a) [Adaptation technologies and stand-alone adaptation projects;]

Alternatives to subparagraph 30 (a):

Alternative 1

[Research and development, diffusion and access to adaptation technologies]

Alternative 2

[Implementation of stand-alone adaptation projects]

- (a).1 Vulnerability and adaptation assessments;
- (b) [Preparation and implementation of [national adaptation [action] plans] [national adaptation programmes of actions (NAPAs)];]
- (c) [Implementation of [NAPAs] [NAPA-like] [National Adaptation Plans] and stand alone adaptation projects or programmes; and ensure NAPAs include a focus on economic diversification;]

Alternative to subparagraph 30 (c):

[Starting full implementation of activities identified in NAPAs by 2012]

(d) [Resilience-building activities with the participation of all stakeholders based on vulnerability and disaster risk reduction assessments, including for sustainable livelihood, economic diversification for a sustainable economy, sustainable agriculture, building community capacities and infrastructures, access to technologies and innovations, etc.]

Alternative to subparagraph 30 (d):

[Improvement of adaptive capacity based on vulnerability assessments, including for sustainable livelihood, sustainable agriculture, building community capacities and infrastructures, access to technologies and innovations, etc.]

- (d).1 Formulate economic development strategies;
- (d).2 Establishment of an economic diversification forum;
- (d).3 Strengthen the crucial linkages between Economic Diversification and Sustainable Development, and take actions to lower the substantial barriers;
- (d).4 Financial support for improving environmental and energy efficiency in upstream and downstream activities relating to fossil fuels;

Move paragraph 30 to chapter IV.A on Finance.

Alternative to paragraph 30:

[Support to adaptation action includes:

- (a) Support specific adaptation programmes, projects, and actions for implementation at local, subnational and national levels, and cross-sectoral and sector-based activities;
 - (b) Support to enabling activities such as:
 - (i) Build capacity, including institutional capacity, through providing financial and technical support for:
 - (ii) Operational planning of adaptation, including for detailed project design, costing of adaptation, and increasing adaptive capacity;
 - (iii) Systematic observation, data collection and archiving, analysis, modelling and dissemination;
- (c) Strategies and measures to reduce, manage and share risk, including early warning systems, insurance-related activities and activities addressing loss and damage from climate change impacts, including those arising from extreme weather events;
 - (d) Strategies and measures to build resilience, including through economic diversification;
- (e) R&D, deployment, diffusion and transfer of adaptation technologies, including capacity-building, taking into account sector-specific adaptation technologies, ecosystem-scale intersectoral linkages and endogenous adaptation technologies;
- (f) Activities related to national and international migration and displacement or planned relocation of persons affected by climate change;]
- 31. [In providing support, priority [shall] [should] be given to:]
- (a) [Supporting adaptation at local, regional, national and subnational levels in developing countries;]
 - (b) [[Particularly vulnerable] developing country Parties, [especially] [inter alia]: *Alternative to subparagraph 31 (b):*

[Vulnerable developing country Parties as stated in Article 4.8 of the Convention]

- (i) [Poor developing countries;]
- (ii) [LDCs and SIDS, [and [countries in]Africa and Asia affected by drought, desertification and floods and landslides];]

Alternative to subparagraph 30 (b)(ii):

[All developing country Parties in accordance with paragraph (containing new definitions to be agreed)]

- (iii) [Low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, [archipelagic countries,] and developing countries with fragile mountainous ecosystems and landlocked countries;]
- (iv) [Countries with unique biodiversity, [tropical][mountainous] glaciers and fragile ecosystems;]

Alternative to subparagraphs 31(b) (i)–(iv):

- (i) [Small island countries;
- (ii) Countries with low-lying coastal areas;
- (iii) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;
- (iv) Countries with areas prone to natural disasters;
- (v) Countries with areas liable to drought and desertification;
- (vi) Countries with areas of high urban atmospheric pollution;
- (vii) Countries with areas with fragile ecosystems, including mountainous ecosystems;
- (viii) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and
- (ix) Land-locked and transit countries.]
- (c) [Particularly vulnerable populations, groups and communities, especially the poor, women, children, the elderly, indigenous peoples, minorities and those suffering from disability.]
- (c).1 Particularly vulnerable sectors:
- (c).2 Particularly vulnerable ecosystems

Alternative to paragraph 31:

[In order to bridge short-term actions to medium and longer term actions a short-term work programme up to 2012 shall be established by the Parties in order to support the preparation and implementation of NAPAs, and to support the strengthening of observation systems, the creation of databases for climate data, and targeted capacity-building for long-term planning.]

32. [In addition to the above, priority consideration should also be given to ecosystem-based and community-based adaptation activities, where appropriate, at local and national levels.]

Alternatives to paragraph 32:

Alternative 1

[In relation to the above priorities, consideration should also be given to sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation.]

Alternative 2

[UNFCCC shall:

- (a) Catalyse actions in different sectors, promoting efficient and effective use of the financial resources for adaptation provided under the Convention;
- (b) Facilitate the knowledge and information sharing and experience at local, national, regional and international levels;
- (c) Engage in education and training programmes, research and public awareness-raising.]
- 33. [In prioritizing support, the level of vulnerability, shall be determined, inter alia, by national circumstances, respective financial and technical capabilities, levels of risk and impacts as well as levels of poverty and climate change [exposure] [vulnerability], should be taken into account. Access to adaptation funds by Parties shall be inversely proportional to their contribution to greenhouse gases in the atmosphere.]

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Alternative to paragraphs 31–33:

[Priority should be given to those most vulnerable to the adverse effects of climate change and least able to adapt.]

34. [Financial support [shall] [should] generally be provided to adaptation through a programmatic approach {and to project-based adaptation action}.]

Alternatives to paragraph 34:

Alternative 1

[Financial support shall generally be provided to adaptation through a programmatic approach and to project-based adaptation action.]

Alternative 2

[Financial support should be provided to adaptation through a programmatic approach and to project-based adaptation action.]

Alternative 3

[Financial support for adaptation shall generally be provided to developing countries on the basis of entitlements to receive regular flows of periodic grant instalments to developing countries for sustained and ongoing adaptation planning and implementation, while also allowing flexibility for countries to receive financial support for adaptation through a programmatic approach and to project-based adaptation action.]

Alternative 4

[Financial support should be provided to adaptation through a programmatic approach or for project-based stand—alone activities.]

35. [In delivering means of implementation for adaptation action in developing countries, complementarity and coherence [shall] [should] be ensured among existing international sources of support, including funds under the Convention and bilateral and multilateral funds outside the Convention.]

Alternatives to paragraph 35:

Alternative 1

[In delivering means of implementation for adaptation actions in developing countries, funds will be under the control of the COP as the supreme authority of the Convention. Other complementary funds may be used on the understanding that they will not be the main source of funding for adaptation actions.] *Alternative 2*

[In delivering means of implementation for adaptation action in developing countries, these funds should be provided in accordance with the commitments acquired under the Convention and to be delivered in accordance with the Financial Mechanism proposed by the G77-China.]

36. [Sources of new and additional financial support for adaptation [may] [shall] include assessed contributions, [auctioning of assigned amounts and/or emission allowances; [levies on CO₂ emissions] from Annex-I Parties in a position to do so; taxes on carbon-intensive products and services from Annex I Parties; [levies on international and maritime transport]]; shares of proceeds on the clean development mechanism (CDM), joint implementation and emissions trading; [levies on international transactions;] [fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties)]; additional ODA and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention). ⁹]

Move aspects related to levies and taxes to chapter IV.A on Finance.

⁹ Proposals concerning the generation of new and additional financial resources are reflected in paragraph 173 below.

Alternatives to paragraph 36:

Alternative 1

[Sources of new and additional financial support for adaptation may include assessed contributions, auctioning of assigned amounts and/or emission allowances; taxes on carbon-intensive products and services from Annex I Parties; extension of shares of proceeds to joint implementation and emissions trading; levies on international transactions among Annex I Parties; fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties); additional ODA and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

Alternative 2

[Sources of new and additional financial support for adaptation shall include assessed contributions of at least 0.7per cent annual GDP of developed country Parties, auctioning of assigned amounts and/or emission allowances; levies on CO₂ emissions; taxes on carbon-intensive products and services from Annex I Parties; extend shares of proceeds to joint implementation and emissions trading; fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties); additional ODA and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

Alternative 3

[Sources of new and additional financial support for adaptation may include assessed contributions from developed country Parties and other developed Parties included in Annex II of the Convention, auctioning of assigned amounts and/or emission allowances; taxes on carbon-intensive products and services from Annex I Parties; share of proceeds from measures to limit or reduce emissions from international aviation and maritime transport; shares of proceeds on the clean development mechanism (CDM), joint implementation and emissions trading; ; fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties); additional ODA and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

Alternative 4

[Financial resources of "Convention Adaptation Fund" shall include assessed contributions, auctioning of assigned amounts and/or emission allowances from developed country Parties.]

*Alternative 5**

[Sources of new and additional financial support for adaptation must meet the full agreed incremental costs of adaptation and initially be within a minimum range of USD 50–86 billion per annum and regularly updated in light of new emerging science, financial estimates and the degree of emissions reductions achieved. Providing financial support shall be additional to developed countries' ODA targets and may include assessed contributions, auctioning of assigned amounts and/or emission allowances; levies on CO₂ emissions; taxes on carbon-intensive products and services from Annex I Parties; levies on international and maritime transport; shares of proceeds on the clean development mechanism (CDM), joint implementation and emissions trading; levies on international transactions; fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties); additional to ODA targets and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

Alternative 6

[Sources of new and additional financial support for adaptation will be needed to scale-up the adaptation activities at the country level in the developing countries. This finance should come from the payment of the adaptation debt by developed countries and be based principally on public sector funding, while other alternatives sources could be considered.]

D. [Risk reduction, management and sharing] [Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance] [Risk reduction and management]

Move section D to section A.

Move section D to section B.

Move section D as subsection under section B.

Delete section D and reflect it in other parts of chapter II, mutatis mutandis

Move paragraphs 37, 38, 39 and 40 to section B after paragraph 27

- 37. [The adaptation implementation [framework][programme] [shall][should]
- (a) Support country-driven projects and programmes aimed at assessing, managing, reducing and sharing the risks associated with climate change, [including the impacts of extreme weather events, and of gradual changes,] as well as other short, medium and long-term risks, through, inter alia, the implementation of the Hyogo Framework of Action;]

Alternative to subparagraph 37(a):

[Support country-driven projects and programmes in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change aimed at assessing, managing, reducing and sharing the risks associated with climate change, including the impacts of extreme weather events, and of gradual changes, through, inter alia, the implementation of the Hyogo Framework of Action;]

- (b) [Enhance insurance, risk assessment and management [, through, inter alia, the implementation of the Hyogo Framework for Action.]]¹⁰
- (b).1 Risk reduction should be given priority in preparation of adaptation planning in order to minimize the adverse effect of climate change, including extreme events and climate related disasters.
- 38. [It shall take into account the intrinsic connection between adaptation policies and measures and risk management, [insurance] and disaster reduction strategies.][at the national and regional levels] [It shall take into account the intrinsic connection between adaptation policies and measures, risk reduction strategies, poverty reduction strategies and national sustainable development plans. It shall ensure that national level processes are supported by regional and international mechanisms, as appropriate.]

Move paragraph 38 to paragraph 37 (a)

- 39. [Activities should include the preparation and implementation of [national adaptation plans], and local disaster [risk reduction and management plans], [national risk management plans] [disaster risk reduction strategies] extreme weather forecast contingency plans, risk transfer mechanisms and early warning systems] and shall be part of the National Adaptation Plans. [Activities should include the preparation and implementation of national and local disaster risk reduction and risk management plans, including:] Ensure that NAPs are consistent with national risk management plans, disaster risk reduction, or incorporate elements of the above.
 - (a) Strengthened risk observation, risk analysis and risk information dissemination;
 - (b) Early warning systems;
 - (c) Disaster preparedness and contingency plans;
 - (d) Emergency response and recovery;
 - (e) Risk transfer mechanisms, including insurance;
- (f) The systematic integration of risk reduction measures in national, subnational and sectoral development planning and programming.

^[10] The Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters. Available at http://www.unisdr.org/eng/hfa/docs/Hyogo-framework-for-action-english.pdf.]

- 40. [During the planning and implementation of the projects and programmes mentioned in paragraph 37 above, coherence should be ensured with the implementation of other adaptation action, and with other adaptation-related efforts [including] [, in particular] under the Hyogo Framework for Action.]
- 41. [[A [multi-window] mechanism]¹¹ [Various mechanisms]¹² [Dedicated financing window in G77 financial mechanism] for [risk reduction] [adaptation], [[and] management [and sharing] exist and should be built on in order [[[could be] [must be] established] within the adaptation framework] to:] [and should be guided by the following principles:]]
 - (a) [Support particularly [all]vulnerable developing countries;]

Alternative to subparagraph 41(a):

[Support particularly vulnerable regions, communities, groups, sectors, and ecosystems within all developing countries;]

- (b) Be consistent with the country-driven approach to adaptation;
- (c) [Function at the international level.]]
- (c).1 Guarantee equitable access and governance, considering all relevant sectors and stakeholders.

Move paragraph 41 to section E

Move paragraph 41 to chapter IV.A on Finance

42. [[This mechanism][These mechanisms] [will][could]:

Option 1

Consist of [two] [three] [four] components:

- (a) A risk management and risk prevention component to develop and promote [risk assessment and risk management] tools and strategies at all levels, with a view to facilitating and supporting the implementation of risk reduction and risk management measures;
- (b) [An insurance component to address climate-related extreme weather events, and risks to crop production, food security, water availability, disease increase and local livelihoods] that encourage risk reduction;
- (c) A rehabilitation and compensation component to address the current and progressive negative impacts that result in loss and damage.]
- (c).1 Include innovative financial instruments, for example venture capital funds and climate insurance funds, integrated into the financial mechanism, for addressing the risks associated with climate change.

[Option 2

serve as a window to provide rapid financing to cope with the aftermath of extreme climate events, including a [insurance] compensation mechanism.]

[Option 3

include innovative financial instruments, for example venture capital funds and climate insurance funds, integrated into the financial mechanism, for addressing the risks associated with climate change.]

Move paragraph 42 to section E

Move paragraph 42 to chapter IV.A on Finance

Alternative to paragraphs 41 and 42:

[A Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts is hereby defined.

(a) The purpose of the Multi-Window Mechanism shall be to assist developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa

¹¹ Parties also referred to "multi-option".

¹² Parties also referred to "systems".

affected by drought, desertification and floods, to minimize and address loss and damage from climate change impacts.

- (b) The Multi-Window Mechanism shall be subject to the authority and guidance of the Conference of the Parties and be supervised by an Executive Board of the Multi-Window Mechanism.
- (c) The membership of the Board shall be determined by the Conference of the Parties taking into account the need to ensure that Board members have the appropriate expertise in climate-related insurance matters.
- (d) The Multi-Window Mechanism shall have three distinct but inter-linked components: (1) a risk reduction/risk management component; (2) an insurance component; and (3) a rehabilitation/compensation component. Parties recognize that all three components are inter-dependent and required to assist developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, in adapting to the financial and physical impacts of climate change.
- (e) These three components of the Multi-Window Mechanism shall provide an integrated approach to loss and damage from climate change impacts as follows:
 - (i) The risk reduction/risk management component, through inter alia the implementation of relevant frameworks such as the Hyogo Framework, shall support risk assessment in developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, and promote the implementation of appropriate risk reduction and risk management measures to minimise loss and damage
 - (ii) The insurance component shall facilitate the design, establishment and operation of insurance-related risk sharing and risk transfer mechanisms tailored to the needs of particularly vulnerable developing countries, especially the least developed countries and small island developing States, to address financial risk associated with increasingly frequent and severe climate-related extreme weather events, including hurricanes, tropical storms, floods and droughts, which result in loss and damage and leverage public and private funding to enhance adaptive capacity.
 - (iii) The rehabilitation/compensatory component shall address loss and damage resulting from the progressive negative impacts of climate-related slow-onset events, including sea level rise, increasing sea and land temperatures, ocean acidification (e.g., land loss, coral bleaching, impacts on potable water availability, reduction in fisheries, desertification etc.)
- (f) A technical advisory group shall be established under the Technical Advisory Branch of the Adaptation Committee to support the Executive Board of the Multi-Window Mechanism.
 - (g) The purpose of the technical advisory group shall be to:
 - (i) Facilitate advice and guidance on existing and innovative risk management, risk transfer and risk sharing approaches, including insurance,
 - (ii) Identify key climate risk factors and thresholds for insurance payments
 - (iii) Estimate the potential physical and economic impacts of key climate risk factors
 - (iv) Receive reports that key climate risk factor thresholds have been exceeded
 - (v) Facilitate the verification that key climate risk factor thresholds have been exceeded
 - (vi) Recommend to the Board appropriate financial compensation payments once climate risk factor thresholds have been exceeded
- (h) Members of the technical advisory group shall represent a range of technical expertise in the areas of hazard mapping, disaster risk reduction, and insurance and reinsurance.

- (i) The Multi-Window Mechanism shall coordinate its operation with other insurance and reinsurance institutions, and United Nations organizations and other relevant international organizations associated with disaster risk management.
- (j) Insurance payments for particularly vulnerable developing countries shall be facilitated through the financial mechanism.]

Alternative to paragraph 42:

[All Parties should commit to reducing and better managing risks associated with climate change by:

- (a) Identifying major vulnerabilities to climate change;
- (b) Creating legal and regulatory conditions that facilitate adaptation, including disaster resilience (for example, building codes, land use planning, risk sharing tools, and strengthening policy coherence among sectors);
- (c) Elaborating best practices that can guide immediate actions with an eye to building long-term resilience to extreme events and disasters, including through implementation of the Hyogo Framework for Action;
 - (d) Minimize incentives that encourage mal-adaptation;
- (e) Educating stakeholders at all levels about adaptation options and the benefits of reducing vulnerability to climate-related risks;
- (f) Using meteorological, Earth observations, socio-economic information, and local and indigenous knowledge to best coordinate disaster planning and response.
- (g) Establish systems of accountability such as institutional checks and balances and open administrative systems. Establish the rule of law through means and processes for enforcement;
- (h) Improve the environment for doing business particularly for small and medium enterprises by combating corruption and reducing bureaucratic barriers (i.e. "red tape") to private sector business activity;
- (i) Improve availability and application of climate and environmental information, including but not limited to remote sensing, and decision making tools;
- (j) Clarify and secure land tenure and planning i.e. allocation, ownership and control over lands and resources;
 - (k) Strengthen environmental and natural resources management and enforcement;
- (l) Reduce perverse incentives that encourage unsustainable land uses, and reduce negative economic incentives (e.g. tax breaks) for vulnerable activities.
- 43. [Public–private partnerships [shall] [should] be promoted to catalyze wider engagement of stakeholders including the private sector and civil society, in risk reduction, management and sharing, including insurance and addressing loss and damages. bearing in mind that the involvement of the private sector should supplement and not substitute commitments by developed country Parties under the Convention]

Move paragraph 43 as a subsection under section B.

Move paragraph 43 under subsection B.

E. Institutional arrangements¹³

Move section E as a subsection under section B.

x.1 The proposed Financial and Technology Mechanism on Adaptation is meant to ensure the full, effective, and sustained implementation of the Convention, in relation to implementation of commitments for the provision of financial resources. This is mandated under Articles 4.1, 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention in accordance with Article 11 defining the financial mechanism under the Convention.

¹³ Institutional arrangements, including funds, for both adaptation and mitigation financing are presented in detail in Chapter IV.A 3.

- x.2 The proposed Financial and Technology Mechanism on Adaptation shall address all aspects of cooperation on technology research, development, diffusion, and transfer in accordance with Articles 4.3, 4.5 and other relevant articles of the Convention, in order to enable adaptation under the relevant paragraphs of decision 1/CP.13.
- x.3 The proposed Financial and Technology Mechanism on Adaptation shall be governed by the following principles and guiding criteria:
 - (a) Be underpinned by the principle of common but differentiated responsibilities and equity.
 - (b) Operate under the authority and guidance, and be fully accountable, to the COP.
- (c) Have an equitable and geographically balanced representation of all Parties within a transparent and efficient system of governance (Article 11.2).
- (d) Enable direct access to funding by the recipients; and ensure the provision of new and additional, adequate and predictable financing resources for technology transfer.
- (e) Ensure recipient country involvement during the stages of identification, definition and implementation, rendering it truly demand driven.
- (f) Support the development and enhancement of endogenous capacities and technologies of developing country Parties.
- x.4 The Financial and Technology Mechanism on Adaptation shall aim to achieve:
- (a) Accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on mitigation and adaptation;
 - (b) Provision of full costs and full incremental costs, as per Article 4.3 of the Convention;
 - (c) Adequacy and predictability of funds for technology transfer;
 - (d) Removal of barriers for technology development and transfer.
- x.5 To support the implementation of the adaptation actions, the following new institutional arrangements should be established:
- (a) An Executive Body on Finance and Technology for Adaptation (EBFTA) shall be established and report directly to the COP.
 - (b) The EBFTA will govern an Adaptation Fund to be also created under the Convention.
 - (c) The EBFTA will be supported by four technical panels on:
 - (d) Research and Development,
 - (e) Capacity-building,
 - (f) Transfer of Technologies for Adaptation, and
 - (g) Observation systems and information management
- [The [Convention] [Copenhagen Agreement] [The Conference of the Parties] [shall promote] [should assume a [catalytic] [primary] [role in] [guiding] and [coordinating] [role] and [mobilizing] [supporting] [should guide and coordinate]] [the implementation of] adaptation activities at the international level, including cooperative action by all Parties and by relevant international, regional and national organizations and institutions. The [Convention process can] [Copenhagen Agreement should] facilitate the provision and sharing of appropriate information on the scientific and technical aspects of adaptation, the sharing of experiences and knowledge in implementing adaptation activities [, and the linking of national entities and [implementing agencies] [relevant, international, regional and national organizations and institutions] with necessary expertise.]] and established processes and/or systems. International specialized agencies and organizations working on the impact of climate change on water resources, in particular those under the UN, be involved in developing the national and international strategies for adaptation in this important sector.

Alternatives to paragraph 44:

Alternative 1

[The Convention process can facilitate the provision of appropriate information on the scientific and technical aspects of adaptation, the sharing of experiences and knowledge in implementing adaptation activities, and the linking of national entities and implementing agencies with necessary expertise.]

Alternative 2

[The Convention shall promote the implementation of adaptation actions at the international level, ensuring the provision of predictable, adequate, new and additional financial resources, technologies, and capacity-building by developed country Parties.]

45. To support the implementation of adaptation actions, existing institutions at the international and regional level should be enhanced with a view to, inter alia, facilitating the implementation of adaptation actions in all countries. [Under the adaptation [framework][programme], [international] institutional arrangements for adaptation [must] [should] be guided by the following principles:

Alternative to the chapeau of paragraph 45:

[Under the adaptation framework, the financial mechanism is to be inclusive, fair and equitable in terms of governance of, and access to, finance, taking into account different national circumstances. Therefore, the adaptation framework should:]

- (a) Be [fair] [equitable], effective, efficient and transparent;
- (b) [Be under the authority, and guidance of, and be fully accountable to, the COP;]
- (c) [Be supportive of] [Build on existing] national institutional arrangements;
- (c).1 Encourage cooperation, where appropriate, on a regional basis to coordinate efforts;
- (c).2 Make use of existing national platforms, such as those for the Hyogo Framework;
- (c).3 Encourage international organizations and institutions to support (through their programs on, inter alia, financial cooperation, capacity-building and institution-strengthening mechanisms) the integration of adaptation into development plans, programs, and priorities.
- (d) [[Ensure that] [Encourage] adaptation action is implemented and coordinated at the most appropriate level,]][Promote adaptation actions] including at local, [subnational,] national and regional levels, recognizing the important roles of [state and regional] [national] governments and recognizing gender equity as an integral part of effective implementation of adaptation;
- (d).1 Act in coordination with existing regional frameworks, and encourage regional coordination between countries with shared natural resources;
- (e) Encourage the integration of adaptation into local, national and regional development plans, including funding for adaptation activities, strategies and programmes[, and priorities];
- (f) [Strengthen and consolidate] [[Create] [arenas] [platforms] for] [Enhance] sharing [of] information and good practices, and forums where different public and private stakeholders can discuss concrete challenges.] recognizing the role of national focal points
 - (f).1 Build on existing arrangements and expertise, to the extent possible;
- (f).2 Seek coherence with, and not duplicate, expertise of other actors and entities in relevant fields:
- (f).3 Enhance scientific monitoring activities to develop ways and means to adapt to the effects of climate change on the ocean.
- 46. [To support the implementation of the adaptation [framework][programme], [existing institutional arrangements [shall] [should] be enhanced] [and the following new institutional arrangements¹⁴ should be established]]:

¹⁴ This section includes proposed institutional arrangements for all aspects of adaptation. Specific institutional arrangements for adaptation finance are contained in paragraph 175, Options 1 and 2, below.

[Option 1

The creation of [A permanent adaptation committee][An adaptation committee][A subsidiary body for adaptation] shall be established to enhance the implementation of adaptation action in developing country Parties through, inter alia: providing advice and technical support to Parties; developing non-exclusive and additional mechanisms for the transfer of adaptation technologies; planning, organizing, coordinating, monitoring and evaluating international actions on adaptation to climate change, including on the means of implementation.] and sharing knowledge, information and experience at local, national, regional and international levels, consistent with relevant international agreements, to receive and evaluate financial support applications from developing countries for implementation of adaptation projects, programme, and actions.]

Alternative to Option 1

[Adaptation committee.

- (a) An Adaptation Committee shall be established by the Conference of the Parties at its sixteenth session.
- (b) The purpose of the Adaptation Committee shall be to assist particularly vulnerable developing countries, to inter alia:
 - (i) develop guidelines for
 - undertaking vulnerability and adaptation assessments;
 - the preparation of national adaptation plans;
 - integrating adaptation actions into sectoral and national planning;
 - (ii) identify sources of funding and technical assistance to support specific adaptation actions
- (c) The Adaptation Committee shall monitor compliance with commitments and pledges made by developed country Parties, and other Parties who voluntarily elect to do so, to provide financial support to particularly vulnerable developing countries.
- (d) The modalities for operation of the Adaptation Committee shall comprise the following:
 - (i) A Facilitative Branch responsible for assessing ongoing work and promoting understanding of the scientific and methodological underpinning of adaptation:
 - Interacting with Parties, agencies and international institutions engaged in existing implementation of adaptation actions;
 - Analysing existing work and identifying best practices for use in relevant circumstances
 - Identifying gaps in existing work and enhancing action to respond to gaps in existing work;
 - Monitoring compliance by Parties of their commitments to support Adaptation.
 - (ii) A Technical Advisory Branch which responsible for:
 - the technical advisory group established to support the Executive Board of the Multi-Window Mechanism
 - advising on technical matters arising from the work of the Adaptation Committee
 - (iii) A clearing House and Information Dissemination Branch responsible for dissemination of information generated by the Facilitative and Technical Advisory branches to users at the national level. Its outputs will include:
 - Information on best practices appropriate for specific circumstances;
 - Information on Methods and Tools;
 - Facilitating the sourcing of relevant expertise for Parties in need of such;

- Facilitating and implementing training and capacity-building activities at the national and regional levels.
- (e) Conference of Parties shall be responsible for elaborating the modalities for operation and composition of the Adaptation Committee.
- (f) The Adaptation Committee will disseminate information through regional centres.
- (g) The Adaptation Committee shall collaborate with other United Nations organisations, international financial institutions and other relevant international organisations to ensure that a coherent and coordinated effort is made to support developing country Parties build their resilience to the impacts of climate change and avoid climate change related disasters.]

[Option 2

The creation of An expert [group] [body] on adaptation under the [subsidiary body for adaptation] [adaptation committee] [mentioned in Option 1 above] [shall be established to enhance the implementation of adaptation action through overseeing adaptation needs of developing countries, including finance, technology and capacity-building; overseeing the creation of the necessary funds and insurance mechanisms and overseeing the effectiveness of funds allocated to adaptation.] [to develop broad guidance for developing national adaptation strategies, and provide support for particularly vulnerable countries in developing these strategies]]

[Option 3

An adaptation advisory panel evolving from the Least Developed Countries Expert Group to develop broad guidance for developing national adaptation strategies, and provide support for particularly vulnerable countries in developing these strategies.]

[Option 4

A facilitative mechanism to design and implement a new work programme on adaptation.] [Option 5

A mechanism to enhance and support action on adaptation now, up to and beyond 2012, including through overseeing the level of adaptation of developing countries, assessing capacity-building needs, overseeing the creation of the necessary funds and insurance mechanisms and overseeing the effectiveness of funds allocated to adaptation, including to enable and support the creating of partnerships among companies and research institutions of developed and developing countries for adaptation technologies and the implementation of adaptation activities.]

[Option 6

A mechanism, under the Convention, to enable and support the creation of partnerships among companies and research institutions of developed and developing countries, and the Parties, for adaptation technologies and the implementation of adaptation activities.]

Merge Options 1, 2 and 6

Option 7

To support the implementation of the adaptation framework an adaptation advisory panel should evolve from the Least Developed Countries Expert Group to develop broad guidance for developing national adaptation strategies, and provide support for particularly vulnerable countries least able to adapt in developing these strategies.

47. [National and ,where appropriate, regional coordinating [bodies] [entities] should be established, or enhanced where they exist, to address all aspects of the means of implementation for adaptation, including gender-balanced participation, and to strengthen the institutional capacity of national focal points and all stakeholders.]

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Alternatives to paragraph 47:

Alternative 1

[A national focal point should be established to address the implementation of this adaptation programme]

Alternative 2

[Parties should designate a national focal point for adaptation to enable the effective implementation of adaptation actions under the Convention, in particular the development and implementation of national adaptation plans. Particularly vulnerable developing countries shall be provided financial and technical assistance to support the work of national adaptation focal points.]

48. [Centres, organizations and/or networks, utilizing existing ones, [shall][should] be [established] where appropriate [and/or] [strengthened][where they exist], including] [including at the national and regional levels].

[Option 1

National centres and networks.]

[Option 2

Regional centres, networks, organizations and initiatives.]

[Option 3

Virtual regional centres.]

[Option 4

An international adaptation centre.]

Option 5

National and regional centres and networks, and an international adaptation centre.

Option 6

Virtual and/or regional centres and/or networks should be established and strengthened, where appropriate.

Alternatives to paragraph 48:

Alternative 1:

[The capacity of existing, relevant national, regional and international institutions should be strengthened to facilitate action on adaptation, including, inter alia:]

- (a) Collect, analyze, and disseminate information on past and current practical adaptation actions and measures, including projects, short and long-term strategies, and local and indigenous knowledge.
- (b) Enhance the capacity of national level interdisciplinary resource groups that include representatives from universities, scientific research institutions, government, industry and NGO's.
- (c) Develop a training programme that allows urban planners to integrate climate risk management into long-term development planning;
 - (d) Generate and share knowledge, and enable transformation of this knowledge into action.
- (e) Strengthen institutions and aid in development of knowledge platform to enable sharing of research, expertise and data.
- (f) Engage science, and policy communities in dialogues to promote effective decision-making related to environment and development issues.
- (g) Seek opportunities and partnerships to build capacity for the use of vulnerability and adaptation assessment methods and tools through new education programs, advanced study institutions.
- (h) Study the stresses generated by climate change and variability and estimation of past, current and future climate -related risks (e.g. sea level rise, intensification of sand storms, especially sand storms.) as well as risks to human health.

Alternative 2:

[National centres and networks as well as regional centres, networks and initiatives could be established or strengthened to contribute to the effectiveness of actions implemented by the relevant bodies established to enhance action on technology transfer (related to paragraph 197 in the Chair's text).]

- 49. [The above-mentioned centres and networks {should} operate with a view to, inter alia:]
- (a) [Facilitating the implementation of adaptation action {in all vulnerable developing country Parties}, [particularly LDCs and [SIDS][small island developing countries] and Africa] [vulnerable to the adverse effects of climate change] through [promoting] research, knowledge sharing, training, capacity-building and the voluntary development, diffusion and transfer of adaptation technology, consistent with relevant international agreements;]
- (a).1 Regional adaptation centres in developing country regions shall be established under the authority of Subsidiary Body for Adaptation, to facilitate the implementation of adaptation actions, capacity-building, knowledge sharing, technology development, diffusion and transfer.
- (b) [Assisting and raising funds for][Financing the] Planning, designing, [implementing,] monitoring [and evaluating] adaptation activities, and facilitating informed decision-making [at all levels;] [at the national and regional levels, especially between countries with shared natural resources], taking gender considerations into account;
- (c) [Coordinating and disseminating free and timely dissemination of information related to systematic observation and [regional][impacts and response] modelling, for improved vulnerability and adaptation assessments;]
- (d) [Assisting Parties to build endogenous capacity for, inter alia: developing analytical tools; undertaking adaptation research and implementation activities; research, development, deployment and transfer of adaptation technologies; awareness-raising; support for pilot projects; and publication of studies on adaptation.]
- (d).1 Exchange lessons learned and best practices, and enhance assessment of the vulnerability of oceans and coasts to the effects of climate change in order to facilitate the implementation of adaptation measures.

Alternative to paragraphs 48 and 49:

- [x.1 The Conference of Parties, in collaboration with other organisations, shall develop regional centres for adaptation.
- x.2 The purpose of regional centres for adaptation shall be primarily to assist particularly vulnerable developing countries, develop and implement national adaptation plans. To fulfil this role regional centres will, inter alia:
- (a) Be a key source for guidance, information and expertise within the regions, and Parties will be encouraged to interact with their regional centres for such support.
- (b) Assist with the formulation and dissemination of guidance for the development of national adaptation plans.
- (c) Provide guidance to the financial mechanism on appropriate criteria for approval and disbursement of financing for adaptation.
- (d) Provide feedback to the Adaptation Committee on gaps at the national and regional levels that need to be addressed.]
- 50. [The scope of the Nairobi work programme [is to] [should] be enhanced to promote understanding of impacts vulnerability and adaptation to climate change and it should become a hub for knowledge and information sharing and capacity-building at regional and national levels.]

Alternatives to paragraph 50:

Alternative 1

[The activities undertaken by the Nairobi Work Program should continue, including by enhancing the role of regional centres, where necessary, as hubs for knowledge and information sharing and capacity-building.]

Alternative 2

[The outcomes and lessons learned from the Nairobi work programme could become a hub for knowledge and information sharing and capacity-building at regional, subregional and national levels.]

F. [Monitoring and review of adaptation action and support] [Monitoring and review of enabled and supported adaptation action] [Measures to facilitate adequate adaptation to climate change] [Review of progress]

Move section F as a subsection under section B.

51. [Progress [under] [in the implementation of] the adaptation [framework] [programme], including the delivery of means of implementation to [all] developing country Parties, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change and progress in building resilience and reducing vulnerability], should be [monitored] [and reviewed] and evaluated [. Reviews will be required.] to ensure the agreed full implementation of adaptation actions supported by finance and technology and commitments relating to financial and technology support [in a measurable, reportable and verifiable manner,] utilizing scientific as well as sex-disaggregated socio-economic data and in the context of transparency, mutual accountability and robust governance.]

Alternatives to paragraph 51:

Alternative 1

[Progress in the compliance of financial commitments of Annex I Parties and in the implementation of the adaptation framework is necessarily linked to the finance, transfer of technology and capacity-building. All of these aspects should be monitored and reviewed.]

Alternative 2

[To ensure transparency, mutual accountability and governance, Parties should strive to integrate the monitoring of adaptation actions within existing country and organizational monitoring and evaluation systems. To facilitate the monitoring and review of adaptation commitments under the Copenhagen Agreement, all Parties should report on progress and experience of adaptation action, and of support received or provided.]

Alternative 3

[Progress in the delivery of means of implementation to developing country Parties should be monitored and reviewed to ensure the full implementation of adaptation actions and commitments of developed country Parties under Article 4.3, 4.4 and 4.5 of the Convention.]

- 52. [[Monitoring] [and evaluation] entails, inter alia:] [A monitoring system shall be established for:] [A system for monitoring and reporting shall be established to evaluate the provision of adaptation support, including, inter alia]
 - (a) [Monitoring and recording these financial resources provided by developed country Parties;]
 - (b) [Monitoring technology transferred to developing country Parties;]
- (c) [Monitoring the utilization and transfer of financial resources to, and support for capacity-building in developing country Parties]

Alternative to subparagraph 52 (c):

[Monitoring actions by Parties to create enabling environments for technology transfer and adaptation within their respective countries];

- (d) [Evaluating the effectiveness of the implementation of adaptation actions, projects and programmes;]
- (e) [Evaluating the sufficiency of financial and technology support to developing country Parties every four years;]
- (f) [Ensuring that effective outcomes are realized from that support.]
- (f).1 Determining and reporting to the compliance committee, any discrepancies between financing and emission reduction commitments and quantities of resources delivered and reductions achieved in a country-by-country basis.

Move elements concerning finance and technology transfer to section C.

53. [A [mechanism][system] for monitoring, reporting and/or providing feedback [shall] [should] be established] [for the review of financial commitments for adaptation activities] [as part of a compliance mechanism for meeting commitments under Articles 4.3, 4.4 and 4.5]

[Option 1

[as part of a compliance mechanism.]]

Alternative to Option 1:

[with a committee of experts on the implementation of commitments contained in paragraph 4 of the Convention]

[Option 2

for all Parties and adaptation actions as part of the overall reporting system under a new climate regime.]

[Option 3

[through utilizing] [utilize] existing mechanisms to monitor and evaluate the provision and effectiveness of adaptation support, such as through multilateral funding and ODA channels.] The most vulnerable developing country Parties shall submit their NAPAs for examination on a country-by-country basis, which should result in prioritizing actions requiring assistance for implementation

Move Option 3 to section C.

54. [The [most] vulnerable developing country Parties] particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change shall submit their NAPAs [for examination] on a country-by-country basis, which should result in prioritizing actions requiring assistance for implementation.]

Alternative to paragraph 54:

[All Parties should enhance reporting on measures to facilitate adequate adaptation to climate change in national communications with additional financial and technical support provided to developing countries.]

III. Enhanced action on mitigation

Structural proposals:

Proposal 1

The section A and B in mitigation chapter should be rearranged according to the following order:

- 1. A section on policies and measures
- 2. A section on mitigation obligations by Parties
 - (a) Subsection on commitments by developed countries
 - (b) Sub-section on actions by developing countries
- 3. A section on measurement, report, and verification
- 4. A section on reviewing mechanism
- 5. A section on compliance

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Proposal 2

A new section should be inserted at the beginning of the chapter on mitigation for structural proposals that address both developing and developed country commitments and actions in a unified format. Annexes should be inserted at the end of the text, to capture, among other things, Parties' quantifiable mitigation commitments and actions.

The mitigation chapter of the text should focus on nationally appropriate mitigation commitments and actions and the measurement, reporting and verification of those commitments and actions. Elements of the text relating to support for mitigation action by developing countries, including the current section on "means of implementation", should be consolidated into a new section under the Financing chapter.

A placeholder should be included at the beginning of the mitigation chapter noting that a new section may be required to set out our overall mitigation objective or objectives, and guiding principles, should these elements not be included in a shared vision.

The mitigation chapter should therefore be structured into 7 sections as follows:

- 1. If needed: Objective and principles
- 2. Nationally appropriate mitigation commitments and actions* (specifically including: Common obligations; National Schedules; Low Emission Development Strategies; Mitigation by developed countries; Mitigation by developing countries)
- 3. REDD
- 4. Bunkers
- 5. Market mechanisms
- 6. Spillover effects
- 7. *Measurement, reporting and verification**
- 8. *Compliance*

Proposal 3

A new section on joint fulfillment

Proposal 4

A new section on LULUCF

<u>Suggestions on placement reflected in other chapters that are related</u> to chapter III include:

The range of emission reduction in para 14(a) and 15(a) should be removed from shared vision chapter and treated in the mitigation chapter

Proposals for preambular paragraphs:

Proposal 1

Recognizing that largest share of greenhouse gas in the atmosphere are originated from developed countries

Recognizing the right to development is a basic human right that is undeprivable.

Recalling that economic and social development and poverty eradication are the first and overriding priorities of the developing countries.

Recognizing that the right to development of developing countries shall be adequately and effectively respected and ensured in the process of global common efforts in fighting against climate change.

Given their historical responsibility and development level and based on the principle of equality, developed country Parties shall have deeper cuts on their GHG emissions so as to ensure adequate spaces for developing countries to achieve their goals of substantive development and eradication of poverty.

^{*} New section aimed at enhancing the implementation of the common obligations of Parties under Article 4 of the Convention.

^{*} New section aimed at enhancing the implementation of the common obligations of Parties under Article 12 of the Convention.

Developing countries should take nationally appropriate mitigation actions in the context of development, supported and enabled by technology, financing and capacity-building from developed countries.

Proposal 2

Provisions of the Conventions reflected a distinct Developed and Developing Countries' obligations on actions on mitigation based on the principle of common but differentiated and respective capabilities, with developed countries should take the lead on such actions.

Proposal 3

Noting that mitigation and adaptation efforts should be given equal consideration,

Ambitious and early mitigation commitments are critical for adaptation. Poor mitigation commitments and actions will impose a higher demand on adaptation measures and will require additional funding.

Proposal 4

Parties acknowledge that enhanced action on mitigation is urgently required to ensure the stabilization of greenhouse gas concentrations in the atmosphere at a level that would minimize negative impacts on the most vulnerable states particularly small island developing States and Least Developed Countries.

Parties acknowledge that 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 from the adverse impacts of climate change.

Parties recognize that in this context greenhouse gas emissions must be stabilized as far as possible below 350 ppmv CO₂-eq, with temperature increases limited to as far as possible below 1.5°C above pre-industrial levels, hence global emissions must peak by 2015, and then reduce by more than 85 per cent below 1990 levels by 2050.

Proposal 5

Noting that mitigation and adaptation efforts should be given equal consideration,

Ambitious and early mitigation commitments are critical for adaptation. Poor mitigation commitments and actions will impose a higher demand on adaptation measures and will require additional funding.

Economy-wide emission reductions by all countries shall be set as a stabilization of GHG concentrations in the atmosphere at 350 ppm carbon dioxide equivalent ($\rm CO_2$ eq) and a temperature increase below 2°C above the pre-industrial level. For this purpose, Parties shall collectively reduce global emissions by at least 45 per cent from 1990 levels by 2020 and by at least 95 per cent from 1990 levels by 2050.

<u>Proposals for additional sections/subsections to be placed before sub-chapter III.A:</u>
Addition 1: a new section/subsection on objectives, scope and guiding principles

- x.1 Enhanced national/international action on mitigation of climate change [should/shall] be pursued with the aim of achieving the ultimate objective of the Convention to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. All Parties [should/shall] contribute towards this objective, in accordance with their common but differentiated responsibilities and respective capabilities, taking into account their historical responsibility and mitigation potential as determined by their respective national circumstances, social and economic conditions and other relevant factors highlighted in Articles 4.8, 4.9 and 4.10 of the Convention, including their access to alternative energy.
- x.2 The ultimate objective of the Convention [shall] be achieved through a long-term global goal for emissions reductions with a view to stabilize atmospheric concentrations of greenhouse gases at [xxx ppm] by 20xx so as to reduce the probability of global temperature rise greater than [x° C]. In this regard, global greenhouse gas emissions should peak by [20xx] and decrease thereafter. To this end, developed country Parties and other Parties included in Annex I to the Convention, as a group, [shall/should] reduce their greenhouse gas emissions by [25-40] per cent from 1990 levels by 2020. Supported and enabled by technology, financing and capacity-building from developed country Parties and other developed Parties

included in Annex II of the Convention, the greenhouse gas emissions of Parties not included in Annex I to the Convention, {shall} {should}, as a group, significantly deviate from baselines by 2020.

Addition 2: a new section/subsection on objectives and principles:

The objective of {this Agreement} {the Parties} is to achieve an environmentally sound response to climate change through effective implementation of the Convention, with a view to achieving its ultimate objective, as provided in its Article 2, by stabilizing atmospheric greenhouse gases at 450ppm CO_2 -e or lower, through unified long-term action that sets the world on a path to peak global emissions by [X] and then reduce global greenhouse gas emissions by X per cent by [X] on [X] levels.

In addition to the principles outlined in Article 3 of the Convention, the Parties shall be guided, inter alia, by the following:

- (a) developed country Parties should take the lead in combating climate change and the adverse effects thereof
- (b) all Parties should contribute to the global effort to combat climate change, in accordance with their common but differentiated responsibilities and respective capabilities a spectrum of effort is envisaged
- (c) all Parties should aim to undertake a similar level of effort to others at a similar level of development and with similar national circumstances
- (d) those Parties whose national circumstances reflect greater responsibility or capability should make a greater contribution to the global effort.

Addition 3: a new section entitled "Mitigation elements common to all Parties".

Move paragraphs 66–68 to this section

- x.1 Recalling Article 4.1(b) of the Convention, under which all Parties shall "[f]ormulate, implement, publish and regularly update programmes containing measures to mitigate climate change...,"
- (a) Parties shall implement their respective nationally appropriate mitigation action(s) reflected in Appendix 1.
- (b) In addition, Parties shall formulate and submit low-carbon strategies that articulate an emissions pathway to 2050 (as specified in paragraph 62 (alternative) below, and in paragraph 74, Option 3.2 (alternative) below).
- (c) Mitigation action is subject to measurement, reporting, and verification, as reflected in an appropriate Appendix.

Proposal for an Appendix in the context of this addition:

Appendix 1 – Mitigation

[to be filled in as per paragraphs x.1 above, paragraph 62 (alternative) below, and paragraph 74, Option 3.2 (alternative) below]

Alphabetical list of UNFCCC Parties

- x.2 Recognizing that the circumstances of countries naturally evolve over time, paragraph 62 (alternative) below shall apply, when Appendix 1 is next updated, to other Parties in accordance with objective criteria of economic development.
- x.3 This Agreement does not affect the ability of Parties to establish emissions trading linkages between or among themselves.

<u>Addition 4: a new section on nationally appropriate mitigation commitments and actions, including subsections:</u>

Subsection on Common obligations

Paragraph recognizing the common obligations of all Parties under Article 4 and other relevant articles of the Convention.

Subsection on National Schedules

- x.1 Each Party (except Least Developed Countries) would be required to:
 - (a) maintain a national schedule
- (b) meet and/or implement the nationally appropriate mitigation commitments and/or actions registered in their national schedule
 - (c) measure and report on the outcomes of these commitments and/or actions."
- x.2 Each Party would be required to register in their national schedule:
 - (a) a national emissions pathway to 2050
- (b) quantifiable nationally appropriate mitigation commitments and/or actions for the agreed commitment period."
- x.3 The required content for Parties' national schedules, is as follows:*
 - (a) a brief description of each commitment or action
- (b) whether it is to be taken on an economy-wide basis, or, if not, the section in which the commitment or action is to be taken
- (c) the baseline or reference case against which the commitment or action shall be measured, reported and verified
- (d) an estimate of the emissions limitation or reduction outcomes expected from the commitment or action or an aggregation of commitments and/or actions
- (e) whether the commitment or action is to be taken unilaterally and/or is enabled by previously agreed financial, technology and/or capacity-building support."
- x.4 Examples of possible commitments and actions include:
 - (a) quantified emission limitation or reduction commitments in economy-wide or sectoral terms
 - (b) quantified emission limitation or reduction actions on an economy-wide or sectoral basis
 - (c) emissions intensity commitments or actions
 - (d) clean energy commitments or actions
 - (e) energy efficiency commitments or actions
 - (f) emissions thresholds aimed at protecting and enhancing sinks and reservoirs
 - (g) other actions aimed at achieving quantified emission limitation or reduction outcomes."
- x.5 The minimum expectations with regard to the commitments and actions Parties would register in their national schedules would be:
- (a) for all developed country Parties, an economy-wide quantified emission limitation or reduction commitment (note: para.55 could be copied here)
- (b) for developing country Parties whose national circumstances reflect greater responsibility or capability, nationally appropriate mitigation commitments and/or actions aimed at achieving substantial deviation from baselines."
- x.6 The registration of mitigation commitments and actions in national schedules would provide recognition of all Parties' contributions to the global effort to combat climate change."
- x.7 *Placeholder* to note that further paragraphs would be required to describe in more detail how national schedules would be negotiated, and how they would operate (including enhancement and amendment procedures).

Subsection on Low Emissions Development Strategies

All countries prepare Low Emission Development Strategies. *Note that further paragraphs would be required to describe in more detail their function and relationship to the national schedules described above and a potential facilitative/matching platform.*

^{*} A diagrammatic representation of a proposed national schedule is contained in proposal 1 in the Annex at the end of Chapter III.A.

<u>Addition 5: new sections/subsections on national schedules and measurement, reporting and verification</u> National schedules

- x.1 Taking into account their common but differentiated responsibilities and respective capabilities, their specific national and regional development priorities, objectives and circumstances, and their mitigation potential, with a view to achieving an aggregate reduction in global greenhouse gas emissions of at least 50per cent by 2050, all Parties shall formulate, regularly update and implement the contents of national schedules annexed to this agreement.
- x.2 Each Party's national schedule shall include:
 - (a) A long-term national greenhouse gas emissions limitation or reduction pathway;
- (b) A country-driven nationally appropriate mitigation strategy, differentiated in the ambition, timing and scope of its mitigation commitments or actions, which could be, *inter alia*, project-based, sectoral or economy-wide.
 - (c) Each Party's nationally appropriate mitigation strategy shall include:
 - (i) Except for least developed countries and small island developing states, quantified emissions limitation or reduction commitments for 2020, consistent with its long-term national greenhouse gas emissions limitations or reduction pathway, subject to regular review; and
 - (ii) Measurable, reportable and verifiable mitigation policies and measures to meet its quantified emissions limitation or reduction commitments for 2020, as appropriate, and to support its national greenhouse gas emissions limitations or reduction pathway, subject to regular review.

Measurement, reporting and verification

- x.3 All Parties shall develop and regularly update and submit information relating to the implementation of their nationally appropriate mitigation strategies. Such information shall be reviewed and verified according to agreed rules and guidelines.
- x.4 All Parties, except for least developed countries and small island developing states, shall develop and regularly update and submit a national inventory of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol.
- x.5 National inventories shall be:
- (a) Undertaken in accordance with the latest agreed Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories; and

Submitted, reviewed and verified according to agreed frequencies, rules and guidelines.

Proposals for additional paragraphs:

Addition 1

To stabilize the concentration of greenhouse gases in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate, the Parties recognize that the global temperature increase should be limited to 2 degree Celsius above the pre-industrial level.

In accordance with scientific findings this implies that the aggregate greenhouse gas emissions by developed country Parties shall be reduced by [25-40] percent by 2020 compared to 1990. Emissions from developing country Parties shall collectively deviate significantly from business as usual by [15-30] percent by 2020. The global greenhouse gas emissions should peak by 2015.

Parties shall further collectively reduce global emissions by 50-85 percent by 2050 compared to 2000 level. These collective obligations should be adjusted in accordance with best available scientific information, including the 5th Assessment Report of the IPCC.

Addition 2

Economy-wide emission reductions by all countries shall be set as a stabilization of GHG concentrations in the atmosphere at 350 ppm carbon dioxide equivalent (CO₂ eq) and a temperature increase below 2°C above the pre-industrial level. For this purpose, Parties shall collectively reduce global emissions by at least 45 per cent from 1990 levels by 2020 and by at least 95 per cent from 1990 levels by 2050.

Addition 3

Mitigation commitments by developed countries are distinct from mitigation actions by developing countries in the following way:

- (a) Mitigation commitments by all developed countries are legally binding economy wide and absolute quantified emission reduction commitments
- (b) Mitigation actions by developing countries are voluntary and nationally appropriate actions, supported and enabled by technology, finance and capacity-building, which reduce or avoid emissions relative to baseline

A. Mitigation [commitments] by [developed countries] [Parties] 15

Proposals for an additional section on Policies and measures by all Parties

- x.1 Each Party shall, to the extent practicable, in implementing relevant Articles of this Protocol:
- (a) Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:
 - (i) Enhancement of energy efficiency in relevant sectors of the national economy;
 - (ii) Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation;
 - (iii) Promotion of reducing emissions from deforestation and forest degradation;
 - (iv) Promotion of sustainable forms of agriculture in light of climate change considerations;
 - (v) Promotion of measures for adaptation to the adverse effects of climate change;
 - (vi) Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;
 - (vii) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;
 - (viii) Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;
 - (ix) Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector;
 - (x) Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy;
- (b) Cooperate with other Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article. To this end, these Parties shall take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness.
- x.2 The Parties shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.

The Bali Action Plan, in its paragraph 1 (b) (i), calls for the consideration of enhanced national/international action on mitigation of climate change, including, inter alia, the consideration of 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.

Parties referred to the following Articles of the Convention in their submissions related to this section: Articles 1, 2, 3, 4 (as a whole and also with reference to paras. 1, 1(b), 3, 5, 6, 7, 8, 9 and 10) and 12 (as a whole and also with reference to paragraph 4).

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x.3 The Parties shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention. The Conference of the Parties serving as the meeting of the Parties to this Protocol may take further action, as appropriate, to promote the implementation of the provisions of this paragraph based on the information provided by affected Parties.

New paragraphs before section 1:

- x.1 To enhance mitigation commitments under Article 4.2(a) and (b) of the Convention, developed country Parties in Annex I of the Convention shall:
- x.2 Annex I Parties collectively, whether or not Parties to the Kyoto Protocol, must reduce their emissions by at least 45 per cent below 1990 levels by 2020 and by more than 95 per cent below their 1990 levels by 2050.
 - 1. Nationally appropriate mitigation commitments or actions by developed countries
- x.1 Consideration of commitments or actions by developed country Parties requires close coordination with the discussions at the AWG-KP.
- 55. [All [All Annex I [country] Parties] [[developed country Parties] [included in Annex I of the Convention] [and other Parties included in Annex I of the Convention] [all Annex I Parties and all current European Union member States, EU candidate countries and potential candidate countries that are not included in Annex I to the Convention][Organisation for Economic Co-operation and Development (OECD) member countries, countries that are not OECD members but whose economic development stages are equivalent to those of the OECD members, and countries that voluntarily wish to be treated as developed countries*]] [Annex-I Parties that are not Party to the Kyoto Protocol] [shall][should] [individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the GHGs listed in (x) do not exceed [take leadership to] adopt [legally binding] [measurable, reportable and verifiable [[nationally appropriate] mitigation commitments or actions] [expressed as] [including] {economy-wide} quantified emission limitation and reduction [objectives 16] [commitments] [targets] [for [up, to and beyond 2012]the period from [1990][2013] [XXXX] until [2017] [2020] [XXXX],]] [as inscribed in Annex X] [of at least 40per cent relative to 1990, by 2020] while ensuring comparability of efforts among them, [based on their historical responsibility,] [[taking into account] [national circumstances for Parties "with economies that are highly dependent on income generated from the production, processing and export and/or consumption of fossil fuels" as specified in Article 4.8 (h)] [differences in their national circumstances]]. [These commitments or actions shall be inscribed in {Annex ...} [{Appendix ...}{Schedule ...}{...}]] [with a view to collectively reducing their GHG emissions in the order of 30 per cent from 1990 levels by 2020]

Alternatives to paragraph 55:

Alternative 1

[All Annex I Parties shall adopt quantified emission reductions commitments required from developed countries should include: aggregate emission reductions of at least 45per cent by 2020 and at least 95 per cent by 2050, both with respect to 1990 levels. Quantified emission reductions commitments by developed countries shall be measurable, reportable and verifiable according to the Bali Action Plan.]

[Developed countries: all Annex I Parties and all current European Union member States, EU candidate countries and potential candidate countries that are not included in Annex I to the Convention} Organisation for Economic Co-operation and Development (OECD) member countries, countries that are not OECD members but whose economic development stages are equivalent to those of the OECD members.]

The term "quantified emission limitation and reduction objectives" is used in paragraph 1 (b) (i) of the Bali Action Plan and is used in this document without prejudice to the outcome of the negotiations on this matter. Alternative formulations used by Parties include: "quantified emission reduction objectives", "quantified emission reduction commitments" and "quantitative emissions reductions/removals".

Alternative 2

[All developed country Parties and countries that are voluntarily wish to be treated as developed countries shall adopt legally binding mitigation commitments or actions.]

Alternative 3

[Schedules should be used to register nationally appropriate mitigation commitments and actions.] *Alternative 4*

[Developed countries shall undertake measurable, reportable and verifiable legally-binding deeper quantified emission reduction commitments. Given their historical responsibility and based on the principle of equality, developed countries shall reduce their GHG emissions in aggregate by at least 40per cent below their 1990 levels by 2020 and take corresponding policies, measures and actions.]

Alternative 5

[All developed country Parties {shall} adopt legally binding mitigation commitments including economy-wide quantified emission reduction objectives for the period from {2013} until 2020, while ensuring comparability of efforts among them, taking into account differences in their national circumstances. These commitments or actions shall be inscribed in {Annex...}..]

- 55.1. Adopt national policies and take corresponding measures on the urgent mitigation of climate change, by limiting their anthropogenic emissions of green house gases and protecting and enhancing their greenhouse gas sinks and reservoirs, and that these policies and measures will demonstrate that the developed countries are taking the lead in modifying longer term trends in anthropogenic emissions consistent with the objective of the Convention ensure that this enhanced mitigation does not affect the legal status and continued effectiveness of the quantified emission reduction commitments of Annex I Parties that are Parties to the Kyoto Protocol of the UNFCCC
- 55.2 The minimum expectations with regard to the commitments and actions Parties would register in their national schedules would be for all developed country Parties, an economy-wide quantified emission limitation or reduction commitment".
- 55.3 Developed country Parties which have not taken commitments prescribed in Article 3 of the Kyoto Protocol, and other Parties who voluntarily elect to do so, shall individually or jointly, undertake verifiable, nationally appropriate mitigation commitments or actions in the form of quantified emission limitation and reduction commitments.
- 55.4 In the post-2012 agreement, the developed countries will adopt legally binding commitments, by means of the examinations of commitments and activities that have to be measurable, reportable and verifiable (according to para. 1(b)(i) of the BAP) quantifying absolute emission reductions, focusing on those sectors, sources and gases that contribute most to total greenhouse gas emissions and facilitate the transition towards the low carbon economies in order to achieve sustainable development.

National circumstances and comparability of efforts

- x.1 In a context of enhanced implementation, shall adopt economy-wide quantified emission reduction commitments that are comparable, and that the commitments for the second commitment period under the Kyoto Protocol shall be the reference for enhanced commitments under paragraph 1 b (i) of the Bali Action Plan:
- x.2 Apply the concept of "nationally-appropriate" for Annex I countries in a compatible manner with economy-wide quantified emission reduction commitments for all Annex I Parties;
- x.3 Recognizing that the concept of comparability is established under the Bali Action Plan and not in a process under the Kyoto Protocol, ensure that comparability among all Annex I Parties shall express itself in magnitude, form, and in compliance requirements;
- 56. [With respect to comparability of efforts [among developed countries], elements relating to emission reduction commitments [that] [for those Annex-I Parties that are not Party to the Kyoto Protocol] [shall][should] be compared include:
- (a) Their [{magnitude} [, using tonnes of CO₂ eq as a unit of comparability] [level of mitigation ambition]];

- (b) [Their [[form[nature] and] legal effect];]
- (b).1 A more robust and stricter compliance mechanism than that in the first commitment period of the KP, including increased caps for emission reductions for non compliant Parties within an agreed timeframe;
- (c) [Consistency with [relevant provisions of the Kyoto Protocol {and}] related decisions of the COP [and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) applying to the first commitment period]}, [including requirements for compliance, monitoring and enforcement]:
- (d) [Time frames [commitment periods] and the application of the same base year established by the Kyoto Protocol.]
 - (e) Magnitude, form and compliance requirements
- (f) The assessment of comparability needs to be made under both the COP and Conference of Parties serving as the meeting of Parties (CMP) for Annex I Parties, through formulating a technical panel (including members from Annex I and non Annex I as well as representative from secretariat) on comparability that would assess the information provided by Annex I Parties in their annual national communications and report its finding to the COP and CMP for further action].

Alternatives to paragraph 56:

Alternative 1

[The comparability of efforts among developed countries shall be judged by the following:

- (a) Comprehensiveness: targets, policies, measures, actions and etc.;
- (b) Same nature of commitments: quantified and legally-binding;
- (c) Proximity of magnitude and intensity;
- (d) Same compliance, monitoring and verification mechanism.]

Alternative 2

[Comparability of mitigation efforts by Parties included in Annex I of the Convention shall be ensured through:

- (a) the establishment or reaffirmation of legally-binding quantified emission limitation or reduction commitments stated relative to 1990 or to other base years consistent with Article 4.6 of the Convention and decision 9/CP.2
- (b) timeframes for emission reductions that are of the same duration;
- (c) comparable provisions for monitoring, reporting and verification of emissions by sources and removals by sinks;
- (d) provisions for third party review of annual emissions inventories and any supplemental information required;
- (e) comparable compliance requirements for all Annex I Parties.]
- 56.1 Ensuring comparability of efforts in a transparent manner among developed countries mitigation efforts will require the establishment of specific indicators in order to compare compliance with country commitments and define which national circumstances are taken into consideration.
- 57. [[In view of the need to account for diverse national circumstances [for only those Parties that are not Party to the Kyoto Protocol] and to ensure comparability of efforts [of the Parties referred to in Paragraph 55] [separately from mitigation by utilizing flexibility mechanisms], the [development] [implementation] of quantified emission [limitation and] reduction [objectives] [commitments] [should][shall] be based on [[robust], relevant[, impartial and credible] indicators, taking into account such factors as:] [undisputed scientific evidence regarding historically responsibilities, mitigation potential and respective capabilities]
- (a) [Historical responsibility for [both] [emissions] [as well as] [and] [global temperature increase];]
 - (a).1 Share of absolute greenhouse gas emissions

- (b) [National [and regional] development priorities;]
- (c) [Natural and geographical characteristics[;][and] resource endowment;]
- (d) [Availability of [low-carbon] [low-GHG emission] energy supply options and opportunities for fuel switching;]
- (e) [{Trends in} [GHG] emissions [per capita][,][and carbon intensity] [{per unit of gross domestic product (GDP)}, {per energy unit} {and population trends}];]
 - (e).1 Population trends
- (f) [Domestic mitigation potential [and mitigation costs, aggregate [and marginal] economic costs, domestic achievement of emission reduction and per capita effort;]
 - (g) [Sector-specific circumstances and sectoral energy efficiency and [GHG][carbon] intensity;] *Alternative to subparagraph 57 (g)*:

[Covering all sectors and all GHG emissions;]

- (h) [Degree of access to flexibility mechanisms;]
- (i) [[Relative][Absolute] size of the economy; [and relative]ability to pay [, and economic and technological capacity];]
 - (i).1 Technological capacity;
 - (j) [Extent of transition to a market economy;]
 - (k) [Position on the human development index.]
- (l) [Methodologies used for calculation of reduction potentials and setting quantified national GHG emissions reduction targets should allow the setting of equitable burden sharing which is measurable, reportable, and verifiable]
- (m) [the extent of international assistance provided by World Bank or IBRD]] *Alternatives to paragraph 57:*

Alternative 1

[To facilitate understanding of comparability of effort, each developed country Party's schedule shall be subject to regular and transparent review.]

<u> Alternative 2</u>

[In view of the need to ensure comparability of efforts, the development of quantified emission limitation and reduction objectives should be guided by considerations of capability and responsibility, taking into account such factors as:

- (a) the capability to pay for domestic emission reductions and to purchase emission reduction credits from developing countries;
- (b) the GHG emission reduction potential;
- (c) domestic early action to reduce GHG emissions;
- (d) population trends and total GHG emissions.]

Alternative 3

[Quantified emission limitation and reduction objectives shall reflect developed countries' historical responsibility and capability.]

<u>Proposed new subheading: Comparability of efforts between large and small Parties</u>

x.1 Due consideration should be given to comparability of efforts between large and small Parties. Small Parties should not face disproportionate disadvantages due to lack of flexibility of action. The mitigation commitment of a Party where a single project adds in any one year more than five per cent to the total carbon dioxide emissions of the Party in 1990, shall be adjusted by subtracting the proportional impact provided the following conditions: (i) the total carbon dioxide emissions of the Party were less than 0.05 per cent of the total carbon dioxide emissions of Annex I Parties in 1990, (ii) renewable energy is used for the single project, resulting in a reduction in greenhouse gas emissions per unit of production,

- and (iii) best environmental practice is followed and best available technology is used to minimize process emissions.
- 58. [[Suitable criteria [, agreeable to every Party,] should be used in defining "developed country Parties".] [There should be a dynamic continuum with different commitments, actions and support for different countries based on common, objective criteria.]
- 59. [An objective, consistent, transparent, thorough and comprehensive technical assessment of the comparability of efforts among [Annex I] [developed country] Parties [that are not Parties to the Kyoto Protocol] shall be [facilitated][made] by a technical panel on comparability [established under the COP]. The panel shall assess the information provided by [Annex I] [developed country] Parties in their annual national communications [and other data available by international organizations] and report its findings to the COP [and CMP] for further action. If the report indicates questions relating to comparability, the COP shall refer the matter to a compliance committee for attention.]

 Alternative to paragraph 59:

[An international compliance mechanism should be established under the Convention in order to compare efforts among developed countries mitigation actions and ensure its effective compliance.]

Mitigation commitments or actions

- x.1 in establishing the magnitude of mitigation commitments, reflect historical responsibility for climate change and ensure ambitious mid-term mitigation commitments for Annex I Parties as a whole compatible with an ambitious long-term target;
- x.2 adopt policies and measures in the form of economy-wide quantified emission reduction commitments;
- x.3 apply the requirement for measurability, reporting and verification (MRV) to compliance with economy-wide quantified emission reduction commitments, enhancing the implementation of Articles 4.2 (d), 12.2 (a) and (b), and 12.3, in accordance with Article 10.2 (b) of the Convention;
- x.4 apply Kyoto Protocol rules for all Annex I Parties to the Convention for comparability purposes, including the Protocol's Article 5 (estimation of emissions and removals), Article 7 (information on compliance with commitments), and Article 8 (review by expert teams), as well as the guidance given by the Conference of the Parties;
- x.5 The AI Parties shall individually or jointly reduce their anthropogenic GHG emissions by at least 40per cent below the 1990 baseline by 2020.

60. <u>Option 1</u>

[Quantified emission [limitation and] reduction [objectives] [commitments] for developed country Parties [and other Parties included in Annex I of the Convention] that are Parties to the Kyoto Protocol shall be those inscribed in Annex B to the Kyoto Protocol as amended [shall be taken as reference], and quantified emission [limitation and] reduction [objectives] [commitments] for those developed country Parties [and other Parties included in Annex I of the Convention] that are not Parties to the Kyoto Protocol shall be as contained in ([the annex of the current instrument]....). The commitments under the Kyoto Protocol [shall] be taken as a reference [; commitments] [Commitments] for those developed country Parties that are not Parties to the Kyoto Protocol [shall] [thus] be comparable [with][to the] commitments taken by [Annex I] [developed country] Parties [developed country Parties and other Parties included in Annex I of the Convention]under the Kyoto Protocol, including with regard to the base year used to express them.]

Option 1.1

Measurable, reportable and verifiable nationally appropriate mitigation commitments shall be expressed as quantified emission limitation and reduction objectives (QELROS). For countries that are Parties to the Kyoto Protocol, the QELROS shall be expressed as a reduction in 2020 compared to total reported emissions falling within limits set by the Kyoto Protocol and relevant COP and CMP decisions during the first commitment period.

60.1 The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases do not exceed their assigned

amounts, calculated pursuant to their quantified emission reduction commitments, with a view to reducing their overall emissions of such gases by at least 40 per cent below 1990 levels by 2020 and by at least 95 per cent by 2050.

60.2 Developed country Parties that are also Party to the Amendment to the Kyoto Protocol may in order to achieve their quantified emission limitation and reduction objectives, utilize the flexible mechanisms established in terms of the Kyoto Protocol.

61. Option 2

[[Annex I] [Developed country] Parties [and other Parties included in Annex I of the Convention] [that are not Parties to the Kyoto Protocol] shall, individually or jointly, ensure that their aggregate anthropogenic CO₂ emissions of the GHGs listed in (...) do not exceed, in the commitment period 2013 to {20XX}, their respective [assigned amounts] [mitigation target taking into account their historical responsibility would be] inscribed in (...).] [Annex B (see below) which are established in a manner ensuring comparability of efforts of each Party, taking into account national and sectoral aspects, in order to take the lead in combating climate change , with a view to contributing to the global efforts towards the peaking-out of the global emissions of greenhouse gases in the next ten to twenty years, and to ensuring a long-term pathway for each Party included in Annex I towards significant emission reduction].]

Proposal for an Annex in the context of paragraph 61:

Annex B

Party	Quantified emission limitation or reduction commitment in the commitment period 2013-20xx						
	Assigned amount reduction rates from 1990 (per cent)		reduction rates from 2000 (per cent)	reduction rates from 2005 (per cent)	reduction rates from 2007 (per cent)		
A	XXX	XXX	xxx	XXX	XXX		
В	XXX	xxx	xxx	xxx	xxx		
• • •							

Parties that undertake such actions or commitments as described in paragraph 55.3 above shall ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of greenhouse gases do not exceed their agreed targets inscribed in Annex (*see below*) for the assessment period 2012-2017.

Proposal for an Annex in the context of this addition:

	Annex I
Party	Quantified emission limitation or reduction commitment or action for assessment period 2012-2017 compared with 1990 base year

62. Option 3

[Recalling Articles [4.1(b)][2(a)] [and 4.2] of the Convention, [developed country] Parties [and other Parties included in Annex I of the Convention] [that are not Parties to the Kyoto Protocol] shall implement their respective nationally appropriate mitigation [commitments or actions] [action], [which are measurable, reportable and verifiable,] including quantitative emission [limitation and reduction objectives] [reductions] and/or removals in the 2020/(...) time frame[, in conformity with domestic law] [and adjusted through multi-lateral negotiations]. They shall also formulate[, submit and implement] [and submit] low-emission¹⁷ strategies [that articulate an emission pathway[s] to 2050] [in pursuit of their quantified emission reduction commitments for 2020 and 2050], including long-term net emission reductions of at least [(...)] [40per cent from 1990 levels by 2020 and 95per cent][(...)] by 2050. Mitigation [commitments or] action[s] [commitments by all developed countries shall be] [is][shall be] subject to measurement, reporting and verification [according to internationally agreed guidelines] [and compliance].]

¹⁷ Parties in their submissions refer either to "low-emission" or "low-carbon" in their proposals of strategies or plans. For the purpose of this document, "low-emission" is used as a more inclusive term pending the outcome of negotiations on this issue.

Alternative to paragraph 62:

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

With respect to developed country Parties:

- (a) For each such Party, Appendix 1 (found in Addition 2 under proposals for additional sections/subsections at the beginning of Chapter III) includes quantitative emissions reductions/removals in the 2020/[Annex] timeframe, in conformity with domestic law.
- (b) Each such Party shall formulate and submit a low-carbon strategy for long-term net emissions reductions of at least [Annex] by 2050.]

63. Option 4

[Each [developed country] Party [and each other Party included in Annex I of the Convention] shall establish, regularly update and implement the contents of national schedules, which {shall} {should} include long-term national GHG limitation or reduction pathways, quantified emission limitation or reduction commitments for 2020, and measurable, reportable and verifiable mitigation policies and measures designed to meet those commitments, subject to regular review by the COP. Each national schedule {shall} {should} provide details on the goals, policies and measures that underpin the Party's commitments, including details on (1) expected emission reduction pathways, including mid- and long-term emission reduction goals, and (2) enabling domestic measures, such as emissions trading regimes and renewable energy targets.]

64. <u>Option 5</u>

[Each Party should decide on a suitable commitment for itself, choosing whether to undertake quantified emission reduction and limitation commitments or nationally appropriate mitigation actions, and whether such commitments or actions will be undertaken voluntarily or in a legally binding context either internationally or domestically.]

Move paragraphs 60–64 to new subsection on Low Emissions Development Strategies [Approaches to achieve quantified emission limitation and reduction [objectives] [commitments]]

65. [Developed country Parties [and other Parties included in Annex I of the Convention] [Annex-I Parties that are not Party to the Kyoto Protocol] [shall] [should] achieve their quantified emission [limitation and] [/or] reduction [objectives] [commitments]

[Option 1

[mostly] through [substantial] domestic action [and they may acquire, from [other developed or] developing country Parties, emission reduction units [or certified emission reductions] provided that the acquisition of [these] [emission reduction] units is supplemental to domestic action][[, which should fulfill at least 90 per cent of their commitments exclusively from domestic actions]. A maximum of [x][10] per cent of their commitments should be achieved through the use of flexibility mechanisms, including offsets].]

[Option 2

[primarily] domestically. If [developed country Parties] [Annex-I Parties that are not Party to the Kyoto Protocol] intend to achieve [any proportion of] [their] [its] emission reductions [abroad,] [through the flexible mechanisms, they must undertake deeper emission reduction] commitments [to undertake deeper emission reductions [of magnitude from 45 to 50]] [i.e. over above its comparable emission reduction requirement] would be required[, as well as clarity on the proportion of emission reductions to be achieved domestically and abroad.]] [Such clarity should include also the percentage to be used under REDD]]

[Option 3

[internally and not through flexible market mechanisms that allow for the purchase of certified emission reduction certificates.] [Appropriate mechanism shall be established for accessibility of the flexibility mechanism to the Annex-1 Parties which are not Parties to the Kyoto Protocol.]]

Alternatives to paragraph 65:

Alternative 1

[Subject to the eligibility requirements outlined in this agreement developed country Parties may use the [flexible][carbon market] mechanisms mentioned in paragraph [139quater] to meet their quantified emission limitation and reduction objectives. The use of these mechanisms shall be supplemental to domestic action. Domestic action shall thus constitute a significant element of the effort made by each developed country Party to meet its quantified emission limitation and reduction objectives.]

Alternative 2

[Developed countries shall achieve their quantified emission limitation and reduction objectives primarily through domestic emission reductions efforts.]

- Definitions, modalities, rules and guidelines for the treatment of land use, land use change and forestry under the Kyoto Protocol shall apply to all developed country Parties.
 - 2. [Measurement, reporting and verification of commitments or actions]

Move this section to a proposed new standalone/unified MRV section.

New paragraph before paragraph 66, as an alternative to the whole section on MRVs:

- [x.1 MRV of developed countries' commitments should be treated in an integrated manner with MRV of developing countries' actions.]
- 66. [The current system for reporting of national communications and annual inventories under the Convention, with its independent review structure, provides a basis on which to build a [robust] system for the measuring, reporting and verification of [mitigation commitments or actions][quantified emission limitation and reduction objectives] [by developed [countries]] [country Parties and other Parties included in Annex I of the Convention]. [In the implementation of measurement, reporting and verification, relevant provisions of Articles 5, 7 and 8 of the Kyoto Protocol and related decisions [should][shall] be applied, including the procedures for annual reporting and review of national GHG inventories and for periodic reporting and review of national communications. [The procedures laid out in Articles 5, 7 and 8 of the Kyoto Protocol [should][shall] [be strengthened [and shall be made more stringent] such that they] apply to the quantified emission limitation and reduction commitments of all developed country Parties [and other Parties included in Annex I of the Convention][, in order to ensure comparability of commitments].]]]

Alternative to paragraph 66:

[The quantified emission reduction targets and corresponding policies, measures and actions undertaken by developed countries shall be measurable, reportable and verifiable. The measurable, reportable and verifiable requirement shall apply to the progress and results of implementation actions as well as the quantified emission reduction commitments per se, which shall apply, mutatis mutandis, the provisions and procedures of the Kyoto Protocol regarding compliance, monitoring and verification mechanisms.]

- 66.1. Also the implementation of measurement, reporting and verification of commitments shall include costs and adverse impact assessments of the mitigation actions, policies and measures, particularly developing countries specified in Article 4.8 (h), as well as assessment of efforts to eliminate the adverse impacts of response measures.
- 66.2. Develop a compliance system built on the existing mechanisms, that address issues of non-compliance flowing from the measurement, reporting, and verifying process.
- 66.3. The COP shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for implementation of quantified emission limitation and reduction commitments.
- 66.4. Modalities and procedures for the measurement, reporting and verification of actions or commitments by Parties identified in paragraph 55.3 above shall be guided by procedures identified in Article 5, 7 and 8 of the Kyoto Protocol so as to ensure comparability of reporting and verification.

- 67. [Issues identified by Parties in the context of paragraph 66 above as requiring further elaboration at the appropriate time include modalities for implementing measurement, reporting and verification, including revision or development of relevant guidelines.]
 - 3. [[Compliance with] [Review of] quantified emission [limitation and] reduction [objectives] [commitments or obligations]]

Move this section to a proposed new standalone compliance section

- x.1 To ensure compliance under the Convention, operationalize Article 13 of the Convention, through the adoption of Decision 10/CP.4 on the multilateral consultative process, and its Annex on its Terms of Reference
- 68. [[Compliance with] [Review of] quantified emission [limitation and] reduction [objectives][commitments] and financial commitments for adaptation and technology transfer undertaken by developed [countries][country Parties and other Parties included in Annex I of the Convention] [shall][should] be monitored and assessed in a robust and credible manner based on agreed procedures for measurement, reporting and verification. [The monitoring and assessment of compliance {shall}{should}]

[Option 1

utilize the relevant procedures implemented under the Kyoto Protocol. These provisions may be enhanced as appropriate, [and shall lead to the application of penalties for non-compliance, including increased future reduction commitments by an amount calculated as a multiple of the shortfall in implementation and financial contributions as penalties or fines and paid into an enhanced financial mechanism monetary penalties to be paid to the Adaptation Fund] [taking into account experiences gained from relevant international agreements].]

[Option 2

[be undertaken within a [new compliance system [under the COP] [under the new agreement]] [review process]. [Procedures and mechanisms to address cases of non-compliance should be determined by the principle that they should be designed to facilitate compliance in the future.]]]

[Option 3

[lead to the application of penalties for non-compliance, including [increased future reduction commitments by an amount calculated as a multiple of the shortfall in implementation [and] [as well as] financial contributions as penalties [10 times to the market price of one tonne of carbon and] [or] fines [and] paid into [an enhanced] [the Convention] financial mechanism] {monetary penalties to be paid to the Adaptation Fund} [a mechanism that establishes clear and direct consequences for non-compliance].]]] *Alternative to paragraph 68:*

[The compliance procedures applied to Kyoto Parties under Section XV of the annex to decision 24/CP.7 and that are relevant to quantified emission limitation or reduction commitments shall be applied equally to all Annex I Parties, whether or not Parties to the Kyoto Protocol. Such compliance procedures may be enhanced.]

Move paragraphs 66–68 to the proposed section on elements that apply to all Parties.

- 68.1. Commitments or actions undertaken by Parties identified in paragraph 55.3 above shall by subject to compliance provisions and shall be guided by the compliance procedures developed pursuant to Article 18 of the Kyoto Protocol.
- 68.2. Parties undertaking commitments or actions under paragraph 55.3 above shall not use these commitments to fulfil obligations established under the Kyoto Protocol.
- 69. [Issues identified by Parties in the context of paragraph 68 above as requiring further elaboration at the appropriate time include modalities for the implementation of compliance procedures, including revision or development of relevant guidelines; and the possibility of establishing a new body for compliance and for measurement and reporting.]

Proposed new subsection on Joint fulfillment:

- x.1 Any Parties included in Annex I that have reached an agreement to fulfil their respective commitments under subparagraph (a) above jointly, shall be deemed to have met those commitments provided that their total combined aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts inscribed in Annex B. The respective emission level allocated to each of the Parties to the agreement shall be set out in that agreement.
- x.2 The Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement. Any such agreement shall remain in operation for the duration of the commitment period referred to in subparagraph (a) above.
- x.3 If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization, any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol.
- x.4 In the event of failure by the Parties to such an agreement to achieve their total level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement.
- x.5 If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with subparagraph (ii) above.

Proposed new subsection on LULUCF:

- x.1 The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in the commitment period referred to in subparagraph (a) above, shall be used to meet the commitments under subparagraph (a) above of each Party included in Annex I. The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner and reviewed.
- x.2 The greenhouse gas emissions by sources and removals by sinks resulting from additional human-induced land use, land-use change and forestry activities may be used to meet the commitments under subparagraph (a) above of each Party included in Annex I, provided that these activities have taken place since 1990.
- x.3 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, decide upon modalities, rules and guidelines related to the issues referred to in subparagraphs (i) and (ii) above, taking into account uncertainties, transparency in reporting, verifiability, the methodological work of the Intergovernmental Panel on Climate Change, the advice provided by the Subsidiary Body for Scientific and Technological Advice and the decisions of the Conference of the Parties.

Proposal to insert as Annex:

Annex A
National Schedules of Mitigation Commitments and Actions
[Alphabetical List of National Schedules of Parties]
National Schedule for [Name of Party] [to be filled in as per Article 4] (of Party Submission)

National pathway		
Emissions pathway to 2050		

Economy-wide nationally appropriate mitigation commitments and actions

Name/brief description of commitment or action	Baseline/ reference case	Emissions outcomes expected	Unilateral/supported	
	e.g. year, period,	XXX	XXX	
	BAU, Mt C0 ₂ e/unit,			
	KW/h/unit, etc			

Sectoral nationally appropriate mitigation commitments and actions

Name/brief description of commitment or action	Baseline/ reference case	Emissions outcomes expected	Unilateral/supported	
	e.g. year, period,	XXX	XXX	
	BAU, Mt C0 ₂ e/unit,			
	KW/h/unit, etc			

ANNEX B	
GREENHOUSE GASES AND SECTORS/SOURCE CATEGORIES	
[NOTE: Greenhouse gases and sectors/source categories to be inserted.]	

B. [Mitigation by developing countries] 18 [Nationally appropriate mitigation actions by developing countries] [Mitigation actions by developing countries]

Suggestions on placement reflected in other sections that are related to this section include:

Move paragraphs 111, 112 and 115–118 to Chapter II.B, subsection 3 on Measurement, reporting and verification of support

Move paragraph 127 to chapter II.B, subsection 5 on institutional arrangements

<u>Proposals for additional paragraphs before section 1:</u>

Proposal 1

x.1 To enhance implementation of Article 4.1 of the Convention, enabled and supported through enhanced implementation of commitments of developed country Parties and other Parties included in Annex II under Articles 4.3, 4.4 and 4.5, in accordance with Article 4.7 of the Convention.

x.2 Principles, Objectives and Scope:

- (a) recognize that nationally-appropriate mitigation actions for developing country Parties, as defined in the Bali Action Plan, paragraph 1 b (ii), are distinct from the mitigation commitments of developed country Parties under its paragraph 1 b (i), both in magnitude and in legal nature;
- (b) abide by the principles of the Convention embodied in its Article 3, in particular the right to sustainable development enunciated in its Article 3.4;

The Bali Action Plan, in its paragraph 1 (b) (ii), calls for the consideration of enhanced national/international action on mitigation of climate change, including, inter alia, NAMAs 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.

- (c) act in accordance with, and take the necessary steps to ensure the implementation of Article 4.7 of the Convention that stipulates 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" (enhanced support and enabling means result in enhanced actions of developing country Parties and not the other way 'round);
- (d) recognize that nationally-appropriate mitigation actions by developing country Parties are taken in the context of sustainable development;
- (e) agree that measurable, reportable and verifiable mitigation actions by developing country Parties are only those enabled by measurable, reportable and verifiable support;
- (f) enhance the implementation of Article 12.4 of the Convention that developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits";
- (g) channel enabling means of implementation of mitigation actions by developing country Parties through the mechanisms on financing, technology and capacity-building as may be established under the Convention and the authority of the Conference of the Parties;
- (h) give international recognition that developing country Parties are undertaking mitigation actions domestically based on their own resources.

Proposal 2

- x.1 Each developing country Party shall, in accordance with Article 4.1 of the UNFCCC, elaborate a low-carbon/emissions development strategy. Low-carbon/emissions development strategies shall contain:
- (a) The description of a long-term strategy, for the low-carbon/emissions development of the developing country in the context of its broader sustainable development strategies, including an emission pathway, this means an emission projection planned to be achieved with the implementation of the strategy;
- (b) The description of all NAMAs, i.e. all mitigation actions, that the developing country intends to undertake on its territory in a short- and mid term as part of this long-term strategy. For each NAMA, the developing country should:
 - (i) indicate autonomous action that is to be financed and implemented by the country itself;
 - (ii) identify barriers to the implementation of autonomous action, including identifying technology needs and barriers to technology deployment and diffusion, whose removal needs support;
 - (iii) indicate action that, due to the incremental costs, requires assistance, in the form of financing, technology or capacity-building for implementation;
 - (iv) specify, when relevant, what type of support in terms of finance, capacity-building and technology it considers most appropriate to enable the implementation of the NAMA;
 - (v) specify, when relevant, if the use of a [flexible][carbon market] mechanism is proposed, and the associated caps and thresholds;
 - (vi) specify the outcomes of the NAMA that are foreseen in terms of emission reductions for several time horizons, e.g. 2020, 2030 and 2050 and provide information on how these emission reductions were estimated.
 - (vii) (other elements)
- x.2 Developing country Parties shall commit to integrate low-carbon/emissions development strategies covering all key emitting sectors into national and sectoral strategies, and have them in place as soon as possible and no later than 2012.

- x.3 The elaboration of low-carbon/emissions development strategies and plans for the least developed country Parties should be supported financially and technically.
- x.4 The Meeting of the Parties to this Agreement shall [at its first session] elaborate further guidelines and modalities for the elaboration and reporting of low-carbon/emissions development strategies under this Article.
 - 1. Nationally appropriate mitigation actions by developing countries

Nature of nationally appropriate mitigation actions

- x.1 The minimum expectations with regard to the commitments and actions Parties would register in their national schedules would be: for developing country Parties whose national circumstances reflect greater responsibility or capability, nationally appropriate mitigation commitments and/or actions aimed at achieving substantial deviation from baselines.
- x.2 NAMAs by developing countries are voluntary and contingent on financial and technical support by developed countries. Only NAMAs that are supported are MRV. Modalities for MRV in developing countries require specific support.
- 70. [Developing country Parties contribute to enhanced mitigation by undertaking range of actions including NAMAs in the context of low-carbon/emissions development strategies. These actions should be country-driven, [commensurate with responsibilities and capabilities of each country Party,] [undertaken [on a voluntary basis] [either as international obligation or on a voluntary basis] in the context of sustainable development, with MVRed means of implementation particularly finance and capacity-building, in conformity with prior needs of sustainable development and eradication of poverty, and [determined and formulated at the national], in accordance with all levels of government authorities, [or international] level in accordance with the principle equity, and of common but differentiated responsibilities and respective capabilities.]

Alternatives to paragraph 70:

Alternative 1

[Developing country Parties may enhance their mitigation actions through NAMAs in accordance with the principle of CBDR & RC. These actions should be in conformity with national development priorities and in the context of sustainable development and poverty eradication. They shall be determined and formulated at the national level.]

Alternative 2

[Recognizing that many developing country Parties have already taken sustained and early actions to reduce their emissions growth, developing country Parties shall continue to contribute to enhanced international mitigation action by pursuing NAMAs, supported and enabled by technology, financing and capacity-building from developed country Parties and other Parties included in Annex II of the Convention. These actions should be country-driven, undertaken on a voluntary basis in the context of sustainable development, in conformity with prior needs of sustainable development and eradication of poverty, and determined and formulated at the national level in accordance with the principle of common but differentiated responsibilities and respective capabilities. Recognition should also be given to the unilateral NAMAs which continue to be taken without being supported and enabled by technology, financing and capacity-building from developed country Parties.]

Alternative 3

[Non-Annex I Parties shall adopt voluntary nationally-appropriate mitigation actions in the context of sustainable development goals and objectives, which shall aim to address anthropogenic emissions of greenhouse gases and protect and enhance greenhouse gas sinks and reservoirs in a measurable way and which, supported and enabled by technology, financing and capacity-building, shall contribute to achievement of the ultimate goal of the Convention by reducing emissions significantly from baseline projections.

In order to promote progress to this end, Non-Annex I Parties, taking into account Article 4, paragraph 1, of the Convention, and their specific national and regional development priorities, objectives and circumstances, shall:

- (a) formulate national low-GHG emission development strategies containing nationally appropriate actions to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, which in the aggregate shall aim to achieve a significant deviation from current baseline emissions by 2020 and by 2050, supported and enabled by technology, financing and capacity-building;
- (b) communicate these strategies to the Secretariat by [date] together with the following information:
 - (i) a description of steps taken or envisaged by the Party to implement its low-carbon development programme; and
 - (ii) a detailed description of the nationally-appropriate mitigation actions that it has adopted or undertakes to adopt to implement its low carbon development programme;
 - (iii) an estimate of the effects that these nationally appropriate mitigation actions will have on anthropogenic emissions by its sources and removals by sinks during the timeframes referenced in paragraph above.

Support shall be provided for the preparation of low-GHG emission development strategies.

NAMAs shall be supported and enabled by financing, technology and capacity-building where sought by developing countries.]

Alternative 4

[Developing country Parties, notwithstanding paragraph __ above, shall undertake nationally appropriate mitigation actions to reduce greenhouse gas emissions.]

Alternative 5

[Mitigation actions by developing countries constitute a meaningful contribution to enhanced mitigation. Such actions are voluntary, nationally appropriate, supported and enabled by developed countries through the provision of technology, finance and capacity-building. NAMAs, which may include projects and programmes, shall be formulated through a country driven process, and in accordance with the principle of common but differentiated responsibilities and respective capabilities. The aim of these actions is to reduce or avoid emissions, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty.]

- 70.1 NAMAs by developing country Parties may comprise the following:
- (a) Actions enabled and supported by finance, technology and capacity-building from developed country Parties and other developed Parties included in Annex II of the Convention;
- (b) Actions, not including those in (a), which are undertaken unilaterally by developing country Parties through public funding or other means ("Unilateral NAMAs");
 - (c) Actions pursued with the intention of generating credits to participate in carbon market(s).
- 70.2 Nationally appropriate mitigation actions are all actions to mitigate climate change consistent with national circumstances, and that are commensurate with Parties' responsibilities and capabilities, as reflected in Parties' national programmes to mitigate climate change required by Article 4.1(b) of the Convention.
- 71. [A subset of][Depending on the nature of] [NAMAs by developing country Parties [shall be][are actions][they may] supported and enabled by technology, financing and capacity-building in accordance with Articles 4.3 and 4.7 of the Convention and undertaken in a measurable, reportable and verifiable manner.]] [Supported and enabled NAMAs [and][as well as] the support for NAMAs [have been already progressed based on unilateral efforts as well as being] {shall} be undertaken in a measurable, reportable and verifiable manner. [The extent of mitigation actions undertaken by developing countries will depend on [negative cost measures and] the effective provision of financial, [and] technological and capacity-building support by developed country Parties.]] [NAMAs by developing countries are contingent on financial and technical support by developed countries. Only NAMAs that are supported are MRVd. Modalities for MRV in developing countries require specific support. Nationally appropriate mitigation

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actions by developing countries must result in a substantial deviation from baseline by 2020 in a measurable, verifiable and reportable manner if enabled and supported by appropriate funding and transfer of technology by developed countries.] [Individual mitigation efforts by developing country Parties must be also considered as NAMAs, and so, be undertaken in a measurable, reportable and verifiable manner].

Alternatives to paragraph 71:

Alternative 1

[NAMAs implemented by developing country Parties, undertaken pursuant to their low-carbon/emission development strategies, that are not financed by the developing country Party through autonomous action and that require assistance, in the form of financing, technology or capacity-building for implementation shall be supported by technology, financing and capacity-building in accordance with Articles 4.3, 4.7 and 11.5 of the Convention. Financial flows for mitigation will be sources and governed in a transparent and balanced manner in line with [chapter 4][paragraphs 173 and 174] of this {text} {agreement}.]

Alternative 2

[NAMAs by developing country Parties shall be supported and enabled by technology, financing and capacity-building in accordance with Articles 4.3, 4.5 and 4.7 of the Convention. Annex I Parties shall provide new and additional financial resources and technology, over and above that provided to enable developing countries to implement their commitments under Article 4.1 of the Convention. NAMAs and support for NAMAs {shall} be undertaken in a measurable, reportable and verifiable manner. The extent of mitigation actions undertaken by developing countries will depend on the extent of effective provision of financial and technological support by developed country Parties.]

Alternative 3

[Both the mitigation actions and the support shall be measurable, reportable and verifiable. The extent to which mitigation actions can be undertaken by developing countries will depend on the effective provision of financial, technological and capacity-building support by developed country Parties.]

72. [NAMAs can [be any actions defined by developing country Parties], [take suitable forms according to the responsibilities and capabilities of developing country Parties] including any individual actions and {projects} [large-scale mitigation programmes, beyond projects] according to national circumstances in the context of Articles 4.1(b), Article 4.3 and 12.4 of the Convention; that lead to measurable, reportable and verifiable emission reductions or limitations [and they should be based on 'a no-lose target' concept] [and should not generate offsets for developed country Parties][and shall be quantified to the extent possible].]]

Alternatives to paragraph 72:

Alternative 1

[NAMAs can be any actions defined by developing country Parties, including any individual actions and appropriate mitigation programmes in the context of Articles 4.1(b) and 12.4 of the Convention; and they should be based on a no-lose target concept.]

Alternative 2

[Developing country Parties in undertaking nationally appropriate mitigation actions may elect to take such actions under the following tiers:

- (a) Tier One: Actions that are financed domestically, either nationally or subnationally;
- (b) Tier Two: Actions that are financed by international financial and/or technical support, either through bilateral support, support from the Multilateral Fund on Climate Change, or other international financial means;
- (c) Tier Three: Actions that are undertaken over and above those identified in Tier One and Tier Two actions that are based on an emission reduction target and which may be eligible for trading of units.

Nationally appropriate mitigation actions described above may be undertaken at the national, sectoral or project level.

Actions undertaken under Tier Two shall be supported by financial assistance for the Mitigation Window of the Multilateral Fund on Climate Change and through other multilateral and bilateral funding sources, as appropriate.

Procedures for the allocation of funds for Tier Two actions shall be developed by the Board of the Multilateral Fund on Climate Change and approved by the Conference of Parties serving as the assembly of Parties.

Actions undertaken under Tier Two shall be subject to appropriate reporting and accounting standards as determined by the Board of the Multilateral Fund on Climate Change and approved by Conference of Parties serving as the assembly of Parties.

Actions undertaken at the national or sectoral level by means of Tier Three may be eligible for emissions trading, subject to appropriate measurable, reportable and verifiable requirements developed according to Article 4, paragraph 3.]

Alternative 3

[NAMAs can be any actions defined by developing country Parties, including any individual actions and {projects} {large-scale mitigation programmes, beyond projects and should not generate offsets for developed country Parties}.]

- 73. [NAMAs may include [but not limited to][inter alia]:
 - [(x.a) Development of national action plan]
 - (a) [Sustainable development policies and measures;]
 - (b) [[Low-emission][Low carbon] development strategies and plans;]
 - (b).1 Renewable energy strategies and plans;
- (c) [Programmatic CDM], technology deployment programmes [or standards], energy efficiency programmes [and energy pricing measures] standards of financial schemes, including renewable energy and energy efficiency;
- (d) [Cap-and-trade schemes and carbon taxes;] and the use of new and existing [flexible][carbon-market] mechanisms, including project- and program-based CDM;
- (e) [[Economy-wide and] [Sectoral intensity targets], national sector-based mitigation actions and standards, [and no-lose sectoral crediting baselines];]
- (f) [REDD-plus¹⁹ activities and other mitigation actions implemented in [different][related] areas and sectors[, including agriculture];]
- (f).1 Mitigation actions at subnational and local level, in particular in cities and rural communities;
 - (f).2 Adaptation actions that have mitigation benefits;
- (f).3 Mitigation actions that provide a win -win situation and that are clearly supported by MVRed means of implementation;
 - (f).4 Renewable energy policies and measures, including financial schemes;
 - (f).5 Bilateral actions or strategies implemented by developing countries Party;
 - (f).6 Renewable energy policies and measures, including financial schemes.
 - (f).7 Bilateral actions or strategies implemented by developing country Parties.

Alternatives to paragraph 73:

Alternative 1

An amended version of paragraph 73 providing examples of possible commitments and actions that Parties could register in national schedules. The paragraph should be moved to a proposed new subsection on National Schedules.

¹⁹ In this document, actions under paragraph 1 (b) (iii) of the Bali Action Plan (issues related to 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) are referred to collectively as "REDD-plus.

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Alternative 2

[NAMAs may include:

- (a) Sustainable development policies and measures;
- (b) Low-emission development strategies and plans;
- (c) CDM, Programmatic CDM, technology deployment programmes or standards, energy efficiency programmes and energy pricing measures;
- (d) Cap-and-trade schemes and carbon taxes;
- (e) Sectoral targets, national sector-based mitigation actions and standards, and nolose sectoral crediting baselines;]

Alternative 3

[NAMAs must contribute to overall global GHG emission reductions in a measurable way (tons of emissions reduced) so that progress in achieving global emission reductions can be assessed and effort compared, and may include measurable and quantifiable emission reductions achieved through:

- (a) renewable energy targets
- (b) energy efficiency targets
- (c) ... etc.]

Alternative 4

[Nationally appropriate mitigation actions shall incorporate the development and diffusion of low greenhouse emitting technologies, particularly renewable energy and energy efficiency technologies.

Nationally appropriate mitigation actions shall not include technologies that have adverse impacts on the environment, including, inter alia, nuclear power and large scale hydro electric power.

Parties that undertake Tier Three actions may be eligible to undertake international emissions trading.

Eligibility for participation in international emissions trading shall be subject to relevant rules, modalities and guidelines developed by the COP (or Conference of Parties serving as the assembly of Parties.)

Any such trading shall be supplemental to domestic actions for the purposes of meeting commitments or actions and supplemental to Tier One and Tier Two NAMAS.

Units generated through trading under this Article may be inter-tradable with units generated by the Kyoto Protocol, subject to rules, modalities and guidelines developed jointly by the COP (or Conference of Parties serving as the assembly of Parties to this Protocol) and the Conference of Parties serving as the meeting of Parties to the Kyoto Protocol.]

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

Move paragraphs 70-73 as options under paragraph 74.

74. [The NAMAs by developing country Parties

[Option 1

[shall][should] be distinct from the commitments of developed country Parties and should not constitute binding obligations or targets for developing country Parties [, or be used as a basis for differentiating among them].]

NAMAs may comprise individual mitigation actions, sets of actions or programmes, including sustainable development policies and measures, REDD, programmatic CDM, no-lose sectoral crediting baselines and others, that are enabled by measurable, reportable and verifiable financial, technological and capacity-building support.

[Option 2

{should} {shall} be different for different groups of countries, depending on the level of development of their economies, [particularly in the case of LDCs and SIDS], and on their respective

capacities and specific national circumstances [, including limited opportunities that may be available for using alternative energy sources].]

Option 3

in further implementation of Article 4.1 of the Convention, shall be elaborated in the context of national low-emission development strategies to be developed by [all] developing country Parties consistent with their capacities and in the context of their broader sustainable development strategies. These low-emission development strategies]

[Option 3.1

shall include an emission pathway (emission projection planned to be achieved with the implementation of the strategy). [The strategies should be put in place no later than 2012 and cover all key emitting sectors.]]

[Option 3.2]

for developing country Parties whose national circumstances reflect greater responsibility or capabilities shall be formulated and submitted as low-emission strategies for long-term net emission reductions by 2050, consistent with the levels of ambition needed to contribute to meeting the ultimate objective of the Convention. [In this context, these countries shall implement NAMAs in the 2020/(...) time frame that are quantified (e.g. reduction from business-as-usual). [These countries shall indicate dates by when they will commit to the types of action undertaken by developed country Parties²⁰.]]] [Actions by developing countries will be enhanced with support from developed countries]

Alternative to option 3.2:

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

With respect to developing country Parties whose national circumstances reflect greater responsibility or capability:

For each such Party, Appendix 1 (found in Addition 2 under proposals for additional sections/subsections at the beginning of Chapter III) includes nationally appropriate mitigation actions in the 2020/[] timeframe that are quantified (e.g., reduction from business-as-usual) and are consistent with the levels of ambition needed to contribute to meeting the objective of the Convention.

Each such Party shall formulate and submit a low-carbon strategy for long-term net emissions reductions by 2050, consistent with the levels of ambition needed to contribute to meeting the objective of the Convention

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

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

[Option 4

[[shall][could include] actions [be] [in the form of sectoral and economy-wide GHG emission intensity targets, with a view to substantially limiting the growth of GHG emissions in those developing countries that contribute substantially to global emissions of GHGs] [and have appropriate response capabilities]. In addition[, each developing country Party {should} {shall} develop a voluntary national action plan, including policies and measures for mitigation, which {should} include quantified elements to the extent possible.]]

As part of the nationally appropriate mitigation actions described in Annex C, each Party included in Annex C shall develop and submit a national action plan, including policies and measures for mitigation, which shall include quantified elements to the extent possible.

²⁰ As described in paragraph 62 above.

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The Parties included in Annex C which have substantial contribution to the global emissions of greenhouse gases and have appropriate response capabilities, shall achieve their respective greenhouse gas emission intensity targets as described in Annex C in the commitment period from 2013 to 20XX, with a view to limiting substantially their greenhouse gas emission growth.

Annex C

Party	Nationally appropriate mitigation actions to be taken pursuant to Article 3, paragraph 2 (actions by developing country Parties)			
A	To develop and submit national action plan			
В*	(1) To develop and submit national action plan			
	(2) To achieve targets as described below:			
	(a) Economy-wide GHG emissions or energy consumption per GDP: xx tonnes-CO ₂ e/US\$ or millions tons of oil equivalent/US\$			
	(b) GHG emissions per unit and other targets in major sectors			
	(i) Iron and Steel: xx kg-CO ₂ e/ton-crude steel (distinguished by major steel-making methods)			
	(ii) Cement: xx kg-CO ₂ e/ton-cement or MJ/t-clinker			
	(iii) Aluminum: xx kg-CO ₂ e/ton-primary aluminum			
	(iv) Power generation: Thermal efficiency of Coal fired powered plant (per cent)/Share of total introduction volume of non-carbon energy (per cent or kw)			
	(v) Other sectors			
С	To develop and submit national action plan			

(Note) Parties marked with an asterisk ("*") are the Parties which have substantial contribution to the global emissions of greenhouse gases and have appropriate response capabilities.

[Option 5

{shall} {should} be incorporated in national schedules. Each {developing country} Party {shall} {should} establish, regularly update and implement the contents of national schedules, which {shall} include long-term national GHG limitation or reduction pathways, quantified emission limitation and reduction commitments [for 2020, and the measurable, reportable and verifiable mitigation policies and measures designed to meet those commitments, subject to regular review by the COP]. {Schedules should identify where specific mitigation actions were made possible through previously agreed international support} [Schedules for LDCs should include a description of intended actions, including those that might benefit from additional international support.][LDCs are invited to establish a national schedule for the commitment period [20XX] to [20XX] at their discretion.]]

[Option 6

{should} evolve over time to reflect changes in national circumstances assessed in accordance with objective criteria of economic development.]] [The Conference of the Parties should review the circumstances of each Party periodically.]

Move to proposed new section on mitigation elements common to all Parties

Option 6.1

[shall][should] be distinct from the commitments of developed country Parties and should not constitute binding obligations or targets for developing country Parties, [or be used as a basis for differentiating among them.]] {Should} {Shall} be different for different groups of countries, depending on the level of development of their economies, (particularly in the case of LDCs and SIDS), and on their respective capacities and specific national circumstances.

Option 6.2

Cooperative sectoral approaches and sector specific actions can be designed by developing countries within their NAMAs in order to receive financial support and technology transfer to achieve the mitigation potential identified in the selected sectors. These actions would not be eligible for crediting or participation in any market mechanism.

Alternatives to paragraph 74:

Alternative 1

[The NAMAs by developing country Parties {shall} {should}:

Option 1

be distinct from the commitments of developed country Parties and other Parties included in Annex I of the Convention and should not constitute binding obligations or targets for developing country Parties, or be used as a basis for differentiating among them.

Option 2

for developing country Parties be formulated consistent with the levels of ambition needed to contribute to meeting the ultimate objective of the Convention.

Option 3

may be in the form of sectoral and economy-wide GHG emission intensity targets (GHG emissions per GDP), with a view to substantially limiting the growth of GHG emissions in those developing countries that contribute substantially to global emissions of GHGs. In addition, each developing country Party {should} {shall} develop a voluntary national action plan, including policies and measures for mitigation, which {should} include quantified elements to the extent possible.]

Alternative 2

[NAMAs may be different for different groups of countries, depending upon their national circumstances.]

- 74.1 The NAMAs of developing country Parties shall take into account their national circumstances. Parties' ability to reduce greenhouse gas emissions is affected by their access to alternative energy options. To this effect, pursuant to Article 4, paragraph 10 of the Convention, the difficulties faced by developing country Parties in switching from fossil fuels to alternative energy sources shall be quantified and taken into account to reflect their alternative-energy disadvantage.
- 75. [Developing country Parties [should][could][may on voluntary basis][may] [register][submit] their [ongoing and planned][proposed] NAMAs, in the context of their low-carbon/emission development strategies to the coordinating mechanism, in order to gain international recognition of these actions [and to seek financial, [and] technological and capacity-building support to undertake [further][the proposed] actions.]] Developing country Parties should elaborate further actions for which they seek financial and technological support in their Low Emission Development Strategies.

Alternatives to paragraph 75:

<u>Alternative 1</u>

[Financial and technological support shall enable developing country Parties to implement their NAMAs.]

<u>Alternative 2</u>

[All developing countries shall be provided with financial and technological support to undertake their actions, and such actions once supported may be registered so as to gain international recognition for their contribution to towards mitigating climate change]

Alternative 3

[Developing country Parties will only register those NAMAs, for which it wishes to secure international financial and technological support.]

- 75.1 Developed countries Parties should register their financial, technological and capacity-building supports in order to fulfill their obligation under the Convention.
- 76. [Actions by developing country Parties that [are qualified as NAMAs and] can be registered [comprise][include]

[Option 1

actions of three types: (1) actions that are undertaken by developing country Parties and are not enabled or supported by other Parties [("unilateral NAMAs")]; (2) actions that are supported by a fund

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and financed by developed country Parties; [and (3) actions that are undertaken to acquire carbon credits.]]

Option 2

only actions that [require support][are supported][and enabled by technology, financing, and capacity-building in MRV manner] by developed country Parties.]] [There will be a mechanism to register and facilitate implementation of nationally appropriate mitigation actions and corresponding MRVed support. Actions are conditional on support.]

Alternatives to paragraph 76:

Alternative 1

[NAMAs eligible for registration may include:

- (a) actions that are supported by developing country Parties;
- (b) actions for which support is sought;
- (c) unilateral actions that are undertaken by developing country Parties that do not require support, for which recognition is sought.

Supports by developed countries that can be registered comprise only supports that are delivered through technology and financing mechanism under the UNFCCC]

Alternative 2

[Actions by developing country Parties that qualify as NAMAs and can be registered comprise actions of three types: (1) actions that are undertaken by developing country Parties and are not enabled or supported by other Parties (i.e unilateral NAMAs); (2) actions that are supported by developed country Parties and other developed Parties included in Annex II of the Convention; and (3) actions that are undertaken to acquire carbon credits, such as a listing of projects under the CDM, and other crediting programmes which could be set-up in the future. These would be subject to international verification consistent with the guidelines for the CDM.]

Alternative 3

[Only those actions can be characterized as NAMA if they are supported by developed country Parties.]

[A mechanism to register and facilitate implementation of nationally appropriate mitigation actions and corresponding support]

Note: Parties presented four detailed proposals for a mechanism for registering and facilitating implementation of NAMAs and the financial, technology and capacity-building support for NAMAs. The essential elements of these proposals are reflected in paragraphs 77–80 below.

77. [Option 1

A NAMA register shall be established [as a mechanism][as part of the Financial Mechanisms] to enhance the implementation of the relevant provisions of Articles, 4.1, 4.3 and 4.5, 4.6, 4.8 and 12.4 of the Convention by facilitating the identification, mobilization [and matching] of support required to implement NAMAs by developing country Parties and enable international recognition and communication of such actions.

[Developing countries may register their NAMAs on a voluntary basis as elaborated in para 75.1]. Once a NAMA is registered and approved by a technical panel, the provision of financial resources and technology transfer shall become automatic [The [level][extent] of mitigation [effort][action] by developing countries shall be commensurate with the level of support received.]

[Developing countries may register their NAMAs with the UNFCCC financial and technology mechanism(s) on a voluntary basis. The level of mitigation effort by developing countries shall be commensurate with the level of financial resources and technology received. Once a NAMA is registered and approved by a technical panel, the provision of financial resources and technology transfer shall become automatic.]

[NAMAs may comprise individual mitigation actions, sets of actions or programmes, [including sustainable development policies and measures, [REDD], [programmatic CDM], [[no-lose sectoral crediting baselines] and others]].]

[Implementation of actions shall be enhanced through the provision of financial resources technology transfer, and support for building institutional capacity in developing countries. Financial resources from Annex I Parties shall be measured, reported and verified when provided to the Financial Mechanism. Technology transfer and capacity-building shall be measured, reported and verified during the course, and following the completion, of the associated NAMA.]

[The UNFCCC Secretariat shall open and maintain the register of NAMAs. The register shall initially contain a list of indicative [proposed] mitigation being implemented or being proposed actions [and information related to the assumptions and [methodology][activities] underpinning the proposed actions, the emissions that would be avoided as a result of the actions (relative to a GHG emission baseline)][, the sustainable development benefits identified by developing country,] and the support that would be required for the proposed methology and actions. [This information shall be assessed by a technical panel composed of representatives of Parties mainly from developing counties, including representatives from LDCs established under the Convention. Once the technical panel has reported to the party that the support and action [and support] have been established in line with agreed approach, additional financial support shall be given to that particular Party's an incentive for the continuation and sustainability of such [good practice,]. [A][a] request to the financial and technology mechanism(s) of the Convention, which shall be responsible for matching support to actions, shall be triggered in this regard.] [Support should match actions to be undertaken, during the whole process.]

[Implementation of actions shall be enhanced through support for building institutional capacity in developing countries. After implementation, both the action and the support shall be measured, reported and verified. The register shall be updated [annually], to reflect the status of implementation of action and its support. Following the first measurable, reportable and verifiable report, the NAMA shall be considered registered (and no longer indicative).]

[International financial and technology support for NAMAs will come from a range of sources mobilized by the financial and technology mechanism(s)]. A set of criteria will be developed to ensure that the funds are spread evenly, ensuring equity, and a fair distribution of benefits and an even spread across all economic sectors.]

Alternatives to paragraph 77:

Alternative 1

[A registry for NAMAs by developing country Parties shall be established with the aims of recognizing their actions as part of the global efforts to combat climate change; and providing a platform for matching those actions, if needed, with measurable, reportable and verifiable support by developed country Parties and other developed Parties included in Annex II of the Convention. Developing country Parties {shall} be invited to register their NAMAs in the registry and implement them so that their actions can be recognized at the international level and supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner. Developing country Parties {shall} also be invited to register in the registry and implement, on a voluntary basis, their unilateral NAMAs taken without technology, financing and capacity-building support, which can be measured, reported and verified according to guidelines agreed by the COP.]

Alternative 2

[Developing country Parties may nominate Tier One, Tier Two and or Tier Three nationally appropriate mitigation actions to be incorporated in an International Register maintained by the secretariat.

The modalities for the operation of the International Register shall be developed by the Conference of Parties serving as the assembly of Parties.]

78. [Option 2

A registry for NAMAs by developing country Parties shall be established with the aims of recognizing the actions as part of the global efforts to combat climate change and providing a platform for

[matching] those actions, [if needed, with measurable, reportable and verifiable support by developed country Parties.]

[Developing country Parties {shall} be invited to register their NAMAs in the registry and implement them so that their actions can be recognized as climate actions at the international level and supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.]

[Developing country Parties, except LDCs, {shall} [also be invited] to register in the registry and implement, [on a voluntary basis], their unilateral NAMAs taken without technology, financing and capacity-building support, in accordance with national regulations, [which can be measured, reported and verified according to guidance provided by the COP]].

[Issues identified by the proposing Party in the context of this option as requiring further elaboration at the appropriate time include: the scope and time frames of NAMAs that are to be registered; the expected contribution of NAMAs to mitigation; modalities to match technology, financing and capacity-building support with NAMAs registered; modalities to measure, report and verify the actions implemented and the support provided; and the modus operandi of the registry.]

79. [Option 3

[A support and [accreditation] mechanism shall be established with the functions of:

- (a) Registering and pooling all pledges for voluntary mitigation actions by developing countries, [and all pledges for financial support and technology transfer by developed countries;]
- (b) [Providing a platform for matching NAMAs with financial and technology support and with the provision of emission reduction credits for those actions;]

Alternative to subparagraph (b)

[Establish a link with the financial and technology mechanism designed under the Convention;]

- (c) Providing for measurement, reporting and verification of both actions and the corresponding support;
- (d) Recognizing NAMAs as part of the global effort to combat climate change.

[The support and [accreditation] mechanism shall facilitate the implementation of NAMAs through:

- (a) "The support path", involving direct financial and technological support by developed countries, channelled through the financial and technology mechanism(s) of the Convention;
- (b) ["The accreditation path", involving provision of emission reduction credits for NAMAs.]

[Developing countries may choose one or [both] of the above "paths" to implement NAMAs.]]

Developing country Parties shall decide when the level of support from [both] sources mentioned above is sufficient for the implementation of a proposed NAMA. They retain the right to delay implementation of the proposed NAMA if they consider the level of support insufficient.]]

80. [Option 4

A coordinating mechanism shall be established with the functions of:

- (a) Providing a technical assessment of the low-emission development strategies of developing countries and the NAMAs contained therein and of the corresponding needs for support identified. It shall assess, in particular, the contribution of a proposed emission pathway to a substantial deviation from business-as-usual emission projections:
- (b) Matching action to support, in such a way as to maximize cost-efficiency and to strengthen financing for NAMAs, taking into account the capabilities of each country;
 - (c) Validating matched action and support.]

[NAMAs and corresponding support that have been approved by the coordination mechanism shall be inscribed in a register, with a view to recognizing actions undertaken by developing countries with strong measurement, reporting and verification of both national action and support.]

Move all proposals related to Finance contained in paragraphs 75–80 to chapter IV.A on Finance

Move all options included in paragraphs 77–80, except paragraph 78, subparagraph 3, to chapter IV.A on Finance.

Alternative to paragraph 80:

[A coordinating mechanism is hereby established. The purpose of the coordinating mechanism shall be inter alia, to facilitate:

- (a) Provide technical assessment of propositions
 - (i) of the low-carbon/emission development strategies, in particular in terms of contribution of the proposed emission pathway to the substantial deviation from business as usual expected from developing countries as a group by 2020;
 - (ii) of the proposed NAMAs and of the corresponding needs for support identified;
- (b) Matching of action to support, in such a way as to maximise the cost-efficiency and strengthen financing for actions (i.e. as to maximise the emissions reductions achieved with regard to the support provided);
 - (c) Validation of matched action and support;

NAMAs and corresponding support that are validated by the coordinating mechanism as part of a low-carbon/emissions development strategy shall be inscribed into a register.

The register shall contain:

- (d) actions taken autonomously,
- (e) actions requiring support,
- (f) and actions to be supported by the carbon market.

For each validated nationally appropriate mitigation action and corresponding support, the register shall in particular contain the following information: (to be determined)

The Meeting of the Parties under this Agreement shall, at its first session, elaborate further modalities and procedures for the coordinating mechanism and the register.

Governance of the coordinating mechanism, including possible supporting technical bodies: (text to be developed)]

Issues identified by the proposing Party in the context of this option as requiring further elaboration at the appropriate time in the context of details necessary for operation of the registry include governance of the coordinating mechanism, including possible supporting technical bodies; specific information on NAMAs and support to be registered; and further modalities and procedures.]

Note: Paragraphs 81–82 below present additional elements proposed by Parties that could apply to one or more of the above paragraphs.

- 81. [[The mechanism(s) for [registering and] facilitating implementation of NAMAs in the context of financial, technology and capacity-building support [should]{shall}:]
- (a) [Serve as a functional "window" to mechanism(s) for finance and technology under the Convention;
- (b) [Allow for confirmation that specific support has been channelled to a specific action. Once this channelling has been confirmed, both support and action {should} become effective within the registry simultaneously;]]
 - (c) Not replicate CDM procedures.]

Move paragraph 81 to chapter IV.A on Finance.

- 82. [The function of the mechanism(s) {shall} {should} include registering:
- (a) [The expected outcome of each NAMA in terms of its sustainable development benefits and co-benefits and mitigation benefit that including direct and indirect benefits the GHG emission [reductions][limitation]]
- (a).1 Mitigation actions implemented by developing countries with their own resources could be reported in national communications, enhancing the implementation of Article 12.1 of the Convention.

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Funding for national communications shall be adjusted accordingly to respond to the added reporting burden.

- (a).2 Mitigation actions receiving support shall be reported in the registry.
- (a).3 Developed countries shall report on the measurement of support in their national communications under Article 12.3 and support shall be updated in the registry on an annual basis [Option 1

in relation to the emission baselines or business-as-usual path [, including at a national or sectoral level][for several time horizons, for example 2020, 2030 and 2050];]

[Option 2

directly, not based on the definition of a baseline or other intermediate outcomes which can be used to show the mitigation benefit of NAMAs when approprate baseline methodologies are not available;]

- (b) An estimate of the full [incremental cost] of each NAMA, including for technology transfer and capacity-building;
- (c) Information relating to implementation of each NAMA, including information on support received and the time frame for implementation;
- (d) [[Any proposed use of a carbon market mechanism, and the associated caps and thresholds.]][Support by developed countries in terms of technology, finance and capacity-building]]. Move paragraph 82 to a proposed new subsection on low-emission development strategies <u>Alternatives to paragraph 82:</u>

Alternative 1

[Information provided in connection with NAMA registration shall include:

- (a) the expected outcome in terms of quantifiable emission reductions in tons of CO₂-eq;
- (b) contribution of reductions to country's achievement of significant deviation from business as usual emissions trajectory in accordance with the country's low emission development programme;
- (c) timeframe for implementation;
- (d) estimated cost.]

Alternative 2

[The function of the mechanism(s) {shall} {should} include registering:

- (a) The expected outcome of each NAMA in terms of its sustainable development benefits and co-benefits and the GHG emission reductions
- (b) Nationally appropriate mitigation actions by developing countries
- (c) Mitigation result, which may be emissions baselines specific to projects and programmes;
- (d) An estimate of the full incremental cost of each NAMA, including for technology transfer and capacity-building;
- (e) Information on the sustainable development benefits.]

2. Means of implementation

Move this section to chapter IV on Enhanced Action on Financing, Technology and Capacity-building

83. [Actions including [NAMAs by developing countries [should] {shall} be supported and enabled [on the basis of {agreed} full {incremental} costs][on the basis of agreed full incremental cost][on the basis of agreed full cost and agreed full incremental cost] and total cost as appropriate [by developed country Parties.] The support for NAMAs [shall][should][may] cover various activities in mitigation, including, but not limited to:]

Alternatives to the chapeau of paragraph 83:

Alternative 1

[NAMAs for the agreed allocation deviation from business as usual that is undertaken by developing country Parties shall be supported on the basis of full incremental cost. The support should cover various activities in mitigation, but not limited to:]

Alternative 2

[NAMAs by developing countries {should} {shall} be supported {on the basis of {agreed} full and {incremental} costs} on full cost basis and shall be undertaken voluntary basis. The support {should} cover various activities in mitigation, including:]

- (a) Activities at different stages of a NAMA, including design preparedness, planning and implementation and related capacity-building;
- (b) [Creating and sustaining enabling environments for mitigation actions in developing countries, [including integrated [territorial] plans at national, regional and local level;]][including support for climate integrated territorial plans at local, national and regional level, as appropriate]
- (c) [Identifying and removing barriers to unilateral actions;]
- (c).1 Planning and implementation of mitigation activities that have adaptation potentials;
- (d) [Undertaking measurement, reporting and verification of actions;]
- (e) [Technology needs assessments (TNAs);]
- (f) [Elaboration of low-emission development strategies and plans for [all developing countries][the LDCs] {should} {shall} be supported {on the basis of agreed full incremental cost} .]]

Make subparagraph 83 (f) paragraph 83.1

Alternative to paragraph 83:

[NAMAs by developing countries shall be supported on the basis of:

- (a) agreed full cost for enabling activities; and
- (b) agreed full incremental cost for implementation of NAMAs.]
- 83.1 NAMAs listed for support in the registry could cover various mitigation activities.
- 84. [[[Matching action to] support shall be undertaken in such a way as to maximize cost-efficiency and strengthen [financing][the provision of financing, technology and capacity-building] for actions. [The establishment of mechanisms for [matching] support and actions [should][shall] take into account the need to ensure environmental integrity of NAMAs and aim at achieving cost-efficient emission reductions.]] The support [should][shall] be based on the needs identified by developing country Parties to enhance implementation of their NAMAs.]

Alternative to paragraph 84:

[The provision of financial resources and technological transfer for matching action to support shall be undertaken in such a way as to maximize cost-efficiency and strengthen financing for actions. To this end, the financial and technology transfer mechanisms under the convention will play a lead role. Taking into account the need to ensure environmental integrity of NAMAs and aim at achieving cost-efficient emission reductions. The support {should} be based on the needs identified by developing country Parties to enhance implementation of their NAMAs.]

- 85. [[Support provided through the registry should not be channeled [solely] to actions that achieve direct emission reductions.] Support {should} be differentiated between different kinds of actions.]
- 86. [Incentives for developing country Parties can be provided by linking supporting measures (in technology and finance) and capacity-building with efforts in measurement, [and] reporting [and verification.]
- 87. [Issues identified by Parties in the context of paragraphs 83–86 above as requiring further elaboration at the appropriate time include the concept and modalities of matching action with support.]

3. [Measurement, reporting and verification of supported actions]

Move this section to a proposed stand-alone section on MRV of commitments and actions (of both developed and developing countries)

[Measurement and reporting]

- x.1 MRV of NAMAs and their desired outcomes shall apply only in such cases where, and to the extent that, they are enabled and supported in terms of finance and technology by the Annex I country Parties through an agreed financing mechanism.
- x.2 Guidelines for such MRV shall be established and approved by the COP.
- x.3 Developing country Parties may establish national coordinating bodies to build institutional capacity, and facilitate coordination for the submission of proposals for NAMAs, together with the details of the support required for the implementation of the proposals for NAMAs. The latter should include an estimate of the full incremental costs which are to be met by the Financial mechanism under the Convention.
- 88. [Measurement and reporting of NAMAs and their achieved outcomes (including those in paragraph 82 (a) above)]

Option 1

shall be applicable only to the mitigation actions as enabled by technology and finance per se.]

[Option 2

shall cover both national low-emission strategies and NAMAs undertaken in the context of those strategies.]

Alternative to Option 2

Alternative 1

[shall cover the content in Parties' national schedules, including [both national low-emission] nationally appropriate mitigation strategies, long-term national GHG emissions limitation or reduction pathways, and NAMAs undertaken in the context of those strategies]

Alternative 2

[shall cover the intensity targets or national action plans and NAMAs undertaken in the context of achieving those targets or plans]

Move paragraph 88 to the first section of a proposed new section on common elements for all Parties. Alternatives to paragraph 88:

Alternative 1

[NAMAs and their achieved outcomes shall be:

- (a) Monitored at a national level according to guidelines to be decided by the Meeting of the Parties to this Agreement at its first session building inter alia on existing IPCC guidance;
- (b) Reported to the UNFCCC according to reporting guidelines to be decided by the Meeting of the Parties to this Agreement at its first session, taking into account the principles of transparency, accuracy, consistency, comparability and completeness, and address inter alia achieved emission reductions as well as their effectiveness in relation to the low-carbon/emissions development strategies;
- (c) Verified under the auspices of the UNFCCC according to agreed guidelines decided by the Meeting of the Parties to this Agreement at its first session.]

Alternative 2

[The Parties shall report on nationally-appropriate mitigation actions in an agreed format that indicates the impact of these measures on national emissions inventories.

Emission reductions achieved in Non-Annex I Parties that are below measured, reported and verified baselines shall be recognized.

Non-Annex I Parties with emissions representing in excess of [X] per cent of global emissions in [XXXX] shall report every two years, with the first report to be presented no later than [date]. LDCs and small island developing States shall be exempted from this requirement but may report at their discretion or through the national communication process.]

89. [Measurement and reporting shall be undertaken under the guidance of the COP [following internationally agreed guidelines that build on, inter alia, existing IPCC guidance] and involve regional center and national expert [in accordance with national measuring and reporting procedures and practices] [and taking into account countries' national circumstances].]

Alternative to paragraph 89:

[Measurement and reporting of NAMAs, in accordance with the established guidelines, shall be undertaken by the host country, while the desired outcomes from such NAMAs shall be verified by the Financing Mechanism established under the Convention and the host country jointly.

A mechanism to register and facilitate the implementation of NAMAs and support for them shall form part of the Financing Mechanism established under the Convention. The mechanism shall be established at the UNFCCC secretariat under the authority of the COP and shall be supported by:

- (a) A technical panel established under the convention to assess both the assumptions and methodology underpinning NAMAs and the support required for such actions,
- (b) A new body established under the COP that will conduct the verification of NAMAs and their corresponding technology, finance and capacity-building support.]
- 90. [Each developing country Party shall {in addition} submit [its national GHG emissions inventories of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol containing] information on]

Alternative to the chapeau of paragraph 90:

[In complying with their obligations under Article 12, paragraph 1, of the Convention, all developing country Parties shall submit an annual national inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol.

In addition, each developing country Party shall submit supplemental information for nationally appropriate mitigation actions by developing countries using the reporting template adopted by the [supreme body to this instrument] and contained in the appendix (*see below*). This shall contain information on inter alia:]

Option 1

how implementation of NAMAs affects GHG trajectories at a national and/or sectoral level or the national baseline.]

[Option 2

the low-emission development strategy of the country in the context of its broader sustainable development strategy and GHG emission pathway.]

[Option 3

for [[major] developing countries]: quantification of actions and quantified energy intensity targets, as well as mitigation policies and measures designed to implement them (especially in major sectors), [based on the requirements which are the same as for developed country Parties].]

[REPORTING TEMPLATE]

Party	National Circumstances	Date of latest reported National GHG Inventory and Date of inventory review	Sector	Agreed projected business as usual emissions/re movals	Nationally Appropriate Mitigation Actions	Expected emission reduction or limitation ^a	Emission budget
Party A	GDP per capita GHG per capita Mitigation potential etc.		Stationary Energy		List NAMAS according to: Quantified targets Price based measures Regulations Other policies and measures	YMT	XMT – (YMT + ZMT)
			N 1 1 F			ZIVII	
			Mobile Energy				
			Agriculture				
			LULUCF				
			Industrial Processes				
			Solvents				
			Waste				
			Multiple sectors				
TOTAL			•	TOTAL Business As Usual Projection		UGT	TOTAL BUDGET

^a Relative to BAU over the sector and expected to be achieved by undertaking listed NAMAs.

91. [[National inventories of developing country Parties shall be submitted [{regularly, on a more frequent basis than is current practice under the Convention [every two years]][annually, starting as soon as possible and not later than 2011].}][provided sufficient financial support by developed country Parties] For LDCs submissions shall be at their discretion based on the provision of resources and national capacities.]

Alternatives to paragraph 91:

Alternative 1

[National inventories of developing country Parties shall be submitted regularly, and on a more frequent basis. This enhanced reporting shall start as soon as possible. In accordance with Article 4(3) of the Convention, developed country Parties and other developed Parties included in Annex II of the Convention shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties, particularly the LDCs and SIDs, in meeting the requirements of this paragraph.]

Alternative 2

[Developing country Parties shall provide annual inventories as soon as possible and not later than 2011, at least for the key emitting categories, facilitated by comprehensive capacity-building and technical and financial support. These inventories shall include a national inventory report with the estimation methodologies used and shall be subject to international review by expert review teams building on existing independent review processes for Annex I Parties inventories. The Meeting of the Parties to this Agreement shall, at its first session, decide on reporting and review guidelines to be used for national GHG inventories of developing countries under this Article.]

Alternative 3

[Mitigation actions implemented by developing countries with their own resources shall be reported in national communications, enhancing the implementation of Article 12.1 of the Convention. In addition, developing countries may voluntarily choose to register actions undertaken with their own resources, but for which they are not seeking multi-lateral support. Such actions may be registered for recognition purposes only.

Mitigation actions receiving support shall be reported in the registry. Reporting on the status of implementation to the registry shall be annual with an update based on measured outcomes every two years, alternating with reporting on GHG inventories.]

- 92. [Unilateral NAMAs {and national plans that are undertaken by developing country Parties and are not enabled or supported by other Parties} may be reported through national communications.]
- 93. [[Sufficient][Adequate and accessible][enhanced][agreed full costs][Adequate technical,][sustained] financial [support] and capacity-building shall be provided to developing country Parties to enable them to develop and maintain capacity to prepare national GHG emissions inventories and national communications.] Developed countries shall report on the measurement of support in their national communications under Article 12.3 and support shall be updated in the registry on an annual basis.

Verification

- [x.1 Achievement of intensity targets by major developing country Parties shall be reviewed by expert review teams.]
- 94. [[Unilateral NAMAs][Nationally appropriate mitigation actions][under the national action plan] by developing country Parties]

Option 1

{shall} {should} be verified by national entities in accordance with internationally agreed guidelines.]

[Option 2

should not be subject to verification.]

[Option 3

shall be reviewed by the Conference of the Parties serving as the meeting of the Parties to a new Protocol.]

Option 4

shall be subject to international verification according to modalities, procedures and guidelines to be established under the authority of the COP. This verification should include international auditing (e.g. by international expert teams).

Alternative to paragraph 94:

[Unilateral NAMAs by developing country Parties {shall} {should} be verified by national entities in accordance with internationally agreed guidelines. In addition, the methodologies of the national verification process should be open to international auditing. If necessary, and subject to agreement by the developing country Party undertaking the NAMA, the domestic verification can also be confirmed by an international verification process, with due respect for the protection of confidential information.]

- 95. [Actions that are implemented with international support [and do not result in transfer of carbon credits][and their outcome in terms of emission reductions] {shall} be subject to [international] verification [from the third Party], together with the support as measured and reported, according to modalities, procedures and guidelines to be established under the authority of the COP. [This verification [shall][should] include international auditing (e.g. by international expert teams)][This verification should be conducted by national entities in accordance with internationally agreed guidelines].]
- 96. [NAMAs that are financed through the carbon market and with market finance {shall} be verified, together with the corresponding support as measured and [reported, by institutions accredited by

the COP and][reported by national level institutions] according to the [same multilaterally] agreed guidelines.]

Alternative to paragraph 96:

[NAMAs that are financed through the [flexible][carbon market] mechanisms and their outcome in terms of emission reductions {shall} be verified, together with the corresponding support as measured and reported, by institutions recognized by the meeting of the Parties under the Copenhagen Agreement using and building upon existing international guidelines for these mechanisms.]

- 97. [Issues identified by Parties in the context of paragraphs 88–96 above as requiring further elaboration at the appropriate time include further guidelines, templates, methodologies and modalities for reporting of actions, taking into account the type of actions as well as specific circumstances and capacities of different groups of developing countries, including SIDS and LDCs.]
- 97.1 For supported NAMAs by developing countries, developed country Parties including those in Annex II shall provide new and additional financial resources to meet the agreed full cost of verification undertaken by developing countries.
 - 4. [Measurement, reporting and verification of [support][the provision of financial resources and technology transfer to the developing country Parties]

Move this section to chapter IV on Enhanced Action on Financing, Technology and Capacity-building

- 98. [Developed country Parties shall measure [(where measurable)][and], report and have support verified in accordance with international guidelines that is provided for NAMAs and {registered under the mechanism(s) referred to in paras. 77–82 above}, including the following:
- (a) [Allocation and transfer of finance for means of implementation [granted [over and above ODA], in units of an agreed common currency];]
- (b) Technology transfer, including development, deployment, application and diffusion[, in units established by the COP];
- (c) The agreed full incremental costs of technology transferred to developing country Parties [in units of an agreed common currency];
- (d) Support for capacity-building according to indicators [and in units] established by the COP.] *Alternative to paragraph 98:*

[Parties shall measure and report support that is provided for NAMAs.]

99. [Developed country Parties shall report on the measurement of support in their national communications under Article 12.3 of the Convention. Information on the support provided shall be updated and verified [annually]. [The measurement and reporting of support {shall} be based on new methodologies for assessing support.]]

Alternatives to paragraph 99:

Alternative 1

[Parties shall regularly report on the support provided.]

Alternative 2

[Developed country Parties shall report on the measurement of financial resources, transfer of technology and other actions in their national communications under Article 12.3 of the Convention. Information on actions to fulfil commitments on financial resources, transfer of technology and other actions under the Convention shall be updated annually. The measurement and reporting of these actions {shall} be based on new methodologies for assessing their adequacy, predictability and effectiveness.]

100. [[The support shall be verified under [an international][a national] register] in terms of contributions by developed [and developing] countries within their responsibilities and respective capacities.]

Alternatives to paragraph 100:

Alternative 1

[The support shall be verified within the existing in-depth review of National Communications from Annex-I country Parties.]

Alternative 2

[The support shall be verified using international guidelines and be reported in an international register under the UNFCCC.]

Alternative 3

[The provision of financial resources, transfer of technologies and other actions shall be verified by the Verification Group of the UNFCCC finance and technology mechanism(s) in terms of contributions by developed {and developing} countries within their respective capacities.]

101. Issues identified by Parties [in the context of paragraphs 98–99 above] as requiring further elaboration at the appropriate time include further guidelines, methodologies and modalities for measurement, reporting and verification of support, [including provision of a possible compliance mechanism].]

Proposed new subsection for Measurement, Report and Verification:

Methodological issues

- x.1 Each Party included in Annex I shall have in place, no later than one year prior to the start of the commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for the national systems, which shall incorporate the methodologies specified in paragraph 3 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of such commitment period.
- x.2 Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall have in place, no later than one year prior to the start of the commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for the national systems, which shall incorporate to the extent possible the methodologies specified in paragraph 3 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of such commitment period.
- x.3 Methodologies for estimating anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Where such methodologies are not used, appropriate adjustments shall be applied according to methodologies agreed upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session. Based on the work of, inter alia, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise such methodologies and adjustments, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to methodologies or adjustments shall be used only for the purposes of ascertaining compliance with commitments in respect of any commitment period adopted subsequent to that revision.
- x.4 The global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases listed in Annex A shall be those accepted by the Intergovernmental Panel on Climate Change and decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of the commitment period. Based on the work of, inter alia, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise the global warming potential of each such greenhouse gas, taking fully into account any relevant decisions by the

Conference of the Parties. Any revision to a global warming potential shall apply only to commitments in respect of any commitment period adopted subsequent to that revision.

Inventory and information

- x.5 Each Party included in Annex I shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the Conference of the Parties, the necessary supplementary information, including sectoral information, for the purposes of ensuring compliance with Article 3, paragraph 1 (commitments by developed country Parties).
- x.6 Each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to demonstrate compliance with its commitments under this Protocol.
- x.7 Each Party included in Annex I shall submit the information required under paragraph 5 above annually, beginning with the first inventory due under the Convention for the first year of the commitment period after this Protocol has entered into force for that Party. Each such Party shall submit the information required under paragraph 6 above as part of the first national communication due under the Convention after this Protocol has entered into force for it and after the adoption of guidelines as provided for in paragraph 8 below. The frequency of subsequent submission of information required under paragraph 6 above shall be determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol, taking into account any timetable for the submission of national communications decided upon by the Conference of the Parties.
- x.8 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under paragraphs 5 and 6 above, taking into account guidelines for the preparation of national communications by Parties included in Annex I adopted by the Conference of the Parties. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the start of the commitment period, decide upon modalities for the accounting of assigned amounts.
- x.9 Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, the necessary supplementary information, including sectoral information, for the purposes of ensuring the compliance with Article 3, paragraph 2 (Actions by developing countries Parties).
- x.10 Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information with respect to the implementation of Article 3, paragraph 2 (Actions by developing country Parties).
- x.11 Each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall submit the information required under paragraph 9 above annually. Each such Party shall submit the information required under paragraph 10 above as part of the first national communication due under the Convention after this Protocol has entered into force for that Party and after the adoption of guidelines as provided for in paragraph 12 below.
- x.12 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under paragraphs 5 and 6 above. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the start of the commitment period, decide upon modalities for the measurement of intensity targets.

Review of information

x.13 (a) The information submitted by each Party included in Annex I shall be reviewed by expert review teams pursuant to the relevant decisions of the Conference of the Parties and in accordance with guidelines adopted for this purpose by the Conference of the Parties serving as the meeting of the Parties to this Protocol under subparagraph (b) below. The information required under Article 5, paragraph 1(inventory and information), shall be reviewed as part of the annual compilation and

accounting of emission inventories and assigned amounts. Additionally, the information required under Article 5, paragraph 2 (inventory and information), shall be reviewed as part of the review of communications.

- (b) The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the review of implementation of the commitments by Parties included in Annex I by expert review teams taking into account the relevant decisions of the Conference of the Parties.
- x.14 The information submitted under Article 5, paragraph 7(inventory and information), by each Party which has its greenhouse gas emission intensity targets inscribed in Annex C shall be reviewed by expert review teams. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for this review.
- x.15 Expert review teams referred to in paragraphs 13 and 14 above shall be coordinated by the secretariat and shall be composed of experts selected from those nominated by Parties to the Convention and, as appropriate, by intergovernmental organizations, in accordance with guidance provided for this purpose by the Conference of the Parties.
- x.16 The review process shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of this Protocol. The expert review teams shall prepare a report to the Conference of the Parties serving as the meeting of the Parties to this Protocol, assessing the implementation of the commitments of the Party and identifying any potential problems in, and factors influencing, the fulfilment of commitments. Such reports shall be circulated by the secretariat to all Parties to the Convention. The secretariat shall list those questions of implementation indicated in such reports for further consideration by the Conference of the Parties serving as the meeting of the Parties to this Protocol.
- x.17 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, with the assistance of the Subsidiary Body for Implementation and, as appropriate, the Subsidiary Body for Scientific and Technological Advice, consider:
- (a) The information submitted by Parties under Article 5(inventory and information) and the reports of the expert reviews; and
- (b) Those questions of implementation listed by the secretariat, as well as any questions raised by Parties.
- x.18 Pursuant to its consideration of the information referred to in paragraph 5 above, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take decisions on any matter required for the implementation of this Protocol.
- x.19 The national action plan submitted under Article 3, paragraph 2 (Actions by developing country Parties), by each Party included in Annex C shall be reviewed by the Conference of the Parties serving as the meeting of the Parties to this Protocol. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for such review.

Proposed new subsection on Review mechanisms:

- x.20 The Parties shall undertake reviews of this agreement, including the consideration of commitments of the Parties for subsequent periods, in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information, bearing in mind the changes of circumstances of the Parties. The first review shall take place at least five years before the end of the 20XX, and further reviews shall take place at regular intervals and in a timely manner. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action, which may include the adoption of amendment to the Annex Band C.
- x.21 The Parties shall, at its first session or as soon as practicable thereafter, identify elements, including the economic development stages, response capabilities and shares of greenhouse gas emissions in the world, to be considered as criteria for changes of circumstances of the Parties.

Proposed new subsection on Compliance:

x.22 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol.

5. [Institutional arrangements²¹

Move this section to chapter IV on Enhanced Action on Financing, Technology and Capacity-building. International

- 102. [A mechanism or mechanisms to [register and facilitate the implementation of NAMAs][review low-carbon development strategies] and support for them (as referred to in paras. 77–82 above) [should]{shall} be established at the UNFCCC secretariat under the authority of the COP, supported by:]
- (a) [[A technical panel] established under the Convention to assess both the assumptions and methodology underpinning proposed [NAMAs][LCSs] [and the support required for the actions];]
- (b) [[A new body established under the COP] that will manage the measurement, reporting and verification of NAMAs and their corresponding technology, finance, and capacity-building support.]
- 103. [An international institutional framework [{shall}[should]] be [established][needed] for measurement, reporting and verification of GHG emission reductions and support from developed country Parties and to provide systematic support for Parties' preparation of low-emission strategies and national inventories for emissions and removals.]

National

104. [Option 1

[National coordinating bodies] [shall][should] be established or be appointed to build or strengthen institutional capacity in developing countries, and to provide support and facilitate coordination for [development and implementation of low-carbon strategies and national inventories][the submission of NAMAs to the international register to register and facilitate the implementation of NAMAs and support for them (as referred to in paras. 77–82 above). [The bodies should also facilitate coordination of mitigation actions undertaken without assistance from developed countries, to ensure international recognition of all mitigation action taken.]]] The agreed full costs of enabling activities undertaken by the national coordinating bodies shall be met by developed country Parties. The administration costs of national coordinating bodies shall be covered through international financial resources made available specifically for this purpose. A separate pool of funding to finance national coordinating bodies through a direct line item in the Secretariat's budget shall be established. Such support shall not be subject to MRV.

105. [Option 2

Each Party with GHG emission intensity targets shall have in place a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol. Guidelines for the national systems shall be elaborated.]]

- x.1 The proposed Financial and Technology Mechanism on Mitigation is meant to ensure the full, effective, and sustained implementation of the Convention, in relation to the implementation of commitments for the provision of financial resources, as mandated in Articles 4.1, 4.3, 4.4, 4.5, and 4.9 of the Convention and in accordance with Article 11.
- x.2 The proposed Financial and Technology Mechanism on Mitigation shall address all aspects of cooperation on technology research, development, diffusion, and transfer in accordance with Articles 4.3, 4.5 and other relevant articles of the Convention, in order to enable mitigation under the relevant paragraphs of decision 1/CP.13.

²¹ Institutional arrangements, including funds, for both adaptation and mitigation are presented in detail in Chapter IV.A 3 below.

- x.3 The proposed Financial and Technology Mechanism on Mitigation shall be governed by the following principles and guiding criteria:
 - (a) Be underpinned by the principle of common but differentiated responsibilities and equity.
 - (b) Operate under the authority and guidance, and be fully accountable, to the COP.
- (c) Have an equitable and geographically balanced representation of all Parties within a transparent and efficient system of governance (Article 11.2);
- (d) Enable direct access to funding by the recipients; and ensure the provision of new and additional, adequate and predictable financing resources for technology transfer;
- (e) Ensure recipient country involvement during the stages of identification, definition and implementation, rendering it truly demand driven;
- (f) Support the development and enhancement of endogenous capacities and technologies of developing country Parties.
- x.4 The Financial and Technology Mechanism on Mitigation shall aim to achieve:
 - (a) Accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on mitigation;
 - (b) Provision of full costs and full incremental costs, as per Article 4.3 of the Convention;
 - (c) Adequacy and predictability of funds for technology transfer;
 - (d) Removal of barriers for technology development and transfer.
- x.5 To support the implementation of the mitigation actions, the following new institutional arrangements should be established:
 - (a) An Executive Body on Finance and Technology for Mitigation (EBFTM), accountable to the COP, shall be established;
 - (b) The EBFTM will govern a Mitigation Fund to be created under the Convention.
 - (c) The EBFTM will be supported by four technical panels on:
 - (i) Research and Development;
 - (ii) Capacity-building;
 - (iii) Transfer of Technologies for Mitigation; and
 - (iv) REDD+;
 - (v) Market Mechanisms;
 - (vi) MRV.
- x.6 NAMAs should be submitted by developing countries to the EBFTM for support.

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 countries²²

Structural proposals

Proposal 1

Subsections 3 (MRV of actions) and 4 (MRV of support) should be merged into one single subsection titled "MRV of actions and support".

Proposal 2

The financial arrangements to support REDD+ actions should be included as part of the broader financial framework proposed to support NAMAs in developing countries (paras. 115 and 122 to be incorporated to Chapter IV on Finance).

Proposal 3

Move paragraph 110 under the "Means of implementation"

Para 121 duplicates paras 94–96, delete 121 from section C.

Paras 122–124 duplicate paras 98–101, delete 122-124 from section C.

Move paragraphs 125–126 to chapter IV.A on Finance; move paragraph 127 to "Mitigation by developing countries, Institutional arrangements".

Proposals for additional paragraphs:

The global goal under the new agreement should include policies and measures that assure the reduction and reversion of GHG emissions from deforestation and forest degradation immediately in a 10 to 20 year framework.

To appropriately address actions related to REDD in developing country Parties, it should be taken fully into account issues related to non-permanence, leakage and additionality of forest-related mitigation actions. Those problems are still being considered under the methodological issues under the SBSTA.

Considering the serious risk of reversion inherent to REDD actions in developing country Parties, such actions should not be linked to quantified emission limitations or reduction objectives (QELROs) of developed country Parties, and should not be addressed under market-oriented approaches which could undermine the environmental integrity of the global GHG emission reduction goal.

Any REDD action in developing country Parties addressed under international emission trading schemes should be supplementary to the QELROs adopted by developed country Parties and additional to the national mitigation efforts by developed country Parties.

Finally, any REDD action to be developed in developing country should ensures sovereignty and national as well as local control over REDD-plus activities.

1. [Objectives, scope and guiding principles

- x.1 A REDD plus mechanism is hereby established
- x.2 The objectives of this mechanism are to help:
 - (a) [Developing country Parties to [re-organize the] work within their forestry sector to contribute in the efforts towards low-carbon economies and taking part in the global effort to stabilize and reduce GHG concentration in the atmosphere][Developing country Parties to re-organize the forestry sector thus implementing low carbon economies and taking part in the global effort to stabilize and reduce GHG concentration in the atmosphere];

The Bali Action Plan, in its paragraph 1 (b) (iii), calls for the consideration of enhanced national/international action on mitigation of climate change, including, inter alia, 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.

- (b) Developed country Parties to meet their ambitious quantified emissions reduction targets [up to x per cent.]
- x.3 All Parties should collectively aim at halting forest cover loss in developing countries by 2030 at the latest and reducing gross deforestation in developing countries by at least 50 per cent by 2020 compared by current levels
- 106. [Developing country Parties contribute to enhanced mitigations actions in the [forestry sector] [land use, land-use change and forestry sector] [agriculture, forestry and land use sector]] [through REDD-plus actions] by reducing emissions [from deforestation and forest degradation], [ensuring [conservation]] [permanence] of existing carbon stocks, [afforestation and reforestation] and enhancing removals [by sinks] [maintaining existing forest carbon stocks and enhancing removals], [and conserving carbon reservoirs] while promoting [sustainable forest [and land] management.] [and forest governance] [sustainable management of forests] [and prioritizing the restoration of forests]

Alternatives to paragraph 106:

Alternative 1

[Developing country Parties contribute to enhanced mitigations actions from deforestation and forest degradation and increasing removals from forest carbon (to be known as REDD-plus).

Alternative 2

[REDD-plus actions are actions in developing countries to reduce emissions from deforestation and forest degradation, ensuring permanence of existing carbon stocks and enhancing removals, while promoting sustainable forest management.]

Alternative 3

[Developing country Parties contribute to enhanced mitigation through REDD-plus actions by reducing emissions, enhancing removals, and ensuring [permanence] [conservation] of existing carbon stocks, while promoting sustainable management of forests.]

Alternative 4

[Developing country Parties contribute to enhanced mitigations actions by reducing emissions and enhancing removals in the land use, land-use change and forestry sector.]

106.1 The REDD-plus mechanism shall be effective, result-based, flexible, dynamic and incentive driven. To achieve this, the mechanism shall be implemented in successive, gradually intensifying phases, beginning with national REDD-plus strategy development and core capacity-building (phase 1), followed by the implementation of national REDD-plus policies and measures in combination with compensation for proxy-based results for emission reductions and removals from selected forest activities and land-use and land-use change categories (phase 2), and finally evolving into a result-based compensation mechanism for fully measured, reported and verified emission reductions and removals from the whole forestry sector and other selected land-use and land-use change sectors (phase 3).

106.2 The scope of REDD-plus:

- (a) will encompass activities which reduce anthropogenic greenhouse gas emissions from deforestation and forest degradation, and increase anthropogenic removals from afforestation, reforestation and enhancement of forest carbon in developing countries; and
 - (b) may be expanded over time to cover the full land sector in developing countries.
- 106.3 With reference to paragraph 106 above, activities that result in reducing emissions, increasing removals and stabilization of carbon stocks in forestry sector at national level shall comprise REDD-plus activities. All REDD-plus activities undertaken according to national circumstances and leading to following objectives shall qualify for receiving positive incentives under REDD-plus mechanism:
 - (a) Stabilization of forest cover, and thereby forest carbon stocks
- (b) Conservation and maintenance of forest carbon stocks due to sustainable management of forests
 - (c) Reduction in deforestation rates
 - (d) Reduction in forest degradation

- (e) Enhancement of forest carbon stocks due to conservation and sustainable management of forests, and/or increase in forest cover due to afforestation and reforestation
- 106.4 Activities under paragraph 106, hereinafter, REDD-Plus, should include:
 - (a) Increasing forest cover due to afforestation and reforestation
- (b) Maintaining and enhancing forest carbon stock by forest conservation, incremental change of forest cover, sustainable management of forest
 - (c) Reducing deforestation
 - (d) Reducing forest degradation
- 106.5 Recognizing the urgent need to take further meaningful action to reduce emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable forest management and enhancement of forest carbon stocks, all Parties shall support or undertake such action as appropriate to national circumstances and capabilities.
- 106.6 Within the context of nationally appropriate mitigation actions for developing countries, a framework for voluntary actions to reduce anthropogenic emissions by sources and increase removals by sinks in the forestry sector (hereinafter referred to as REDD-plus mechanism) is hereby defined.
- 106.7 The purpose of the REDD-plus mechanism is to assist developing country Parties in:
 - (a) Contributing to the objective in Article 2 of the Convention;
- (b) Enhancing efforts to achieve sustainable development goals through their nationally appropriate mitigation strategies;
 - (c) Meeting their commitments under the Convention and related international agreements;
 - (d) Conserving biological diversity and combating desertification;
 - (e) Developing comprehensive land use inventories and monitoring frameworks; and
 - (f) Achieving sustainable land management.
- 107. [REDD-plus [actions] [strategies and actions plans] [should] [shall] be country-driven [and voluntary [NAMAs]], and undertaken in accordance with countries' capabilities [, legislation] and national circumstances.][Taking into account the need to ensure equitable access to financial and technological support for these actions] [and subject to adequate, predictable, and sustainable finance].] *Alternative to paragraphs 106 and 107:*

[A mechanism to reduce emissions from deforestation and forest degradation [and other forest related activities] in developing country Parties is hereby defined.

The purpose of the mechanism shall be to assist developing country Parties to maintain [and enhance] forest carbon stocks while promoting their sustainable development; and to assist all Parties in contributing to the ultimate objective of the Convention by reducing emissions from deforestation and forest degradation [and by enhancing removals through other forest related activities], and in meeting their commitments under the Convention and any of its related legal instruments.

Emission reductions [and enhanced removals] resulting from activities under this mechanism shall be certified by operational entities to be designated by the [supreme body of this agreement], on the basis of:

- (a) Voluntary participation approved by each Party involved;
- (b) Real, measurable and long-term benefits related to the mitigation of climate change; and
- (c) Reductions in emissions [or enhancements of removals] that are additional to any that would occur in the absence of the mechanism.]

Alternatives to paragraph 107:

<u>Alternative 1</u>

[REDD-plus should abide by follow principles:

(a) Participation by developing countries should be voluntary;

- (b) Implementation should be a process driven by developing countries, in accordance with developing countries capability and national circumstance;
- (c) Adequate, predictable and sustainable financial and technical supports from developed countries is precondition for successful implementation of REDD in developing countries.
- (d) An important component to facilitate sustainable development, reduce poverty and respond climate change in developing countries, rather than a way to help developed countries to fulfill its commitment of emission reduction.]

Alternative 2

[REDD-plus policy approaches and positive incentives should invite broad country participation, be country-driven, be integrated into NAMAs, and voluntary, and undertaken in accordance with countries' capabilities and national circumstances.]

Alternative 3

[Within the context of nationally appropriate mitigation actions, developing country Parties may undertake actions to reduce emissions from deforestation and forest degradation.

National appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation may include, *inter alia*, conservation, sustainable management of forests and enhancement of forest carbon stocks.]

108. [[[Broad country] [national level] participation,] [Maximize participation of developing countries] [sustainable forest management] [sustainable management of forests], [forest governance], [permanence] and co-benefits such as biodiversity [conservation] [and ecosystem services] {should} be promoted, [the necessity for good local government, in which indigenous peoples and local communities have participation and also apply the customary patterns of government], and [domestic] leakage {should} be [accounted for and] avoided] [reduced as much as possible].

Alternatives to paragraph 108:

Alternative 1

[Co-benefits such as biodiversity conservation and other ecosystem services, should be taken into account and promoted when designing a REDD+ mechanism, which may complement the aims and objectives of relevant international conventions and agreements.]

Alternative 2

[REDD-plus actions should promote the sustainable management of forests and co-benefits, including biodiversity conservation, that may complement the aims and objectives of national forest programmes and relevant international conventions and agreements]

Alternative 3

[Broad country participation, improved forest governance, the effective involvement of relevant major groups, sustainable forest management, permanence and co-benefits such as biodiversity should be promoted, and leakage should be avoided. REDD+ actions should be fully coherent with other relevant international instruments, including in particular the Convention on Biodiversity and its expanded program of work on forest biodiversity.]

Alternative 4

- [Option 1: Broad country participation, sustainable forest management, permanence and co-benefits such as biodiversity {should} be promoted, and leakage {should} be avoided.
- Option 2: REDD-plus actions should promote sustainable development, including social and environmental benefits, such as biodiversity.]
- 108.1 The REDD mechanism shall ensure that Parties take precautionary measures and establish safeguards to protect biological diversity in host countries, including safeguards against the conversion of natural forests to forest plantations.
- 109. [[There should be full and effective engagement of] [Indigenous peoples and] local communities [[should] [shall] be involved] [must not be only like assistants to the implementation, but must begin with] [in design plans and actions] [design, development and] implementation of [REDD-plus] actions [in

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their land] and their rights [should be] respected, [including the right of full prior and informed consent,] [including prior and informed consent,] [consistent with the provisions established under the respective national legislation [or], [and][in its absence,]] [in accordance with the United Nations Declaration on the Rights of Indigenous Peoples][consistent with relevant international instruments, obligations and national legislation]. [The CBD and its Expanded Work Programme on Biodiversity in forest should be observed to avoid inconsistencies at level of national implementation.]]

Alternatives to paragraph 109:

Alternative 1

[The implementation of REDD-plus actions should engage indigenous peoples and local communities and should respect the rights of indigenous peoples and members of local communities in accordance with national legislation and appropriate international law.]

Alternative 2

[Actions to reduce emissions from deforestation and forest degradation shall ensure that the rights of indigenous peoples and local communities are not adversely affected and that all actions are consistent with the United Nations Declaration on the Rights of Indigenous Peoples.

The COP (or the Conference of Parties serving as the assembly of Parties) shall, in consultation with appropriate indigenous peoples' and local community organisations, develop guidelines to ensure that the rights of indigenous peoples and local communities are not adversely affected by actions to reduce emissions from deforestation and forest degradation.]

- 109.1 REDD-plus actions should be consistent with sustainable forest management, noting, inter alia, the relevant provisions of the United Nations Forum on Forests, United Nations Convention to Combat Desertification and the Convention on Biological Diversity
- 109.2 Respect the rights of indigenous peoples and ensure the full and effective involvement of stakeholders, in particular indigenous peoples and local communities, in the design and implementation of all activities linked to this mechanism.
- 110. [Developing country Parties [aiming] [who decide] to implement REDD-plus actions [shall] [should]]:
- (a) Develop REDD-plus national [or subnational strategies,] [and where applicable, subnational actions, that may cover] [implementation plans][action plans][strategies] [as part of their low carbon /emissions development strategies] [consistent with national sustainable development goal], covering different phases of implementation [in accordance to their process on relevant policy/actions;] when appropriate [the phases may include] [(i.e. a readiness phase, a policy implementation and demonstration activities phase, and full implementation)];
- (b) [Designate a national authority for [coordinating] [registering, supporting, approving and] implementing REDD-plus actions, [according to relevant national legislative and policy frameworks];

Alternative to subparagraph (b)

[Designate a national authority for implementing REDD-plus actions, and ensure the full and effective participation of all relevant major groups, including in particular indigenous peoples and local communities and women, in the design and implementation of REDD-plus actions.]

(c) [Establish national reference [emission] levels [and/or national reference levels] in accordance with their national circumstances $\{$, which can be reviewed and adjusted over time, $\}$ and submit them to (...)].

Alternatives to subparagraph (c):

Alternative 1

[Establish national reference emission levels and/or national reference levels in accordance with their national circumstances and respective capabilities. National reference levels shall be independently reviewed, adjusted over time and adopted by the Meeting of the Parties to this Agreement.]

Alternative 2

[Establish reference emission levels/ reference levels in accordance with their national circumstances, which can be reviewed and adjusted over time, and submit them to Conference of Parties, which should establish a contact group for further consideration.]

Alternative 3

[Establish national reference emission levels in accordance with their national circumstances, which can be reviewed and adjusted over time, and submit to the future REDD coordinating mechanism under the UNFCCC.]

- (c).1. Involve all relevant stakeholders, including local communities and indigenous peoples, as appropriate;
 - (c).2. Collaborate transparently with the independent review authority.
 - (c).3. Have a process in place that promotes the full and effective participation of all relevant stakeholders, including indigenous peoples, forest dwellers, and local communities, prior to and during the design, planning, implementation, monitoring and evaluation of REDD-plus activities.

Alternatives to paragraph 110:

Alternative 1

[Developing country Parties aiming to implement REDD+ actions [shall] [should]:

- (a) In order to address differing national circumstances, a step-wise approach should be implemented, which consists of [Develop REDD+ national {implementation plans} {action plans} {strategies}, covering different phases of implementation when appropriate (i.e.)] a readiness phase, a policy implementation and demonstration activities phase, and full implementation;
- (b) Either designate a national authority for implementing REDD+ actions; or address implementation within the context of relevant national legislative and policy frameworks;
- (c) Establish national reference emission levels for emissions and/or removals, where relevant, in accordance with their national circumstances, and submit them to the Conference of the Parties, which in turn will establish a contact group for further consideration. [and/or national reference levels in accordance with their national circumstances {, which can be reviewed and adjusted over time,} and submit them to (.).]

Alternative 2

[REDD-plus actions will be implemented through the forest carbon mechanism according to the principles of effectiveness, efficiency, simplicity, environmental integrity, consistency and fairness. The forest carbon mechanism should address permanence, leakage and additionality.

Participation in the forest carbon mechanism will be voluntary by Parties, and should be country-driven, taking into account national circumstances and capabilities. Under the forest carbon mechanism, Parties shall:

- (a) develop robust national carbon monitoring and accounting systems that are subject to review;
- (b) develop national frameworks for the sustainable management of forests; and
- (c) establish national forest emissions levels, which take account of national circumstances, and that are agreed by the COP based on independent expert advice.]

Alternative 3

[Developing country Parties aiming to implement REDD-plus actions should:

(a) cover different phases of implementation when appropriate (i.e. a readiness phase, a policy implementation and demonstration activities phase, and full implementation);

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- (b) Either designate a national authority for implementing REDD-plus actions, or address implementation within the context of relevant national legislative and policy frameworks;
- (c) Establish national reference levels for emissions, removals, conservation areas, and existing forest carbon stocks, where relevant, in accordance with their national circumstances, including expected emissions trends where appropriate and submit them to the Conference of the Parties that shall then establish a contact group for further consideration.]

111. [Option 1

National accounting [and monitoring system] of emissions and removals in the forest sector {shall} {should} be established [according to national circumstances and capabilities, when appropriate], with the establishment of sub national accounting [and monitoring system] as an optional interim measure [and as part of the national system]. [Each Party should develop a unique emissions [and removals] accounting and monitoring system for its forestry sector which includes all sub national activities.]]

Alternatives to paragraph 111:

Alternative 1

[National monitoring and reporting systems for REDD plus activities shall be established, which include all subnational activities. The possibility to accommodate subnational monitoring and reporting systems as an optional interim measure should be considered.]

Alternative 2

[Establish, according to national circumstances and capabilities, robust and transparent national forest monitoring and reporting systems for REDD+ activities, and, if appropriate, subnational monitoring and reporting systems may be established in an initial phase, ensuring their compatibility with national monitoring system.]

Alternative 3

[Developing country Parties shall establish national estimation of emissions and removals in the forest sector. Each developing country Party should develop an emissions estimation and monitoring system for its forestry sector.]

Alternative 4

[National monitoring and reporting for REDD-plus activities should be established, with the establishment of subnational monitoring and reporting as an optional [interim] measure [for demonstration activities]. Each Party should develop a national monitoring and reporting system for REDD-plus activities which includes all subnational activities.]

112. [Option 2

National [and/] or subnational accounting of emission reductions from deforestation may be accounted for at either national or subnational level, as decided by each Party.]

Alternatives to paragraph 112:

Alternative 1

[Given the linkage between the loss of forest carbon due to bio-energy and food production needs, this Mechanism may be expanded in the future to include other emissions intensive activities or sectors, such as rural energy and food production, consistent with modalities, rules and guidelines approved by the Conference of the Parties.]

Alternative 2

[All Parties should be encouraged to find appropriate ways to relieve the pressure on forests and land that result in greenhouse gas emissions.]

Alternative 3 (merging para. 111, Option 1 and para. 112, Option 2)

[Developing country Parties, which decide to participate REDD-plus, should establish national accounting and monitoring system of emission and removals from REDD-plus, with the establishment of

subnational accounting and monitoring system as an optional interim measure, as appropriate, after received adequate, predictable and sustainable financial and technical supports from developed countries.] *Move paragraphs 111 and 112 to chapter II.B, subsection 3 on Measurement, reporting and verification of supported actions.*

- 112.1 The Conference of the Parties shall, at its next session, elaborate modalities and procedures with the objective of ensuring that activities, under the REDD plus mechanism, carried out and accounted for at the subnational level are accounted for in a way that addresses leakage in a comprehensive and conservative way.
- 112.2. Developing country Parties which undertake nationally appropriate mitigation actions to reduce emissions from deforestation and forest degradation shall ensure that:
 - (a) necessary actions are taken to avoid national and international emissions displacement;
 - (b) such actions are permanent and do not result in an increase in emissions from deforestation and forest degradation at a later time;
 - (c) appropriate governance structures put in place to facilitate the appropriate use of funds provided for reducing emissions from deforestation and forest degradation
 - (d) appropriate consultative mechanisms and domestic legislative arrangements are in place to avoid infringement of indigenous peoples and local community rights.
 - (e) land tenure systems are recognised;
 - (f) actions are consistent with the conservation of biological diversity.
- 112.3. Developed country Parties shall undertake policies and measures to ensure that the import of forest products and other commodities from developing countries Parties does not contribute to emissions from deforestation and forest degradation.
- 112.4. All Parties shall undertake policies and measure to ensure that actions undertaken by persons with legal personality of their countries do contribute to international emissions displacement in forests of developing countries.
- 112.5. Developing country Parties who wish to undertake Tier 2 nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation shall by guided by good practice guidance developed by the Intergovernmental Panel on Climate Change and any relevant decisions of the Conference of Parties serving as the assembly of Parties.
- 112.6. Tier 3 nationally appropriate mitigations actions shall not apply with respect to reducing emissions from deforestation and forest degradation and hence nationally appropriate mitigation actions for reducing emissions from deforestation and forest degradation shall not be eligible for emissions trading.

2. Means of implementation

Note: Owing to the different initial capabilities of developing countries to implement REDD-plus activities, Parties foresee different phases: an initial readiness phase, which can include or be followed by a policy implementation and demonstration activities phase, and a full implementation phase. The options presented in paragraphs 113–114 below relate to support for those phases.

- x.1 The developed country Parties shall provide financial resources according to their obligations under the Convention. Under the REDD-plus mechanism, developed country Parties commit to adequate, predictable and long-term sustainable funding of activities for reducing emissions by sources and increasing removals by sinks in the forestry sector and other selected land-use and land-use change sectors in developing countries.
- x.2 Funding shall be based on an appropriate and effective international funding mechanism. The Conference of the Parties shall, at its 15th session, establish such a funding mechanism. At its [16th] session, the Conference of the Parties shall supplement the relevant principles, modalities, rules and guidelines for funding of all phases, including decisions on linkage to the carbon-marked.
- x.3 A REDD+ mechanism should be transparent, efficient, and equitable; and it should ensure a fair distribution of REDD derived benefits among all relevant stakeholders and indigenous peoples and local communities, in response to their efforts in REDD activities.

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113. [The readiness activities phase of REDD-plus actions, and the subsequent policy implementation and demonstration activities phase, including the activities to be implemented up to 2012, [should] [shall] be supported [through [one or more of the following sources]][by new an additional fund]:]

Option 1

A readiness fund established under the COP to support capacity-building, technology transfer, policy implementation and institutional arrangements] [and the scaling up of demonstration activities that shall receive adequate, predictable and sustained resources from, inter alia, additional to official development assistance, and market-linked revenues such as the auctions of allowance for implementation of national policies and measures by Annex-1 Parties].

Alternatives to Option 1:

Alternative 1

[A REDD plus fund established under the COP to support capacity-building, technology transfer, policy implementation and institutional arrangements, and activities aimed at conserving carbon stocks. This fund will be financed by innovative sources of financing such as auctioning of national emissions trading allowances or of assigned amount units at international level,]

Alternative 2

[A REDD plus fund established under the COP to support capacity-building, technology transfer, policy implementation and institutional arrangements. This fund will be financed by innovative sources of financing such as auctioning of national emissions trading allowances or of assigned amount units at international level, and penalties or fines on non-compliance of developed country Parties with their emission reduction and financial resources commitments.]

Alternative 3

[A readiness fund established under the COP to support capacity-building, technology transfer, policy implementation and institutional arrangements, complementary to the financing provided by the Global Environment Facility and by bilateral and multilateral funding, for enhancing the capabilities of developing countries to monitor [changes in their forest cover and the associated carbon stocks] [emissions and removals in their forest sector] and for designing and implementing policies that reduce deforestation and forest degradation, enhance and conserve carbon stocks.]

Alternative 4

[A readiness fund to be established under the COP to support capacity-building, technology transfer, policy implementation and institutional arrangements. These funds shall be new and additional to the ODA funds.]

[Option 2

REDD-plus readiness windows of the relevant Convention funds (e.g. the proposed mitigation fund referred to in para. 175 below).]

[Option 3

Auctions of allowances for implementation of national policies and measures.]

[Option 4

Limited access to the market for emission reductions achieved by demonstration activities.]

Option 5

A special climate change fund to finance activities, complementary to the financing provided by the Global Environment Facility and by bilateral and multilateral funding, for enhancing the capabilities of developing countries to monitor changes in their forest cover and the associated carbon stocks and for designing and implementing policies that reduce deforestation and forest degradation.]

Alternatives to paragraph 113:

Alternative 1

[The REDD-plus mechanism shall allow for the evolution of national REDD-plus strategies, in particular the self-financed actions, actions eligible for capacity-building, technical assistance and financial support, and actions contained therein that result in emissions reductions or removals with sufficient integrity to become eligible to participate in the carbon market.]

Alternative 2 (in which several options in para. 114 are combined)

[The full implementation phase of REDD-plus activities in developing countries, including early actions should be supported by a special REDD-plus fund under the convention complementary to the Global Environmental Facility and bilateral and multilateral funding, to support ongoing REDD-plus activities, the financial sources of the special REDD-plus fund could, but not limited, include:

- (a) additional public funds, such as ODA
- (b) donation
- (c) auction of allowance in developed countries
- (d) taxation of carbon in developed countries
- (e) other sources, but should not include international levies,]

Alternative 3

[In the readiness activities phase of REDD-plus actions, developing country Parties shall strengthen forest governance and establish capacities and institutions for measuring, monitoring, reporting and verifying emission reductions and increases in removals from the forest sector. In the policy implementation phase, developing country Parties shall implement REDD-plus policies and measures. The readiness activities phase of REDD-plus actions, and the subsequent policy implementation phase, should be supported through windows of the relevant mechanisms.]

Alternative 4

[Windows for REDD-plus activities could be opened under the relevant Convention funds, actions could be supported by market approaches and funds, and we think reforestation activities should also be supported.]

Alternative 5

[A REDD Window of the International Climate Fund shall be established to assist developing country Parties undertake nationally appropriate mitigation actions with respect to reducing emissions from deforestation and forest degradation.

Funding through the REDD Window shall be used by developing country Parties to:

- (a) undertake actions to build capacity in measuring, reporting and verifying actions to reduce emissions from deforestation and forest degradation;
- (b) undertake nationally appropriate mitigation actions to directly reduce emissions from deforestation and forest degradation.]

Move paragraph 113 to chapter IV.A on Finance

114. [The full implementation phase of REDD-plus [strategies and actions] [activities] in developing countries, including early actions, [should][shall] [be supported by] [should be financed by]]
[Option 1²³

use of public funds, through one or more of the following approaches:

- (a) A specialized fund established under the COP for reducing emissions from deforestation and forest degradation;
- (b) Specialized funds or funding windows established under the COP:
- (c) Trust funds for community forestry accounts, a Convention adaptation fund, by which conservation and sustainable forest management could be supported as adaptation

²³ This proposal is presented in conjunction with proposals for adaptation and mitigation funds presented in paragraph 175.

measures, and/or a forest reserve fund for conservation and sustainable forest management under the mitigation fund under the COP proposed in paragraph 175 below.]

Option 2

use of markets, such as:

- (a) Access to the carbon market through issuance of carbon credits for emission reductions from deforestation and forest degradation;
- (b) Access to the carbon market for emission reductions from deforestation and forest degradation, and for conservation and enhancement of carbon stocks in existing forest.]

Alternative to subparagraph (b)

[For REDD-plus actions to be eligible to generate tradable emissions reductions or removal units, the monitoring, reporting and verification must be at the national scale unless methodologies for estimating intra-national leakage resulting from subnational or project-level REDD-plus actions have been adopted by the COP, in which case those methodologies shall be applied.

Participation in the carbon market will be limited to Parties that have used country-specific, national reference levels of greenhouse gas emissions and removals.]

[Option 3

- a [flexible] combination of market approaches and funds, such as:
- (a) [A fund for conservation additional to ODA, [international levies] and/or market-linked mechanisms;]
- (b) [Funds for capacity-building, conservation efforts and sustainable forest management. Use of funds [or markets] would depend on host countries' preferences for activities to reduce emissions from deforestation and forest degradation;]
- (c) [A market-based approach for supporting enhancement of carbon stocks through sustainable forest management and reduced [emissions from] deforestation [and forest degradation]; and a non-market-[regulation] based approach for supporting stabilization of forest cover, conservation and maintenance of carbon stocks through sustainable forest management;]
- (d) [A special climate change fund complementary to the Global Environment Facility and bilateral and multilateral funding, to support ongoing forest conservation and efforts to enhance forest carbon stocks, while using the certified emission reductions that accrue from project activities, involving the private and public sector to contribute to compliance with part of the countries' quantified emission limitation and reduction commitments under the Convention.]

Alternatives to Option 3, subparagraphs (a), (b) and (c)

Alternative 1

- [(a) A fund shall be used to support efforts to conserve carbon stocks, including sustainable forest management. Activities to reduce deforestation and degradation can also be financed by the fund depending on host countries' preferences. Replenishment sources of the fund as been detailed in paragraph 7 above.
- (b) A market shall be developed, learning from the CDM, for supporting reduced deforestation and degradation as well as enhancement of carbon stocks through sustainable forest management.
- (c) The Conference of the Parties shall elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability to ensure the environmental integrity of the mechanism.]

Alternative 2

[(a) A fund shall be used to support conservation efforts and sustainable forest management and provide upfront funding for demonstration activities. Activities to reduce deforestation and

- degradation can also be financed by the fund depending on host countries' preferences. Replenishment sources of the fund shall follow as has been detailed in paragraph 7 above.
- (b) A market shall be developed, learning from the CDM, for supporting reduced deforestation and degradation as well as enhancement of carbon stocks through sustainable forest management, based on a voluntary participation of Parties. Market and/or non-market approaches shall be developed for supporting stabilization of forest cover, conservation, and maintenance of carbon stocks through sustainable management of forests.
- (c) The Conference of the Parties shall elaborate modalities and procedures to ensure the integrity of the carbon market in other sectors, the compatibility with the CDM and real benefits to climate and sustainable development.]

Alternative to options 1, 2 and 3 in paragraph 114

- [(a) Use of markets or funds would depend on host countries' preferences for REDD+ actions;
- (b) Access to the carbon market for REDD+ actions;
- (c) Funds to support REDD+ actions;
- (d) Funds for ongoing capacity-building, support of price floors, etc.]

Option 3.1

[A combination of market approaches and/or funds:

- (a) Use of markets or funds would depend on host countries' preferences for REDD-plus actions;
- (b) Access to the carbon market for REDD-plus actions;
- (c) Funds to support REDD-plus actions organized under the Convention;
- (d) Funds for ongoing capacity-building, support of price floors, etc.
- (e) Recognizing that higher levels of measurement, reporting and verification will be required for market-based eligibility.

Alternatives to paragraph 114:

Alternative 1

[Prior to the commencement of the full implementation phase, the [supreme body of this instrument] shall elaborate rules, modalities and procedures for the establishment of a robust framework for addressing issues of non-permanence.]

Alternative 2

[This paragraph should define the concrete activities within REDD-plus to be supported by the fund, namely the orientation of the financial supports, which could include: capacity-building, formulating plan and strategy, establishing carbon accounting and monitoring system, technology transfer, policy implementation, institutional arrangements etc.]

Alternative 3

- [A fund shall be established to reward or provide incentives for reducing emissions through sustainable land management practices, including forest conservation, sustainable forest management, the avoidance of deforestation, afforestation and sustainable agriculture.]
- 114.1 When accessing the carbon market the Secretariat would register the information agreed by the Parties under Paragraph 118, and if achieved, any subsequent emissions reductions or removals enhancements. On a periodic or annual basis:
- (a) Based on the total projected emissions reductions and removals enhancements, the Secretariat would deduct an equivalent number of assigned amount units from the respective allocations to relevant Parties. Deductions would be equitable and held by the Secretariat in an independent settlement account.
- (b) As emissions reductions or removals enhancements are reported to the Secretariat and independently verified, they would be exchanged on an equal basis for the assigned amount units held in the settlement account.

(c) If the supply of verified emissions reductions or removals enhancements is less than the total deductions, then the Parties may agree that they be auctioned with the proceeds used for the general purposes outlined in Paragraph 4; while if supply of verified emissions reductions or removals enhancements is greater than the total deductions, then the surplus may be made available under relevant flexibility mechanisms, as agreed by the Parties.]

Move paragraphs 113 and 114 to chapter IV.A on Finance

3. [Measurement, reporting and verification of actions] [Measurement and Monitoring System]

115. [Option 1

[Developing countries participating in the forest carbon mechanism shall register their national forest emissions level in its National Schedule, with activities under the forest carbon mechanism measured, reported and verified against their agreed national forest emissions levels.] [Developing country Parties requesting support {shall} {should} record under the NAMA registry REDD-plus actions undertaken within their REDD-plus national [implementation plans] [action plans] [strategies], including information on the extent and type of support requested and the nature of the action, and any information received on measurement, reporting and verification of actions, including their outcomes.]]

Alternative to paragraph 115:

[The COP (or Conference of Parties serving as the assembly of Parties) shall develop appropriate means of measuring, reporting and verifying Tier 2 nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation.

To assist in developing methods and procedures for measuring, reporting and verifying Tier 2 nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation, developing country Parties shall develop:

- (a) national capacity needs assessments;
- (b) national forest inventories;
- (c) national and where appropriate, subnational baselines to calculate changes in emissions from deforestation and forest degradation;
 - (d) strategic plans to reduce emissions from deforestation and forest degradation.
- (e) quality assurance and quality control regulations to ensure that funds for reducing emissions from deforestation and forest degradation are used directly for that purpose and not diverted for other purposes.]

116. [Option 2

Developing country Parties requesting support [, including market-based eligibility,] [shall] [should] submit to [...][the Conference of the Parties] [the future REDD coordination mechanism under the UNFCCC] their national REDD-plus [implementation plans][action plans][and] [strategies] [information on their REDD-plus actions to the Conference of the Parties] [, including information on the extent and type of support requested, the nature of the actions to be supported, [as far as possible,] their systems for measurement, reporting and verification of actions [,] and the outcomes of the actions]] [their system of measurement and monitoring of actions, and the outcomes of the actions].]

- 117. [When establishing national reference emission levels [for emissions, removals, conservation areas, and existing forest carbon stocks, where relevant] [and] [/or national reference levels] [or subnational strategies], taking into account national circumstances, developing country Parties that are requesting support shall follow [any] guidance [decided] [developed] by the [COP] [Meeting of the Parties to this Agreement at its first session] [and adopted at its [seventeenth][sixteenth] session] on how to establish the levels[, including ways to [account for and] address [domestic] leakage]] [if applying subnational approaches for demonstration activities] [and the development of guidance in monitoring and reporting with the full effective engagement of indigenous people and local communities.]
- 117.1. A global reference level for future emissions and removals from the forestry sector and other selected land-use and land-use change categories and activities from developing countries shall be established in order to avoid carbon leakage and to ensure the environmental integrity of the mechanism.
- 117.2. The methodology for the establishment of a global reference level shall:

- (a) Be robust and based on objective, measurable, and verifiable criteria; and
- (b) Ensure additionality both at the national and global level compared to business as usual scenarios.
- 118. [Parties aiming to implement REDD-plus actions [duly supported with assured funding] shall, [[under the NAMA registry as mentioned in paragraph 115 above][on the basis of their national REDD-plus [implementation plans][action plans][strategies]]:
- (a) [Report information on the implementation of national REDD-plus [implementation plans][action plans][strategies][actions], readiness activities, including policy implementation and demonstration activities, and identified co-benefits [such as biodiversity];]
- (b) [Measure and report the quantitative reduction of GHG emissions [or quantitative increment in removals] achieved and/or the change in carbon stocks in relation to the [reference emission level] [/reference level] [or the aggregate reductions achieved by its registered subnational activities] [national reference levels for emissions, removals, conservation areas, and existing forest carbon stocks, where relevant,] [national reference levels for emissions and/or removals, where relevant].]
- (b).1 Report information on REDD-plus actions taken [up to 2012] [during the period from 2005 up to the date a Party gives notice under this paragraph] for consideration of credit for early action
 - (b).2 Report early actions taken up to 2012 for consideration.
- (b).3 Report information, to be determined by the Parties, related to the application of a correction factor to the relevant national reference levels, either higher or lower, taking into account national circumstances, historically low rates of deforestation and forest degradation, developmental divergence, and respective capabilities and capacities.

Alternative to paragraph 118:

[As part of the measuring and reporting process described in paragraph 88, Parties shall measure and report the quantitative reduction of GHG emissions achieved and/or the change in carbon stocks in relation to the national reference emission level.]

Move paragraphs 115 to 118 to chapter II.B subsection 3 on Measurement, reporting and verification of supported actions

- 119. [Developing country Parties shall develop] Robust national monitoring systems [for emission reductions [and][/or]] [emissions removals] [carbon stock changes] [for emissions/removals from REDD-plus] [to measure emissions by sources and removals by sinks in the land use, land-use change and forestry sector] [shall][should] [be developed following][take into account] relevant methodological guidance [to be] provided by the [COP] [Meeting of the Parties to this Agreement], on the basis of the advice received from the Subsidiary Body for Scientific and Technological Advice (SBSTA) including the use of [relevant IPCC guidelines and methodologies] [, when appropriate]][the most recent IPCC guidelines [and methodologies] for GHG inventories] [, including above and below ground carbon stocks, subject to the availability of technology, finance and capacity-building] [taking into consideration the indigenous ancient knowledge and local communities].
- 120. [[Measurement and monitoring][Measurement, reporting and verification] of REDD-plus actions shall be carried out in accordance with guidelines to be [agreed][decided] by the [COP] [Meeting of the Parties to this Agreement]. These guidelines shall cover, inter alia, eligibility criteria for access to support[, take into consideration the advice resulting from the outputs of the work programme on] methodological issues established under the SBSTA, ²⁴ and the type of support required, [while recognizing that higher levels of measurement, reporting and verification will be required for market-based eligibility.] [Monitoring, reporting and verification for REDD-plus actions shall extend to the provisions for involvement of indigenous peoples and local communities as set out above, and to consistency with sustainable forest management, noting, inter alia, the relevant provisions of the United

²⁴ The SBSTA is carrying out a programme of work on methodological issues relating to decision 2/CP.13, paragraph 11 (FCCC/SBSTA/2008/13, paragraph 47). It will report back to the COP at its fifteenth session with the aim of providing advice on methodological issues related to measuring and reporting, and reference emission levels [and reference levels].

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Nations Forum on Forests, United Nations Convention to Combat Desertification and the Convention on Biological Diversity].]

121. [Verification of [reported greenhouse gases emissions reductions and removals resulting from] REDD-plus actions shall be carried out by [an expert review team under] [an expert review team under the guidance of] the [COP] [Meeting of the Parties to this Agreement at its first session] [expert review teams or] [a measurement, reporting and verification technical panel] [which to be established by the future coordinating REDD mechanism, which [shall] includes inputs by indigenous people as well as local communities] [measurement and monitoring technical panel] [expert review teams in accordance with the agree rules and guidelines] [national expert review teams, peer reviewed by team of experts or a measurement, reporting and verification technical panel appointed by the COP] [national experts and peer reviewed by international teams under the guidance of the COP in case of national scale activities, and by an independent body(ies) in case of subnational scale].] To maintain the environmental integrity within and between international agreements on climate change, at the end of an agreement period, any final surplus in accounted emissions reductions and removals enhancements compared to the reported quantity should be transferred to a subsequent international agreement on climate change.

4. Measurement, reporting and verification of support

122. [Option 1

Parties, when providing support to REDD-plus actions in developing countries, [shall][should] enter information into the NAMA registry on the extent and type of support to be provided, and the nature of the action to be supported.]

Alternative to paragraph 122:

[Means for measuring, reporting and verification of support by Parties shall be undertaken in accordance with general MRV provisions for NAMAs.]

123. [Option 2

[Developed Country] Parties, when providing support to REDD-plus actions in developing countries, [shall] [should] provide information on the extent and type of support, and the nature of the action for which the support is provided]. [All Parties recognize that the level of support, through fund or market options for REDD activities, will be important in determining the success of developing countries in reducing the emissions from deforestation and forest degradation.] [All Parties recognize that the level of support, through fund or market options, will be important in determining the success of developing countries in implementing REDD-plus actions].]

124. [Measurement, reporting and verification of support provided [by Developed Country Parties to Developing Country Parties] for REDD-plus actions [should][shall] be carried out] [by a technical panel comprised of experts equitably balanced between developed and developing countries] [by the expert panel appointed by the COP as in paragraph 121 above].]

5..Institutional arrangements, including funds

x.1 [Effective forest governance is a prerequisite for managing forests sustainably and should be promoted at all governance levels, from national to subnational to local level.]

125. [Option 1

The financial arrangements to support REDD-plus actions should be included as part of the broader financial framework proposed to support NAMAs in developing countries (see paras. 115 and 122 above and chapter IV below).]

[Option 1.1

Specialized funds, funding windows and a board shall be established by the COP, as well as mechanisms to link the various funds. Each of the funds could be advised by an expert group or committee supported by a technical panel/technical panels.]

Alternative to paragraph 125:

[Developing country Parties may be eligible to seek funding through the REDD Window of the International Climate Fund.

A special allocation shall be provided through the REDD Window to assist developing country Parties to establish develop community-based trust funds to support local actions associated with reducing emissions from deforestation and forest degradation.

The COP (or Conference of Parties serving as the assembly of Parties), in collaboration with other organisations, shall develop regional REDD centres.

The purpose of regional REDD centres shall be to assist developing country Parties build their capacity in measuring, reporting and verifying nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation.]

126. [Option 2

The financial arrangements to support REDD-plus actions should be developed for REDD-plus activities in developing countries, and should:

- (a) Be under the guidance and authority of the COP;
- (b) Ensure full transparency, efficiency, effectiveness, openness and the equitable and balanced representation of [all] Parties;
 - (c) Provide coherence and coordination between various sources of financing.]
 - (c).1 [[Secure] [Provide] adequate, predictable and sustainable financial resources]
- (c).2 [Ensure under the authority of the COP the development and application of guidance and criteria on what REDD-plus action can be funded by which financing mechanism]
- (c).3 [Coordinate implementation through internationally accredited agencies while leveraging the efforts already undertaken by the World Bank's Forest Carbon Partnership Facility and the UN-REDD Program]
- (c).4 [Include ongoing activities coordinated through existing institutional arrangements] *Move paragraphs 125 and 126 to chapter IV.A on Finance*

127. [Option 3

A specific body shall be established to supervise REDD-plus actions. An entity or group of entities or bodies shall be designated by the COP [to verify and certify the emission reductions [or removals] achieved] [to assess the emissions and removals].

Move paragraph 127 to chapter II.B, subsection 5 on Institutional arrangements

128. [Issues identified by Parties in the context of paragraphs 110–127 above as requiring further elaboration at the appropriate time include rules and modalities in relation to activities or necessary arrangements, provisions for linking the information on readiness and implementation of REDD-plus actions with the financial resources.]]

Alternative to section C:

- x.1 [A mechanism for reducing anthropogenic emissions by sources and increasing removals by sinks in the forestry sector and other selected land-use and land-use change sectors in developing countries (REDD-plus mechanism) is hereby defined.
- x.2 The REDD-plus mechanism shall be effective, result-based, flexible, dynamic and incentive driven. To achieve this, the mechanism shall be implemented in successive, gradually intensifying phases, beginning with national REDD-plus strategy development and core capacity-building (phase 1), followed by the implementation of national REDD-plus policies and measures in combination with compensation for proxy-based results for emission reductions and removals from selected forest activities and land-use and land-use change categories (phase 2), and finally evolving into a result-based compensation mechanism for fully measured, reported and verified emission reductions and removals from the whole forestry sector and other selected land-use and land-use change sectors (phase 3).
- x.3 The REDD-plus mechanism will gradually be phased out as developing country Parties commit to quantified emission targets for the land-use, land-use change and forestry sector.
- x.4 The purpose of the REDD-plus mechanism is to assist developing country Parties in:

- (a) Contributing to the ultimate objective of the Convention by reducing their emissions by sources and increasing removals by sinks in the forestry sector, and other selected land-use and land-use change sectors;
- (b) Initiating efforts to embark on economy-wide low carbon development pathway, through economy-wide low carbon development plans;
 - (c) Meeting their commitments under the Convention and related legal instruments;
- (d) Developing capacity and a reliable national framework for measurement, reporting and verification of emission reductions and removals from forestry sector and other selected land-use and land-use change sectors;
 - (e) Achieving sustainable development; and
 - (f) Conserving biological diversity.
- x.5 The developed country Parties shall provide financial resources according to their obligations under the Convention. Under the REDD-plus mechanism, developed country Parties commit to adequate, predictable and long-term sustainable funding of activities for reducing emissions by sources and increasing removals by sinks in the forestry sector and other selected land-use and land-use change sectors in developing countries.
- x.6 Funding shall be based on an appropriate and effective international funding mechanism. The Conference of the Parties shall, at its 15th session, establish such a funding mechanism. At its [16th] session, the Conference of the Parties shall supplement the relevant principles, modalities, rules and guidelines for funding of all phases, including decisions on linkage to the carbon-marked.
- x.7 For the purpose of this mechanism the following definitions, to be provided by the Subsidiary Body for Scientific and Technological Advice, shall apply:
 - (a) "Forest" (as defined in 16/CMP.1)
 - (b) "Afforestation" (as defined in 16/CMP.1)
 - (c) "Reforestation" (as defined in 16/CMP.1)
 - (d) "Deforestation" (as defined in 16/CMP)
 - (e) "Plantation"
 - (f) "Biological diversity"
 - (g) [...]
- x.8 For the purposes of this mechanism, eligible activities and land use categories are those set forth in annex A and that started on or after [...].
- x.9 The mechanism shall provide flexibility for including over time additional land-use and land-use change categories and activities on the basis of measurable, reportable and verifiable commitments and actions, including guidelines agreed by the COP.
- x.10 Governance of and participation in the REDD-plus mechanism shall be in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, and guided by the following:
- (a) Recalling Article 3.4 of the Convention, developing country Parties have a right to and should promote sustainable development.
- (b) The Parties should take measures to anticipate, prevent and minimize the risk of inter- and intra-national carbon leakage. The Parties should cooperate to address leakage.
- (c) The Parties should take precautionary measures to anticipate, prevent and minimize the risk of non-permanence. The Parties should cooperate to reduce the risk and consequences of non-permanence.
- x.11 In their actions under the REDD-plus mechanism, the Parties shall:
- (a) Ensure the environmental integrity of the mechanism; especially global and national additionality of reduced emission and enhanced removals from the forestry sector and other selected

land-use and land-use change sectors to any that would have occurred in the absence of the REDD-plus mechanism:

- (b) Ensure against the conversion of natural forests to forest plantations;
- (c) Ensure real, measurable and long-term benefits related to the reductions of emissions by sources and increasing removals by sinks from the forestry sector and other and other selected land-use and land-use change sectors;
- (d) Respect the rights of indigenous peoples and ensure the full and effective involvement of stakeholders, in particular indigenous peoples and local communities, in the design and implementation of all activities linked to this mechanism;
- (e) Take precautionary measures and establish safeguards to protect biological diversity in REDD-plus host countries; and
- (f) Establish and further develop measurable, reportable and verifiable nationally appropriate REDD-plus framework, institutions and capacities.
- x.12 The Conference of the Parties shall develop guidelines, principles, methodologies and mechanisms for measurement, reporting and verification (MRV) of emission reductions and removals from the forestry sector and other land-use and land-use change categories and activities, based on the most recent IPCC guidelines for GHG inventories, for adoption at [COP 17].
- x.13 The REDD-plus framework shall be consistent with overall approaches to measurement, reporting and verification of nationally appropriate mitigation actions by developing country Parties under this Agreement and related agreements, recognizing the need for higher tier level of MRV for sectors linked to the carbon-market.
- x.14 Emissions and removals shall be reported in a transparent, consistent, comparable, complete and accurate way.
- x.15 Verification should build on review procedures and methodologies for Annex I Parties, including making use of the institutional function of the UNFCCC secretariat as host of the verification mechanism. The Conference of the Parties shall define rules and procedures for international verification of national GHG inventories, including a comprehensive and robust international expert review of inventories.
- x.16 A global reference level for future emissions and removals from the forestry sector and other selected land-use and land-use change categories and activities from developing countries shall be established in order to avoid carbon leakage and to ensure the environmental integrity of the mechanism.
- x.17 The methodology for the establishment of a global reference level shall:
 - (a) Be robust and based on objective, measurable, and verifiable criteria; and
- (b) Ensure additionality both at the national and global level compared to business as usual scenarios.
- x.18 In addition, individual country specific reference levels for developing country Parties shall be established. Such country specific reference levels shall be dynamic, adjustable over time and incentivize all developing countries to participate in the REDD-plus mechanism.
- x.19 The methodology for the establishment of individual reference levels shall be robust and based on objective, measurable, and verifiable criteria, taking into account relevant national factors, such as:
 - (a) Historic emissions and removal rates from the forestry sector;
 - (b) Forest cover;
 - (c) Expected future emission and removal trends;
 - (d) Capacity for emissions reductions and removals based on, inter alia, GNP per capita;
 - (e) Other country specific conditions and circumstances.
- x.20 An expert body shall be mandated to propose individual reference levels. Any such proposal shall be subject to the approval by the concerned developing country Party before being submitted to the COP or a mandated body for final determination. The reference levels shall be updated at regular intervals.

- x.21 The Conference of the Parties shall establish:
- (a) The global reference level, subject to the requirements set out in paragraphs 16 and 17 above; and
- (b) Guidelines, and supplement and expand methodologies and procedures for the establishment of individual reference levels in accordance with the principles defined in paragraphs 10 and 11 above, for adoption at [COP 17].
- x.22 A developing country Party is eligible to participate in the REDD-plus mechanism if:
 - (a) It is a Party to the Convention; and
 - (b) It is in compliance with its commitments under the Convention.
- x.23 Subject to paragraphs 29, 31 and 36 below, the Conference of the Parties shall establish additional eligibility criteria for each phase, to be adopted at its [16th] session.
- x.24 Parties participating in the REDD-plus mechanism shall designate a national authority for this purpose.
- x.25 A Party that authorizes private and/or public entities to participate in REDD-plus activities shall remain responsible for the fulfillment of its obligations under the Convention and this Agreement. Participation of private and public entities is subject to whatever guidance may be provided by the Conference of the Parties or any mandated body.
- x.26 The REDD-plus mechanism shall be subject to the authority and guidance of the Conference of the Parties and be supervised by a mandated body.
- x.27 The Conference of the Parties shall elaborate modalities, rules and procedures for the REDD-plus mechanism, in particular for ensuring transparency, efficiency and accountability through independent auditing and verification of REDD-plus activities and the dispersal and expenditure of REDD-plus related compensation.
- x.28 In phase 1, subject to the provisions of paragraph 29 below, a developing country Party, that meets the requirements set out in paragraph 22, will receive assistance to develop a national REDD-plus strategy, including, but not necessarily limited to:
- (a) Policies and measures for the establishment of capacity and framework necessary for measuring, monitoring, analyzing, reporting and verifying emission reductions and removals from the forestry sector and other selected land-use, land-use change categories and activities as defined in Annex [B];
- (b) Initial institutional development to address the reductions of emissions and increase of removals from the forestry sector and other selected land-use, land-use change categories and activities as defined in Annex [B]; and
 - (c) Identification of necessary adjustments in forest law and governance.
- x.29 A developing country Party is eligible to participate in phase 1 activities, if it has demonstrated a national commitment to the REDD-plus mechanism in accordance with the principles defined in paragraphs 10 and 11 above.
- x.30 In phase 2, subject to the provisions of paragraph 31 below, a developing country Party will receive additional financial resources to implement the national REDD-plus strategy defined in phase 1 by adopting policies and measures, such as:
- (a) Development of a comprehensive REDD-plus legal framework, including, but not limited to, reform of land tenure with due regard to collective land rights, land use planning and forest governance, where necessary and appropriate, and of respective law enforcement capabilities;
 - (b) Further development of MRV institutions and capacities; and
- (c) Development of a REDD-plus action plan within the framework of a national low carbon development strategy.
- x.31 A developing country Party is eligible for funding under phase 2, if it has demonstrated commitment to implementing the REDD-plus strategy developed in phase 1, *inter alia*, by:
 - (a) Establishment and/or elaboration of transparent, rule-based forest governance; and

- (b) Implementation of inclusive, multi-stakeholder consultations and cooperation, including consultations and co-operations in good faith with the indigenous peoples and local communities concerned through their own representative institutions in accordance with international instruments.
 - (c) Establishment of safeguards against the conversion of natural forests to forest plantations;
 - (d) Establishment of safeguards to protect biological diversity;
- x.32 Subject to the provisions of paragraph 34 below, such funding shall be granted on the basis of performances, including measurable, reportable and verifiable indicators for the implementation of policies and measures, as well as for institution and capacity-building.
- x.33 Subject to the provisions of paragraph 34 below, further funding may be granted on the basis of results derived from proxy data on reduced emissions and enhanced removals from the forestry sector, and other selected land-use, land-use change categories and activities defined in Annex C. Suitable proxy data are identified in Annex D. An expert body should be mandated to propose proxies and corresponding indicators for individual countries, to be finally determined by the COP or any body so mandated by the COP.
- x.34 Where necessary, ex ante funding may be granted on the basis of spending plans and stated commitments, subject to ex post verification of delivery.
- x.35 In phase 3, subject to the provisions of paragraph 36 below, a developing country Party shall be compensated for emission reductions and enhanced removals from the whole forestry sector and from other selected land-use, land-use change categories and activities as defined in Annex E, relative to the agreed country specific reference level for future emissions, provided that reductions in emissions and enhanced removals from land use activities are:
 - (a) Measured, monitored, reported and verified; and
 - (b) Additional to those achieved in previous phases.
- x.36 A developing country Party is eligible for compensation under phase 3, if:
- (a) It remains in compliance with phase 1 and 2 eligibility criteria in accordance with paragraphs 29 and 31;
- (b) It can demonstrate that previously received compensation under the mechanism has been spent according to agreed guidelines for agreed purposes; and
- (c) It has implemented an operational national forest greenhouse gas inventory based on measured, reported and verified data according to agreed rules.
- x.37 The third phase shall end individually for each developing country Party, unless a further decision is taken by the Conference of the Parties to extend it, when the Party commits to quantified emission reduction targets for the land use sector.
- x.38 The Conference of the Parties shall, at its 15th session, mandate an appropriate institutional body to ensure immediate efforts to implement the REDD-plus mechanism and define the relevant principles, rules and guidelines for the mandated body, to be adopted at its [16th] session.

Annex A – Categories and activities (potentially) covered by the REDD-plus mechanism

[...]

Annex B – Categories and activities for the pupose of phase 1 (para. x.28)

. . . |

Annex C – Categories and activities for the purpose of result-based funding in phase 2 (para. x.33)

`...]

Annex D – Suitable proxy data for the purpose of result-based funding in phase 2, (para. x.33)

. . . |

Annex E – Categories and activities for the purpose of result-based funding in phase 3 (para. x.35)

[...]]

D. Cooperative sectoral approaches and sector-specific actions²⁵

Structural proposals:

This section should not be a separate section from NAMAs, should be included in nationally appropriate mitigation actions by developing countries.

Move paragraphs 135–138 on international aviation and maritime emissions to a new section separate to the general sectoral approaches.

- x.1 Cooperative sectoral approaches and sector-specific actions" shall be focused on the enhanced implementation of Article 4.1 (c) of the Convention, on:
- (a) The development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montréal Protocol, in all relevant sectors, including, but not limited to, energy, transport, industry, agriculture, forestry, health, tourism, and waste management sectors;
- (b) The provision of information on available technologies, conditions of access to and financing transfer of these technologies, including the development of effective modalities for the implementation of all stages of the technology cycle, from development, application, transfer, and diffusion;
- (c) Actions that cover the whole scope of technologies both for adaptation and mitigation, including those that control, reduce and prevent emissions, for abatement of increases in emissions and enhancement of and removal by sinks, and include those technologies that are publicly-owned, or in the public domain as well as those held by the private sector.
- 129. [Cooperative sectoral approaches and sector-specific actions {shall} {should} enhance the implementation of Article 4.1(c) of the Convention. To this end, these approaches and actions {should}:
- (a) [Be applied at the national level [only];] [Sectoral approaches and sector-specific actions should be cooperative and not imposed by one or some Parties on other Parties.]

[Be used in the definition and implementation of mitigation actions in developed and developing countries;]

- (a).1 Cooperative sectoral approaches and sector-specific actions should not be used to circumvent or undermine the differentiation made in the Convention between Annex I and non-Annex I Parties or modify their respective commitments and obligations.]
 - (a).2 Be applicable to all sectors;
- (b) [Be tailored to][Take into account] national sector-specific needs and priorities and [consider] social and economic conditions and other relevant factors;
- (c) [Strengthen][[Be aimed at strengthening] cooperative actions within any phase of the technological cycle and facilitate the management of technical and financial resources for the implementation of NAMAs;]
- (d) [Assist in fostering][Foster private and public sector][national] initiatives in R&D, capacity-building and [technological] [technology] cooperation;
- (e) [[Assist in achieving [the levels of] financing and technology transfer] [necessary to address climate change] in a measurable, reportable and verifiable manner;]

[Facilitate as appropriate in obtaining finance, technology and know-how to address climate change in measurable, reportable and verifiable manner;]

(f) [Facilitate the identification of best practices and best available technologies for each sector through cross-border analysis and promote the transfer of those best practices and best available technologies [from developed country Parties through analysing reduction potentials and setting indicators].]]

[Facilitate the identification of best practices and best available technologies and promote the exchange of information.]

²⁵ The Bali Action Plan, in its paragraph 1 (b) (iv), calls for the consideration of enhanced national/international action on mitigation of climate change, including, inter alia, cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention.

- 129.1 Cooperative sectoral approaches and sector-specific actions should enhance the implementation of Article 4.1 (g) and (h) of the Convention through the provision of financial resources, including for transfer of technology, at agreed full incremental costs in accordance with Article 4.3 of the Convention.
- 130. [Cooperative sectoral approaches and sector-specific actions should be implemented as analytical tools to inform national mitigation efforts, taking into account the capabilities of each sector, and should contribute to the enhancement of Parties' [measurable, reportable and verifiable] actions in order to ensure environmental integrity. Bottom-up sectoral analysis may be used as a tool for analysing mitigation potential, based on recent scientific findings and existing knowledge using a common methodology to determine sectoral baselines of Parties. [Cooperative sectoral approaches and sector-specific actions may also be used as instruments for both market and non-market mechanisms.]]
- (a) For developed country Parties, sectoral efforts may contribute to, but cannot replace legally binding absolute emission reduction targets (QELRCs) and mitigation commitments for all Annex I Parties;
- (b) For developing country Parties, domestic sectoral efforts may be one option in the toolbox for national mitigation actions, but shall not be a basis for the imposition of trade barriers, punitive trade measures, benchmarking or standards for developing countries, or any action that would be contrary to Article 3.5 of the Convention:

130.1 Means of implementation

- (a) Implementation of Article 4.1 (c) shall be financed at agreed full incremental costs, in accordance with Article 4.3 of the Convention;
- (b) Provision of financial resources and promotion and facilitation of access and transfer of technology in implementation of Article 4.1 (c) shall be accomplished under the guidance of the Executive Body on Technology of the Convention and the financial mechanism to be established under the authority of the Conference of the Parties
- 131. [Priority areas shall be identified sector by sector and technology by technology. The possibilities of utilizing renewable energy resources shall be explored fully. The most climate-sensitive sectors, including GHG-intensive and climate-vulnerable sectors, shall be fully considered for the development, transfer and deployment of environmentally sound technologies. In line with the technology transfer mechanism and taking into account, among others, countries' technology needs assessments (TNA), if available, a list of major environmentally sound technology needs shall be assessed regularly, to include analysis of reliability, costs, penetration range, sectoral share of market production capacity and market obstacles. Measures shall be taken to overcome obstacles to development, transfer and deployment of technologies in specific sectoral contexts.]
- 132. [The implementation of cooperative sectoral approaches and sector-specific actions should [complement and support national commitments of all Parties under Article 4.1.] [not replace the national targets of developed country Parties [or lead to [new commitments for developing country Parties, [trans-national or national emission reduction targets,]] arbitrary or unjustifiable discrimination or disguised restriction on international trade[, or the application of global uniform and equal standards for Parties]]].]
- 133. [Cooperative sectoral or sector-specific actions by developing countries to control their GHG emissions represent modalities of their implementation of Article 4.1 of the Convention. Annex II Parties must therefore meet their commitments for the provision of support for these actions to developing countries in accordance with Articles 4.3, 4.5 and 4.7 of the Convention.]

Alternative to paragraph 133:

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

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In particular, inclusion of international transport in an ETS shall not impose constraints and incremental costs on developing countries. Developing countries should be exempted or, if included they should be given financial and technological support to enable them to comply with these provisions without incurring any incremental costs.]

Agriculture

- x.1 Cooperative sectoral approaches in the agricultural sector should avoid the creation of international performance standards for the sector and any other measure that may result in barriers to or distortion of the international trade system of goods and products of the agricultural sector.
- 134. [Parties shall cooperate in R&D of mitigation technologies for the agriculture sector, recognizing the necessity for international cooperative action to enhance and provide incentives for mitigation of GHG emissions from agriculture[, in particular in [developing][developed] countries. [Consideration should be given to the role of soils in carbon sequestration, including through [the use of biochar and] enhancing carbon sinks in drylands]]]

Alternatives to paragraph 134:

Alternative 1

[Special considerations should be given to the role of sustainable land management (SLM) in general, including the role of soils in carbon sequestration and GHG emissions from sources.]

Alternative 2

[All Parties should enhance efforts to reduce emissions and enhance removals from agriculture by strengthening and cooperating in research and development of mitigation technologies and methodologies for the agriculture sector. All Parties should consider means of increasing the efficiency of agricultural production systems, enhancing soil carbon sequestration, and achieving sustainable agricultural land management benefits including for reducing emissions from deforestation.]

Alternative 3

[Cooperative sectoral approaches in the agricultural sector should be encouraged but such actions should not lead to:

- (a) discriminatory trade practices;
- (b) carbon offsets;
- (c) approaches that may contribute to deforestation and forest degradation in developing countries]
- 134.1 In considering mitigation actions in the agricultural sector, Parties should consider the interlink between population growth and food security and, therefore, focus mitigation actions on the improvements in the efficiency of the agricultural activities, taking into account past efforts countries have made in this regard.

International bunker fuels

135. [All sectors of the economy [, in particular those of Annex I Parties,] should contribute to limiting emissions, including international maritime shipping and aviation. [Multilateral collaborative action would be the most appropriate means to address emissions from international aviation and the maritime transport sector, the International Civil Aviation Organization and the International Maritime Organization dealing with this issue should prevent the adoption of trade restrictions and take into account the special economic conditions of developing countries and the principles of equity and of common but differentiated responsibilities and capabilities.] [Global][Sectoral approaches could address emissions that cannot be attributed to any particular economy, and multilateral collaborative action by all Parties would be the most appropriate means to address emissions from international aviation and the maritime transport sector.]]

Alternative to paragraph 135:

[Those developed country Parties that are not Parties to the Kyoto Protocol shall undertake measures within the context of their national appropriate mitigation commitments to reduce emissions from international aviation and international maritime transport.

Developing country Parties may undertake actions to reduce emissions from international aviation and international maritime transport within the context of nationally appropriate mitigation actions.]

136. [Option 1

The International Maritime Organization shall be encouraged to continue without delay its activities for the development of policies and measures to reduce GHG emissions, and specifically:

(a) [To achieve, through the use of its policies and mechanisms, total GHG emission reductions which are at least as ambitious as the total GHG emission reductions under the Convention;]

[To establish an ambitious global goal for the reduction or limitation of greenhouse gas emissions from ships to be achieved through the implementation of its policies and measures.]

- (b) To report regularly to the COP {and its subsidiary bodies as appropriate} on relevant activities, emission estimates and achievements in this respect;
- (c) To report to the COP {at its seventeenth session} on policies, established measures, measures under development, and expected emission reductions resulting from these measures.] *Alternative to paragraph 136 [in the form of a draft decision by the COP]:*

[Reduction of greenhouse gas emissions from international shipping

The Conference of the Parties,

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

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

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

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

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

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

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

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

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

Requests the Secretariat of the UNFCCC to continue co-operating with the Secretariat of the International Maritime Organization.]

137. [Option 2

Parties shall take the necessary action to reduce emissions of GHGs not controlled by the Montreal Protocol from aviation and marine bunker fuels.

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

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

138. [Option 3

[Taking into account the interests of developing countries,][All Parties][Developed country Parties][Parties][Annex I Parties] shall pursue limitation or reduction of emissions of GHGs not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.]

138.1 Option 4

[The Parties should pursue a collective reduction of [X per cent] below [year XXXX] for emissions of anthropogenic greenhouse gases not controlled by the Montreal Protocol from international aviation bunker fuels and [Y per cent] below [year XXXX] levels for emissions of anthropogenic greenhouse gases not controlled by the Montreal Protocol from international marine bunker fuels in the commitment period [20XX to 20XX].]

The Parties should commence negotiations on two global sectoral agreements to address, respectively, international aviation and maritime emissions in 2010 with a view to concluding by COP-17 in 2011, taking into account work already done in ICAO and IMO.

E. [[Various approaches to enhance the cost-effectiveness of, and to promote, mitigation actions²⁶] [Market mechanisms]]

- 139. [[Parties {shall} {should}] [Encourage Parties to] cooperate, as appropriate, to enable cost-effective mitigation [at the least economic cost] through the use of environmentally effective, market-based instruments that provide economic incentives to achieve maximum [private-sector] participation. [Policies in developed and developing countries [{shall} promote] [should contribute to promoting] the flow of funding to developing countries in order to catalyse mitigation actions at the scale that will be necessary to address the climate challenge.]]
- 139.1 Parties shall strive to establish a global carbon market through the progressive implementation of new and improved [flexible][carbon market] mechanisms as provided for under this agreement.
- 139.2 A robust carbon price signal should be created as a key means to deliver cost-effective GHG emissions reductions globally. A global carbon market offers a key means to meet mitigation objectives, to provide finance for the worldwide transition towards a low carbon economy, and contribute towards achieving development objectives.
- 139.3 The [flexible][carbon market] mechanisms are:
- (a) new mechanisms consisting of sectoral trading and crediting mechanisms established under this Agreement;
- (b) existing mechanisms consisting of international emissions trading, joint implementation and the clean development mechanisms established under the Kyoto Protocol.
- 139.4 The Parties shall by 20XX, revise the modalities and procedures for clean development mechanism in order to ensure a more equal geographical distribution of CDM projects, sustainable development and the environmental integrity of the clean development mechanisms including by establishing:
 - (a) benchmarks for baseline setting and determination of additionality for specific project types;

²⁶ The Bali Action Plan, in its paragraph 1 (b) (v), calls for the consideration of enhanced national/international action on mitigation of climate change, including, inter alia, various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions.

- (b) discount factors for application to issuance of certified emissions reductions for specific clean development mechanism project types as an alternative in situations where it is not feasible to establish baselines on the basis of benchmarks;
 - (c) criteria on the primary technology employed in the relevant sector;
 - (d) a rules based approach to decision making.
- 139.5 The Parties shall by 20XX revise guidelines for the implementation of Joint Implementation, including for improving its effectiveness and efficiency by extending its timing, guaranteeing its environmental integrity, and preparing for new participants.
- 139.6 Market based approaches shall employ market based mechanisms that shall be neutral with respect to the technology used and gas covered, except when specifically not eligible, based on well defined, objective criteria, and as result of a transparent process. These criteria shall be approved by COP.
- 139.7 Developed country Parties which are not Parties to the Kyoto Protocol and developing country Parties that undertake Tier three NAMAs may trade carbon units with Kyoto Protocol Parties subject to the following provisions:
- (a) that means of measuring, reporting and verifying the generation of carbon units is compatible with reporting and verifying provisions established under Articles 5, 7 and 8 of the Kyoto Protocol;
- (b) that any system of trade with the Kyoto Protocol Parties is approved by the Conference of Parties serving as the meeting of Parties to the Kyoto Protocol;
- (c) that no carbon units generated from reducing emissions from deforestation and forest generation are used or converted into other carbon units.
- 140. [[Eligibility criteria for project activities linked to market-based mechanisms] [Instruments, such as financing to cover additional risk,] should be established to ensure additionality, a fair distribution of projects across regions and mitigation technologies and to ensure fair access to financing schemes[, including through the advance payment of future carbon credits to cover the full incremental costs of project activities].]

Alternative to paragraph 140:

[Eligibility criteria for access by developed country Parties to new and existing [flexible][carbon market] mechanisms shall include establishment of assigned amount pursuant to a binding national cap, and submission of the most recently required national inventory. Eligibility criteria for access by economically more advanced developing country Parties to new and existing [flexible][carbon market] mechanisms shall include submission of the most recently required inventory. Further eligibility criteria may be defined by the Meeting of the Parties under this Agreement.]

141. [Co-benefits should be [included as eligibility criteria for project activities; these may include technology transfer, capacity-building, employment creation and positive environmental impacts] [promoted by facilitative means for project activities; which may contribute to technology transfer, capacity-building, employment creation and environmental conservation such as air pollution reduction, improvement of water quality, and proper treatment and reduction of waste]. {These criteria shall be defined by a new body to be created under the Convention.}]

Alternative to paragraph 141:

[Projects that demonstrate co-benefits should be promoted through a number of measures, including lower registration fees and expedited registration measures; the criteria for co-benefits may include technology transfer, capacity-building, employment creation and positive environmental impacts. [These criteria shall be defined by the CDM Executive Board or a new body to be created under the Convention.]]

142. [Actions enabled through support that is provided by [market mechanisms] [developed countries to developing countries may] require [a level of] measurement, reporting and verification [that ensures a high degree of international confidence].]

- 142.1 The Clean Development Mechanism as defined by article 12 of the Kyoto Protocol shall continue to assist developed country Parties in achieving compliance with part of their quantified emission reduction commitments and assist developing country Parties in achieving sustainable development.
- 143. [The use of market-based mechanisms {shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments [of developed country Parties and other Parties included in Annex I of the Convention] } {should comprise not more than 10 per cent, including offsets, of the quantified emission limitation and reduction commitments of developed country Parties} {shall not provide credits for offsetting the quantified emission limitation and reduction targets of developed country Parties}.]
- 144. [[A four-year programme of work on] [Parties should take advantage of] opportunities for rapid, near-term climate mitigation [shall be established as a precautionary measure] to complement ongoing measures to mitigate climate change over the medium and long-term, with the goal of achieving significant near-term results through, for example, reducing emissions of substances that are short-lived in the atmosphere such as black carbon (soot), promoting the phase-down of hydrofluorocarbons (HFCs) and biosequestration. {An arrangement shall be established to reduce emissions of HFCs}.
- 144.1 Parties shall establish an arrangement to reduce emissions of HFCs.
- 145. [[Mitigation commitments and actions {shall} {should} be comprehensive in addressing all GHG sources [in all sectors], as well as GHG sinks.] [Mitigation potential should be maximized through the comprehensive coverage of greenhouse gas sources and sinks.] {A metric based on global warming potential {shall} {should} be used.} [In deciding on inclusion of new GHGs, it is important to consider whether the technical information on these gases is available and whether inclusion of each gas is appropriate from a viewpoint of effective implementation.]

Alternative to paragraph 145:

[For the purposes of this agreement, the global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases listed in Annex [X] shall be those provided by the Intergovernmental Panel on Climate Change in its Fourth Assessment Report based on the effects of the greenhouse gases over a 100-year time horizon. Any revision to a global warming potential by the Intergovernmental Panel on Climate Change subsequent to the Fourth Assessment Report or revisions of the approach to calculate carbon dioxide equivalence shall apply only to commitments in respect of any commitment period adopted subsequent to that revision.]

Move paragraph 145 to another section

146. [Issues identified by Parties requiring further elaboration at the appropriate time include further modalities and procedures that prevent double counting of emission reductions between any of the mechanisms [and other support].]

[A crediting mechanism for nationally appropriate mitigation actions]

- 147. [A NAMA crediting mechanism {shall} {should} be established, under which credits may be generated for the verifiable emission reductions achieved by the NAMAs by developing country Parties in order to assist them in achieving sustainable development and contributing to the global efforts to combat climate change. NAMA generated credits shall be used to meet the commitments of Annex I Parties both under the Kyoto Protocol and the LCA and shall be fully fungible with other carbon market units under the LCA and KP.]
- 148. [The NAMA crediting mechanism shall be subject to the authority and guidance of the COP and shall be supervised by a dedicated body constituted by the COP [or by the Executive Board of the CDM], advised by a body composed of stakeholders, including experts from the private sector, environmental organizations, etc.]

The issues relating to HFC and perfluorocarbon emissions as well as additional new gases and methodological proposals for the measurement of GHGs are also being considered by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol and by the SBSTA.

- 149. [NAMAs financed through the NAMA crediting mechanism shall be verified, together with the corresponding support as measured and reported, by institutions accredited by a body under the authority of the COP, and in accordance with guidelines developed under the authority of the COP. Where independent third-party verification is used, it shall result in a verification report considered by a body under the authority and guidance of the COP.]
- 150. [Issues identified by proposing Parties requiring further elaboration at the appropriate time include modalities for the implementation of the NAMA crediting mechanism, including the scope of NAMAs eligible for crediting, appropriate criteria and standards, and methodologies for measuring and verifying emission reductions while rigidly ensuring additionality of actions for environmental integrity, based on appropriate data and robust MRV mechanisms.]

[Sectoral crediting]

- 151. [A sectoral crediting mechanism, subject to the authority and guidance of the COP and supervised by {a body} [a dedicated body constituted by the COP], shall be established [to enable developing countries to strengthen their contribution to the ultimate objective of the Convention and to access carbon markets, to assist developed countries in achieving compliance with part of their quantified emission limitation and reduction commitments, and to promote sustainable development].]
- 151.1 A sectoral crediting mechanism is hereby established for the purpose of supporting Parties to reduce anthropogenic emissions and increase anthropogenic removals of greenhouse gases from sectoral no-lose emissions reduction thresholds registered in national schedules.
- 152. [Developing countries that have absolute or intensity based sectoral emission thresholds and meet requirements (to be developed) may participate in sectoral crediting.]
- 153. [Developing countries may propose absolute or intensity based sectoral emission thresholds, as part of their low-emission development strategies.]
- 154. [{Certified emission reductions} {other fungible units} may be issued {by a specific body} in respect of sectoral emission reductions beyond the absolute or intensity based emission threshold and shall be fungible with other units issues under the KP and LCA such as CERs, ERUs and AAUs.]
- 155. [Issues identified by proposing Parties in the context of paragraphs 151–154 above as requiring further elaboration at the appropriate time include:
- (a) Preparation, submission, review and approval of proposals for inscribing absolute sectoral emission thresholds, while rigidly ensuring the adequacy of targets for environmental integrity;
 - (b) Monitoring, verification and reporting of emissions and accounting of units;
- (c) Modalities and procedures for sectoral crediting including possible guidelines for management and allocation of issued credits;
 - (d) Criteria for eligible countries and sectors;
 - (e) Nature of targets (absolute or intensity);
 - (f) Possible stakeholders, including public-private cooperation;
 - (g) Results of non-achievement of the target;
 - (h) Relationship with CDM activities.]
- 155.1 [The Meeting of the Parties to this Agreement shall, [at its Xth session], elaborate modalities and procedures for the:
- (a) preparation, submission, review and approval of proposals for inscribing absolute sectoral emission thresholds;
 - (b) monitoring, verification and reporting of emissions and accounting of units.]
- 155.2 The modalities and procedures shall as a minimum ensure that:
- (a) Parties' absolute emission thresholds for the relevant sectors should deviate significantly from business as usual emissions and be established in a conservative manner taking into account, inter alia, the most efficient techniques, procedures, substitutes and alternative production processes;

- (b) independently verified data and projected emissions in the relevant sector are taken into account;
- (c) methodologies for estimating and accounting sectoral greenhouse gas emissions in a conservative manner are available;
 - (d) sectoral emissions are effectively monitored, reported and reviewed;
 - (e) there is a clear definition of sectoral boundaries;
- (f) the crediting period for [certified emission reductions or/other fungible units] shall be [X] years;
 - (g) absolute sectoral emissions thresholds are reviewed every [X] years;
 - (h) leakage is minimised to the extent possible;
- (i) revenues derived from sectoral emission reductions are additional to any other financial support for NAMAs.

[Sectoral trading]

- 156. [Developing countries that have sectoral emission targets and meet requirements (to be developed) may participate in international emissions trading. Developing countries may propose sectoral emission targets as part of their low-carbon development strategies. Units issued under sectoral emissions trading shall be fully fungible with other units issues under the KP and LCA such as CERs, ERUs and AAUs.]
- 156.1 A sectoral trading mechanism is hereby established for the purpose of supporting Parties to meet sectoral quantified emission limitation or reduction commitments registered in national schedules.
- 157. [Any trading pursuant to paragraph 156 above for the purpose of meeting sectoral emission targets shall be supplemental to domestic actions.]
- 158. [Issues identified by proposing Parties in the context of paragraphs 156–157 above as requiring further elaboration at the appropriate time include:
- (a) Preparation, submission, review and approval of proposals for sectoral emission targets while rigidly ensuring the adequacy of targets;
 - (b) Monitoring, verification and reporting of emissions and accounting of units;
- (c) Modalities and procedures for sectoral trading including possible guidelines for management and allocation of issued credits ;
 - (d) Criteria for eligible countries and sectors;
 - (e) Nature of targets (absolute or intensity):
 - (f) Possibly stakeholders;
 - (g) Result of non-achievement of the target;
 - (h) Relationship with CDM activities.]
- 158.1 [The Meeting of the Parties to this Agreement shall, [at its Xth session], elaborate modalities and procedures for the:
 - (a) preparation, submission, review and approval of proposals for sectoral emission targets;
 - (b) monitoring, verification and reporting of emissions and accounting of units.]
- 158.2 The modalities and procedures shall as a minimum ensure that:
- (a) sectoral emission targets should deviate significantly from [business as usual/reference] emissions and be established in a conservative manner taking into account, inter alia, the most efficient techniques, procedures, substitutes and alternative production processes;
- (b) independently verified data and projected emissions in the relevant sector are taken into account;
- (c) methodologies for estimating and accounting sectoral greenhouse gas emissions in a conservative manner are available;
 - (d) sectoral emissions are effectively monitored, reported and reviewed;

- (e) there is a clear definition of sectoral boundaries;
- (f) the trading period for [assigned amount/fungible units] shall be [X] years;
- (g) sectoral emission targets are reviewed every [X] years;
- (h) leakage is minimised to the extent possible;
- (i) revenues derived from sectoral emission reductions are additional to any other financial support for NAMAs.
- 158.3 The Meeting of the Parties to this Agreement shall, [at its Xth session] define modalities and procedures which:
 - (a) prevent double counting between the new and existing mechanisms and other support;
- (b) provide for an orderly transition between mechanisms where one mechanism' ceases to be applicable due to the application of another mechanism;
- (c) ensure credits issued from clean development mechanism project activities registered before [XXXX] will continue to be issued [until XXXX];
- (d) exclude new clean development mechanism projects in sectors for which absolute sectoral emission thresholds or targets are defined.
- 158.4 Units generated from market mechanisms established under this agreement shall be available to Parties to meet mitigation commitments under the Kyoto Protocol.
- 158.5 Parties which take on economy-wide or sectoral quantified limitation or reduction commitments under this agreement shall be eligible to participate in the Kyoto Protocol flexibility mechanisms.
- 158.6 Units generated from the Kyoto Protocol flexibility mechanisms shall be available to Parties which take on economy-wide or sectoral quantified limitation or reduction commitments under this agreement for the purpose of fulfilling this commitment.

<u>Proposed new subsection on a crediting and trading mechanism for nationally appropriate mitigation actions</u>

- x.1 A crediting and trading mechanism for nationally appropriate mitigation actions is hereby defined.
- x.2 The purpose of the mechanism shall be to assist developing country Parties in undertaking nationally appropriate mitigation actions that produce a net mitigation benefit to the atmosphere, to promote cost-effective global mitigation through the use of markets, and to assist developed country Parties in meeting their commitments under the Convention and any of its related legal instruments.
- x.3 This mechanism shall complement other means of implementation for nationally appropriate mitigation actions by developing country Parties.
- x.4 Participation in the mechanism by any Party shall be voluntary.
- x.5 Subject to the requirements in paragraph x.6, each participating developing country Party may participate in the mechanism on the basis of a quantified crediting or trading threshold:
- (a) Proposed by that Party as a form of nationally appropriate mitigation action, or in conjunction with such action;
- (b) Established in accordance with rules, procedures, modalities and guidelines to be adopted by the [supreme body of this instrument]; and
 - (c) Approved by the [supreme body of this instrument].
- x.6 Developing country Parties shall meet the following eligibility requirements and any other requirements established by the [supreme body of this instrument]:
- (a) Establishment of a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with the requirements in the guidelines decided pursuant to this Article;
- (b) Establishment of a national registry, in accordance with the requirements in the guidelines decided pursuant to this Article; and

- (c) Annual submission of the most recent inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with the requirements in the guidelines decided pursuant to this Article and taking fully into account any relevant decisions by the Conference of the Parties.
- x.7 A crediting or trading threshold shall cover one or more eligible sectors elected by the participating developing country Party.
- x.8 A crediting or trading threshold shall be set at a level significantly below projected anthropogenic emissions, or above projected anthropogenic removals, of greenhouse gases within the sector boundary, taking into account the national circumstances and respective capabilities of the participating developing country Party.
- x.9 For each developing country Party that elects to participate on the basis of a crediting threshold:
- (a) NAMA units shall be issued to the Party following the verification of the Party's actual reductions in emissions and/or removals by sinks within the sector boundary relative to the threshold.
- (b) Where the Party's actual emissions with the sector boundary exceed the threshold, or the Party's actual removals with the sector boundary are below the threshold, no NAMA units shall be issued and there shall be no further consequences under [this instrument].
 - (c) The Party may participate in emissions trading.
- x.10 For each developing country Party that elects to participate on the basis of a trading threshold:
- (a) NAMA units shall be issued to the Party at the start of each trading period in an amount calculated in accordance with that Party's trading threshold.
- (b) At the end of each trading period, the Party shall retire a number of NAMA units or other eligible units equal to its actual net emissions within the sector boundary during the trading period.
- (c) The Party may participate in emissions trading. Any such trading shall be supplemental to domestic actions by the Party.
- x.11 The mechanism shall function under the guidance of and be accountable to the [supreme body of this instrument] and shall be supervised by a body to be established or appointed by the [supreme body of this instrument].
- x.12 The [supreme body of this instrument] shall adopt the definitions, rules, modalities and guidance for the mechanism, including in relation to: the determination of eligible sectors and sector boundaries; requirements for measurement, monitoring, reporting and verification; ensuring real, measurable and long-term benefits related to the mitigation of climate change; the duration of crediting and trading periods; the carry-over of units between periods; issuance and accounting of NAMA units; eligible units for the purposes of paragraph x.10 (b) above; treatment of potential leakage across sectors; and the consequences for not meeting a trading threshold including facilitative measures.

A proposed new subsection on an upfront crediting mechanism for the implementation of emission trading and carbon taxes on national level

- x.13 A mechanism to support developing countries in implementing cap and trade systems and carbon taxes nationally is herby established.
- x.14 Developing country Parties eligible to allowances up front will receive emission allowances under the Copenhagen Agreement from a set aside reserve.
- x.15 The amount of allowances and the necessary capacity-building for introducing such measures should be scaled up with sector scope, high price on emissions and early implementation, and scaled down with GDP/capita.
- x.16 The Conference of the Parties shall adopt further principles, modalities, rules and guidelines for the functioning of this mechanism at its [16th] session.

A proposed new subsection on a new project based mechanism

x.17 A project based mechanism for storing CO_2 or other greenhouse gases in geological formations is hereby established.

x.18 The Conference of the Parties shall adopt further principles, modalities, rules and guidelines for the functioning of this project based mechanism at its [16th] session.

A proposed new subsection on Addition to or subtraction from the assigned amount

- x.19 (a) Any emission reduction units, any certified emission reductions, any assigned amount units or removal units, which a Party acquires from another Party in accordance with the provisions of paragraph x.20 or x.21 below, shall be added to the assigned amount for the acquiring Party.
- (b) Any emission reduction units, any certified emission reductions, any assigned amount units or removal units, which a Party transfers to another Party in accordance with the provisions of paragraph x.20 or x.21 below, shall be subtracted from the assigned amount for the transferring Party.
- (c) Any certified emission reductions which a Party acquires from another Party in accordance with the provisions of paragraph x.22 below shall be added to the assigned amount for the acquiring Party.
- (d) The acquisition of emission reduction units, certified emission reductions, assigned amount units or removal units under paragraphs x.20, x.21, x.22 below shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3, paragraph 1 (Commitments by developed country Parties).

A proposed new subsection on JI

- x.20 (a) For the purpose of meeting its commitments under Article 3, paragraph 1 (Commitments by developed country Parties), any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:
 - (i) Any such project has the approval of the Parties involved;
 - (ii) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur; and
 - (iii) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 4 (Methodological issues) and 5 (Inventory and information).
- (e) A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition, under this paragraph of emission reduction units.
- (f) If a question of implementation by a Party included in Annex I of the requirements referred to in this paragraph is identified in accordance with the relevant provisions of Article 6 (Review of information), transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3, paragraph 1 (Commitments by developed country Parties), until any issue of compliance is resolved.

A proposed new subsection on Emissions Trading

x.21 The Parties included in Annex I may transfer and/or acquire, through emissions trading, emission reduction units, certified emission reductions, assigned amount units or removal units for the purposes of fulfilling their commitments under Article 3, paragraph 1 (Commitments by developed country Parties).

A proposed new subsection on Clean Development Mechanism

- x.22 (a) A clean development mechanism is hereby defined.
- (g) The purpose of the clean development mechanism shall be to promote nationally appropriate mitigation actions by Parties included in Annex C in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in meeting their quantified emission limitation and reduction commitments under Article 3, paragraph 1 (Commitments by developed country Parties).
 - (h) Under the clean development mechanism:

- (i) Parties included in Annex C will benefit from project activities resulting in certified emission reductions; and
- (ii) Parties included in Annex I may use the certified emission reductions accruing from such project activities to meet part of their quantified emission limitation and reduction commitments under Article 3, paragraph 1(Commitments by developed country Parties), as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.
- (i) The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.
- (j) Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:
 - (i) Voluntary participation approved by each Party involved;
 - (ii) Real, measurable, and long-term benefits related to the mitigation of climate change; and
 - (iii) Reductions in emissions that are additional to any that would occur in the absence of the certified project activity while adopting methodologies widely and efficiently applied to project activities.
- (k) The clean development mechanism shall assist in arranging funding of certified project activities as necessary.
- (l) The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.
- (m) Participation under the clean development mechanism, including in activities mentioned in subparagraph x.22 (c)(i) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.
- x.23 The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, decide upon guidelines for the implementation of paragraphs x.20, x.21 and x.22 above, including for verification and reporting, taking into account the characteristics of respective schemes.

F. Economic and social consequences of response measures²⁸

Structural proposals:

Proposal 1

Put the whole section F in abeyance until the work within the joint SBSTA/SBI contact group and the work on Article 2.3 and Article 3.14 within the AWG-KP deliver conclusions.

Proposal 2

Include the treatment of the underlying causes of deforestation and degradation of forests.

Proposal for preambular paragraphs:

Recognizing the special difficulties of those countries, especially developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken on limiting greenhouse gas emissions,

There is a need to undertake a global transition to a low emission economy in order to tackle climate change. Although this transition presents a major opportunity for all countries to follow a clean

²⁸ The Bali Action Plan, in its paragraph 1 (b) (vi), calls for the consideration of enhanced national/international action on mitigation of climate change, including, inter alia, and economic and social consequences of response measures.

development path, it can also pose challenges for all Parties, in particular to the most vulnerable countries. Parties should work together to ensure this transition is congruent with sustainable development processes in all countries.

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

The Parties acknowledge that the issue of adaptation to the adverse impacts of climate change is a separate issue and one to be addressed under the adaptation building block of the Bali Action Plan, while the discrete issue of the impacts of response measures is to be addressed under enhanced action on mitigation under the mitigation building block of the Bali Action Plan.

159. [Developed country Parties shall [strive to] implement policies and measures to respond to climate change in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and [social, [environmental] and economic impacts on other Parties] [adverse economic, social or environmental consequences], [especially developing country Parties, and in particular those identified in Articles 4.8 [and] [,] 4.9 and 4.10 of the Convention, taking {fully} into account Article 3 of the Convention [, in particular Article 3.2, 3.3 and 3.5]].]

Alternatives to paragraph 159:

Alternative 1

[Developed country Parties shall minimize the adverse effects of response measures, on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties, and in particular those identified in Articles 4.8 and 4.9 of the Convention.]

Alternative 2

[Parties shall strive to implement mitigation policies and measures in such a way as to minimize social, environmental and economic impacts on other Parties, especially the poorest and most vulnerable developing country Parties that are least capable to address them, taking into account Article 3 of the Convention.]

Alternative 3

[Parties shall strive to implement policies and measures to respond to climate change in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially those Parties most vulnerable to the adverse effects of climate change and the least able to adapt, taking {fully} into account Article 3 of the Convention {, in particular Article 3.5}. Such efforts should not constrain or hinder progress in addressing climate change.]

Alternative 4

[All Parties shall endeavour to reduce their emissions in such a way so as to avoid economic and social consequences of taking such actions. In taking action to avoid economic and social consequences of mitigation action special attention should be given to low income countries, and in particular consequences for women and children in low income countries.]

- 159.1 Promotion and cooperation in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies (Article 4.1 g);
- 159.2 Promotion and cooperation in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies (Article 4.1 h);
- 159.3 The difficulties of assessing the complex issue of potential impacts of policies are compounded by the fact that some of these impacts are unintended and often unanticipated. Wider economic and political factors can play a role in the vulnerability of socio-economic sectors and can amplify or diminish

the impacts of policies. Parties should cooperate to enhance the understanding on the potential consequences of policies and measures, taking into account of:

- (a) The need for information from those affected;
- (b) Evidence of actual impacts;
- (c) Both positive and negative effects.
- 159.4 All Parties shall develop and implement policies and measures to ensure that mitigation action, including, inter alia, the use of biofuels, does not contribute to deforestation and forest degradation in developing countries.
- 159.5 As a means of ensuring that mitigation action, including, inter alia the use of biofuels, does not contribute to deforestation and forest degradation in developing countries, all Parties shall initiate forest law enforcement, governance and trade measures.
- 159.6 All Parties shall ensure all actions to reduce emissions from deforestation and forest degradation in particular countries do not result in emissions from deforestation and forest degradation in other countries as a result of emissions displacement. Measure may include regulation of demand-side use of forest products or other commodities that have resulted in deforestation or forest degradation.
- 160. [Adverse economic and social consequences of response measures {shall} {should} be addressed by proper economic, social and environmental actions including promoting and supporting economic diversification and the development and dissemination of win-win technologies in the affected countries, paying particular attention to the needs and concerns of the poorest and most vulnerable developing country Parties.]

Alternatives to paragraph 160:

Alternative 1

[Adverse economic and social consequences of response measures shall be addressed by various means, including but not limited to promoting, supporting and enabling economic diversification, funding, insurance and the development, transfer and dissemination of win-win technologies in the affected countries, such as cleaner fossil fuel technologies, gas flaring reduction, and carbon capture storage technologies.]

Alternative 2

[The understanding of adverse economic and social consequences of response measures should be enhanced by exchanging and sharing information between Parties on experience of actual impacts of climate change response measures, cooperating in developing tools and methods and building the capacity to assess potential impacts of climate change policies and measures in the affected countries, paying particular attention to the needs and concerns of the poorest and most vulnerable developing country Parties that are least capable to address them.]

- 161. [[Developed [and developing] countries] [Developed and developing country Parties] [All Parties] [shall] [should:]
- (a) [[Assess] [Consider] the economic, [cultural,] [environmental] and social effects that result from their mitigation strategies and measures;]
- (b) [Consider [how to avoid] negative spillover effects and positive spillover effects when designing their policies and measures to tackle climate change;]
- (c) [Provide information in their national communications on any impacts arising from the implementation of their commitments under the Convention and any related instruments;]

[Make use of the national communications to report on impacts experienced arising from the implementation of climate change response measures taken by another Party]

[Provide information in their national communications on any impacts they are experiencing as a result of the implementation of their commitments under the Convention]

(d) [Request the secretariat to Undertake comprehensive [studies] [a study] of direct costs and adverse impacts of response measures, as well as associated indirect costs and impacts on other Parties,

especially on developing country Parties identified in Articles 4.8 [and] [,] and 4.9 and 4.10 of the Convention.]

- (d).1 Compensation for damage to the LDCs' economy and also compensation for the lost opportunities, resources, lives, land and dignity as many will become environmental refugees
- (d).2 Africa, in the context of environmental justice, should be equitably compensated for environmental, social and economic losses arising from implementation of response measures.
- 162. [Efforts to assess the potential effects of response measures should not constrain or hinder progress in addressing climate change.]

Move paragraph 162 and insert it as a new paragraph following paragraph 159

163. [Developed country Parties {shall} {should} provide support to developing countries, particularly those specified in Articles 4.8 and 4.9 of the Convention, in order to address issues related to social and environmental development, economic diversification, risk assessment, modelling and insurance to prevent the adverse effect resulting from the spillover effects.]

Alternative to paragraph 163:

[In the implementation of 159.1 and 159.2 above, through the provision of financial resources, including for access, development and transfer of technology, at agreed full incremental costs in accordance with Article 4.3 of the Convention;

Promotion of the understanding of the nature and magnitude of the impacts of climate change and its adverse effects, as well as the economic and social consequences of various response strategies;

Recognizing that there are ways and means to reduce or avoid such impacts through careful and informed selection of policies and measures, evaluate the effectiveness of existing tools, and consider new ones, to assist developing country Parties in addressing these impacts.]

- 164. [A permanent [forum] shall be established, under the {COP} {Subsidiary Body for Implementation}, to provide a venue for Parties to share information, experiences and views on the economic [and] [,] social [and environmental] consequences of response measures, so as to enhance the efforts of Parties to analyse and understand these consequences and to identify innovative policy responses and technologies to address adverse consequences. This permanent forum shall be open to participation from all Parties and intergovernmental organizations and mobilize expertise from the scientific and modelling communities and the private sector. The [work of the] permanent forum should [lead to] [formulate] a comprehensive framework to address adverse consequences [by] [in order to], inter alia:]
 - (x.a) Prepare guidelines on how to integrate/assess the adverse impacts of response measures;
- (a) [[Enabling] [Enable] all Parties to select appropriate and effective policies and measures that achieve the desired mitigation results while avoiding or reducing the adverse impacts of these policies and measures on the sustainable development of other Parties, particularly developing country Parties;]
- (b) [[Enabling] [Enable] developing country Parties confronted by unavoidable adverse consequences of policies and measures to strengthen their resilience and adaptive capabilities [and to] [by inter alia] undertake economic diversification, integrating these responses in their sustainable development processes.]
 - (b).1 Report periodically to the COPs.
- 165. [The permanent [forum] should also formulate/implement a work programme that [includes] [addresses inter alia] the following components:]
 - (a) [Insurance and financial risk management;]
 - (b) [Modelling, analytical and methodological tools;]
 - (c) [Economic diversification.]
 - (c).1 Early warning and systematic observation;
 - (c).2. Disaster management and preparedness;
 - (c).3 Compensation procedures and actions including funds;

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- (c).4 Funding;
- (c).5 Other related matters:

Proposed new section on Measurement, Reporting and Verification

Proposed new section on Compliance

IV. Enhanced action on financing, technology and capacity-building

A. Enhanced action on the provision of financial resources and investment²⁹

Structural proposals:

Proposal 1

The chapter should be structured as follows:

- A. Objectives, role of UNFCCC and guiding principles,
- B. Sources of funds,
- C. Actions by all Parties,
- D. Institutional arrangements

Proposal 2

Move the text on compliance (para 178) to an integrated section on MRV or to a section on the review mechanism under the COP.

Proposal 3

Paragraphs 22(c), 28-36, 41 and 42 should be moved from the adaptation chapter to the finance chapter. Paragraphs 22(c), 30, 32 and 35 should be inserted in this chapter as appropriate and bracketed, as they are duplicative. The other paragraphs should be inserted and bracketed.

Proposal 4

Proposals on "mechanisms for facilitating financial support for NAMAs" (paras. 77–87) should be moved from the mitigation chapter into the financing chapter.

Proposal 5

Paragraphs 113 and 114 on REDD and implementation of REDD Plus should also be moved to the finance chapter.

Proposal 6

Text identifying the objectives and scope for the 'enhanced action on the provision of financial resources and investment' (elements from paras 167–170) should precede text on principles for implementation (para 166).

Suggestions on placement reflected in other chapters that are related to chapter IV, include:

 $Move\ proposals\ related\ to\ finance\ contained\ in\ paragraphs\ 75-80\ to\ chapter\ IV.A\ on\ Finance$

Move all options included in paragraphs 77–80, except paragraph 78, subparagraph 3, to chapter IV.A on Finance

Move paragraph 81 to chapter IV.A on Finance

Move chapter III.B, subsection 2 on Means of implementation, to chapter IV

Move chapter III.B, subsection 4 on Measurement, reporting and verification of support to chapter IV

Move chapter III.B, subsection 5 on Institutional arrangements to chapter IV

Move paragraphs 125 and 126 to chapter IV.A on Finance

Move paragraph 198 to chapter IV.A on Finance

Move paragraph 201 to chapter IV.A on Finance

The Bali Action Plan, in its paragraphs 1 (e), calls for enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation. Parties referred to the following Articles in submissions related to this section: Articles 4.1, 4.3, 4.4, 4.5, 4.8, 4.9, 11.1, 11.2 and 11.5 of the Convention.

Proposals for preambular paragraphs:

Proposal 1

To ensure the full, effective and sustained implementation of the Convention in relation to the implementation of the commitments of developed country Parties and other developed Parties included in Annex II for the provision of new and additional, adequate and predictable financial resources, on a grant or concessional basis, including for the transfer of technology, as stipulated in Article 4.3 of the Convention, and to enhance the implementation of Articles 4.1, 4.3, 4.4, 4.5, 4.8, and 4.9, in the context of Article 4.7, and in accordance with Article 11 of the Convention, the COP shall operationalize an effective financial mechanism under the Convention, [in order to bring about coherence in the global financial architecture for financing for climate change and its adverse effects,] under its authority and governance, the COP shall establish a financing mechanism under the Convention, in fulfilment of its functions as its Supreme Body, as mandated under Article 7.2 (h) of the Convention.

Need for recognition of the significant gap between the actual needs and the resources available; enhanced actions on the provisions on commitments under the Convention.

Proposal 2

Establish financial mechanism of the Convention in accordance with article 11 with structure that meets the requirement laid down under article 11.1 and 11.2 of the Convention.

1. Objectives, scope and guiding principles

- x.1 The objective of the provision of financial resources is to further enhance the full, effective and sustained implementation of the UNFCCC and Bali action plan on grant basis and to reach positive outcome. Concrete arrangements shall be made for financial resources to enable developing countries to take nationally appropriate mitigation and adaptation actions, in the context of sustainable development, supported by technology, financing and capacity-building from developed countries.
- x.2 Parties agree to establish the financial mechanism of the Convention in accordance with Article 11 with a structure that meets the requirements laid down under Article 11.1 and 11.2 of the Convention.
- x.3 The objective of the provision of financial resources is to promote equity and justice so that the ultimate objective of the Convention can be achieved.
- x.4 The financial resources should be raised by developed country Parties and other developed Parties included in Annex II and provided to developing countries in accordance to Articles 4.3, 4.4 and 4.5 of the Convention. Deeply concerned over the substantial gap between the financial resources required for enhanced action on adaptation and mitigation in developing countries and the level of financial resources currently available.
- x.5 Emphasizing the urgent need for developed country Parties and other developed Parties included in Annex II to honour their commitments under the Convention including those contained in Article 4 of the Convention related to the provision of financial resources to support adaptation, mitigation and technology transfer.
- x.6 Stressing that the provision of financing for adaptation to address the needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, represents an urgent and immediate global priority.
- x.7 Developed country Parties and other developed Parties included in Annex II shall provide new additional and predictable financial resources to support enhanced action on mitigation and adaptation in developing countries. The provision of financial resources shall be guided by the principles of the Convention and the priorities of developing countries especially those particularly vulnerable to the adverse impacts of climate change.
- x.8 Considering that the current amounts of resources destined for climate change are insufficient for all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.

- x.9 Bearing in mind the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing countries Parties that would have to bear a disproportionate or abnormal burden under the Convention, Should be given full consideration.
- x.10 Bearing in mind that the last UNDP Human Development Report estimated that an additional 86 billion US dollars per year would be needed for adaptation for 2015.
- x.11 Also bearing in mind the fact that the UNFCCC Secretariat indicated that the amount required for climate change activities would be between USD 28- 67 billion for 2030.
- x.12 Stressing the need of increasing the provision of new, additional (to ODA), predictable and sustained level of resources.
- x.13 Highlighting the fact that financial commitments have not been met on behalf of Annex I Parties, in accordance with articles 4.3, 4.4, and 4.5 of the Convention.
- x.13 Stressing the principle of common but differentiated responsibilities.
- x.14 Noting that adaptation and mitigation efforts should be given equal consideration.
- x.15 Taking into account that although adaptation needs are already an urgent necessity, it is clear that early and ambitious emission reduction by developed country Parties will decrease needed efforts and funding for adaptation. Poor mitigation commitments and actions will impose a higher demand on adaptation measures and will require additional funding.
- x.16 Parties agree to establish, in accordance with Article 11 of the Convention, the Financial Mechanism of the Convention with a structure that meets the specific requirements laid down under Articles 11.1 and 11.2 of the Convention. This Financial Mechanism shall enable, enhance and support mitigation and adaptation actions by developing country Parties through the provision of financial resources to meet the agreed full incremental costs of such actions including the cost of technology transfer.
- x.17 Financial mechanism shall ensure developing countries to be able to meet the objective(s) of the convention as laid down under article 4.3, 4.4 and 4.5 of the Convention.
- x.18 Recognizing the urgency of taking enhanced action on Adaptation by all developing country Parties, Annex I Parties shall provide adequate financial resources to meet the full cost of adaptation activities, technology transfer and capacity-building needs in a timely manner.
- 166. [[[The operationalization of] With a view to enhancing the implementation of the Convention and operationalization of its Article 11 [the] financial mechanism³⁰ [the provision of financial resources]][shall] be established and will be guided by the following principles:]

Alternative to chapeau of paragraph 166:

Alternative 1

[To establish a multi window financing mechanism with the following guiding principles:]

Alternative 2

[Parties should seek to enhance the coherence and effectiveness of multilateral climate-change related support, guided by the following:]

Alternative 3

[The financing {shall} {should} be guided by the following principles:]

Alternative 4

[The financial architecture enabled by this Agreement {shall} be guided by the following:]

- (a) Full transparency, fairness, predictability, stability, feasibility, adequacy, inclusive, efficiency and effectiveness, and [the equitable and balanced] appropriately representation of all Parties [shall][should] be ensured;
- (a).1 Be underpinned by the principles of equity and common but differentiated responsibilities;

³⁰ Some proposals referred to this matter as "financial framework", "architecture", "financial architecture", "global financial architecture" and "new financing architecture".

- (a).2 The Financial Mechanism shall fulfill the implementation of the commitments contained in articles 4.3, 4.4, 4.5, 4.8 and 4.9 in the context of Article 4.7 of the Convention;
- (a).3 The principle of common but differentiated responsibilities of the Convention is the fundamental guiding principle for financial mechanism. Developed countries shall take responsibility for their historical cumulative emissions and current high per capita emissions to provide financial resources and transfer technology to developing countries. Developing countries will, in pursuing economic development and poverty eradication, take proactive measures to adapt to and mitigate climate change;
- (a).4 The funding provided by the developed country Parties shall be new, additional, adequate, predictable and sustained. All the developing country Parties are eligible for the funding;
- (b) [The financial mechanism [shall][should] function under the [authority and] governance and [guidance] of {and be [fully] accountable to} the [COP] [Meeting of the Parties to the Copenhagen Agreement] {, which [shall][should] decide on its policies, programme priorities and eligibility criteria}] and allocation of resources for adaptation, mitigation, technology and capacity-building;

Alternative to subparagraph (b):

[The financial mechanism shall function under the strategic guidance of the COP;]

(c) [Coherence in the global financial architecture for financing under the {authority and} governance of the COP and coordination between various financial resources and individual funds {shall} {should} be ensured in order to reduce fragmentation in the implementation of the Convention and promote access to and enhance the variety of available funding sources;]

Alternatives to subparagraph (c):

Alternative 1

[Coherence in multilateral climate-change related support, including between the financial mechanism of the UNFCCC and various financial sources and funds not accountable to and outside the guidance of the COP, shall be promoted;]

Alternative 2

[Coherence and coordination between financing under the guidance of the Meeting of the Parties to the Copenhagen Agreement and various financial mechanisms and individual funds should be encouraged and facilitated in order to reduce fragmentation, strengthen synergy and build on their comparative advantages in the implementation of this Agreement and promote access to a wide variety of available funding sources]

- (c).1 The financial mechanism shall operate and function under the authority and guidance, and be fully accountable to the COP, which shall decide on its policies, programme priorities and eligibility criteria, in order to ensure coherence in the global financial architecture and reduce fragmentation in the implementation of the Convention;
- (d) [[All] developing country Parties [shall][should] be eligible to [direct] access [to] [the] financial resources, [in accordance with the objectives and provisions under this Agreement] [particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change] [with special attention to the [adaptation] needs of [the most] vulnerable countries, [according to their financial capacity] [with special preference to the needs of LDCs and SIDS;]]

Alternatives to subparagraph (d):

Alternative 1

[All developing country Parties {shall} {should} be eligible to access support with priority for support to poorest countries and those most vulnerable to the adverse effects of climate change and least able to adapt;]

Alternative 2

[All Parties that meet specified criteria shall be eligible to access the financial resources with special attention to the needs of vulnerable countries. The criteria set should be based on:

- (i) National and regional development priorities;
- (ii) Natural and geographical characteristics; resource endowment;
- (iii) Relative size of the economy;
- (iv) Economic and technological capacity;
- (v) Position on the human development index.
- (vi) Being eligible to borrow from the World Bank (IBRD and/or IDA) or to be an eligible recipient of UNDP technical assistance through its country Indicative Planning Figure (IPF)];
- (d).1 Have an equitable and geographically-balanced representation of all Parties within a transparent system of governance;
- (d).2 In providing adaptation support, priority {shall} {should} be given to developing country Parties that are the most vulnerable to climate change impacts and that are the least able to adapt:
 - (i) Supporting adaptation at local and national levels;
 - (ii) Particularly vulnerable developing country Parties, especially:
 - Poor developing countries;
 - LDCs and SIDS, and countries in Africa affected by drought, desertification and floods;
 - Low-lying and other small island countries, countries with low-lying coastal, arid
 and semi-arid areas or areas liable to floods, drought and desertification,
 archipelagic countries, and developing countries with fragile mountainous
 ecosystems;
 - Countries with unique biodiversity, tropical glaciers and fragile ecosystems;
 - Particularly vulnerable populations, groups and communities, especially the poor, women, children, the elderly, indigenous peoples, minorities and those suffering from disability;
- (d).3 In addition to the above, priority consideration should also be given to ecosystem-based adaptation activities;
- (d).4 In prioritizing support, the level of vulnerability, determined by national circumstances, respective financial and technical capabilities, levels of risk and impacts as well as levels of poverty and climate change exposure, should be taken into account;
- (e) [[Access to financial resources [shall][should]] be simplified and improved [including, where appropriate, through direct access by recipient countries] while ensuring internationally agreed fiduciary standards and eligibility criteria, [provided that the fiduciary standards of the in-country recipient entities are effective],] and provided in an expeditious, effective, equitable and [timely manner] subject to robust governance arrangements agreed by the Parties];

Alternative to subparagraph (e):

[Access to financial resources {shall} {should} be simple and an improved version of past experiences, and provided efficiently, effectively, and timely to eligible Parties;]

- (e).1 Enable direct access to funding;
- (f) [Delivery of financial resources [shall][should] generally [follow a programmatic and project approach, using a project approach when appropriate], to be based on a programmatic approach and project approach, and be host country-driven; and be country-driven;] The

approach should ensure the involvement of recipient country on the stages of identification, definition and implementation of the programmes;

Alternatives to subparagraph (f):

Alternative 1

[Delivery of financial resources should be as efficient as possible, including by following a programmatic approach if feasible, and be country-driven;]

Alternative 2

[Delivery of financial resources {shall} {should} goal oriented and follow a programmatic approach, using a project approach when appropriate, and be country-driven;]

- (f).1 Ensure recipient country involvement during the stages of identification, definition and implementation of activities, rendering it truly demand-driven;
- (g) [Delivery of financial resources ,where appropriate, [shall] be for implementation and [could] [should] [strive to] [leverage] other financing, [including private-sector financing [through carbon markets and/or through other measures]] and ensure participation of LDCs and SIDS;]

Alternative to subparagraph (g):

[Provision of financial resources {shall} {should} strive, where appropriate, to leverage financing from other sources, including private-sector financing through carbon markets and/or through other measures;]

- (g).1 Financial resources shall be provided for the implementation of concrete actions;
- (h) [Financial resources [shall][should] be provided in the form of [grants][grants and concessional loans {for specific programmes}] as per commitments under Article 4/3, 4.4, 4.5, 4.8 and 4.9 of the Convention and should not crowd out private investment or create market distortions. Financial resources shall be provided as grants on a full cost basis for LDCs and SIDS;]

Alternative to subparagraph (h):

Alternative 1

[Financial resources {shall} {should} be provided in a variety of forms;]

Alternative 2

[Financial resources, for adaptation, should be provided in the form of grants, while for mitigation, a combination of grants and concessional loans may be provided;]

Alternative 3

[Financial resources may be provided inter alia, on a grant or concessional basis or in the form of guarantees, where appropriate;]

- (h).1 Financial resources may be provided for funding international, regional or national, activities that contribute to the continued fulfillment of Article 4.1 of the Convention;
- (i) Taking into account [[Mutual] accountability, country ownership, alignment, harmonisation, focus on results, [with a compliance mechanism] and sound financial management [[taking into account] consistent with the principles of aid effectiveness as set out in the Paris Declaration on Aid Effectiveness];]
- (i).1 In order to send clear market signals, drive expanded private investment, and attract increased international public support, domestic enabling policy with appropriate capacity-building support, should be implemented;
- (i).2 Support for technical assistance to build the readiness of developing countries on accessing larger pools of financing shall be provided;
- (i).3 Involvement of the recipient country during the stages of identification, definition and implementation of activities;
- (i).4 Financing should be fully derived from multiple sources;

- (i).5 Existing institutions should be utilized more efficiently;
- (i).6 Catalytic role of public financial flow to facilitate private sector funding and investment should be further strengthened;
- (i).7 Effective, efficient, feasible, and balanced governance for financing is necessary;
- (i).8 Need to facilitate the matching of needs and resources should be confirmed;
- (i).9 The ownership by the developing countries is important;
- (i).10 Recognition of the urgency to address the adverse impacts of climate change to the vulnerable countries, like LDCs and small island developing countries;
- (i).11 Prioritization on adaptation is important;
- (i).12 Funds shall be allocated for adaptation, mitigation, technology transfer and capacity-building, in a balanced manner, with especial emphasis on adaptation with preferential allocation for the most vulnerable countries particularly LDCs and SIDS;
- (i).13 Access to funds by Parties shall be inversely proportional to their contribution to greenhouse gases in the atmosphere;
- (i).14 A specific portion proceeds from the carbon market shall flow towards Adaptation Activities for LDCs and SIDS;
- (i).15 Responsiveness to evolving needs and respective roles of public and private finance;
- (i).16 Financial resources should be provided in accordance with internationally agreed environmental and social standards and safeguard policies;
- (i).17 In their interaction with relevant institutions, the Meeting of the Parties to the Copenhagen Agreement and individual Parties are requested to take these principles into account in pursuing the objectives of this agreement;
- (i).18 The shares of mitigation, adaptation, and technology development and transfer actions are decided in two years and financial resources are allocated based on the decided ratios;
- (i).19 Recognize, promote and strengthen effective engagement at the country level, in order to give effect to the principles given in subparagraphs 1 (d) and 1 (e) above;
- (i).20 Enable a shift from a project-based approach when dealing with proposals for funding, to a programmatic approach, where appropriate, in order to make optimal use of the full range of means of implementation available and to allow for implementation at scale;
- (i).21 Facilitate linkages between the various funding sources and separate funds in order to promote access to the variety of available funding sources and reduce fragmentation;
- (i).22 Maintain consistency with the policies, programme priorities and eligibility criteria adopted by the decisions of the COP, as well as all activities, including those related to funding, relevant to climate change, undertaken by institutions outside the framework of the financial mechanism;
- (i).23 Determine new and additional financial resources to be provided to meet the agreed full costs incurred by developing countries in complying with their obligations for the preparations of their national communications (Article 12.1), and such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by Article 4.1 of the Convention, ensuring adequacy and predictability of such financial flows, in accordance with Article 4.3 of the Convention;
- (i).24 Define a list of agreed full costs in implementation of Article 12.1 obligations, and agreed full incremental costs in implementation of Article 4.1 obligations;
- (i).25 Take into account the need for adequacy and predictability in the flow of such funds;
- (i).26 Any other function that may be determined by the COP;
- (i).27 Full and effective repayment of climate debt, including historical emissions and adaptation debt, by developed to developing countries.

166.1 The financial needs of developing countries vary according to their national circumstances, their economic and technical capacity, and the implementation measures undertaken.

167. Option 1

[The [public sector shall be the [major] source of funds], [while market mechanisms and other private-sector sources] would play a complementary role in addressing climate change.] Public finance may also be used to leverage private investment and to provide incentives for additional efforts. A specific portion proceeds from the carbon market shall flow towards adaptation activities for LDCs and SIDS].

168. Option 2

[Where it is provided, public finance should be directed to [[Public finance shall be provided in] areas that cannot be adequately financed by the private sector to leverage private investments and to provide incentives for additional efforts]. Private funding will be, via appropriate policy frameworks and regulations, the main source of necessary investments as well as adaptation by providing a specific portion of proceeds towards adaptation activities for LDCs and SIDS. [Carbon market related support also has the potential to play a significant role in reducing emissions.]]

- 168.1 Increases in private sector investment depend largely on public policies that create the enabling environments and demand for climate change technologies. Financing the incremental costs of technologies for adaptation and mitigation is dependent on public sources of finance and public policies. To make the best use of public funds, it is essential to leverage commercial investment, indirectly build up the target markets, and respond to market segments and national conditions.
- 168.2 Both public and private finance should play a major role in the implementation of this Agreement. Public finance should leverage private investments and provide incentives for additional efforts and be directed towards areas that cannot be adequately financed by private sector, in particular for adaptation. Private funding should, via appropriate policy frameworks be the main source of necessary investments for mitigation. Parties should encourage the establishment of a robust carbon price signal, including through a progressive integration into the global carbon market, as a key means to deliver cost-effective emissions reductions globally.
- 168.3 The main source of funding will be new and additional financial resources, defined as resources over and above the financing provided through financing institutions outside of the framework of the financial mechanism of the Convention (listed in Article 11.5), of which the major source will be the public sector.

169. [Option 1

[Financial resources provided through bilateral, regional, and other multilateral channels or under mechanisms/institutions outside the Convention shall not be regarded as fulfillment of commitments by developed country Parties] and other developed Parties included in Annex II under Article 4.3 of the Convention, and [their [commitments for] [obligations to provide] measurable, reportable and verifiable financing, as referred to in paragraph 1 (b) (ii) of the Bali Action Plan.]]

170. Option 2

[[The developed country] Parties [and other developed country Parties included in Annex II to the Convention [[and other Parties according to agreed eligibility criteria] [and other Parties in a position to do so]] may also provide, and developing country Parties will [may] avail themselves of, financial resources through bilateral, regional and other multilateral channels [with a robust system of measurement, reporting and verification of financial resources provided through these channels] in accordance with the article 4 of the Convention.] There is a need for a toolbox of financing instruments that can be applied to particular technologies or national circumstances. A portfolio approach to finance is important to maintain flexibility and to be able to tailor solutions to particular financing and technology challenges.

170.1 Parties may provide financial resources through bilateral, regional and other multilateral channels for actions carried out in fulfillment of the objectives of this Agreement. These financial resources shall be deemed as contributing to the fulfillment of the financial commitments of this Agreement, in accordance with the relevant provisions of this Agreement.

170.2 The mechanism shall assure that:

- (a) these financial resources are predictable, stable and delivered in a timely manner;
- (b) these financial resources shall be essentially grant-based, particularly for adaptation, without prejudice to possible concessional loan arrangements in appropriate form, to meet the need of a specific programme;
- (c) the level of the new funding is initially set at between 0.5 to 1per cent of the GDP of developed country Parties and other developed Parties included in Annex II of the Convention; and
- (d) the Executive Board, established to govern and manage the financial mechanism shall determine the allocations for mitigation and adaptation, to be periodically reviewed, taking into account the historical imbalances in and the urgency of funding for adaptation.

2. [Generation][Provision] of financial resources

- x.1 All Parties shall implement and periodically report on policies and instruments used to mobilize public and private financial resources and investment in support of measures to mitigate and adapt to climate change.
- 171. [In order to meet the scale of financial resources required {and the commitments under Articles {4.1}, 4.3, 4.4 and 4.5 and 4.8 } all Parties will take action to mobilise financial resources and improve enabling environments to support [[enhanced action] on adaptation and mitigation by] developing country Parties, [including] [and] for technology cooperation and capacity-building, developed country Parties and other developed Parties included in Annex II of the Convention [[and Annex II Parties] [and other Parties according to agreed [eligibility] criteria, which shall be updated through a periodic review]] {shall} provide [[scaled-up,] new and additional,] financial resources [over and above existing ODA commitments], in a sustainable, adequate, predictable and stable manner financial resources that is measurable, reportable and verifiable [, in accordance with section IIF and section IIIB4 and IIIC4a [measurable, reportable and verifiable manner, [without diverting ODA] [keeping in consideration the provisions of Article 4.7 of the Convention and the Bali Action plan]. The COP shall deal with cases of non-compliance through the mechanisms established in Article 5, paragraph 4 of this Protocol.

Alternative to paragraph 171:

[All Parties shall take measures, according to their respective capabilities, to generate and lever additional public and private funds to support actions outlined in Article 4.1 of the Convention and other actions as appropriate. Developed country Parties and other Parties according to their capability should ensure that scaled-up, new and additional financial resources, over and above existing ODA, are provided bilaterally and multilaterally, such that climate related support can be delivered to developing countries in a manner that is, to the extent feasible, sustainable, adequate and predictable.]

- 171.1 In order to meet the level of financial resources under Articles 4.3, 4.4 and 4.5 and to support enhanced action on adaptation and mitigation for developing country Parties and for technology cooperation and capacity-building, Annex I Parties provide scaled-up, new and additional, sustainable, adequate, predictable and stable financial resources, in a measurable, reportable and verifiable manner.
- 172. [The [generation][provision] of financial resources [shall][should] be guided by agreed objective criteria the principles of the Convention the economic capacity of Parties, and the objective of internalizing appropriate climate change costs [, in particular the principles of equity and common but differentiated responsibilities and respective capabilities, taking into account the ability to pay and emissions [[and take into account [the consideration of] [[the polluter pays principle,]] [and] historical responsibilities]]]]. The public sector shall be the major source of funds, while market mechanisms and other private sector sources would play a complementary role in addressing climate change.

³¹ Some proposals suggest that financial resources to support action on mitigation should amount to approximately USD 200 billion per year by 2020, and financial resources to support adaptation actions should amount to at least USD 67 billion per year by 2020.

Alternatives to paragraph 172:

Alternative 1

[The generation of financial resources shall be guided by the principles of the Convention, in particular the principles of common but differentiated responsibilities, respective capabilities, on the basis of equity, and shall take into account the consideration of historical responsibilities and the right to development for developing countries.]

Alternative 2

[The provision of financial resources shall be guided by the principles of the Convention, in particular the principles of common but differentiated responsibilities and respective capabilities, and shall be generated through a combination of various sources, including;

- (a) An assessed contribution from developed country Parties;
- (b) Developed country Parties, based on the principles of equity, common but differentiated responsibilities and respective capabilities, GDP 2 per cent per year;
- (c) The auctioning of assigned amount units at international level;
- (d) A share of proceeds of 2 per cent on CDM and 8 per cent on joint implementation and emissions trading and market-based mechanisms under the Kyoto Protocol; and
- (e) Penalties or fines on non-compliance of developed country Parties with their emission reduction and financial resources commitments.]

Alternative 3

[Funding for the Multilateral Fund for Climate Change (defined below) shall be provided by the following sources:

- (a) Contributions from all Parties based on a contribution formula developed by the COP (or Conference of Parties serving as the assembly of Parties). Criteria for such contributions shall be based on respective capability and historical responsibility for emissions;
- (b) A levy placed on international maritime transport and international aviation. Such a levy shall be developed in collaboration with the International Maritime Organization and the International Civil Aviation Organization;
- (c) A share of proceeds from the trading of units established under this agreement The COP (or Conference of Parties serving as the assembly of Parties) shall determine the appropriate level and modalities for the deriving a share of proceeds from unit trading;
- (d) Contributions from the Kyoto Protocol Adaptation Fund. Such contributions shall be directed towards specific adaptation activities agreed upon by the Conference of Parties serving as the meeting of Parties upon advice from the Adaptation Fund Board;
- (e) Additional contributions by Parties over and above assessed contributions identified in (a) above:
- (f) Contributions by philanthropic organizations and other donor sources;

172.1 Developed country Parties shall:

- (a) take substantive actions to secure adequate and predictable financial resources for the implementation of the Convention, in particular, Article 4.3, 4.4, 4.5, 4.8, 4.9 of the Convention;
- (b) make assessed contributions by a percentage of their annual GNP, e.g. 0.5-1per cent, in addition to the existing ODA;
- (c) fulfill their financial commitments under the Convention in a measurable, reportable and verifiable manner; any funds pledged outside the UNFCCC shall not be regarded as the fulfilment of commitments by developed country Parties for the implementation of Article 4.3 of the Convention and the Bali Action Plan;
- 172.2 The funding is used to enhance actions on adaptation, mitigation and technology development and transfer, as well as related capacity-building.

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173. [New and additional financial resources {shall} {should} be generated through a combination of various sources, including, inter alia:

Option 1

[An assessed contribution updated on a regular basis from

[Option 1.1

[developed country Parties and other developed Parties included in Annex II of the Convention [, based on the principles of equity, common but differentiated responsibilities and respective capabilities, [{GDP}, [the polluter pays principle, current emission levels]] of Annex I Parties {historical responsibility}, amounting to [{0.5–1}{0.8}{2} per cent of gross national product] at least {0.5–1 per cent of GDP}].³²]

Alternatives to Option 1.1:

Alternative 1

[developed country Parties, of common but differentiated responsibilities, respective capabilities, on the basis of equity, and take into account GDP, GDP per capita and historical responsibility.]

Alternative 2

[developed country Parties and their historical climate debt, including historical emissions and adaptation debt, based on the principles of equity and common but differentiated responsibilities.]

[Option 1.2

[[all Parties] except LDCs based on an agreed set of criteria, reflecting the ability to pay and emissions [including GHG emissions, GDP and population.]]]

[Option 2

Percentage of The auctioning of [X] per cent of {assigned amount units} [under the Copenhagen Agreement] [and of] [emission allowances] of Annex I Parties at international [and domestic] level[s] by developed countries. 33

A mechanism for financing climate change actions by monetizing emission allowances through auctioning is hereby established.

This financial mechanism implies that a certain proportion of the total number of emission allowances under the Copenhagen Agreement is held back and auctioned at the international level.

The auctioning will generate revenue that shall be used to assist developing countries in implementing climate change actions.

Revenue generated by this mechanism will contribute to the fulfillment of financial obligations under the Convention of those countries taking on quantified emission reduction commitments.

The scope of this mechanism is to provide financial resources for

- (a) Adaptation;
- (b) REDD;
- (c) Capacity-building.

The Conference of the Parties shall determine the quantity of allowances to be auctioned at its [16th] session for the period [......] to support each financial need referred to in paragraph 5 above.

In order to provide predictable funding, the method for determining the quantity to be auctioned may factor in price fluctuations in emission allowances. The quantity could be determined on the basis of a number of allowances, a fixed percentage of the total amount or a predefined revenue requirement or a combination of these methods.

³² Some proposals suggest that this option be used to provide funding for adaptation.

³³ Some proposals suggest that a percentage of these resources be used to provide funding for adaptation.

The Conference of the Parties shall adopt further principles, modalities, rules and guidelines for the functioning of this financial mechanism at its [16th] session, including adopting procedures for the determination of the quantity to be auctioned for subsequent periods.

[Option 3

[A uniform global levy] of USD 2 per tonne of CO_2 [in all the countries having per capita emissions higher than 1.5 tonne] for all fossil fuel emissions, [with a tax exemption of $\{1.5\}\{2.0\}$ tCO₂ per inhabitant with an exemption for LDCs] {Taxes on carbon-intensive products and services from Annex I Parties}.³⁴]

[Option 4

[Levies on] [Funding from instruments addressing] emissions from international aviation {and maritime transport}, [for developed countries] may be auctioned through emission allowances under an international regulation scheme.

[Option 5

[An international air passenger [adaptation levy/green] levy on air fares [, except on journeys originating in and destined for LDCs].]

Alternative to Options 4 and 5:

[Share of proceeds from measures to limit or reduce emissions from international aviation and maritime transport;]

Alternative to Option 5:

[An international air adaptation levy on airfares except on journeys originating from LDCs and SIDS.]

[Option 6

[A share of proceeds of {2} [3–5] per cent on CDM and] extend the share of proceeds of [[2]4[810]12] per cent on {joint implementation and emissions trading.} [{market-based mechanisms under the Kyoto Protocol} {and new sectoral market mechanisms} [extended to other carbon market transactions]]] other compliance linked carbon market mechanisms. ³⁵

[Option 7

A [global] 2per cent levy on international financial market [monetary] transactions to Annex I Parties]

[Option 8

Agreed [Penalties or fines on non-compliance of developed country Parties with their emission reduction and financial resources], technology transfer and capacity-building commitments. ³⁶]]]

Option 8.1

Carbon market finance and private investment, leveraged as appropriate by domestic policy frameworks and targeted public funds.

Option 8.2

Mobilization of international resources and debt relief that shall contributed significantly to ensure mitigation and adaptation of climate change at all levels, especially in developing countries. Innovative sources of finance, including implementation of the principle, external debt swap/relief for sustainable development of developing countries originated from ODA and other bilateral/multilateral sources, or usage of special drawing rights for sustainable development shall be further explored.

Option 8.3

Establishing a set aside reserve.

³⁴ Some proposals suggest that this option be used to provide funding for adaptation and/or technology cooperation.

Most proposals suggest that this option be used to provide funding for adaptation.

³⁶ Some proposals suggest that this option be used to provide funding for adaptation.

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- (a) A mechanism for financing mitigation actions where a certain proportion of the total number of emission allowances under the Copenhagen Agreement is held back in a set aside reserve is hereby established.
- (b) The Conference of the Parties shall adopt further principles, modalities, rules and guidelines for the functioning of this financial mechanism at its [16th] session, including adopting procedures for the determination of the quantity to be set aside for subsequent periods.

Alternative to paragraph 173 including options:

[New and additional financial resources {shall} {should} be generated through an assessed contribution from developed country Parties, amounting to at least 0.5per cent per cent of GDP per annum.

Additional sources may include:

- (a) The auctioning of assigned amount units at international level;
- (b) Additional resources from the carbon market, driven by more ambitious quantified emission reduction commitments by developed countries.]

Proposal for additional subheading: Action by all Parties

173.1 All Parties play a role in increasing efforts in addressing climate change including by taking actions to mobilise financial resources.

Proposal for additional subheading: Funding Activities

- 173.2 The mechanism shall fund the following:
- (a) the agreed full costs for the preparations of national communications of developing country Parties:
- (b) the agreed full incremental costs incurred by developing country Parties of implementing measures that are covered by Article 4.1 of the Convention, including for the transfer of technology, for, inter alia, the following:
 - (i) mitigation;
 - (ii) deployment and diffusion of low-carbon and environmentally-sound technologies (ESTs);
 - (iii) research and development of technologies;
 - (iv) capacity-building for mitigation and adaptation actions;
 - (v) preparations of national action plans and their implementation;
 - (vi) patents;
 - (vii) adaptation in accordance with Articles 4.4 and 4.9 of the Convention;
 - (viii) any other funding decisions as may be determined by the COP.
- (c) In accordance with Article 4.3, developing country Parties are to be provided with new and additional financial resources, including for the transfer of technology, to comply with their obligations under Article 4.1 of the Convention. These financial resources shall be used for mitigation and adaptation activities of developing country Parties.
- (d) Funding for the development and transfer of technology as a means of implementation shall include, inter alia, technology development, deployment and transfer, capacity-building, and risk management, including insurance. It will cover financial for the implementation of action programmes developed under the Convention, such as the NAPAs and the TNAs, and other programmes as may be identified in the financial needs assessment project under the Convention.
 - 3. [Institutional arrangements, including funds]³⁷ [Institutional Structure]
- x.1 Institutional arrangement shall be established for the operationalization of an effective financial mechanism under the COP. In stead of on an interim basis in line with Article 21.5 of the Convention, an international operating entity shall be well arranged and entrusted with the operation of the financial mechanism referred to in Article 11. The international operating entity of the financial mechanism shall

³⁷ Specific proposals related to REDD-plus are reflected in paragraphs 113 and 114 above.

be supported by a Secretariat, a Scientific Advisory Panel, a Monitoring and Evaluation Panel, and a Trustee or Trustees.

- x.2 The institutional arrangements shall also include a Convention Adaptation Fund, a Mitigation Fund, a Multilateral Technology Acquisition Fund and a Capacity-Building Fund. Innovative financial instruments, e.g. Venture Capital Fund and Climate Insurance Fund, could be developed and integrated into the financial mechanism, for addressing risks associated with climate change.
- x.3 The governance of these Funds should be under the authority and guidance of the COP with equitable and balanced representation of all Parties in a transparent and efficient manner. The Funds should be managed with easy accessibility and low administrative cost.
- x.4 The financial mechanism shall facilitate linkages between various funding sources and separate funds in order to promote access to a variety of available funding sources and reduce fragmentation. Modality/ies of determining the role of existing funds and entity/ies for the operation of the mechanism shall be developed.
- x.5 The Financial Mechanism, established under the Convention, will be managed by an Executive Board appointed by the COP in accordance with the Convention. The Executive Board shall have an equitable and balanced representation of all Parties within a transparent system of governance and shall function under the guidance of and be accountable to the COP which shall decide on its policies, program priorities and eligibility criteria. The Executive Board will be supported by a professional Secretariat.
- x.6 The Financial Mechanism, established under the Convention, shall have separate specialized windows for funding projects, programs and actions aimed at mitigation, adaptation and technology transfer. Each of the funding windows shall be assisted by a specialized thematic assessment unit. The thematic assessment units shall be under the authority of the Executive Board and, together with the professional secretariat of the Executive Board, shall constitute the operating entity of the Financial Mechanism.
- x.7 The Funding provided by the Financial Mechanism established under the Convention should be demand driven and enable direct access to funds by the ultimate beneficiaries.
- x.8 A Trustee selected through open competitive bidding among reputed pre-qualified institutions would administer the funds of the Financial Mechanism established under the Convention.
- x.9 The national entities, designated by the developing country Parties, shall approve funding for projects, programs, actions, subject to the guidelines and procedures established by the specialized thematic assessment units duly approved by the Executive Board. The thematic assessment units under the Executive Board shall carry out the relevant assessments for disbursement of funds to the designated national entities under their respective specialized funding windows.
- x.10 A transparent, efficient and competitive procurement regime with conditionalities limited to those warranted by prudent fiduciary norms and the MRV regime foreseen under Decision 1/CP 13 should characterize funding from the Financial Mechanism established under the Convention.
- x.11 The Financial Mechanism established under the Convention shall manage a certification and registry system for receiving and deploying financial resources to enable developing country Parties to count their financial contributions and technology support towards compliance of their commitments under the Convention and under paragraph 1(b) (ii) of Decision 1/CP 13.
- x.12 The designated national funding entities could also accept contributions directly, as per guidelines agreed in the COP, from and facilitate linkages with other private or official national, regional, subregional, international bodies and/or stakeholders that may seek to implement actions relating to mitigation, adaptation and technology transfer and related activities directly.
- x.13 The Executive Board of the Financial Mechanism, with approval of the COP, shall institute suitable external independent oversight as well as internal monitoring and evaluation of the management and operation of the Financial Mechanism established under the Convention.
- x.14 The resources of the Financial Mechanism established under the Convention shall be used to meet the costs associated with the functioning of the Executive Board, the Secretariat and the thematic assessment units, subject to the approval of the COP.

- x.15 Institutional arrangements for the operation of the financial architecture have the following functions including, inter alia:
 - (a) assessment of needs for financial resources for the fulfilment of this Agreement;
 - (b) effective use of resources, including those generated under paragraphs x;
- (c) coordination of financial resources, including those generated under paragraphs x for the fulfilment of this Agreement;
 - (d) measurement, reporting and verification / monitoring and review.
- x.16 The institutional arrangements shall be periodically reviewed to assess its fulfilment of these functions.
- 174. [[Institutional arrangements for [the operationalisation of] [the establishment of] the financial framework [mechanism] of the Convention defined in Article 11 shall [include]] entail the following: *Alternative to chapeau of paragraph 174:*

[In addition to improvements to the financial mechanism of the Convention, institutional arrangements {should} be improved by:]

[Option 1

[The COP shall appoint a {board} {executive body} accountable to the COP to manage the financial mechanism [and the related facilitative mechanism] and bodies, with the support of a secretariat {of professional staff contracted by the board} a scientific advisory panel, a monitoring and evaluating panel, and a trustee or trustees, selected through a competitive bidding, to address all aspects of the means of implementation for developing countries, for both adaptation and mitigation,] which shall have an equitable and balanced representation of all Parties within a transparent system of governance.

The Board shall be assisted by a dedicated secretariat of professional staff contracted by the Board; The COP shall establish specialized funds and funding windows under its governance, and a mechanism to link various funds;

Funds will be administered by a Trustee or Trustees selected through a process of open bidding; Each of the separate funds may be advised by an expert group of committee, which could also be supported by a technical panel or panels addressing specific issues addressed by the Board;

To ensure transparent and efficient governance, other possible components of the structure shall include a consultative/advisory group of all relevant stakeholders, and an independent assessment panel.

Under the {authority and} guidance of the COP, the {board} {executive body} shall:

- (a) Establish, supervise and manage the current funds, specialized funds and funding windows under its governance, and a mechanism to link various funds;³⁸
 - (b) [Establish a consultative/advisory group of all relevant stakeholders.]

Alternative to subparagraph (b):

[Establish advisory panels, constituted by representatives of all participant countries, contributors and beneficiaries, grouped in a balanced manner;]

- (c) Establish an independent assessment panel, constituted by experts and specialist, for transparent and efficient governance;
- (d) [{Be supportive of the existing national institutional arrangements to coordinate activities and financial resources}. {[Authorize] the national entities of developing country Parties shall act as the direct channel of access between developing country Parties and the board. Such entities shall as designated by such Parties to approve activities, projects and programmes for funding, [subject to the guidelines and procedures approved by the COP;}]]

³⁸ This proposal is presented in connection with proposals on funds reflected in paragraphs 175, options 1, 4, 5 and 6, below.

Alternative to subparagraph (d):

[Be supportive of the national entities of developing country Parties as designated by such Parties to approve activities, projects and programmes for funding, subject to the guidelines and procedures approved by the COP;]

(e) [Manage a [registry and [certification] system] for delivery of [receiving] financial resources in compliance with the financial commitments of developed country Parties under Article 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention;]]

Alternative to subparagraph (e):

[Financial resources will be made available to support an effective system to measure, report and verify developed countries support;]

(e).1 Provide annual report to the COP on matters related to a proposed fund.

Alternative to Option 1:

[an Executive Board or a Governing Council, constituted by representatives of all participant countries, taking into account a balanced geographical representation, with transparent systems of governance, be fully accountable to and under the authority and governance of the COP, to manage the financial framework and the related facilitative mechanism and bodies.

The role and remit of the COP in the modalities and procedure of such mechanism must be clear, including the setting of operational guidelines, election of executive board members, approval mechanism of final budgets, and audit process or verification.]

[Option 2³⁹

an executive council that will report annually to the COP on matters related to a proposed fund, constituted by representatives of all participant countries, [contributors and beneficiaries,] grouped in a balanced and practical way. Country representatives would be from finance ministries or their equivalent. The executive council will be supported by a scientific committee, to be established in consultation with the IPCC and a multilateral banks committee.]

[Option 3

[establish] a means to, inter alia, draw on public/private-sector expertise; recommend steps intended to mobilize domestic and international financing from a variety of domestic, bilateral, regional, and multilateral sources, including carbon markets; recommend ways to improve the effectiveness and efficiency of the Parties' aggregated efforts to mobilize investment; and address concerns of competition, targeting and overlap of such efforts.]

[Option 4

[make efficient and effective use of current institutions, including the GEF, multilateral development banks, specialized UN institutions and other existing funds, as well as specific funding windows for adaptation, including insurance, mitigation, technology development and transfer and capacity-building with financial support provided by developed country Parties and availed of by developing country Parties through bilateral, regional and other multilateral channels, in accordance with Article 11.5 {, with a robust system of measurement, reporting and verification of financial resources provided through these channels}.]]]]

- 174.1 The levies from the international air passenger adaptation levy (IAPAL) on airfares shall be managed under the Convention Fund* and will be allocated for Adaptation Window. The COP should initiate a process to develop and implement an operational modality to manage the funds generated through IAPAL.
- 174.2 A Board accountable to the COP is hereby established to manage the financial mechanism with the support of a secretariat of professional staff contracted by the Board, to address all aspects of the means of implementation for developing countries, for both adaptation and mitigation.

³⁹ This proposal is presented in connection with proposals on funds reflected in paragraph 175, option 7, below.

^{*} As proposed by G77 and China.

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- (a) The COP shall establish specialized funds, and funding windows under its governance, and a mechanism to link to various sources of funding. Under the authority and guidance of the COP, the Board shall supervise and manage specialized funds and funding windows under its governance, including:
 - (i) A Multi-Lateral Technology Acquisition Fund, to enable the wide diffusion of environmentally sound technologies in developing countries;
 - (ii) A Technology Risk Facility to assist technologies from demonstration to commercial maturity;
 - (iii) A Venture Capital Fund for start-up finance;
 - (iv) A Technology Grant programme for research and development of new technologies;
 - (v) Other funds as required.
- (b) Financial resources provided through mechanisms/institutions outside the Convention shall not be regarded as fulfilment of commitments by developed country Parties under Article 4.3 of the Convention, and their commitments for measurable, reportable and verifiable financing.
- 174.3 The COP, as the supreme body of the Convention, shall exercise its authority over and provide guidance to the financial mechanism, and shall decide on its operation, and on the policies, programme priorities and eligibility criteria for financing purposes.

Funds

- 174.4 Funding windows would serve as disbursement processes/procedures/mechanisms for climate change activities.
- 175. [Institutional arrangements on single consolidated funds {shall} include {the relevant existing funds} 40 the GEF, LDCF and SCCF, as well as the specific funding windows for adaptation, including economic diversification, insurance, mitigation, technology and capacity-building {as well as following new funds}:]

[Options for specialized funds

Option 141

[An adaptation fund under the guidance and authority of the COP, to complement the Adaptation Fund established under the Kyoto Protocol[, including a window to address loss and damage from climate change impacts, as well as negative impacts from response measures including insurance, rehabilitation and compensatory components, and a window for risk reduction and management related to climate change.]]]

[Option 2

Multilateral adaptation fund for low and medium income countries, with revenues partly channeled into national climate change funds for financing national climate change policies according to the country's specific needs and legal frame. The multilateral adaptation fund will provide funding for a prevention pillar and an insurance pillar.]

[Option 3

Solidarity funds and insurance mechanisms, including micro-insurance.]

Alternative to paragraph 175 Options 1, 2 and 3:

[Convention Adaptation Fund

x.1 In the implementation of Articles 4.3 and 4.4 of the Convention and concerned over the substantial gap between the financial resources available and the financial resources required to meet the adaptation needs of developing countries particularly vulnerable to climate change, it is decided to establish a Convention Adaptation Fund, which is hereby defined;

⁴⁰ In presenting their proposals, Parties have mentioned the Least Developed Countries Fund and the Special Climate Change Fund.

This proposal is presented in the context of the proposals reflected in paragraph 174, option 2, above.

- x.2 The purpose of the Convention Adaptation Fund is to provide new, additional and predictable financial resources to developing countries particularly vulnerable to climate change especially Small Island Developing States and Least Developed Countries, to meet the full costs incurred in adapting to the adverse impacts of climate change:
- x.3 The Convention Adaptation Fund shall fund:
- (a) The implementation of national and regional adaptation plans and strategies, concrete adaptation projects and strategies including those contained in national communications.
- (b) The implementation of the activities and actions identified under the Adaptation Committee (AC)* and all other relevant processes under the Convention.
 - (c) The Multi-Window Mechanism to Address Loss and Damage.
- x.4 The Convention Adaptation Fund shall function under and be accountable to the Financial Mechanism*under the Convention.
- x.5 It shall be managed by a geographically balanced and representative Governing Board comprised as follows: 3 members from the 5 UN regional groups, 2 members from small island developing states, 2 members from the group of Least Developed Countries.
- x.6 In deciding on its policies and procedures, the Board shall ensure that the Convention Adaptation Fund adheres to sound financial management and transparency.
- x.7 The Convention Adaptation Fund shall be financed from:
- (a) An assessed contribution from each country listed in Annex II of 0.5per cent of their Gross Domestic Product (GDP). This assessed contribution should be additional to existing ODA commitments.
- (b) An agreed share of the proceeds from new market-based mechanisms developed under the Convention.
 - (c) International levies, as appropriate.
 - (d) Voluntary contributions.
- (e) Contributions from the Kyoto Protocol Adaptation Fund. Such contributions shall be directed towards specific adaptation activities jointly agreed upon by the Conference of Parties serving as the meeting of Parties of the Kyoto Protocol and the Conference of Parties serving as the assembly of Parties to this Protocol.
- x.8 Access to financing under the Convention Adaptation Fund for developing countries particularly vulnerable to the adverse impacts of climate change shall be direct and simplified.
- x.9 The Convention Adaptation Fund shall be operationalized no later than the 16th Session of the Conference of the Parties.]

Option 4⁴²

Mitigation fund.]

[Option 5⁴³

[Multilateral climate technology fund⁴⁴ {to support the implementation of the technology mechanism} for the provision of technology-related financial resources on a grant or concessional basis. The fund shall [be used [as a catalyst]] to provide stakeholders, especially owners of patented climate friendly technologies, with incentives to implement the development, deployment, diffusion and transfer of technologies by meeting the full incremental costs for, inter alia, the deployment and diffusion of technologies in developing countries and full costs of activities such as technology R&D and

⁴² This proposal is presented in the context of the proposals reflected in paragraph 174, option 2, above.

^{*} Please see the AOSIS proposal for the establishment of an Adaptation Committee.

^{*} The Financial Mechanism as proposed by the Group of 77 and China.

⁴³ This proposal is presented in the context of the proposals reflected in paragraphs 174, option 2, above and 196, option 2, below

⁴⁴ Other formulation proposed "a multilateral technology acquisition fund".

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demonstration of technologies, capacity-building, technology needs assessments, know-how and information sharing and construction of national policy instruments.]

Alternative to Option 5:

[Multilateral climate technology fund {to support the implementation of the technology mechanism} for the provision of technology-related financial resources on a grant or concessional basis. The fund shall be used to implement the development, deployment, diffusion and transfer of technologies by meeting the agreed full incremental costs for, inter alia, licensing IPRs, the deployment and diffusion of technologies in developing countries and full costs of activities such as technology R&D and demonstration of technologies, capacity-building, technology needs assessments, information sharing and construction of policy instruments.]

[Option 6⁴⁵

Capacity-building fund.]]

Options for funds for multiple uses:

[Option 7⁴⁶

A world climate change fund or green fund, to {establish linkages between} scale-up funds for mitigation actions, support efforts on adaptation and provide technical assistance that include financing the national meteorological services particularly in LDCs and SIDs to enhance development and establishing of early warning systems and promote the development, transfer and diffusion of clean technologies. All Parties with the exception of the LDCs should contribute according to specified criteria. All Parties could benefit according to specified criteria, except those developed country Parties that elect not to do so. Once its operations stabilize, the fund could establish functional connections with existing or potential carbon units, such as those from carbon market mechanisms under a post-2012 agreed outcome [mechanisms established under the Kyoto Protocol].]]]

Alternative to Option 7

Establish a global fund to support a global-feed-in-tariff programme, providing guaranteed purchase prices, over and above the retail energy price in the developing countries, of energy from renewable sources including wind, solar PV, concentrated solar, geo thermal, hydro and others, to the producers of such energy in the developing countries for a period of 20 years. The Global Fund shall aim at both inducing a shift to renewable energy without compromising the development momentum in the developing countries, and the realization of economies of scale and sustained reduction of costs of generation of renewable energy.

Option 7.1

Special fund for the economic and social consequences of response measures (para 1.b(vi) of Bali Action Plan).

Option 7.2

Special fund to assist Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products (Article 4.8 (h) of the Convention).

Alternative to paragraphs 174 and 175 (this proposal also applies to para. 196):

- x.1 [Institutional arrangements (para. 174, chapeau) for enhancing the implementation of Article 11 of the Convention, through finance, technology and capacity-building, shall include:
- x.2 The creation of a Financial and Technology Mechanism meant to ensure the full, effective, and sustained implementation of the Convention, in relation to implementation of commitments for the provision of financial resources. This is mandated under Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention in accordance with Article 11, defining the financial mechanism under the Convention.
- x.3 The Financial and Technology Mechanism shall address all aspects of cooperation on technology research, development, diffusion, and transfer in accordance with Articles 4.1(c), 4.3, 4.5 and other

⁴⁵ This proposal is presented in the context of the proposals reflected in paragraph 174, option 2, above.

⁴⁶ This proposal is presented in the context of the proposals reflected in paragraph 174, option 3, above.

relevant articles of the Convention, in order to enable mitigation and adaptation under the relevant paragraphs of decision 1/CP.13.

- x.4 The basic architecture of the Financial and Technology Mechanism under the Convention will comprise two pillars, one on adaptation and the other on mitigation.
- x.5 An Executive Body on Finance and Technology for Adaptation (EBFTA), accountable to the COP, shall be established. The EBFTA shall have, inter alia, the following functions:
- (a) The EBFTA shall organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for adaptation, including the enabling means of financing, technology and capacity-building.
- (b) (Para 196, Option 2, (c)) The EBFTA will guide and supervise the disbursement of the Adaptation Fund to be created under the Convention. [Further provisions on the Adaptation Fund to be inserted.]
- (c) The EBFTA shall coordinate disbursements from the Adaptation Fund according to the needs as indicated in national plans for adaptation submitted by developing countries to the EBFTA.
- (d) Financial and technical support should be available upon request by developing countries to the EBFTA for the elaboration of national plans for adaptation.
- (e) (Para. 174, Option 1, (e)) The EBFTA shall manage a certification system for receiving financial resources in compliance with the financial commitments of developed country Parties under Article 4.3 of the Convention.
- (f) (Para. 196, Option 5, (d)) The EBFTA shall articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programs and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.
- x.6 The EBFTA will be supported by four technical panels on Research and Development, Capacity-building, Transfer of Technologies for Adaptation, and Observation systems and information management. The technical panels (para. 196, Option 2) shall compromise government representatives elected by the COP with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts, in order to (para. 174, Option 1, (c)) ensure transparent and efficient governance.
- x.7 An Executive Body on Finance and Technology for Mitigation (EBFTM), accountable to the COP, shall be established. The EBFTM shall have, inter alia, the following functions:
- (a) The EBFTM shall organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for mitigation, including the enabling means of financing, technology and capacity-building;
- (b) The EBFTM will govern a Mitigation Fund to be created under the Convention; [Further provisions on the Mitigation Fund to be inserted.]
- (c) The EBFTM shall coordinate disbursements from the Mitigation Fund according to the needs as indicated in NAMAs submitted by developing countries to the EBFTM;
- (d) Financial and technical support should be available upon request by developing countries to the EBFTM for the elaboration of NAMAs;
- (e) The EBFTM shall coordinate disbursements from the Mitigation Fund according to the needs for REDD+ activities as requested by developing countries to the EBFTM;
- (f) Financial and technical support should be available upon request by developing countries to the EBFTM for the preparation of REDD+ activities;
- (g) The EBFTM will also coordinate with regional development banks concessional loan arrangements for the private sector in developing countries for the implementation of specific mitigation activities;

- (h) (Para. 174, Option 1, (e)) The EBFTM shall manage a registry and certification system for receiving financial resources in compliance with the financial commitments of developed country Parties under Article 4.3 of the Convention;
- (i) (Para. 196, Option 5, (d)) The EBFTM shall articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programs and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created
- x.8 The EBFTM will be supported by five technical panels on Research and Development, Capacity-building, Transfer of Technologies for Mitigation, REDD+, and Market Mechanisms. The technical panels (para. 196, Option 2) shall compromise government representatives elected by the COP with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts.

x.9 Technical Panels

- (a) Both Technical Panels on Research and Development (TPRDA and TPRDM) shall, inter alia, coordinate multilateral (para. 186, chapeau) technology research, development and demonstration programs and provide appropriate support to developing country Parties through North-South and South-South cooperation schemes, and promote (para. 186, (b)) joint ventures to accelerate deployment, diffusion and effective transfer of technologies;
- (b) Both Technical Panels on Capacity Building (TPCBA and TPCBM) shall organize, coordinate, monitor, evaluate and retrofit the implementation of capacity-building activities for adaptation and mitigation and the respective financing and technology development and transfer, in developing countries. TPCBs shall also provide information and views on the fulfillment of support commitments for capacity-building by developed countries. The TPCBs shall create mechanisms for sharing lessons learned, promote south-south cooperation as well as for the dissemination of successful capacity-building activities in developing countries;
- (c) Both Technical Panels on Transfer of Technologies (TPTTA and TPTTM) shall, inter alia, (para. 196, Option 2, (a)) Provide advice and recommendations to the Executive Bodies on Finance and Technology on the overall implementation of technology; (para. 196, Option 2, (d)) Promote communication and information/knowledge sharing; (para. 196, Option 2, (e)) Monitor and assess the performance and progress of technological research, development, demonstration, diffusion, and deployment, using performance indicators, and report to the COP. In addition, this technical panel shall (para. 196, Option 3, (a)) develop reviews on existing technologies, including information on estimated cost, risks, benefits and limitations, taking into account the circumstances of the host Party;
- (d) The Technical Panel on Observation Systems and Information Management (TPOSIM) shall, inter alia, organize, coordinate, monitor, evaluate and retrofit the implementation of systematic observation and information management (including data collection and archiving, analysis, modelling, downscaling and dissemination) activities for adaptation in developing countries. The TPOSIM shall create mechanisms for sharing lessons learned, promote south-south cooperation as well as for the dissemination of successful systematic observation and information management activities for adaptation in developing countries;
- (e) The Technical Panel on REDD+ (TPREDD+) shall, inter alia, determine reference levels methodologies, support enhancement of REDD project activities within countries, and other general methodological issues;
- (f) The Technical Panel on Market Mechanisms (TPMM) shall, inter alia, organize, coordinate, monitor, evaluate, and retrofit the implementation of mitigation activities in developing countries that are carried out under the market mechanisms. The TPMM will deal with issues such as country-specific sectoral baselines, additionality, monitoring and verification plans, registration of mitigation activities and actions, issuance of credits, etc.;
- (g) In addition, an MRV Panel to be created under the COP shall be in charge of establishing methodologies for MRV, measuring, reporting and verifying mitigation actions and the support received

as required by paragraph 1.(b)(ii) of Decision 1/CP.13, and keeping records of mitigation and adaptation activities implemented by developing countries with their own resources.

x.10 The UNFCCC Secretariat shall support and facilitate the activities of the EBFTA, EBFTM, and the technical panels.]

Alternatives to paragraph 175:

Alternative 1

[Institutional arrangements on funds may build upon, inter alia, the relevant existing funds and institutions inside and outside this Agreement. The Meeting of the Parties to the Copenhagen agreement and all Parties are requested to take the principles laid down in paragraph X of this Agreement into account in their interaction with relevant institutions in pursuit of the objectives of this Agreement, in particular by enhancing existing funds under the Convention and the Kyoto Protocol.]

Alternative 2

[A Multilateral Fund for Climate Change is hereby established.

The purpose of the Multilateral Fund for Climate Change Fund is to establish, administer and deploy substantial and predictable sources of funding to support actions prescribed within this agreement.

The Multilateral Fund for Climate Change shall be subject to the authority and guidance of the COP (or Conference of the Parties serving as the assembly of Parties) and be supervised by a Board.

The constituency of the Board shall be determined by the Conference of Parties serving as the assembly of Parties and be guided by the principle of equitable geographical representation.

The Board of the Multilateral Fund on Climate Change shall regularly report to the COP (or the Conference of Parties serving as the assembly of Parties).

The secretariat of the Convention shall service the Multilateral Fund for Climate Change Fund and its Board

The Multilateral Fund for Climate Change shall have five discrete funding windows:

- (a) Mitigation Window
- (b) REDD Window
- (c) an Adaptation Window
- (d) an Insurance Window
- (e) a Technology Window

The COP (or the Conference of Parties serving as the assembly of Parties) shall determine the proportion of funding that shall be allocated to each funding window and shall give priority to funding for adaptation.

The Board of the Multilateral Fund for Climate Change shall establish technical advisory panels for each of the funding windows.

The purpose of the technical advisory panels shall be to, inter alia:

- (a) identify sources of funding;
- (b) identify priorities for funding;
- (c) provide assistance to recipient countries in developing project proposals and find appropriate financial support.]

176. [Issues identified by Parties in the context of paragraph 175 above as requiring further elaboration at the appropriate time include modalities for the determination of the role of existing funds and entity/ies for the operation of the financial mechanism].

Institutional arrangements at the national level

177. Developing country [Parties {shall} {should} establish and or strengthen national coordinating bodies to address all aspects of the means of implementation, including strengthening the institutional capacity of national focal points and all stakeholders, including subnational and local governments. These coordinating bodies shall be the national focal points to support the implementation of climate

change projects and programmes that have received technology, finance and capacity-building assistance from developed country Parties. ⁴⁷]

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

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

In achieving its objectives, the national coordinating body shall:

- (a) Ensure national ownership of and commitment to NAMAs to be registered internationally;
- (b) Ensure proper assessment of the financial, technological and capacity needs of NAMAs and national adaptation measures;
 - (c) Mobilise, coordinate and involve with existing in-country mechanisms;
 - (d) Facilitate development and establishment of national expertise on adaptation and mitigation;
- (e) Coordinate climate change funding, technology transfer, and capacity-building requirements, including identifying and prioritising needs and guiding the preparation of proposals;
- (f) Harness synergies across thematic activities and facilitate exchange of experience and good practice;
 - (g) Identify stakeholders for direct access for financial assistance.

[Compliance

178. [A [compliance mechanism][and] [for commitments of developed country Parties included in Annex I and II on Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention][monitoring mechanism] [shall][should]] be established to ensure [the full implementation of the commitments of [developed country] [Annex I and Annex [B]] [II] Parties, particularly those contained in paragraph 4 of the Convention and with reference to their agreed assessed contributions. This body {shall}:]

Alternative to chapeau of paragraph 178:

[A compliance mechanism shall be established to ensure the full implementation of the commitments of Annex I and Annex B Parties, with reference to their provision of financial resources, (need to establish an amount of resources for climate change activities) This body shall:]

- (a) Review compliance of [developed country] [Annex I and Annex [B][II]] Parties with their commitments on the provision of financial resources in a timely and predictable manner and in consonance with the needs identified by the developing country Party;
- (b) Define non-compliance parameters, penalties and fines, or a combination of the two or other as appropriate, and implement parameters and procedures defined by the COP to retrieve funds derived from fines and penalties. ⁴⁸]]
- (b).1 Impose financial penalties, at a minimum of ten times the market price of carbon, for any emissions in excess of the level implied by the emissions reduction commitment.

Alternative to paragraph 178:

[All Parties shall report on an annual basis, all contributions made to the Multilateral Fund for Climate Change.

Annual reports of contributions by Parties shall be maintained by the secretariat in a contribution ledger. This ledger shall be maintained on a publicly available link on the secretariat website.

⁴⁷ This proposal is presented in the context of the proposals reflected in paragraphs 47 and 104 above.

This proposal is presented in the context of the proposals reflected in paragraph 68, option 1, above.

The Board of the Multilateral Fund for Climate Change shall undertake an annual process of review of the contributions by Parties to the MFCC and shall make a report to the COP (or the Conference of Parties serving as the assembly of Parties) at it annual meeting.

The COP (or the Conference of Parties serving as the assembly of Parties) shall develop procedures for recovering finances from Parties who have not provided their assessed contributions to the MFCC.]

179. [Issues identified by Parties in the context of paragraph 178 above as requiring further elaboration at the appropriate time include parameters and procedures to retrieve funds derived from fines.]

B. Enhanced action on development and transfer of technology⁴⁹

Structural proposals

Proposal 1:

The technology chapter should be rearranged into two sections according to the following orders;

A section on objectives, scope and guiding principles

A section on cooperation on technology research, development, diffusion and transfer for technologies for mitigation and adaptation.

- 1. A subsection on Technology needs assessments
- 2. A subsection on Enabling environments
- 3. A subsection on Capacity-building
- 4. *A subsection on Technology information*
- 5. A subsection on Mechanisms for enhanced cooperative action on technology development, deployment, transfer and diffusion.
- 6. A subsection on Cooperative research and development

Proposal 2:

The technology chapter should be rearranged into six sections according to the following orders:

- 1. A section on preambles
- 2. A section on objectives
- 3. A section on guiding principles
- 4. A section on cooperative action to promote technology needs assessment, technology information, enabling environments and capacity-building
- 5. A section on cooperative action to promote technology research, development and demonstration and deployment
- 6. A section on Institutional arrangement

Proposal 3:

The technology chapter should be rearranged into seven sections according to the following orders:

- 1. A section on preamble
- 2. A section on objectives
- 3. A section on guiding principles
- 4. A section on enhanced national capacity
- 5. A section on cooperative actions on capacity-building, information sharing
- 6. A section on cooperative actions on research, development and demonstration
- 7. A section on institutional arrangements

⁴⁹ The Bali Action Plan, in its paragraph 1 (d), calls for enhanced action on technology development and transfer to support action on mitigation and adaptation. In advancing their proposals under this matter, Parties referred to Articles 4.1(c), 4.3, 4.5 and 11.5 of the Convention.

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Proposal 4:

Insert a section entitled National and cooperative actions to enhance the development, application and diffusion, including transfer, of technologies, practices and processes

Insert a new subsection entitled Technology action plans/technology road maps

Proposals for preambular paragraphs:

Proposal 1

Recognizes the existing framework for meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention established under Convention 4/CP7 and enhanced under BAP 3/CP.13 (the framework for technology development, deployment, diffusion and transfer) along with Articles 4.1(c), 4.5 and 11.5.

Proposal 2

Enhanced action on technology shall build on and enhance the implementation of the existing framework for technology action as described in the Article 4 paragraphs 1 (c), 5 and Article 11 paragraph 5, of the Convention, and decision 4/CP.7 and decision 3/CP.13.

Proposal 3

Recognizing that climate change poses a serious threat to social and economic development of all Parties and noting that the SIDS and LDCs are particularly most vulnerable to impacts of adverse effects of climate change and that these groups of countries will suffer disproportionately;

Recognizing also the urgency and the immediacy of the climate change problem the Parties agreed on a legally binding Adaptation Framework as set out in subsequent sections;

Noting the continuing growth in greenhouse gas emissions, particularly high rate of growth in developing countries;

Aware that such growth will significantly contribute to increasing concentration level of GHGs in the atmosphere with serious potential consequence;

Guided by the principles and provisions of the Convention and the principle of learning by doing; Guided also by the best available science and broad participation of stakeholders at national and local government and community levels.

Proposal 4

Recognizing the importance of technology under the framework beyond 2012, intensive support for promotion of technology transfer such as identification of technologies to be deployed and matching of companies with of those that own the technologies and of those that require the technologies should be provided to the developing countries that have already taken policy measure, measures on GHG reductions, and made efforts to enhance the business environment to accelerate technology transfer.

Confirming that in order to achieve the long-term goal, it is essential not only to quickly deploy practically available technologies but also to develop innovative technologies.

Proposed additional paragraph:

x.1 To address the gaps in, and to enhance the implementation of Articles 4.1, in particular 4.1 (c), 4.3, 4.5, 4.8, and 4.9, in the context of Article 4.7 of the Convention, the COP shall:

1. [Objectives, scope and guiding principles]

- x.1 Parties recognize the importance to promote and cooperate in the development, deployment, transfer and diffusion of technologies that control, reduce or prevent anthropogenic emissions of greenhouse gases in all relevant sectors.
- x.2 Developed Country Parties shall provide new and additional financial resources, including for the transfer of technology, needed by the Developing Country Parties to meet the agreed full incremental costs of implementing such measures.
- x.3. Developed Country Parties shall take all practicable steps to promote, facilitate and finance, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly Developing Country Parties, to enable them to implement the provisions of the Convention.

- x.4 Enhanced action on technology must give urgent and equal weight to action on technologies for adaptation in conjunction with action on technologies for mitigation and to ensuring that existing barriers to the diffusion of adaptation technologies are addressed.
- x.5 All Parties, taking into account their common but differentiated responsibilities and respective capabilities, shall cooperate to promote the transfer and diffusion of, or access to, technologies and know-how necessary for supporting the mitigation and adaptation actions taken by developing country Parties.
- x.6 The developed country Parties shall promote development of innovative technologies through strengthening international cooperation including sharing roadmaps for technology development.
- 180. Building on the existing framework for technology as described in decision 4/CP.7, reaffirmed in decision 3/CP.13, in accordance with Articles 4.1c, 4.5 and 11.5, an [[An] enhanced action on technology [technology mechanism⁵⁰][framework for technology] [shall] be [established] [developed] [promoted]] [Existing frameworks for technology shall be enhanced] to [support the short-, medium- and long-term cooperative action on technology] [and {shall}][should] be guided by the following objectives and principles:

Alternatives to chapeau of paragraph 180:

Alternative 1

[An enhanced {technology mechanism } {framework for technology} {shall} be {established} {developed} to support the short-, medium- and long-term cooperative action on technology and {shall} {should} take into account the special needs of all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, and should be guided by the following principles:]

Alternative 2 to be reflected in a new section on Objectives

[An enhanced framework for technology shall be established, to support short-, medium- and long-term cooperative action on technology at the national and international level.]

- (x.a) Establish enabling environment for technology transfer, including, according to the IPCC, inter alia, the macroeconomic policy framework: trade and foreign investment policies, financial sector regulation and energy tariffs policies;
- (a) [Build on and strengthen [existing] activities under the Convention [and under other specialized institutions] and [operate under the [authority] guidance of the COP] and in accordance with relevant provisions of the Convention;]

Alternative to subparagraph (a)

[Build on domestic strategies that identify needs and priorities;]

(b) Address all stages of the technology development cycle including R&D, deployment, diffusion, demonstration and [transfer] of [affordable] state of the art environmentally sound technologies to [enable all Parties, particularly] developing country Parties, to enhance action on mitigation and adaptation;

Alternative to subparagraph (b)

[Address all stages of the technology development cycle including R & D, deployment, diffusion, and transfer of affordable environmentally sound technologies, processes and practices to enable all Parties, particularly developing country Parties, to gain access to technologies necessary to address the worst effects of climate change;]

- (b).1 Wide diffusion of existing technologies similar to scale of information communication technologies;
 - (c) [Promote coherence by integrating and expanding ongoing activities related to technology;]

⁵⁰ Other formulations proposed include a "technology transfer mechanism", "technology facilitative mechanism", "arrangement" and "technology institutional framework".

- (c).1 Facilitate national actions and international cooperative actions that maximize the full potential of technology to reduce greenhouse gas emissions and build climate resilience;
- (d) [[Aim to] achieve accessibility], Facilitate the removal of barriers for technology development and transfer, [affordability, appropriateness] and adaptability of technologies [required] identified by [developing countries], as appropriate, in order to support [enhance] [their action on mitigation and adaptation] Articles 4, paragraphs 1 (c) and 5 of the Convention;
- (e) [[[Aim to] identify and achieve the removal of barriers for technology development, deployment and transfer] to developing countries by reducing tariffs on environmental goods and services and strengthening the IPRs;]
- (f) [Stimulate the formation and development of local, national and international innovation systems [and markets for technologies for mitigation and adaptation], creating enabling trade and investment environments, [creating] the creation of favourable investment and enabling environments, and [engaging] engagement with the private sector;]
- (g) [Provide for full agreed cost and full agreed incremental cost, as referred to in Article 4.3 of the Convention;] In order to implement the framework Parties may avail themselves of resources in accordance with the relevant provisions set out in Article Z.
- (h) [[[Take into account the important role [relevance] of] public finance] in supporting technology R&D and [to leverage private investment] in the demonstration, deployment, diffusion and transfer of technologies. Parties, particularly Annex II Parties, are urged to support R&D, deployment and diffusion of technologies by public/private sector;]

Alternative to subparagraph (h)

[Rely on developed country Parties' public finance in supporting technology R&D and to leverage private investment in the deployment, diffusion and transfer of technologies;]

(i) Recognize the importance of enabling environments, the engagement of the private sector, and the key roles that the public and private finance will play in the development, deployment, diffusion and transfer of technologies [role that small and medium-sized enterprises could play in the success of adaptation and mitigation efforts and in economic development];] and take into account the obstacles they face regarding the development and transfer of technology.

Alternative to subparagraphs (h) and (i):

[Take into account the relevance of public financing in supporting technology R&D and to leverage private investment in the deployment, diffusion and transfer of technologies; Recognise the role of small and medium-sized enterprises could play in the success of adaptation and mitigation efforts and in economic development;]

- (i).1 Address the unique technology relevant issues specific to SIDS recognizing scale of economies, enabling environments, and geographical remoteness for both adaptation and mitigation.
- (i).2 Ensure participation of all stakeholders at all levels of decision-making on technology cooperation and sharing, especially women, youth, indigenous peoples and local communities, among others.
- (i).3 Efforts for enhanced action on technology development, deployment and diffusion should aim at:
 - (i) reducing greenhouse gas emissions, facilitating low emission development and contribute to appropriate adaptation, to contribute to the overall objective of the convention:
 - (ii) Accelerate research, development, diffusion and transfer of environmentally sound technologies among all Parties.
- (i).4 Improving energy efficiency and environment in upstream and downstream activities relating to fossil fuels.
- (i).5 Promote diversified energy particularly carbon capture & storage technology.

- (i).6 Support for the promotion of inward foreign direct investment, labour-intensive exports (manufacturing and services), trade liberalisation, competition, access to developed countries' markets and human resource development.
- (i).7 Support for price and ownership reforms in energy and associated industries.
- (i).8 Technical assistance for economic diversification.
- (i).9 Be guided by the provisions of the Convention, particularly Articles, 4.3, 4.4, 4.5, 4.8 and 4.9, and built on existing activities within the Convention, including the work of the Expert Group on Technology Transfer (EGTT), and expand ongoing activities relating to technology.
- (i).10 Aim to achieve the accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on adaptation.
- (i).11 Enhance R&D through supporting and improving of existing and establishment of new national and regional centres of excellence working on environment friendly technologies, in particular in developing countries.

Alternatives to paragraph 180:

Alternative 1

[An enhanced set of short-, medium- and long-term national and international cooperative actions shall be developed to support global research, development, diffusion and transfer of climate related technologies and shall be guided by the following principles:

- (a) Enhance implementation of the Convention's framework for technology development, deployment, diffusion and transfer;
- (b) Complement and build on all relevant existing and emerging national and international technology related initiatives;
- (c) Address all stages of the technology development cycle including R&D, deployment, diffusion and transfer of environmentally sound technologies to enable all Parties, particularly developing country Parties, to enhance action on mitigation and adaptation;
- (d) Promote coherence through expanded catalytic and integrated actions on technology in order to support global mitigation and adaptation responses;
- (e) Aim to achieve accessibility, affordability, appropriateness and adaptability of technologies required by all Parties, in particular developing country Parties, in order to enhance their action on mitigation and adaptation;
- (f) Provide Parties with pathways to low emission and climate resilient technology implementation, and promote measures that facilitate technology innovation and diffusion by all Parties, including north-south and south-south and triangular action;
- (g) Aim to achieve the removal of barriers for technology development and transfer;
- (h) Further stimulate the formation and development of national and international innovation systems and markets for technologies for mitigation and adaptation, create favourable investment and enabling environments, and promote engagement of the private sector;
- (i) Take into account the respective roles of public and private sectors in supporting technology outcomes, including the need to leverage private investment in the deployment, diffusion and transfer of technologies;
- (j) Support to be prioritised for the least developed and most vulnerable countries.]

Alternative 2

[Enhanced action on technology development and transfer to support action on mitigation and adaptation should contain by the following elements:

(a) Build on existing activities under the Convention and other efforts on technology development and transfer outside the Convention;

- (b) Consider all stages of the technology spectrum including RD&D, deployment, diffusion and transfer of environmentally sound technologies to enable all Parties, particularly developing country Parties, to enhance action on mitigation and adaptation;
- (c) Promote coherence between ongoing activities inside and outside the convention related to technology;
- (d) Aim to achieve accessibility, affordability, appropriateness and adaptability of technologies required by developing countries in order to enhance their action on mitigation and adaptation;
- (e) Address barriers to technology development, transfer and diffusion;
- (f) Stimulate the formation and development of national and international innovation systems and markets for technologies for mitigation and adaptation, creating favourable investment and enabling environments, and engaging the private sector;
- (g) Take into consideration the full incremental costs and benefits of adopting environmentally sound technologies;
- (h) Take into account the roles of public and private finance in supporting technology RD&D and to leverage private investment in the deployment, diffusion and transfer of technologies;
- (i) Recognize the role that small and medium-sized enterprises could play in the success of adaptation and mitigation efforts and in economic development;
- (j) Accelerate innovation of environmentally sound and affordable technologies for mitigation and adaptation, in all countries and regions;
- (k) Scale up deployment of environmentally sound and affordable technologies for mitigation and adaptation, especially in developing countries;
- (l) Speed up diffusion of environmentally sound and affordable technologies for mitigation and adaptation, especially in developing countries.
- (m) Promote a shift to sustainable development paths.]

Alternative 3

[An enhanced {technology mechanism} {shall} be {established} to support the short-, medium- and long-term to enhance the implementation of article 4.3, 4.5, and 4.8 of the Convention. The technology mechanism {shall} be guided by the following principles:

- (a) Build on existing activities under the Convention and operate under the authority of the COP and in accordance with relevant provisions of the Convention;
- (b) Address all stages of the technology development cycle including R&D, deployment, diffusion, and transfer of affordable environmentally sound technologies to enable all Parties, particularly developing country Parties, to gain access to technologies necessary to address the worst effects of climate change
- (c) Aim to achieve accessibility, affordability, appropriateness and adaptability of technologies required by developing countries in order to address the worst effects of climate change and to take nationally appropriate action on mitigation and adaptation;
- (d) Serves as a primary vehicle in the removal of barriers for technology development and transfer;
- (e) Stimulate the formation and development of national and international innovation systems and markets for technologies for mitigation and adaptation, creating favourable investment and enabling environments, and engaging the private sector;
- (f) Provide for agreed full cost and agreed full incremental cost, as referred to in Article 4.3 of the Convention;
- (g) Public finances shall be allocated by the annex-I Parties in supporting technology R&D and to leverage private investment in the deployment, diffusion and transfer of technologies to the developing countries;

(h) Small and medium-sized enterprises could play in the success of adaptation and mitigation efforts and in economic development.]

Alternative 4

[An enhanced framework for technology shall be established to implement the technology transfer provisions of the Convention and shall be guided by the following principles:

- (a) Build on existing activities under the Convention and operate under the authority of the COP and be accountable to it in accordance with relevant provisions of the Convention.
- (b) Address all aspects of cooperation on technology research and development cycle, deployment, transfer and diffusion in accordance with Article 4 paragraph 1 (c), 3 and 5 of the Convention, in order to enable mitigation and adaptation as stipulated in Decision 1/CP.13 (Bali Action Plan).
- (c) Promote coherence by integrating and expanding ongoing activities related to technology;
- (d) Aim to achieve accessibility, affordability, appropriateness and adaptability of technologies required by developing countries in order to enhance their action on mitigation and adaptation;}
- (e) Aim to remove barriers for technology development and transfer
- (f) Stimulate the formation and development of national and international innovation systems for technologies for mitigation and adaptation.
- (g) Provide for full cost and full incremental cost, as referred to in Article 4.3 of the Convention;
- (h) Take into account the relevance of public finance in supporting technology R&D, deployment, diffusion and transfer of technologies.]

Alternative 5 to be reflected in a new section on Guiding Principles

[The framework for technology should be guided by the following principles:

- (a) Build on existing activities under the Convention
- (b) Complement and build on existing technology relevant initiatives, including international and non-governmental organisations
- (c) Contribute to the development of national long-term strategies for low emission development and climate change adaptation
- (d) Assist developing countries in building sustainable national regulatory and institutional frameworks that promote the development, deployment and diffusion of environmentally sound technologies
- (e) Aim to achieve accessibility, appropriateness and adaptability of technologies needed by developing countries in order to enhance their action on mitigation and adaptation.
- (f) Address all stages of the technology development cycle including R&D, deployment, diffusion and transfer of affordable environmentally sound technologies to enable all Parties, particularly developing country Parties, to enhance action on mitigation and adaptation;
 - (g) Promote coherence by integrating and expanding ongoing activities related to technology;
- (h) Take into account the relevance of public finance in supporting technology R&D and to leverage private investment in the deployment, diffusion and transfer of technologies;
- (i) Recognize the role that small and medium-sized enterprises could play in the success of adaptation and mitigation efforts and in economic development.]
- 2. <u>Promoting [Cooperati[on]ive policies between the developed and developing countries on technology research, development, diffusion and transfer]</u>⁵¹]

Note: Proposals for the implementation of enhanced action on technology are reflected in this section. In advancing their proposals, Parties in some cases also proposed a governance structure for such action. Such proposals are reflected in paragraphs 196–198 below.

⁵¹ Technology cooperation in specific technologies and sectors is reflected in paragraphs 129–131 above.

<u>Proposed new section entitled National and cooperative actions to enhance the development, application</u> and diffusion, including transfer, of technologies, practices and processes

National actions

- x.1 Recognizing that national policies and actions drive technology financing, leverage the private sector, build capacity, create suitable investment conditions, and support technology RD&D, demonstration, deployment, diffusion and transfer, Parties will, in the context of their national strategies, and consistent with their national circumstances:
- (a) Implement actions, consistent with relevant national social, economic, energy and environmental policies, that establish conditions which promote the development, deployment and diffusion of environmentally sound technologies;
- (b) Establish effective enabling environments with policies and regulations, economic instruments, and other related measures to foster technology diffusion;
- (c) Promote private investment and matchmaking, encourage innovative financial mechanisms and reduce market, technology and political risks to private investment in climate technologies;
- (d) Establish national programmes that support common performance standards, testing, verification and certification programmes for technologies for mitigation and adaptation;
- (e) Establish training, information and workforce development programmes to build capacity, including national centres of excellence, to ensure that all market actors understand the costs, performance and benefits of climate change technologies;
- (f) TNAs {to be fully elaborated taking into account the findings of the 2006 TNA review and expanded to cover more in-depth assessments of obstacles in the functioning of relevant technology innovation systems, including detailed assessment of technology capacity and markets. TNAs should also be shared and made publicly available} {to be carried out within the framework of the NAPAs and NAMAs in order to ensure consistency and coherence among the various efforts; TNAs should not constitute a barrier to short-term technology transfer}.
- (g) Capacity-building, taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within an enhanced framework for capacity-building for mitigation and adaptation (decision 2/CP.7);
- (h) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks {shall} {should} be developed, used, shared and sustained at regional and national levels
- (i) Parties should strengthen their national technology research and their national technology research, development and demonstration programmes and provide appropriate support to developing country Parties through, inter alia:
 - (i) Reinforcing North-South, South-South and triangular cooperation with the aim of promoting endogenous technologies of developing countries and prioritizing technologies for mitigation and adaptation that might have high costs but also high potential for GHG mitigation and/or increase resilience to negative impacts of climate change;
 - (ii) Providing opportunities for participation by developing country Parties in joint RD&D programmes for specific technologies and joint ventures to accelerate deployment, diffusion and effective transfer of technologies
- (j) Focused voluntary technology oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations {shall} {should} be recognized. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.

Cooperative actions

- x.2 Recognizing that cooperative actions should be conducted and acknowledged that promote the development and deployment of environmentally sound technologies. Parties will engage in cooperative actions, to the extent appropriate and consistent with their national strategies that:
- (a) Strengthen technical and institutional capacity to sustain cooperative technology development, deployment, diffusion and transfer activities including enhancements in policies, standards, information and assessment, and investment programmes;
- (b) Promote greater public and private sector investment in RD&D for targeted EST technology areas through enhanced support for strengthened incentives for private-sector participation in RD&D.
- (c) Promote participation in international programmes that support the development and use of common performance standards, testing, verification and certification programmes.
- (d) Establish international partnerships to advance the development, deployment and transfer of environmentally sound technologies.
- (e) Support, strengthen and expand globally coordinated research programmes and networks or alliances of climate technology research institutes to engage developing countries.
- (f) Capacity-building, taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within an enhanced framework for capacity-building for mitigation and adaptation (decision 2/CP.7);]
- (g) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks {shall} {should} be developed, used, shared and sustained at regional and national levels
- (h) Parties should strengthen their national technology research and their national technology research, development and demonstration programmes and provide appropriate support to developing country Parties through, inter alia:
 - (i) Reinforcing North–South, South–South and triangular cooperation with the aim of promoting endogenous technologies of developing countries and prioritizing technologies for mitigation and adaptation that might have high costs but also high potential for GHG mitigation and/or increase resilience to negative impacts of climate change;
 - (ii) Providing opportunities for participation by developing country Parties in joint RD&D programmes for specific technologies and joint ventures to accelerate deployment, diffusion and effective transfer of technologies
- (i) Focused voluntary technology oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations {shall} {should} be recognized. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.

[Technology action plan

181. [A] technology action plan shall be drawn up [as a starting point] for enhanced cooperative action on technology. ⁵² It shall aim to accelerate research, development, diffusion and transfer and use of environmentally sound technologies [[among all Parties], [particularly]] [to the developing countries with a view to implementing the Annex I commitments contained in the Convention] [from] [Annex II Parties] [the developed Parties that have commitments under the Convention and the other developed Parties in a position to transfer environmentally sound technologies] [developed country Parties and other developed Parties included in Annex II of the Convention] [to] [non-Annex I Parties] [developing country Parties and other Parties in need of abovementioned activities], in accordance with Article 4.5 of the Convention, in order to support action on mitigation and adaptation [and] [to] promote a shift to sustainable

This proposal is presented in the context of proposals to establish an executive body on technology and a multilateral climate technology fund reflected in paragraphs 175, Option 5, above and 196, Option 2, below.

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development paths. The technology action plan shall develop an effective strategy to identify and propose specific measures to overcome the economic and technical barriers and to assess the required steps to accelerate research, development and transfer of environmentally sound technologies for both mitigation and adaptation.

Alternatives to paragraph 181:

Alternative 1

[Develop a Technology Action Plan (TAP) to serve as a starting point for the work of the Executive Body.

- (a) It will include specific actions and timelines for the first three years, and will be updated for successive three-year periods.
- (b) To realize the full potential of technology, the TAP shall support all stages of the technology cycle, including research, development, demonstration, diffusion, and transfer
- (c) The TAP will define specific policies, actions and funding requirements for all relevant technologies under the following classifications: public domain technologies, patented technologies and know-how, future technologies
- (d) The establishment of national and regional technology centres of excellence to reinforce north-south, south-south and triangular cooperation, including joint research and development (details can be annexed to the legal/agreed outcome)]

Alternative 2

[A technology action plan shall be drawn up as a starting point for the work of a body for the technology mechanism. It should support all stages of the technology cycle, including technology research and invention through scientific and technical cooperation, technology development, technology transfer and diffusion, and ensure that financing for technology transfer, including all available means to ensure the affordability of technologies, products and related services, is available.

Parties should promote the development of innovative technologies and strengthen international technology cooperation, including through the formulation and sharing of national technology road maps as part of the technology action plans. Such road maps should include:

- (a) Identification of technological options for specific sectors;
- (b) Obstacles to the development and transfer of identified technological options;
- (c) Policy instruments and infrastructure required for the deployment, diffusion and transfer of identified technological options;
- (d) Capacity-building needs;
- (e) Opportunities for joint technology R&D between developed and developing countries.]
- 182. [[To realize the full potential of technology,] the action plan shall support all stages of the technology development cycle and [articulate] [linked] with the financial mechanism of the Convention in order to [secure] assist with obtaining the necessary financing.
- 183. [The action plan [shall][should] include specific policies, actions, institutional arrangements and funding requirements for existing and emerging [technologies in the public domain, patented technologies and [future]] [IPRs protected] technologies to be developed in the future. The plan shall also include clear actions for the first three years, and be reviewed after every [updated for successive] three-year periods in light of lessons learned.] This should also include: public domain technologies and future and innovative technologies.]]

<u>Alternative to paragraphs 181, 182 and 183</u>: to move to new section entitled Cooperative action to promote technology research, development and demonstration and deployment and new subsection on Technology action plans/technology road maps:

- x.1 [Parties shall promote the development of innovative technologies and strengthen international technology cooperation, including through the following actions:
- (a) A series of prioritised technology action plans shall be developed to, inter alia, identify the potential for the technology to contribute to global, regional or national mitigation and adaptation

responses, identify the gaps and barriers to commercial maturity and recommend further actions that may be required to realise this potential.

- (b) Technology action plans shall be informed and supported by comprehensive technology road maps which shall identify:
 - (i) the current state of development for the technology
 - (ii) key stakeholders and relevant existing and emerging efforts contributing to the development of the technology
 - (iii) gaps and barriers to commercial maturity
 - (iv) opportunities for collaborative effort between developed and developing countries, including their respective private sectors
- (c) Technology action plans and technology road maps will build on and work collaboratively with other relevant international and national efforts and institutions to maximise efficiency of effort and avoid duplication.]

[Technology needs [assessments], enabling environments, [and] capacity-building, technology information, and mechanisms for enhanced cooperative action on technology development, deployment, transfer and diffusion] [Enhanced national capacity] [Cooperative action to promote technology needs assessment, technology information, enabling environments and capacity-building]

- 184. [Cooperation on technology [shall][should] be enhanced by the following elements:
- (a) [[TNAs] [[to be fully elaborated taking into account the findings of the 2006 TNA review and expanded to cover more in-depth assessments of obstacles in the [access to, development and transfer of] [functioning of] relevant technology innovation systems, including detailed assessment of technology capacity, barriers and markets. TNAs] should [continue to [also] be [shared and] made publicly available] [and] [could] [[to] be carried out within the framework of the [NAPAs], [and] NAMAs and other relevant reports and information including national communications in order to ensure consistency and coherence among the various efforts; [TNAs should not constitute a barrier to short-term technology transfer to the developing country Parties.];] Technology road mapping exercises that identify, inter alia, opportunities for partnerships, as well as obstacles to technology development and deployment, could constitute an element of TNAs;]

Alternative to subparagraph (a):

[A single process will be carried out to identify technology needs (TNAs), nationally appropriate mitigation actions (NAMAs) and long-term planning for achieving low-emission development. This process will result in preparation of a national low-emission development strategy, as described in Article X, paragraph Y. This single document should contain an in-depth assessment of obstacles in the functioning of relevant technology innovation systems, including detailed assessment of technology capacity and markets. Assessment of technology needs for adaptation, and barriers to the deployment of these technologies, should be carried out in the context of climate resilient development, as described in Article P, paragraph Q.]

- (b) [Enabling environments] [which create the conditions conducive to private and public sector technology development, deployment, transfer and diffusion] [– technology-specific policies and measures with both adaptation and mitigation benefits [need to] [should] be defined [[/strengthened] and implemented]. Policies and measures [should] [may] include deployment schemes for adaptation measures and [low-greenhouse gas emission technologies] measures to address barriers to technology development, deployment and diffusion, and technologies for adaptation [and national energy and climate policies]];
- (c) Capacity-building, also taking into account the various activities completed or under way on a bilateral or multilateral basis [and in accordance with the capacity-building theme articulated in decision 4/CP.7 and 3/CP.13, as well as the framework for capacity-building in developing countries (decision 2/CP.7)] [and mainstream[ed]ing within an enhanced framework for capacity-building for mitigation and adaptation [(decision 2/CP.7)]], under the Convention; capacity-building activities should be guided by

the Convention. Capacity-building needs should be identified and delivered in the overall context of support for mitigation and adaptation;

- (d) [Information to support actions that enable technologies for mitigation and adaptation.] Knowledge, technical and other necessary expertise in existing institutions and organizations, including local and subnational authorities, existing regional centres and networks [shall]{should} be developed, strengthened, used, shared and sustained at regional and national levels.]
- (d).1 Mechanisms for enhanced cooperative action on technology development, deployment, transfer and diffusion.
- (d).2 Global technology roadmaps to provide an overview of what needs to be done to promote wider and more rapid development and deployment of key technologies for mitigation.

Alternatives to paragraph 184:

Alternative 1

[Technology outcomes should be enhanced through the following catalytic actions:

- (a) Enhancement of the Technology Needs Assessment process to support full participation by all developing countries, taking into account the revision of the TNA handbook and lessons learned in the field testing and early implementation phases. The TNA process should be integrated into the low emission development strategies which could include NAMA/NAPA processes and the use of country specific technology development plans.
- (b) Parties shall improve and strengthen national and international enabling environments to promote enhanced technology development, diffusion and transfer. The use of integrated TNAs and country specific low emission development strategies will be a key tool to support this process.
- (c) Capacity-building, taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within mitigation and adaptation (decision 2/CP.7);
- (d) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks shall be developed, used, shared and sustained at regional and national levels.
- (e) Enhancement and integration of existing and emerging technology information services to provide access to technology providers, technical information and support, best practice dissemination and sharing of experience.]

Alternative 2 as a new section entitled Enhanced national capacity:

[Action to enhance national capacity on technology shall include the following elements:

- (a) Developing countries shall be assisted in completing Technology Needs Assessments, integrated with national low carbon development strategies. TNAs should include, inter alia, in-depth assessments of national barriers to technology deployment and diffusion, capacity for technology adoption and related capacity-building needs as well as relevant market conditions.
- (b) TNAs to be fully elaborated taking into account the findings of the 2006 TNA review and expanded to cover more in-depth assessments of obstacles in the functioning of relevant technology innovation systems, including detailed assessment of technology capacity and markets. TNAs should also be shared and made publicly available} {to be carried out within the framework of the NAPAs and NAMAs in order to ensure consistency and coherence among the various efforts;
- (c) Priority areas shall be identified sector by sector and technology by technology. For the most GHG intensive sectors, nationally appropriate deployment schemes should be developed within the context of TNAs and low emission development strategies, taking into account specific barriers for technology deployment in these sectors.]
- 184.1 Parties shall promote the accelerated penetration of cost-effective technologies in non Annex-1 countries through pilot projects which strengthen their capacity to develop specifications for these

applications which are appropriate to national circumstances, and create human resources necessary for the design, implementation, and operation and maintenance of these applications.

<u>Proposed new paragraph 184.2 under new section entitled Cooperative actions on capacity-building and information sharing:</u>

- 184.2 A programme for capacity-building for accelerated technology development, deployment and diffusion in developing countries shall be developed. This programme for capacity-building should include the following elements:
- (a) Analyses, information, training activities and advice on development and implementation of relevant policies, institutional and regulatory frameworks that promote the development and use of environmentally sound technologies;
- (b) Advice and support for the development and implementation of national technology deployment schemes;
- (c) Advice and technical assistance to developing countries in order to facilitate increased private investment in key GHG emitting sectors, including advice on the establishment of public-private partnerships for promoting environmentally sound technologies.
- (d) Enabling environments technology-specific policies and measures should be defined/strengthened and implemented. Policies and measures should include deployment schemes for low-emission technologies and national energy and climate policies;
- (e) Capacity-building, taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within an enhanced framework for capacity-building for mitigation and adaptation (decision 2/CP.7);
- (f) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks {shall} {should} be developed, used, shared and sustained at regional and national levels.
 - (g) Identification of technological options for specific sectors;
 - (h) Obstacles to the development and transfer of identified technological options;
- (i) Policy instruments and infrastructure required for the deployment, diffusion and transfer of identified technological options;
 - (j) Improve access to information on existing and new technologies.

Technology road maps

- 185. [In accordance with their respective commitments in the Convention, the [Parties {shall}[should] promote and support the development of innovative and climate friendly technologies and [strengthen international technology cooperation,] including through the formulation and sharing of national technology road maps. Such road maps {shall}[should] [include] be consistent with TNA and should in accordance with Article 4, paragraph 5, of the Convention:
 - (x.a) National needs assessment;
 - [(a) Identification of technological options for [specific] all sectors;]

Alternative to subparagraph (a):

[Identification of specific technological options for all sectors and all gases;]

- (a).1 Improved understanding on the role of oceans on climate change and vice-versa, and its effects on marine ecosystems, marine biodiversity and coastal communities, especially in developing countries and small island states; including marine scientific research and sustained integrated ocean observatory systems;
- (b) Removing [Obstacles] barriers to the development, deployment, diffusion and transfer of [win-win technological options such as carbon capture and storage, clean fossil fuel, non-energy use of fossil fuel technologies] [identified technological options];

Alternative to subparagraph (b):

[Identification of obstacles to the development diffusion, development and transfer of technological options;]

- (c) Policy instruments and enabling environments infrastructure required for the deployment, diffusion and transfer of identified technological options;
- (d) Capacity-building needs;
- (e) Opportunities for joint technology R&D between developed and developing countries should be paid by developed countries.]
- (e).1 R&D between developing countries, and triangular cooperation.
- (e).2 All Parties shall periodically review progress and identify areas where international cooperation should be strengthened.]

Move paragraph 185 to become a new paragraph 183.1.

Move paragraph 185 to proposed new subsection entitled Technology action plans/technology road maps.

[Cooperative actions on research and development]

186. [[All] [[Developed country] Parties], in accordance with national capabilities, and other developed Parties included in Annex II of the Convention [The developed Parties that have commitments under the Convention and the other developed Parties in a position to transfer environmentally sound technologies] [shall]{should} [take efforts to] strengthen their national technology research, development and demonstration (RD&D) programmes [and provide appropriate support] with the aim of a substantial increase of private and public energy-related RD&D compared to current levels, working towards at least a doubling of global energy-related RD&D by 2012 and increasing it to four times its current level by 2020, with a significant shift in emphasis towards safe and sustainable low greenhouse-gas-emitting technologies, especially renewable energy [towards] [[to developing country Parties] through], inter alia:] *Alternative to the chapeau for paragraph 186*:

[Providing opportunities for participation by developing country Parties in joint R&D programmes for specific technologies and joint - ventures to accelerate deployment, diffusion and effective transfer of technologies from developed to developing country Parties, particularly technologies for adaptation for low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, in the absence of win-win solutions and market intervention:]

- (a) [Reinforcing] Enhancing North–South, South–South [and triangular] cooperation, including city to city twinning arrangements, with the aim of promoting technology development taking into account endogenous technologies [of developing [countries][country Parties]] and prioritizing technologies for mitigation and adaptation [towards a goal of bringing down costs and increasing the] that [might] have not only [high costs but also high] potential for GHG mitigation and/or increas[e]ing resilience to the [negative] adverse impacts of climate change;
- (b) Providing opportunities for [all] [participation [by developing country]] [Parties] in joint R&D programmes[, as appropriate] for specific technologies and joint ventures to accelerate deployment, diffusion and effective transfer of technologies [from developed country Parties and other developed Parties included in Annex II of the Convention to developing country Parties], particularly technologies for adaptation for [SIDS] small island developing countries, LCDs and Africa consistent with the language of the Bali Action Plan and the Convention[, in the absence of win-win solutions and market intervention].

Alternative to subparagraph (b):

[Providing opportunities for participation by developing country Parties in joint R&D programmes for specific technologies and joint - ventures to accelerate deployment, diffusion and effective transfer of technologies from developed to developing country Parties, particularly technologies for adaptation for low lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or

areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, in the absence of win-win solutions and market intervention.]

(b).1 The [{technology mechanism} {framework for technology}] should assess the need for increased global or regional RD&D for targeted technologies, especially those with particular relevance to developing countries, and facilitate activities to address any gaps.

Alternatives to paragraph 186:

Alternative 1

[Parties shall strengthen their national technology research, development and demonstration programmes and provide appropriate support to developing country Parties through, inter alia:

- (a) Reinforcing North–South, South–South and triangular cooperation with the aim of promoting endogenous technologies of developing countries and prioritizing technologies for mitigation and adaptation that might have high costs but also high potential for GHG mitigation and/or increase resilience to negative impacts of climate change;
- (b) Providing opportunities for participation by developing country Parties in joint R&D programmes for specific technologies and joint ventures to accelerate deployment, diffusion and effective transfer of technologies from developed to developing country Parties, particularly technologies for adaptation for SIDS, in the absence of win-win solutions and market intervention.]

Alternative 2

[Stimulate the formation and development of national and international innovation systems and markets for technologies for mitigation and adaptation, creating favourable investment and enabling environments, and engaging the private sector]

Developed country Parties {shall} {should} strengthen their national technology research, development and demonstration programmes and provide appropriate support to developing country Parties through, inter alia:

- (a) Reinforcing North–South, South–South and triangular cooperation with the aim of promoting endogenous technologies of developing countries and prioritizing technologies for mitigation and adaptation that might have high costs but also high potential for GHG mitigation and/or increase resilience to negative impacts of climate change;
- (b) Providing opportunities for participation by developing country Parties in joint R&D programmes for specific technologies and joint ventures to accelerate deployment, diffusion and effective transfer of technologies from developed to developing country Parties, particularly technologies for adaptation for SIDS, in the absence of win-win solutions and market intervention.

Focused voluntary technology oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations {shall} {should} be recognized. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.

National and regional technology innovation centres and networks {shall} {should} be {established} {strengthened} to:

- (a) Promote joint R&D activities in the context of South–South, North–South and triangular cooperation;
- (b) Promote the transfer of environmentally sound technologies to developing country Parties;
- (c) Stimulate capacity-building, in particular for endogenous technologies;
- (d) Improve access to information on existing and new technologies;

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The contribution to enhanced action on RD&D through voluntary agreements on research, development and demonstration of key mitigation or adaptation technologies, shall be recognized under the Convention. Such agreements shall involve Parties to the Convention, and may include partnerships with the private sector, academia and civil society.

Parties shall promote and support the accelerated development and transfer of technologies through a network of Climate Innovation Centres, each of which shall be a coordinating nodal centre to facilitate and enable the identification of one or more key technological products which have strong sustainable development and climate change benefits along with their projected price and performance targets, the development of such products, and the markets for these products, in partnership with appropriate public and private sector organizations.

Parties shall cooperate to significantly reduce or remove tariff barriers to the import and export of renewable energy and energy efficiency technologies as well as environmentally sound adaptation technologies.]

[Measures to address intellectual property rights

187. [Option 1

[Technology development, diffusion and transfer {shall} be promoted by operating the intellectual property regime. [This process shall also make use of the flexibilities in the IPR regime to][in a manner that encourages development of climate-friendly technologies and simultaneously] [such as compulsory licensing to] facilitates [the][their] demonstration, diffusion and transfer to developing countries. Buy down the cost of technologies:

- (a) Full cost for LDCs; and
- (b) Partial for other developing countries taking into account the ability to pay]

Alternative to paragraph 187:

[Parties shall cooperate to develop and deploy patent sharing and/or intellectual property free renewable energy and energy efficiency technologies.]

188. [Option 2

Specific and urgent measures {shall} [should] be [instituted in a relevant forums] [established] to remove barriers to development and transfer of technologies from [developed] [the developed Parties that have commitments under the Convention and the other developed Parties in a position to do transfer environmentally sound technologies] to developing country Parties arising from the intellectual property rights (IPR) protection, including:

(a) [Compulsory licensing for [specific] patented [environmentally safe and sound] technologies;]

Alternative to subparagraph (a):

[All necessary steps shall be immediately taken in all relevant fora to mandatorily exclude from patenting climate-friendly technologies held by Annex II countries which can be used to adapt to or mitigate climate change.]

(b) [Pooling and sharing] publicly funded technologies and making the technologies available in the public domain at an affordable price;

Alternative to subparagraph (b):

[Creation of a "Global Technology Pool for Climate Change" that promotes and ensures access to technologies that can be used to adapt to or mitigate climate change and associated know-how and trade secrets to developing countries including on non-exclusive royalty-free terms in order to provide better information service and reduce transaction costs.]

- (c) Taking into account the example set by decisions in other relevant international forums relating to IPRs, such as the Doha Declaration on the TRIPs Agreement and Public Health;]
- (c).1 Preferential pricing.

- (c).2 Reviewing all existing relevant IPR regulations in order to provide certain information to remove the barriers and constraints that GHG mitigation technologies are subject to.
- (c).3 Promoting innovative IPR sharing arrangements for joint development of Environmentally Sound Technologies.
- (c).4 Differential pricing between the developed and developing countries.
- (c).5 Promoting Joint technological or patent pools for the development and transfer of technologies to the developing countries at low cost.
- (c).6 Limited/reduced time patents on climate friendly technologies.
- (c).7 Exclusion from patenting of climate friendly technologies.]

Alternative to paragraph 188

- [(a) All necessary steps shall be immediately taken in all relevant fora to mandatorily exclude from patenting environmentally sound technologies which can be used to adapt to or mitigate climate change.
- (b) Biological resources including microorganisms, plant and animal species and varieties, and parts thereof that are used for adaptation and mitigation of climate change shall not be patented.
- (c) Specific measures shall be taken and mechanisms developed to remove existing barriers to development and transfer of technologies from developed to developing country Parties arising from intellectual property rights (IPR) protection, including:
 - (i) to use to the full flexibilities contained in the Trade Related Aspects of Intellectual Property Rights (TRIPS) including Compulsory licensing to access intellectual property protected technologies;
 - (ii) take steps to ensure sharing of publicly funded technologies and related know-how, including by making the technologies available in the public domain at an affordable price and on terms and conditions that promotes access for developing countries;
 - (iii) creation of a "Global Technology Pool for Climate Change" that promotes and ensures access to intellectual property protected technologies and associated know-how to developing countries including on non-exclusive royalty-free terms;
 - (iv) adoption of a Declaration on IPRs and Environmentally Sound Technologies in relevant fora to, inter alia, reaffirm the flexibilities in the TRIPS Agreement and enhance the enabling environment for implementing these flexibilities.
- 188.1 All necessary measures and actions shall be immediately taken to facilitate technology pools that include associated trade secrets and know-how on environmentally sound technologies and enable them to be accessed, including on royalty-free terms for developing countries.]

189. [Option 3

[[LDCs][Countries vulnerable to the adverse effects of climate change] should be exempted from patent protection of climate-related technologies for adaptation and mitigation, as required for capacity-building and development needs. [Genetic resources, including germplasms of plant and animal species and varieties that are essential for adaptation in agriculture, shall not be patented by multinational or any other corporations.]]]

189.1 Option 3.1

Specific measures shall be taken and mechanisms developed to remove barriers to development and transfer of technologies from developed to developing country Parties arising from intellectual property rights (IPR) protection, in particular:

(a) Parties agree that nothing in any international agreement on intellectual property shall be interpreted or implemented in a manner that limits or prevents any Party from taking any measures to address adaptation or mitigation of climate change, in particular the development and transfer of, and access to technologies;

- (b) Immediately to take all steps necessary in all fora to mandatorily exclude from patenting in developing countries environmentally sound technologies to adapt to or mitigate climate change, including those developed through funding by governments or international agencies;
- (c) Immediately to take all steps necessary in all fora to revoke in developing countries all existing patents on essential/urgent environmentally sound technologies to adapt to or mitigate climate change;
- (d) Immediately to take all necessary measures to facilitate technology pools that includes trade secrets and associated know-how on environmentally sound technologies and enable them to be accessed on royalty-free terms, for developing countries;
- (e) Immediately to create and provide new and additional financing that is adequate, predictable and sustainable for joint technology excellence centres in developing countries, to enable entities in these countries to do research and development especially on adaptation as well as mitigation technologies;
- (f) Immediately to ensure that any technology transfer to developing countries is appropriate for the developing countries concerned in order to enable its effective utilization.
- 189.2 The Executive Body on Technology (EBT) should establish a committee, an advisory panel, or designate some other body, to proactively address patents and related intellectual property issues to ensure both increased innovation and increased access both for mitigation and adaptation technologies. Such a committee/panel should:
 - (a) Actively engage enterprises and institutions in both developed and developing countries;
- (b) Develop a clear framework for evaluating and determining when intellectual property becomes a barrier to international technology research, development, deployment, diffusion and transfer and provide options for corrective action;
- (c) Make recommendations back to the UNFCCC COP or COP/MOP on barriers that may require further actions.

[Incentive mechanism[s] for technology transfer][Cooperative technology deployment]

- x.1 A new technology leveraging service which could form part of a broader facilitation platform should be created to provide an interactive facilitation service for actions identified through low emission development strategies and/or TNA/NAMA/NAPA processes. This service is to be provided to developing countries and would, on a voluntary basis, assess potential actions, assist in the development of rigorous projects proposals and assist in matching with the most appropriate form of investment support, particularly with a view to leveraging private sector funding. This service would work closely with relevant international financing institutions, multilateral development banks and the private sector.
- 190. [[An incentive][The existing] [mechanism][s] for technology transfer for mitigation and adaptation via projects/programmes that stimulate accelerated diffusion and transfer of existing and new environmentally safe and sound technologies to developing [countries] [country Parties], in particular a vulnerably countries {shall} {should} be [strengthened] [established] [offered]] in accordance with Article 4, paragraph 9.

Alternative to paragraph 190:

[The Annex I countries shall institute incentives at the national level notably tax exemption and subsidies for the owner of patented technology with a view to promoting transfer and diffusion of the environmentally sound technologies to the developing countries;]

- 191. [For the purpose of [meeting its quantified emission limitation and reduction commitments] and requirements for monitoring, reporting and verification, as appropriate, a Party may transfer to, or acquire from, other Parties emission reduction units resulting from projects and programmes that accelerate the diffusion or transfer of environmentally sound technologies, provided that:
 - (a)' Host Parties establish technology targets or objectives;
 - (a) Voluntary participation is approved by each Party involved;
 - (b) Any such project results in measurable, reportable and verifiable reductions of GHG emissions by sources or enhancements of removals by sinks;

- (c) The project contributes to the achievement of the technology targets and objectives of the [host] Party in receipt of that technology;
- (d) The [host] Party [providing the technology shall be] [has] allocated assigned amount units or environmentally sound technology rewards (ESTRs) [for] [to] the project or programme, proportionate to volume of emissions removed;
- (e) The project/programme is registered under the Convention;
- (f) Participants in the ESTR mechanism may involve private and public companies.]] *Alternative to paragraph 191:*

[For the purpose of meeting its commitments, any Party included in Annex II may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

- (a) Any such project has the approval of the Parties involved:
- (b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;
- (c) It does not acquire any emission reduction units if it is not in compliance with its obligations; and
- (d) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments.]
- 191.1 Parties shall promote the accelerated penetration of cost-effective technologies in non Annex-I countries through the provision of financial support as appropriate, such as concessional loans and risk guarantees, for the large-scale dissemination of these technologies.

[[Voluntary agreements][Partnerships]

192. [Option 1

Focused voluntary technology oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations and local and subnational governments [shall]{should} be [recognized][encouraged], including in accordance with Article 11.5 of the Convention. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.]

Move paragraph 192 option 1 to proposed new section entitled National and cooperative actions to enhance the development, application and diffusion, including transfer, of technologies, practices and processes

Alternative to paragraph 192:

[The contribution to enhanced action on RD&D through voluntary agreements on research, development and demonstration of key mitigation or adaptation technologies, shall be recognized under the Convention. Such agreements shall involve Parties to the Convention, and may include partnerships with the private sector, academia and civil society.]

193. [Option 2

Technological information transfer agreement/multiple agreements to facilitate the spread of environment-friendly products [and a healthy and reliable agricultural production system should be established].]]

Technology information

Move the section on Technology information before section on Voluntary agreements.

194. [Option 1

[The development and technology mechanism under the convention can also include a] [A] technology information platform, based on existing platforms, [should be developed and be continuously updated to collect information] on sector-specific technologies and best practices [on publicly and

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privately held technologies, [including on IPRs and licensing], costs, abatement potentials, barriers and manufacturers of technologies.]]

Alternative to paragraph 194:

[The existing technology information platforms should be strengthened and linked together.]

195. [Option 2

[The enhanced technology mechanism will also develop a][A] global database including '[green production][low-emission]' technologies and best practices for mitigation and adaptation to be continuously updated [should be developed through the technology information clearing house (TT:CLEAR).]]

3. Institutional arrangements, including funds

[Note: Parties proposed several options for the creation or strengthening of institutional arrangements under the Convention for enhancing action on technology. In proposing these arrangements, Parties in some cases also proposed funds and/or implementation aspects. Proposals on funds for technology are reflected in paragraph 175 above and proposals on implementation aspects of enhanced action on technology are reflected in paragraphs 181–185 above.]

196. [Institutional arrangements for] enhanced cooperative action on technology [shall]{should}[include]

[Option 1

[Strengthen cooperation][make efficient use of the current institutional arrangements] through a range of institutions by:

[[Option 1.1]

engaging the private sector and encouraging cooperative partnership between governments, research intuitions, including cities, and industries, recognizing a wide variety of processes, mechanisms and organizations outside the UNFCCC and the critical role of private-sector investment, capacity and expertise as well as the role of public research institutions.] seeking cooperation and coordination with relevant international technology initiatives and organisations, particularly with respect to the development of technology road maps, cooperative actions on research and development of technology, options for financing technology deployment, diffusion and transfer, and advice on issues related to IPR.

stimulate the establishment of facilitative mechanisms to leverage private sector financing to meet developing countries' needs.

[[Option 1.2]

[An enhanced advisory capacity or role for] [and further efforts by] the Expert Group on Technology Transfer (EGTT) [acting in accordance with decision 4/CP.7 and serving as an advisory body to] [to all bodies of the Convention] [the SBI, and] [the SBSTA] [and SBI] with appropriate improvements.]]

The EGTT shall

- (a) Provide advice and recommendations to the COP on the overall implementation of Technology action under the Convention;
- (b) Elaborate a technology action plan as a starting point of its work;
- (c) Guide and supervise the disbursement of a multilateral climate technology fund;
- (d) Promote communication and information/knowledge sharing;
- (e) Monitor and assess the performance and progress, using performance indicators, and report to the COP.

Proposal to merge Options 1.1 and 1.2 into a single option

[Option 1.3

Make maximum use of current institutional arrangements with further enhancements to provide additional capacity and technical resources, including by:

- (a) Encouraging and strengthening collaborative partnership arrangements with relevant existing and emerging national and international public and private sector institutions and initiatives, including academia, the research community, government, business and other stakeholders.
- (b) Established an enhanced technology expert advisory group with an expanded membership to encompass business, research community and other relevant expert organisations, including the financial community. This group would have responsibility for, inter alia,
 - (i) Provision of relevant technical and other expert advice relating to the process of technology development, deployment and diffusion;
 - (ii) Undertaking technology action plans and road maps;
 - (iii) Provide advice as requested on TNAs, technology development plans or low emission development strategies.]

[[Option 2⁵³

an executive body on technology, as a subsidiary body of the Convention, to enhance the implementation of the Convention by enhancing action on technology development and transfer to support action on mitigation and adaptation. The executive body shall, inter alia:

- (a) Provide advice and recommendations to the COP on the overall implementation of technology action under the Convention;
 - (b) Elaborate a technology action plan as a starting point of its work;
 - (c) Guide and supervise the disbursement of a multilateral climate technology fund; *Alternative to subparagraph (c):*

[Guide and supervise the disbursement of a multilateral climate technology fund according to eligibility criteria such as Parties' level of development as well as their emissions reduction, limitation and adaptation potentials and their absorption capacities (human capital, depth of domestic market etc.).]

- (d) Promote communication and information/knowledge sharing; and policy dialogue;
- (e) Monitor and assess the performance and progress, using performance indicators, and report to the COP.
- (e).1 Identifying areas of cooperation with the private sector and making recommendations to the COP for action;
- (e).2 Contribute to the measuring, reporting and verifying of both the actions and the support for the actions;
- (e).3 Advise on promoting technology transfer and diffusion in all relevant sectors, especially carbon capture and storage technology;
- (e).4 Identify best practices and best available technologies from developed countries and technologies that will be available in the future.

Under the guidance of the COP, this body would comprise and be supported by a strategic planning committee, technical panels, a verification group and a secretariat {accountable to the executive body}.

The executive body on technology shall {comprise government representatives elected by the COP with balanced regional representation, who are experts on matters related to technology development and transfer, and be open to input from other experts.} {be open to all Parties. Members of the committee and panels shall be determined by the COP.}] A multilateral climate technology fund

⁵³ This proposal is presented in connection with proposals on funds reflected in paragraph 175, option 5, above and proposals on implementation aspects reflected in paragraphs 181–183, above.

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(MCTF) shall be established that will provide technology-related financial requirements as determined by the Executive Body under COP.

[Option 3

a new subsidiary body, or the EGTT, with the role of advisory centre at UNFCCC subsidiary bodies for development and transfer of technologies, and perform the following functions:

- (a) Development of special reviews on existing technologies, including information on estimated cost, risks, benefits and limitations, as well as the required infrastructure, human resources and diffusion potential, taking into account the circumstances of the host Party;
- (b) Elaboration of suggestions on the implementation of the most appropriate financial scheme for a given technology deployment in a given country, including assessment of local capability in production of its components and their servicing;
- (c) Elaboration of regulatory documents, terms and criteria and guidance, and preparation of the respective decisions of the Parties.]

[Options 4⁵⁴

[a technology committee [to advise] the COP in technology policy issues. [The committee should be serviced by a strengthened professional secretariat and advised by a technology panel comprising experts nominated by Parties.] The functions of the technology committee include][a technology panel shall have the following functions]:

- (a) Identifying areas of cooperation with the private sector and making recommendations to the COP for action;
 - (b) [Reviewing and propose [and deciding] on technology investments];
 - (c) [Reviewing [and approving] technology funding requests];
 - (d) [Reviewing progress of implementation of the technology action programme;]
 - (e) [Approving procedures and modalities for technology cooperation with the private sector.]
 - (e).1 Identify and promote best practices and best available technologies;
- (e).2 Identify appropriate ways for promoting transfer of existing best available technologies and those that will be available in the short, medium and future terms;
- (e).3 provide guidance and support to developing country Parties in producing technology needs assessments as part of their low carbon development strategies;
 - (e).4 Gather and, where necessary, produce or commission global technology roadmaps;
 - (e).5 Assist coordinating mechanism with assessment of NAMAs and other relevant bodies.

[Option 5

a new body on technology transfer and financing [under the Convention] to enhance the implementation of technology transfer mechanisms as well as the associated enabling activities such as capacity-building, technical training, and R&D cooperation, including those activities identified in TNAs NAMAs and NAPAs. The new body on technology transfer and financing should

- (a) Coordinate the existing financing mechanisms, either market or non-market, [to be established];
- (b) Contribute to the measuring, reporting and verifying of both the actions and the support for the actions;
- (c) Facilitate links for accessing to funds and should reduce diversification among existing sources of funds within the Convention;
- (d) Articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral

⁵⁴ This proposal is presented in connection with proposals on funds reflected in paragraphs 175, option 5, above and proposals on implementation aspects reflected in paragraph 181–183 above.

development programs and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.]

Insert a new paragraph which integrates key elements of current options 2, 3, 4 and 5.

[Option 6

involvement of private entities and/or relevant international organizations, at national and/or sectoral level, through, inter alia, the enhancement of public-private partnership and the provision of advisory functions by experts in public and/or private sectors. For enhancing this cooperation, an [advisory group] for sectoral technology cooperation to support the implementation of NAMAs by removing obstacles to and promoting technology transfer and diffusion in all relevant sectors.

The advisory group for sectoral technology cooperation should, inter alia:

- (a) Identify best practices and best available technologies from developed countries and technologies that will be available in the future;
- (b) Identify appropriate ways for promoting transfer of existing best available technologies through analysing emission reduction potentials and setting indicators;
 - (c) Advise on promoting technology transfer and diffusion in all relevant sectors;
 - (d) Periodically report to the COP on its activities.]

Alternatives to paragraph 196:

Alternative 1

[Establish an Executive Body on Technology (EBT), as a subsidiary body of the Convention, in accordance with its Article 7.2 (i). The EBT shall be composed of government representatives, elected by the COP, with balanced regional representation, who are experts on matters of technology development and transfer. The EBT shall: (the following can be put in an Annex to the decision to establish the EBT, as terms of reference, organizational structure, functions, etc...)

- (a) be guided by the following principles:
 - (i) operate under the authority and guidance of the Conference of the Parties;
 - (ii) achieve the accessibility, affordability, appropriateness, and adaptability of technologies required by developing country Parties for enhanced action on mitigation and adaptation;
 - (iii) achieve the removal of barriers for development, deployment, adoption, diffusion, and transfer of environmentally-sound technologies (ESTs);
 - (iv) ensure the provision of new and additional, adequate and predictable financing resources for development, demonstration, deployment, adoption, diffusion, and transfer of ESTs;
 - (v) support the development and enhancement of endogenous capacities and technologies of developing country Parties;
 - (vi) accelerate the penetration of cost effective technologies, including pilot projects. capacity-building and facilitating financing;
 - (vii) promote win-win solutions and technologies that have great potential to minimize adverse impacts of climate change and the adverse impacts of response measure in developing countries Parties including economic diversification;
 - (viii) be action-oriented in the view to achieve cost effectiveness;
 - (ix) promote broader involvement of relevant stakeholders;
 - (x) promote public-private partnership.
- (b) have the following functions:
 - (i) accelerate the development, demonstration, deployment, adoption, diffusion, and transfer
 of environmentally-sound technologies from developed country Parties and other
 developed Parties included in Annex II to the Convention, to developing country Parties,
 in order to avoid the lock-in effects of non-ESTs, and to promote sustainable
 development in developing country Parties;

- (ii) provide access to technology for adaptation at national, sub-regional and regional levels, enabled by capacity-building, and the provision of new and additional, adequate and predictable financing resources to meet the costs of both integration of adaptation into the development process and stand-alone adaptation activities;
- (iii) remove barriers to technology transfer and enhance means of facilitating this transfer, to promote urgent access to advanced ESTs while balancing rewards for innovators with the common good of humankind, including, inter alia, jointly-developed technology and sharing of intellectual property rights;
- (iv) enhance enabling environments to facilitate access to technology, including through financing environments that leverages private sector financial resources, including policy dialogues, and involvement in development, demonstration, deployment, adoption, diffusion, and transfer of environmentally-sound technologies (ESTs);
- (v) build on existing activities within the Convention, including the work of the enhanced Expert Group on Technology Transfer (EGTT), to promote coherence through the integration of ongoing activities related to development and transfer of technologies;
- (vi) provide the means for the full implementation of Convention commitments on development, deployment, adoption, diffusion, and transfer of environmentally-sound technologies (ESTs), and related financing and capacity-building;
- (vii) develop strategy and technology action plans and monitor and verify the implementation of the specific operational policies, guidelines and administrative arrangements, including the disbursement of resources, for the purpose of achieving the objectives of the multilateral technology fund taking into account the cost effectiveness of the proposed activities as well as the potential for their replicability;
- (viii) coordinate action by different stakeholders at international, regional and national levels;
 - (ix) assess the performance of development and transfer of ESTs in terms of speed, range and size of the technological flow.
- (c) be comprised of and supported by:
 - (i) A Strategic Planning Committee to:
 - develop strategy;
 - provide regular guidance;
 - assess and elaborate technology-related matters;
 - continuously evaluate progress, including financial and technological flows and range and effectiveness of technologies transferred;
 - develop updates for the Technology Action Plan (TAP), as described below, at regular intervals;
 - perform any other functions to be assigned to it by the EBT;
 - capacity-building.
 - (ii) Technical Panels to generate and compile current expert information related to, inter alia,
 - policies and measures;
 - intellectual property cooperation, sharing and partnership;
 - sectoral, cross-sectoral and cross-cutting cooperation;
 - assessment, monitoring and compliance related matters;
 - dissemination of knowledge;
 - documenting, scaling up and diffusion of indigenous adaptation technologies which already exist in developing countries.
 - (iii) A Verification Group to put in place a measurement, reporting and verification system for compliance with the provision of financing and the development, demonstration,

deployment, adoption, diffusion, and transfer of environmentally-sound technologies by Annex I Parties to developing countries under the mechanism, and the overall compliance with financing and technology commitments under the Convention, including the MRV requirements under the Bali Action Plan.

- (iv) A Secretariat to:
 - support and facilitate the activities of the Executive Body of Technology;
 - compile and prepare a final report on the financial and technological contributions made and reported by Parties to the technology mechanism, including the overall MRV requirements under the Bali Action Plan.
- (d) Develop a Technology Action Plan (TAP) to serve as a starting point for the work of the Executive Body.
 - (i) It will include specific actions and timelines for the first three years, and will be updated for successive three-year periods.
 - (ii) To realize the full potential of technology, the TAP shall support all stages of the technology cycle, including research, development, demonstration, diffusion, and transfer.
 - (iii) the TAP will define specific policies, actions and funding requirements for all relevant technologies under the following classifications: public domain technologies, patented technologies and know-how, future technologies.
- (e) the establishment of national and regional technology centers of excellence to reinforce north-south, south-south and triangular cooperation, including joint research and development (details can be annexed to the legal/agreed outcome).

An indicative list of activities and costs eligible for support under the EBT is attached as an Annex (the Annex will consist of the indicative list of activities and costs eligible for support by the mechanism contained in the G77 and China submission on a Technology mechanism under the COP)].

Alternative 2

[A Technology Development and Transfer Facility is hereby established.

The purpose of the Technology Development and Transfer Facility is to assist developing country Parties to identify and help facilitate the transfer of low greenhouse gas emitting technologies, particularly renewable energy and energy efficiency technologies, to assist in the undertaking of national appropriate mitigation actions. The Facility shall also assist particularly vulnerable developing countries to identify and help facilitate the transfer of appropriate adaptation technologies.

The Technology Development and Transfer Facility shall be subject to the authority and guidance of the COP (or the Conference of the Parties serving as the assembly of Parties) and be supervised by a Board.

The constituency of the Board shall be determined by the COP (or Conference of Parties serving as the assembly of Parties) and be guided by the principle of equitable geographical representation.

The Technology Development and Transfer Facility shall regularly report to the COP (or Conference of Parties serving as the assembly of Parties).

Advice shall be provided to the Technology Development and Transfer Facility Board by the Expert Group on Technology Transfer.]

<u>Proposal to consolidate paragraph 196 with paragraphs 174 and 175</u>: See proposal reflected as an alternative to paragraphs 174 and 175

National and regional technology innovation centres

- 197. Existing National and regional technology innovation centres and networks among Parties, particularly in developing countries [shall][should] be [established][and existing centres][strengthened][established and/or strengthened], as appropriate, to:
- (a) Promote joint R&D activities [in the context of South–South, North–South and triangular][and] cooperation;

Alternative to subparagraph (a):

[Promote the joint development of new technology, which may include the sharing of IPRs.]

- (b) [Promote the deployment, development and transfer of environmentally sound technologies for mitigation and adaptation [to developing country Parties]];
 - (c) Stimulate capacity-building[, in particular for endogenous technologies];
 - (d) Improve access to information on existing and new technologies;

Move subparagraph (d) to paragraph 183.

(e) [Promote the sharing of IPRs].]

Move paragraph 197 after paragraph 191.

Alternative to paragraph 197:

[Cooperative Technology Development Centres shall be established in major developing country regions around the world.

The purpose of Cooperative Technology Development Centres shall be to provide cooperative training and development facilities supported by public-private partnerships to develop and deploy renewable energy and energy efficiency technologies and environmentally sound adaptation technologies.

Cooperative Technology Development Centres shall provide training opportunities for participants from all countries to facilitate the development and transfer of renewable energy and energy efficiency technologies as well as other environmentally sound adaptation technologies.

Funding for the development of Cooperative Technology Development Centres shall be developed from a variety of sources identified by the COP (or Conference of Parties serving as the assembly of Parties) and shall include funding from the Technology Window of the Multilateral Fund on Climate Change.]

198. [Financial resources required to support such centres and networks [shall][should] be provided by various sources including the [multilateral climate technology fund referred to in paragraph 175, option 5, above] and {[developed country] Parties through [an assessed contribution] [existing bilateral and multilateral cooperative programmes, partnerships and initiatives]}.]]

Move paragraph 198 to chapter IV.A on Finance.

Alternative to paragraphs 198 and 175:

x.1 [Establish a Multilateral Climate Technology Fund (MCTF) to provide technology-related financial resources as determined by the EBT. The MCTF shall operate under the Conference of the Parties as part of the enhanced multilateral financial mechanism set up under the Convention (as proposed by the G77 and China): (Note: the following can likewise form part of the Annex (*see paragraph x.4 below*) to the decision to establish the MCTF)

x.2 Sources of Funds:

- (a) The MCTF shall be financed by assessed contributions from developed country Parties and other developed Parties included in Annex II of the Convention. Contributions to the mechanism shall be new and additional, and adequate and predictable, in accordance with Article 4.3 of the Convention;
- (b) An agreed proportion of contributions by developed country Parties to bilateral and regional cooperation may be considered as contributions to the MCTF, provided that such cooperation is consistent with the policies and scope of the mechanism, and the guidance provided by the EBT;
- (c) Specific sources including, parts of regular fiscal budget for research and development, fiscal revenue from taxation on carbon transaction and/or auction of emission permits in carbon market, as well as fiscal revenue from energy or environmental taxation in developed countries;
- (d) Financing transfer to the MCTF shall be counted as measurable, reportable and verifiable commitments, both for mitigation and adaptation actions;
- (e) Any financial resources for technology development and transfer channelled outside the framework of the financial mechanism, and therefore outside the authority and guidance of the COP, shall

not be regarded as fulfilment of commitments by developed country Parties under Articles 4.3 and 4.5 of the Convention, or in fulfilment of the Bali Action Plan;

- x.3 The MCTF will cover, inter alia,
 - (a) eligible costs of activities approved by EBT;
- (b) the administrative costs of the Executive Body, the Secretariat, and other bodies serving the EBT;
- (c) costs associated with other specific decision of the Conference of the Parties related to technology development and transfer.

x.4 Annex I

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

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

- (iii) Cost of technical assistance for the design, installation, and stable operation of the technology;
- (iv) Cost of fuel and other operational costs;
- (v) Cost of technologies for fuel switching;
- (vi) Cost of monitoring and verification.]

C. Capacity-building

Note: Parties have made proposals on enhanced action on capacity-building in the context of enhanced action on adaptation, mitigation, technology and finance. Such proposals are integrated in the appropriate sections. In addition, Parties have made proposals on the cross-cutting issue of capacity-building. Such proposals are reflected in paragraphs 199–201 below.

- x.1 For LDCs capacity-building activities will be undertaken in the context of the article 4.9 of the Convention. This will ensure that there is capacity to utilize effectively the support given to this group to adapt to the impacts and participate in mitigation actions.
- x.2 Capacity-building is a continuous, progressive and iterative process. Parties should cooperate to address the capacity needs of developing countries taking into account the following guiding principles:
- x.3 Capacity-building should be:
 - (a) country driven and consistent with national priorities and circumstances;
 - (b) context specific and tailored to specific needs;
 - (c) build on existing institutions and make use of local and indigenous knowledge;
 - (d) cross cutting and integrated into development planning and implementation;
 - (e) participatory, with the engagement of a broad range of stakeholders.
- 199. [International cooperation [shall][should] be enhanced to support the capacities of developing country Parties to implement mitigation and adaptation [capacity-building] actions, including, inter alia:
 - (x.a) Capacity-building shall be an integral part of enhanced action on adaptation and mitigation;
- (a) [Creation of enabling environments at the national, subnational and local level [for enhanced action on adaptation and as appropriate mitigation], including [the establishment of, where necessary, appropriate] policy and legal and regulatory frameworks;]

Alternative to subparagraph (a):

[Strengthening of enabling environments at the national level, including policy and legal and regulatory frameworks;]

(b) [Institutional strengthening through [the establishment or enhancement of national coordinating bodies, where they exist and] strengthening capacity of national focal points, national coordinating bodies and stakeholders;]

Alternative to subparagraph (b):

[Strengthening of relevant national coordination processes including national focal points;]

(c) [Capacity-building for the preparation, implementation and follow-up of [NAPAs] [National Adaptation Plans], other national adaptation plans/strategies national communications, TNAs for adaptation and mitigation including under NAMAs and [NAPAs] [National Adaptation Plans], and the readiness and implementation phase for REDD and REDD-plus activities and the carbon capture and storage project activities;]

Alternative to subparagraph (c):

[Enhancing capacity to plan, prepare and implement relevant mitigation and adaptation actions;]

(d) [Capacity-building for monitoring, reporting and verification of NAMAs, [{including} {and} REDD-plus actions], national greenhouse gas inventories and the carbon capture and storage project activities;

Alternative to subparagraph (d):

[Enhancing the capacities to monitor and report on climate change actions, including for preparation of national communications;]

- (e) [Capacity-building needs identified in national communications, national adaptation plans, NAMAs, national REDD-plus plans, and national technology road maps and the carbon capture and storage project activities;]
- (e).1 Capacity-building needs specific for urban areas;
- (f) Promoting education, training and public awareness, with special focus on youth, women and indigenous peoples;
- (f).1 Promote gathering and exchange of information related to climate change impacts on marine ecosystems, communities, fisheries and other industries; emergency preparedness, monitoring, and forecasting climate change and ocean variability; and improving public awareness of early warning system capacity;
- (g) Provision of technical assistance for building developing countries' capacity to 'ready' themselves for accessing larger pools of domestic and international financing;]
- (g).1 Build, develop, strengthen, enhance, improve, existing scientific and technical skills, capabilities and institutions particularly in developing countries, to enable them to assess, adapt, manage and develop technologies that have:
 - (i) great potential to reduce the GHG emission;
 - (ii) win-win solutions including carbon capture and storage technologies;
 - (iii) great potential to minimize the adverse impact of climate change and the adverse impact of response measures in developing country Parties including the economic diversification;
- (g).2 Capacity-building in technology R&D, including innovation for adapting available technologies to national endowments and circumstance;
- (g).3 Capacity-building in actual deployment and servicing of technologies at operational levels. *Alternative to paragraph 199:*

[A specific capacity development and support mechanism shall be established and supported by developed country Parties to carter for specific capacity-building needs of developing county Parties, in particular LDCs, SIDS and African countries, including training (sub-regional training of trainers), mentoring, and learning by doing activities among other measures:

- (a) To empower relevant institutions at various levels taking into account also the need for stand alone capacity development activities at various levels;
 - (b) To enhance observation, research and knowledge management;
 - (c) To strengthen endogenous capacities;
- (d) To strengthen communication, education and awareness-raising at all levels, especially at the local and community levels;
- (e) To strengthen and use the regional networks of information and knowledge-sharing, including indigenous knowledge sharing;
- (f) To share experiences, information and best practices of developing countries regions including, African, Asia, Latin American countries within the AOSIS countries;
- (g) To assess, strengthen and mobilize the capacities of exiting relevant facilities and institutions in LDCs, SIDs, Africa and other developing countries;
- (h) To strengthen and use data for systematic observation, early warning, modelling, disaster preparedness and capacity evaluation and monitoring;
- (i) To strengthen capacity for modelling and needs assessments related to adaptation, mitigation, capacities, financing, and technologies;
 - (j) To develop tools, methods and technologies and support their application;

(k) To encourage and strengthen participatory and integrated approaches in planning and decision-making, including the meaningful participation various non governmental actors.

Developed countries shall support developing countries to formulate and implement strategies and action plans to implement learning by doing stand alone capacity-building projects/ programmes and activities within the agreed framework under the Convention. Such activities shall be measured through the use of agreed and effective performance indicators, in order to ensure that the resources provided by developed country Parties are benefiting developing countries within the context of the agreed activities identified and undertaken through a bottom up, national driven process.]

- 199.1 Strengthening national institutions to address the emerging capacity-building needs particularly those related to implementation of the provisions of the climate change regime.
- 199.2 A specific capacity development and support mechanism shall be established and supported by developed country Parties to cater for specific capacity-building needs of developing county Parties, in particular LDCs, SIDS and African countries, including training (sub-regional training of trainers), mentoring, and learning by doing activities among other measures:
- (a) To empower relevant institutions at various levels taking into account also the need for stand alone capacity development activities at various levels;
 - (b) To enhance observation, research and knowledge management;
 - (c) To strengthen endogenous capacities;
- (d) To strengthen communication, education and awareness-raising at all levels, especially at the local and community levels;
- (e) To strengthen and use the regional networks of information and knowledge-sharing, including indigenous knowledge sharing:
- (f) To share experiences, information and best practices of developing countries regions including, African, Asia, Latin American countries within the AOSIS countries;
- (g) To assess, strengthen and mobilize the capacities of exiting relevant facilities and institutions in LDCs, SIDs, Africa and other developing countries;
- (h) To strengthen and use data for systematic observation, early warning, modelling, disaster preparedness and capacity evaluation and monitoring;
- (i) To strengthen capacity for modelling and needs assessments related to adaptation, mitigation, capacities, financing, and technologies;
 - (i) To develop tools, methods and technologies and support their application;
- (k) To encourage and strengthen participatory and integrated approaches in planning and decision-making, including the meaningful participation various non governmental actors.
- 199.3 Developed countries shall support developing countries to formulate and implement strategies and action plans to implement learning by doing stand alone capacity-building projects/ programmes and activities within the agreed framework under the Convention. Such activities shall be measured through the use of agreed and effective performance indicators, in order to ensure that the resources provided by developed country Parties are benefiting developing countries within the context of the agreed activities identified and undertaken through a bottom up, national driven process.
- 200. [The measurement of support for capacity-building actions should be in accordance with indicators and in units to be established as part of the review of the implementation of the capacity-building framework adopted under decision 2/CP.7.]

Alternative to paragraph 200:

[To facilitate the monitoring and review of commitments under the Copenhagen Agreement, all Parties should report on progress made in enhancing the capacity to address climate change, and of support provided or received.]

201. [The financial resources required to support the implementation of capacity-building actions {shall} {should} be provided {through the capacity-building fund referred to in paragraph 175, option 6, above}. Provision of capacity-building support to developing country Parties, along with delivery of

financial support and technology transfer, {shall} {should} be a {legally binding} obligation of developed country Parties, {with consequences for non-compliance}.]

Alternative to paragraph 201:

[The financial resources required to support the implementation of capacity-building actions shall be provided through the mechanism referred to in paragraph 166 and 174, option 1 above. Provision of capacity-building support to developing country Parties, along with delivery of financial support and technology transfer, shall be a legally binding obligation of developed country Parties, with consequences for non-compliance.]

Move paragraph 201 to the Finance section.

- 201.1 Financial and technological support should be provided in the context of article 4.9 of the Convention and should be provided in a transparent, expedited, direct access, sustainable and predictable manner within the overall guidance of the COP.
- 201.2 Technical Panels on Capacity Building (TPCBA and TPCBM) shall organize, coordinate, monitor, evaluate and retrofit the implementation of capacity-building activities for adaptation and mitigation and the respective financing and technology development and transfer, in developing countries. TPCBs shall also provide information and views on the fulfilment of support commitments for capacity-building by developed countries. The TPCBs shall create mechanisms for sharing lessons learned, promote south-south cooperation as well as for the dissemination of successful capacity-building activities in developing countries.
- 201.3 A specific capacity development and support mechanism, including training (regional, sub-regional, training of trainers), mentoring, and learning by doing approaches among other measures, shall be established:
 - (a) To empower relevant institutions at various levels;
 - (b) To enhance observation, research and knowledge management;
- (c) To strengthen communication, education and awareness-raising at all levels, especially at the local and community levels;
 - (d) To strengthen and use the regional networks of information and knowledge-sharing;
 - (e) To develop tools, methods and technologies and support their application;
- (f) To encourage and strengthen participatory and integrated approaches in planning and decision-making, including the meaningful participation of civil society;
 - (g) To share experiences, information and best practices of developing countries;
- (h) To assess, strengthen and mobilize the capacities of exiting relevant facilities and institutions in developing countries;
 - (i) To strengthen the structural and institutional capacity for economic diversification.
